Examiner's report

F9 Financial Management

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

Unfortunately, there are some candidates who are clearly underprepared for an examination in Financial Management at this level. It is worth re-emphasising that candidates sitting this examination must study the whole of the syllabus to prepare themselves adequately for this test of Financial Management skills.

Overall, candidates were well prepared in some areas of the syllabus, in particular those that have featured regularly such as calculating a WACC, but less well prepared in others. Furthermore, candidates continue to be well prepared in techniques requiring calculation, but less well-prepared in section C requirements for a discussion of knowledge and an explanation of terms and concepts.

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 question carefully and understanding the difference between an asset beta and an equity beta.

Example 2 is a question testing understanding of interest rate hedging techniques.

Example 1

Shyma Co is a company that manufactures ships and has an equity beta of 1.6 and a debt:equity ratio of 1:3. It is considering a new project to manufacture farm vehicles.

Trant Co is a manufacturer of farm vehicles and has an asset beta of 1.1 and a debt:equity ratio of 2:3.

The risk free rate of return is 5%, the market risk premium is 3% and the corporation tax rate is 40%.

Using CAPM, what would be the suitable cost of equity for Shyma to use in its appraisal of the farm machinery project (to one decimal place)?

In this case, candidates should ignore Shyma Co's beta of 1.6 and use the proxy beta of 1.1. This proxy beta is already an asset beta so does not need to be ungeared.

The asset beta does need to be regeared for Shyma Co's debt:equity ratio.

Equity beta = 1.1 x (3 + 1(1 – 0.4))/3 = 1.32
Using CAPM, k_e = 5 + 1.32 x 3 = 8.96% = 9.0% to 1 decimal place

Example 2

Act Co wishes to hedge interest rate movements on a borrowing it intends to make three months from now for a further period of six months.

Which TWO of the following will best help Act Co hedge its interest rate risk?

A Enter into a 3 v 6 forward rate agreement
B Enter into a 3 v 9 forward rate agreement
C Sell interest rate futures expiring in three months' time
D Buy interest rate futures expiring in three months' time

The correct responses are B and C.

The forward rate agreement (FRA) to be a purchased by a borrower must reflect the period to the commencement of the borrowing and the cessation of the borrowing- hence here the appropriate FRA would be a 3 v 9 FRA.

With respect to futures, to hedge against interest rate increases, interest rate futures should be sold now.

This question shows that candidates need to conceptually understand all the hedging techniques to be able to answer questions in the F9 examination.

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. A candidate who selects three statements will also receive 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 remain some typically common errors across examination sessions which are being 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.

Future candidates must read the question carefully to identify the correct timing of all project cash flows.

Additionally a number of candidates appear to not be aware of how to maximise shareholder wealth in a situation of capital rationing and it may not be appropriate to undertake the project with the highest NPV.

Other areas which caused difficulty for some candidates included knowledge of the conditions for when it is appropriate to use expected values to appraise projects and also feature of NPV and IRR methods of project appraisal.

Business valuation

One common error was not including the value of a dividend about to be paid in the dividend growth model, if the share was cum dividend.

Candidates also did not necessarily realise that a company share price can rise even though it has reduced its dividend payments. This may be the case if the market was expecting a larger reduction.

Price earnings ratio questions caused difficulties for some candidates, one particular issue being the need to use profit after tax and preference dividends before applying a price earnings multiple.

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, but particularly noticeable for questions on interest rate derivatives and especially interest rate futures.

In questions on both foreign exchange and interest rate hedging it was common to see errors occurring from candidates selecting the incorrect rates and not time apportioning interest rates in a money market hedge calculation.

A number of candidates also demonstrated a lack of conceptual understanding of the interest rate parity formula.

There was one further area relating to interest rates which candidates struggled with which was understanding of gap exposure and the significance of the types of gap for the company.

Financial management function

A lack of understanding of the likely impact of a change in how managers' bonus payments were awarded on a company led to errors for this part of the syllabus.

Section C

The main issue arising from candidates' responses to Section C questions is that, in general, candidates perform much better on calculation-based questions than on discussion questions.

It is in section C of the examination that candidates have the opportunity to display deeper knowledge of topics. Whilst there were lots of reasonable attempts at most parts of questions, there were too many scripts where responses to discursive questions displayed little or no knowledge, It is a concern that such discursive parts of questions, which can be worth up to 10 marks, are simply not attempted in too many cases.

