Foundations in Financial Management (FFM) September 2020 Examiner's report

The examining team share their observations from the marking process to highlight strengths and weaknesses in candidates' performance, and to offer constructive advice for those sitting the exam in the future.

Contents

This was the second sitting of the new syllabus and also the second time this examination has been tested in CBE format. Generally, the standard of candidate answers were high. In this report the examining and marking team share their observations from the marking process to highlight the areas where candidates performed badly or well in order to offer constructive advice for future candidates. This report should be used in conjunction with the published exam which can be found here.

General Comments

The two-hour examination was divided into two sections. Section A consisted of 15 multiple choice questions (MCQs) each worth two marks, totalling 30 marks. Section B consisted of seven questions: one worth 20 marks, two worth 15 marks each and four worth five marks each. All questions in both sections were compulsory.

Most candidates used the technology provided for the CBE well. However, there were a significant number of candidates who simply typed the final answer into the spreadsheet answers rather than showing the working within the cells. This approach is only acceptable if the answer is correct or if separate workings are shown elsewhere in the answer. Unfortunately, this was rarely the case and the marking team could not determine if these answers had any merit and could not, therefore award any marks. It is vital that all workings are shown and the easiest way to do this is to perform the calculations within the spreadsheet cells. Markers can view spreadsheet answers both as a final answer and as a set of calculations and will check all workings to award method marks. It is possible to score a good pass on a calculation question even when the final answer is incorrect. Obviously, this is not possible if there are no workings shown as markers cannot assume a correct methodology. Future candidates should be aware that the majority of marks for the calculative elements of section B are for method and failing to show workings is likely to lead to minimal marks.

There was no evidence that candidates ran out of time during this examination and, as in December 2019, it appears that the use of the spreadsheet and word processing applications helped significantly with this aspect of examination pressure.

The vast majority of candidates answered all of the questions in Section A, the few that did not should be reminded that an educated guess is better examination technique than leaving a MCQ unanswered. There is no negative marking for any part of this examination and all MCQs score either 0 or 2 marks.

Similarly, in section B almost all candidates attempted all questions, and although the calculation elements were answered better than the discussion elements, most were answered to a good standard. In fact, there were some outstanding answers to all questions indicating that candidates were thoroughly prepared for this examination. Unlike previous diets there were few answers that did not address the specific requirements of the questions. For some of the written questions there is a table template provided and candidates should use the template whenever is provided in a question.

Future candidates should be aware of the use of sub-divisions within questions. These are usually identified as a(i), a(ii) and so on. Where longer form questions are subdivided like this it is normally intended to help candidates approach the calculations in the correct order. Unfortunately, some candidates ignored a(i) altogether thus depriving themselves of easy marks, while others correctly calculated a(i) of these questions and then used an entirely different figure to answer part a(ii).

Specific Comments

Section A

The new CBE system monitors the amount of time candidates take to answer each question. As this examination is two hours long, this equates to approximately 1.2 minutes per mark or 2.4 minutes for each MCQ. Overall candidates took less time on average than the 36 minutes suggested for Section A. Candidates performed far better on the knowledge based, discursive style questions than the calculation questions which is a change from previous diets. This indicates that the average candidate entered this examination much better prepared and with a greater knowledge and understanding of the syllabus than in the past.

There is a skill to answering MCQ and all future candidates should take care to practise as many as possible before sitting the live examination in order to master this skill. These questions are difficult because they often cover a wide range of subjects that require an agile mind. When reading a MCQ, always read the requirement first, this will always be in bold. Candidates should be sure of what is being asked of them before they read the body of the question (if there is one) or the answer options. If the question is a narrative MCQ candidates should eliminate any obviously wrong options and then read the requirement again carefully, before selecting the most likely option. If the question is a calculation question, candidates should perform the calculation and then look at the options. All options that are not the correct answer are called distractors; they are designed to be plausible and are based on errors candidates make most frequently. For this reason, candidates should always double check their answers. The three most poorly answered questions that are detailed below all contained convincing distractors that steered candidates into selecting the wrong answer.