Requirements must be read carefully and answered directly. It is essential that candidates address the requirement of a question. As has been said in previous reports, candidates should therefore avoid making the mistake of trying to answer the question they would have preferred and focus on the requirement before them. Candidates should also go back to the requirement in front of them on a regular basis, to make sure their answer continues to address it.

For instance, if the requirement is to calculate and comment, then make a comment based on the outcome of your calculations should be provided but should amount to more than one to two words e.g. if a project results in a positive NPV, then some explanation as to why it should be accepted is necessary rather simply to say 'accept'.

Furthermore, if asked to 'discuss whether.....' something is important/relevant/beneficial, it is not enough to simply list a few points. Rather, there is an expectation that the subject of the

requirement needs to be looked at in more than one way i.e. arguments that support the suggestion, but also consider the opposite view.

Candidates must continue to exercise good time management in the examination. An examination at this level is a challenge to complete in the time allowed; hence candidates must allocate their time wisely. This means allowing sufficient time to attempt the discursive parts of questions in section C.

To reiterate a point made in previous reports, candidates must use the information provided in a question. If a question specifies clearly that the tax liability is settled in the year in which it arises, then it is somewhat surprising (and obviously incorrect) to see tax liabilities being delayed by one year or even to see tax liabilities being settled in the year it which it arises, but the tax allowable deprecation tax benefits being accounted for one year later. These are examples of avoidable errors, which could be the difference between passing and failing the examination.

Candidates at this diet were presented with Section C questions drawn mainly from the areas of:

- Stakeholders and impact on corporate objectives
- The nature, elements and importance of working capital
- Management of inventories, accounts receivable, accounts payable and cash
- Investment appraisal techniques
- Allowing for inflation and taxation in DCF
- Adjusting for risk and uncertainty in investment appraisal
- Specific investment decisions
- Sources of and raising business finance
- Estimating the cost of capital
- Sources of finance and their relative costs
- Capital structure theories and practical considerations

Stakeholders and impact on corporate objectives

In one part question at this diet, candidates were asked to discuss why conflict may arise between stakeholder objectives. Whilst there were some good responses to this requirement, many candidates could not see beyond the issue of agency theory implied by the scenario. A much deeper discussion was required, looking at the wider spectrum of internal, external and connected stakeholders, the conflicts between them, and how satisficing may result.

This is an example of a part of the F9 syllabus which can be easily overlooked by candidates, not least for the reason that the topic can arise in other ACCA examinations. Nonetheless, it illustrates the point that all parts of the F9 syllabus can be examined.

The nature, elements and importance of working capital

One of the learning outcomes in this part of the syllabus is to identify the objectives of working capital management in terms of liquidity and profitability, and discuss the conflict between them. Overall, this was done fairly well by candidates, but illustrating their answers by reference to the required calculations in the preceding part of the question was less well performed.

Management of inventories, accounts receivable, accounts payable and cash

This part of the F9 syllabus includes an outcome requiring candidates to discuss, apply and evaluate the use of relevant techniques in managing accounts receivable, including offering early settlement discounts. Question ZXC Co from September/December 2015 is an earlier example of this.

At this diet, candidates were asked to calculate the change in profit and the impact upon the balance of short term securities resulting from the early settlement discount. The change in profit requirement was done well, but the impact upon cash/securities less so.

In the same question, candidates were also tested on their ability to discuss and apply the use of relevant techniques in managing cash, which in this scenario involved two cash management models, Baumol and Miller-Orr. Most candidates demonstrated good knowledge of the return point and upper limit cash balances in using the Miller-Orr model, but it was very much a case of candidates either knowing it well or not at all.

Finally here, candidates were asked to discuss the use of one cash management model as opposed to the other. Whilst there were some good responses, there was often a shallow level of discussion here with generic advantages given (simple, quick, understandable) as an attempt to be seen to write something. Disadvantages were scarcely discussed.

Investment appraisal techniques

Candidates are, in general, continuing to do well on investment appraisal questions requiring NPV calculations. Many candidates score good marks here, often full marks.

Whilst it is good to see that the common errors mentioned in previous reports are reducing in quantity, there are still the following mistakes being made:

- incorrectly placing initial investment at year 1 rather than year 0
- placing the terminal value in the incorrect year
- inflating relevant cash flows incorrectly, most commonly by applying only one year's inflation to unit prices or unit costs which are more than one year in the future
- not placing tax-related cash flows in the correct time period
- omitting the tax-related cash flows in the final year, when they are payable one year in arrears
- working capital computations omitted, or done incorrectly with a lack of appreciation of the meaning of incremental working capital and its subsequent recovery
- incorrectly believing that tax allowable depreciation (TAD) itself is the relevant cash flow benefit, or not adding back TAD when it has been used to calculate a taxable profit figure
- not justifying financial acceptability comments by failing to refer to the decision rules relevant to the techniques (see earlier comment)

There was also evidence, on this occasion, of candidates failing to use the correct project time span, despite sufficient information being provided in the scenario. This is another example of the need for information being provided in the scenario to be read and processed effectively. For

example, even if production and sales continue for subsequent years, if the scenario says that directors appraise projects over a four-year time horizon, then that it what is needed to be done in answering the question.

Improvement is still required when it comes to the aspects of investment appraisal needing discussion. For example, at this diet, one part question required candidates to identify the errors made in an investment appraisal computation provided in the scenario. Candidates could often identify the errors but were less proficient at explaining the impact of the error on the investment appraisal.

Allowing for inflation and taxation in DCF

The ability to apply and discuss the real-terms and nominal-terms approaches to investment appraisal was tested at this diet.

There is confusion amongst some candidates as to the difference between the two approaches and how to apply them. At its extreme, some candidates believe that 'nominal is real', and vice versa. Even where there is some knowledge as to the difference, many candidates demonstrated an inability to calculate real cash flows and also seem to think that a real terms approach completely ignores inflation.

There were very few fully correct responses to a part question testing the real terms approach, with many candidates incorrectly believing that such an approach required them to take the same (nominal) cash flows used in the prior part question and then simply to discount them at the real rate.

The published question, Darn Co, from December 2013, illustrates well the differences between the two approaches.

Adjusting for risk and uncertainty in investment appraisal

This area of the F9 syllabus includes a requirement for candidates to be able to apply sensitivity analysis to investment projects and discuss the usefulness of sensitivity analysis in assisting investment decisions.

Candidates' responses in these areas vary considerably. As was reported in September 2017, when asked to perform a sensitivity analysis calculation, the basic structure of the percentage computation is usually reproduced and performed by prepared candidates, but far too many candidates fail to take into the tax effects of a change in a variable such as sales volume. Furthermore, whilst sensitivity analysis can be often be explained by candidates, a requirement to 'discuss' its usefulness should be more than a list of some bullet points.

Additionally, this area of the syllabus includes a requirement for candidates to be able to discuss the usefulness of probability analysis in assisting investment decisions. At this diet, in one question, candidates were asked to discuss the limitations of using probability analysis in an investment appraisal decision, and overall, some good knowledge was displayed.

As with the previously stated comments about discussion-type requirements, good examination technique should be applied here in that a requirement to 'discuss three limitations' for six marks means that each limitation is likely to be worth up to two marks, and therefore one or two words per limitation is insufficient. Also, listing a fourth or fifth limitation, when only three are asked for, is superfluous, gains no credit, and wastes precious time in the examination.

Specific investment decisions

Within this topic area of the F9 syllabus, there is a specification that candidates are expected to be able to evaluate asset replacement decisions using equivalent annual cost (EAC) and equivalent annual benefit (EAB). One part question at this diet asked candidates to discuss the problem of choosing between assets with unequal lives.

The knowledge displayed by candidates here was not up to the standard required. Only a small number of candidates were able to recognise that assets with unequal lives were not comparable in a meaningful way, and hence good explanations as to how EAB or EAC could be used to resolve the problem of non-comparability were few in number.

Sources of and raising business finance

This part of the syllabus requires candidates to be able identify and discuss internal sources of finance, including the theoretical approaches to, and the practical influences on, the dividend decision.

When answering a question in an area such as this, there is a tendency for candidates to avoid addressing the requirement directly and, when attempted at all, to write instead all that they know about the topic or to write in general terms about one of the areas.