Question 2

The question least well answered in this section tested an understanding of the economic order quantity model and was presented as follows:

A company uses 1,200 units of component X per month. Component X costs $2 per unit. The holding cost for one unit for one year is 10% of purchase cost. The company has a fixed ordering cost of $4,800 per year plus a variable element of $100 per order. The company carries no safety inventory.

If the company uses the economic order quantity (EOQ) model to manage inventory, what is the total cost of ordering and holding component X per year (to the nearest $)?

A $5,559
B $5,019
C $5,258
D $759

The first step to answering this question is to understand what the question is asking for and what calculations are needed. Here the EOQ needs to be calculated first in order to determine the total ordering cost and total holding cost.

To calculate the EOQ simply put - the figures into the formula provided. Remember that demand is annual demand and that the holding cost is the cost of holding one item of inventory for a year.
The EOQ = ($100 x 1,200 x 12 x 2/ $0.2)$^{0.5}$ = **3795 units (rounded)**

The total holding cost is calculated by multiplying the average number of units held by the cost of holding a unit for a year = 3795/2 x $0.2 = **$379.5**
As the holding cost and order cost is the same when using the EOQ there is no need to perform the calculation for the order cost, but for completeness here it is:
(1,200 X 12/3795) X $100 = **$379.5.**

In this question there is also a fixed order cost of **$4,800** which must be incurred regardless of the number of orders and this will need to be included in the total ordering cost.

Therefore, the total holding and ordering cost is:
£379.5 + $379.5 + $4,800 **= $5,559 = Answer A**

Distractor D is the total of the ordering and holding costs but without the fixed order cost included. = $379.5 + $379.5 = **$759**.

Distractor C was the option chosen by the majority of candidates, which was surprising as it is the most incorrect option. The EOQ is calculated using the fixed order cost as the variable order cost while ignoring the $100 variable order cost altogether. Thus ($4,800 x 1,200 x 12 x 2/ $0.2)$^{0.5}$ produces an EOQ of **26,290 units.** Following from this error holding costs are 26,290/2 X $0.2 = **$2,629** and ordering costs are assumed to be the same **= $5,258.**

Distractor B is the EOQ calculated using the monthly demand rather than the correct annual demand = ($100 x 1,200 x 2/ $0.2)$^{0.5}$ =**1,095 units.** Following on from this error holding costs are 1,095/2 x $0.2 = **$109.5** and ordering costs are assumed to be the same plus the $4,800 fixed ordering costs, **= $5,019**

Question 10

The next least well answered question was as follows:

A project requires an immediate investment of $10,000 and will generate a $5,000 net cash inflow at the end of each of the next five years. The project's NPV at an interest rate of 12% has been correctly calculated as $8,025.

By how much can the annual cash inflow reduce before the project is no longer financially viable?

A $ 2,226
B $1,605
C $1,387
D $2,774

This question requires candidates to understand how the value of an annuity can affect the NPV of a project, an area that is often misunderstood by candidates taking this examination. Although the question gives all the figures necessary to complete this question quickly, it is perhaps worthwhile explaining the basic principles behind the correct answer. The NPV would be calculated as follows:

Year	**0**	**1-5**
Investment ($)	(10,000)	
Net cash inflows($)		5,000
PV factor at 12%	1	3.605
Present value ($)	(10,000)	18,025
Net present value = $8,025		

What the question is asking is by how much can the $5,000 cash inflows reduce before the NPV falls to 0. With this question it would be easy, although not particularly quick, to recalculate the NPV for each of the four option in order to find the one that does reduce the NPV to 0. For example, taking **option A**, it can be seen that this is the correct answer.