One part question at this diet saw this occur once again, as it required candidates to discuss the relevance of dividend policy to equity market value. Too many candidates failed to mention the dividend valuation model despite using the model in an earlier part of the question, or even mention the relationship of the dividend payable to the cum dividend and ex dividend market prices, despite this information being provided in the scenario.

Instead, candidates demonstrated a lack of understanding of the theory relating to dividend relevance/irrelevance by instead discussing the types of dividend policy available, factors influencing dividend policy, discussing capital structure or even alternatives to cash dividends.

On the other hand, good points were made by some candidates about the signalling effect of dividends, 'bird in hand' theory and 'home-made' dividends when discussing relevance/irrelevance of dividend policy.

Estimating the cost of capital

A question requiring candidates to calculate the weighted average cost of capital (WACC) of a company based on current market values saw many candidates gaining good marks. Errors that led to candidates not scoring enough marks here have been stated in previous reports but, to reiterate, they include:

- errors in calculating a cost of equity using the dividend growth model (DGM), such as using the cum dividend share price and not the ex dividend share price or, failure to apply the correct growth rate, because the current dividend has not been used in its computation despite it being clearly stated in the question.
- errors in calculating an after-tax cost of debt of loan notes using linear interpolation, such as not using after tax interest in the IRR calculation, not performing the convertible value calculation and not stating why conversion should take place (rather than simply assuming that it should take place)
- using nominal value as the purchase price of loan notes rather than market value
- applying an after tax (1-t) formulation to an already post-tax cost of debt in the final WACC calculation

Studying previous questions on this topic such as Dinla Co from June 2016 and Tufa Co from September/December 2017 should help future candidates avoid these mistakes.

One mathematical point worth making here is that decimal places are important when dealing with growth rates, share prices and, indeed, percentage costs of the various sources of finance. Accuracy is needed. Unnecessary and harsh rounding should be avoided by future candidates.

Sources of finance and their relative costs

One question at this diet required candidates to assess the impact of sources of finance on financial position, financial risk and shareholder wealth using appropriate measures including ratios such as gearing and interest cover.

Interest cover was calculated well in general, but gearing ratios often failed to take into account the changes in equity brought about by the new retained profit resulting from the financing proposals.

Discussions about which of two financing options (rights issue or loan notes) to choose were of varying quality, with other relevant factors such as issue costs, the availability of security for new debt, and the willingness of shareholder to provide more finance, to name but three, being rarely mentioned. Also, despite the requirement clearly stating ‘recommend’, many candidates hedged their bets, rather than making a clear decision between the two options.

Capital structure theories and practical considerations

The question referred to immediately above also required candidates to explain pecking order theory. Whilst candidates could in many cases list an order of preference, few could explain that it was an alternative to traditional theory based upon real world observation. Furthermore, good

explanations of how it would affect the company's financing decision, in any detailed way, were scarce.

Spreadsheet and Word Processing Technique

There was a noticeable improvement at this diet in terms of the way in which candidates presented their answers within spreadsheets. More candidates were including workings in CBE answers and there was better labelling of entries in the spreadsheets. Future candidates should be aware it is good practice for their work to be presented in a way that it can be easily read and understood e.g. where text is entered into a cell; it should be clearly visible without the need for markers to manipulate the cell.

The same principles apply to calculations in CBE examinations as in PBE ones, namely that workings and supporting calculations must be shown and clearly labelled. It is perfectly acceptable to use cell formulae to perform computations, but care must continue to 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, rather than formulae, placed in spreadsheet cells with no supporting calculations.

In respect of word processed answers, candidates should be aware that, as in the professional work environment, the use of a computer does not remove their responsibility to present their written work professionally with spelling, punctuation and grammar appropriate to an examination at this level.

Furthermore, use of sub headings in discursive responses, can help candidates not only in the initial planning of their answers, but can subsequently be useful in judging which specific points are being discussed.

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

Preparing for the F9 exam may appear daunting but there are many resources available to help you. There are many technical articles available on the topics in this report. In addition all the past exams referred to, and more, are available for your use. You should refer to these throughout your studies. Please make sure that you visit the ACCA's website and look at everything available to you. There are also plenty of support materials to help you feel confident about taking your exams on CBE.

http://www.accaglobal.com/uk/en/student/exam-support-resources/fundamentals-exams-study-resources/f9.html