Year	**0**	**1-5**
Investment ($)	(10,000)	
Net cash inflows($) **(5,000-2,226)**		2,774
PV factor at 12%	1	3.605
Present value ($)	(10,000)	10,000
Net present value = 0		

It can be seen that the NPV is 0 where the cash inflow multiplied by the annuity is equal to $10,000. Therefore, a quicker way to calculate the answer is to understand that the cash flow that leads to an NPV of 0 is $2,774 ($10,000/3.605) and that $2,774 is $2,226 less than $5,000.

However, the quickest way to arrive at the correct **answer A**, using the information given in this question, is to appreciate that the NPV needs to fall by $8,025 and that this reduction will be an equal reduction in the five years annuity values. This is simply calculated as $8,025/ 3.605 = $2,226.

The distractors in this question are simply variations on the numbers given in the question that represent common candidate misunderstandings as follows:

B $1,605	=($8,025/ 5 years)
C $1,387	=($5,000/ 3.605)
D $2,774	=($10,000 / 3.605)

Question 9

The third least well answered MCQ was as presented as follows:

A company has the following issued share capital

	$m
Ordinary shares (nominal value $0.50)	10
8% Preferred shares (nominal value $0.10)	5

Profit before tax is $12 m. Tax on these profits is $4m.

What is the company's earnings per share (EPS) (to the nearest $0.01)?

A $0.40
B $0.80
C $0.38
D $0.76

In order to answer this question candidates needed to be aware that earnings per share (EPS) refers to earnings per equity share. Equity earnings are profit after interest and tax (PAIT) and preference dividends and these earnings are divided by the number of ordinary shares.

Equity earnings are $7.6m ($12m EBT less $4m tax less $0.4m preference dividend ($5m x 8%)), which when divided by the 20m ordinary shares ($10m /$0.50) results in an EPS of $0.38. Therefore, **option C** is the correct answer.

Distractor A calculated the EPS without first deducting the $0.4m preference dividend from the PAIT.
Distractor B used the same incorrect PAIT as distractor A and used the $10m as number of ordinary shares.
Distractor D used the correct PAIT but used the same incorrect number of shares as distractor B.

It was disappointing that so many candidates got this question wrong as a very similar question was reviewed in the December 2019 Examiner's report. Future candidates should use these reports as a guide during their preparation for the examination.

Section B

As mentioned above, section B consisted of seven questions. The requirements were a combination of numeric and written questions, both knowledge and application based, allowing candidates the opportunity to demonstrate their abilities across a range of syllabus topics. As in previous diets, under the old syllabus as well as December 2019, it was clear that candidates are better at answering the numerical questions compared to the written ones. However, this sitting saw much less of a differential between the two types.
To view the published questions, click here.

Question 16

This first part of this question required the production of a fairly complicated cash budget. Cash budgets are core to this syllabus and all candidates should be able to compile one to a reasonable standard. The second part of the question asked for the benefit of a cash budget.

The pass rate for this question was the best on this exam and there were some excellent answers, which was pleasing to see. However, many candidates could not produce the sales and production budget in first part of the requirement. To produce the sales budget all that a candidate had to do was multiply the sales units given by the selling price. Those candidates that did produce accurate sales and production budgets often failed to use them to compile the receipts and payments within the cash budget, electing instead to use other, often made-up figures. As already stated, questions that are subdivided into different parts (such as part a(i) and a(ii)) are designed to help candidates perform the relevant calculations in the correct order. A significant number of candidates completely messed up the timing of the cash flows, indeed some candidate answers produced items before the purchasing the raw material needed to make them. Few candidates included the opening receivables within the cash budget, and many used it to represent an opening cash balance.

The biggest single mistake made on this question was not showing any workings. As stated earlier in this report, markers cannot check that the correct method has been used if there are no workings (especially when some of the numbers have been made up by the candidates). Future candidates should show workings as formula within the spreadsheet cells or elsewhere in the answer.

Question 18

The first of the five-mark questions asked for a definition and an explanation of the symptoms of overtrading. This was answered very well by most candidates. It was satisfying to see that not only did candidates have good technical understanding, but that most answered fully the question set.

Question 19

This was the least well answered question as few candidates actually understood what convertible loan notes are and therefore, could not explain the reasons a company

might issue them. Candidates either had the knowledge necessary to score well on this question or they did not.

Question 20

This question asked for the main similarities and differences between a lease and hire purchase agreement and was not well answered. Many candidates would have scored higher marks if they had used headings to identify the similarities and the differences as often it was unclear which if any, were being explained. Most answers attempted a definition of a lease and/or a hire purchase but did not address the question and attempt to compare the two. It cannot be emphasised enough that failing to answer the question set means that marks cannot be awarded.

Question 21

Candidates were asked to calculate five specific ratios from an extract of a company's financial statements. It was expected that most candidates would score well on this question, but this was not the case. Future candidates should know what capital employed is and how to calculate it. Not being able to calculate capital employed and not knowing how to calculate the asset turnover were the most common errors with the answers to this question.

Question 22 & 23

Part (a) of this question required candidates to calculate the incremental net present value (NPV) in order to decide whether to purchase a replacement machine. Part (b) of this question asked for the benefit of NPV compared to the accounting rate of return (ARR).

Part (a) was not well answered. Only a minority of candidates produced an incremental NPV while quite a few candidates appeared not to know what NPV is. The weakest candidates simply copied out the question and added together some of the figures given. In between these extremes of ability were many more errors and misunderstandings. For example, many answers included sunk costs and depreciation in the NPV calculation. Strangely, the same candidates who made these mistakes then went on to explain correctly that NPV is less subjective than ARR as it uses relevant cashflow and not profit. Many candidates did not distinguish between costs and revenues correctly, often deducting revenues or adding costs.
Most candidates made good use of the spreadsheet functions in order to perform the calculations required by this question and the marking team were able to follow the workings with less difficulty than question one.

Part (b) was quite well answered. However, some candidates did not expand their answers beyond a single sentence. For example, many stated, "NPV uses cashflow rather than profit." as a benefit of using NPV compared to ARR. While this is correct it cannot gain full marks as it does not explain why or how it is a benefit. Candidates that simply added "and cashflow is more objective as profit can be measured in many different ways. "were awarded good marks.

Question 24 & 25

This question asked for the net cost or benefit of different options to manage a company's receivables and a recommendation of which (if either) should be chosen. Part (b) asked candidates to explain two benefits of employing a factor company. Many candidates scored full marks on part (a) which was good to see. Less successful candidates failed to appreciate that the cost of financing receivables is based on the company's receivables balance and not the annual sales figure. This error occurred time and time again and is most disappointing. Furthermore, many candidates did not read the question carefully enough and assumed that it was asking for the cheaper of the two options presented. The question was structured so that candidates had to choose between the existing cost of managing receivables a(i) the cost of using a factor and the cost of employing a credit controller a(ii). Those candidates that ignored the calculation in a(i) could not make this choice.

Part (b) was quite well answered although future candidates should be aware that, "it is cheaper" is not a complete answer and earned no marks. If a factor company is earning a margin from providing a service how can it be cheaper than an in-house cost? It is possible that it is cheaper, but to earn marks a candidate needs to explain *why* it is and give specific reasons. Many candidates correctly stated that the cost of irrecoverable debt could be avoided by the company employing the factor company, but then mixed up the explanations of with-recourse and non-recourse factor agreements.

Conclusion

The FFM syllabus is quite broad and although core topics are regularly examined, candidates need to be familiar with all areas of it, to maximise their chance of passing. Future candidates should enter this exam with the ability to prepare a cash budget and an NPV. In addition, candidates should understand the meaning, benefit and relevance of the various techniques, models and ratios as well as being able to calculate them. As accountants we need to be able to explain and interpret results as well as compute them. This examination will always contain at least 45% non-computational questions that will test underlying knowledge and understanding.

Future candidates are reminded that the key to success is a structured learning and revision programme. It is important that during the learning and revision periods, all syllabus topics are covered and that examination standard questions are used for learning and exam practice.