

# **EXAMINATION**

April 2005

## **Subject CT2 — Finance and Financial Reporting Core Technical**

### **EXAMINERS' REPORT**

#### **Introduction**

**The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.**

**M Flaherty  
Chairman of the Board of Examiners**

**15 June 2005**

- 1 B
- 2 A
- 3 C
- 4 D
- 5 C
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- 10 B

- 11** The principal test is whether Company A can control Company B.  
There are some guidelines for the measurement of control in the Companies Act and accounting standards.  
This could happen if Company A has purchased more than 50% of the voting shares.

Control might also arise if Company A can appoint or remove directors to or from the board of Company B,  
particularly if it could control more than 50% of the votes at board meetings in this way.

Company A might also be able to exercise a dominant influence over Company B,  
for example by entering into a contract that gives Company A the ability to exercise control.

- 12** Probability trees are used to organise complex decisions where the choices available at any stage will be affected by decisions made at earlier stages.  
For example, a company can invest in an investment opportunity. Before committing itself it can decide whether or not to purchase a report which will cost a great deal but will enable the company to make a more reliable assessment of the project.  
A probability tree will enable management to decide whether it is better to go ahead or abandon the project without buying the report or whether to buy the report before making a decision.

The probability tree would involve the following steps:

- mapping the possible choices, beginning from the initial project decision and branching out to represent all the possible subsequent options
- assigning estimated cashflows associated with each future possible choice
- estimating the probabilities associated with each future cashflow
- using standard expected value calculations, incorporating both the time value of money and the probabilities, to assess the optimal choices in each future time period based on the knowledge of the intervening events
- working backwards from the latest decision point to the present day in order to establish the best (e.g. highest NPV) route to follow at the outset

One use of the probability tree would be to organise the various aspects of this complex series of decisions that have to be made in order to reach a conclusion.

- 13** The role of the external auditor is to add some credibility to the financial statements published by the company.  
The auditor expresses an independent opinion on the truth and fairness of the financial statements.  
This opinion is based on both detailed testing of the bookkeeping records and an analysis of the accounting policies that have been used to prepare the statements.  
If the auditor's reported opinion supports the figures then shareholders should have fewer concerns about the accuracy of the figures or the basis on which they have been prepared.  
This reassurance makes the capital markets more open than they would otherwise be.
- Any monitoring or covenants based on published accounts will be regarded as more effective if the statements are supported by such an opinion.
- 14** The markets demand an adequate rate of return from an investment.  
Essentially, stock market prices reflect both the market's projections of cash flows from the investment and the discount rate that should be applied to these.  
The quality of management can affect both the size of expected cash flows and the risks associated with them.  
If managers are seen to under perform then the share price will fail to rise, or even fall.  
That could open the way to a takeover bid from someone who wants the opportunity to run the company more efficiently.  
The buyer would then dispose of the existing management team.  
There can be more immediate market disciplines. Managers are often paid in stock or stock options.  
Their performance will have an effect on the value of the financial instruments granted to them as part of their remuneration.
- 15** Companies are liable for corporation tax whereas the partners in a partnership pay income tax on their share of the profits.  
The effective tax rates for the partners post-incorporation may be higher or lower. Companies are taxed on their income plus capital gains. Partnerships do not pay income tax on capital gains, although individual partners may pay capital gains tax on their share of gains.  
The starting point for tax for a limited company is profit from ordinary activities before taxation. This is then adjusted for any non-allowable expenses, depreciation is added back and gross franked investment income is deducted.  
One of the main differences in the taxation of limited companies is the treatment of dividends. Franked investment income is dividends received plus a tax credit of 10%. The tax credit is given to recognise that dividends are paid from post tax profits.

The imputed tax system ensures that there is no disadvantage suffered by the shareholders when a company distributes profit.

As directors the former partners would pay income tax on their salaries and the company pays corporation tax on the remaining profits.

The partners would previously have paid income tax on the whole profits.

- 16** In theory, incorporation would limit the liability of the consultants. Lenders would have a claim against the company's assets but not those of the individuals who own it.

This advantage could prove costly though. Lenders will perceive a higher risk. They might respond by charging a higher rate of interest which will, eventually lead to lower profits for the consultants.

They might also seek additional security over assets, thereby imposing some constraints on the consultants' freedom to trade.

They might even demand personal guarantees from the consultants so that they become liable for the loans despite the incorporation.

Even if the lenders did not take action to protect themselves, limited companies are subject to some additional regulatory requirements that have to be set against the benefits of limited liability.

For example, limited companies are subject to some reporting and filing requirements that partnerships are not.

This would involve paying to put trading information in the public domain, where it might prove useful to competitors or other parties.

- 17** (a) The option holders have the right to buy shares at the striking price. They will almost certainly exercise those rights if the market price exceeds the striking price.  
Buying shares at a discount to the market price will spread future profits over more shares.  
The corresponding investment made by the option holders will probably be insufficient to compensate for the broader shareholding, hence the value of existing shares will be "diluted". Effectively, this means that H's investment might fall in value at some future date because of the options.
- (b) The current market price of the shares will reflect the fact that these options are outstanding.  
That means that H will not actually subsidise or pay for the effect of these options.  
If the options expire unexercised then H will benefit from this "discount" and will not bear any cost.  
On the other hand, if the share price rises then the potential upside will be limited to some extent by the effect of the options.  
That might affect the overall risk profile of the investment.

- 18** (a) The most obvious way in which to reduce beta is to diversify.  
The company should move into lines of business that are as dissimilar from existing lines as possible.  
The company could even conduct a historical analysis to find businesses or industries that tend to move in the opposite direction to Cappemm plc over time.
- (b) It is unlikely that reducing beta in this way will attract investors. Investors can diversify for themselves.  
It is unlikely that they will pay a premium for this reduction. They might also be put off by the fact that Cappemm's management will be responsible for a substantial investment in an industry that they know little about.  
The risks associated with this will be specific risks that can be diversified away,  
but the costs of managing this company will reduce profit and that will make the investment less attractive.
- Shareholders looking to build a clearly diversified portfolio might actually be more attracted to the company that has a clear investment strategy.  
They might prefer this to an artificial diversification offered by Cappemm's new policy.
- 19** (i) (a) The company might have a standard hurdle rate for all capital projects.
- This might take account of the cost of the company's capital.  
It might even take account of the systematic risks associated with investing in the company as identified by the company's beta.
- Essentially, the discount rate should reflect the risks associated with the project  
and also the need to generate a real rate of return from the capital that has been invested.
- (b) The most appropriate rate will be specific to the risks associated with the project itself.  
Standard rates based on the company itself are not really relevant because each project will have its own risks and rewards.
- (ii) In theory, debt is cheaper than equity because lenders take fewer risks.  
In theory, borrowing will reduce WACC because of the higher proportion of debt.  
In practice, this might be slightly more complicated because borrowing will affect the gearing levels and that will affect the risk characteristics of existing equity.  
Borrowing will increase the risk of holding shares and that could increase the cost of equity.  
At higher levels of gearing the risk attached to debt might also increase and that could increase the cost of borrowing too.

These additional costs will offset the savings from using the cheaper source of finance.

Borrowing also carries a tax advantage because interest can be offset against profit whereas dividends cannot.

The Modigliani and Miller argument suggests that the reduction in WACC due to borrowing will be exactly offset by overall increases in the cost of equity. This means that there is no particular cost advantage in using debt or equity.

This argument ignores taxation, though.

- (iii) The models used to evaluate investment projects require many highly subjective decisions to be made about the parameters that are to be used in the model.

In practice, that often means that any particular project can be justified by adjusting estimates about the projected cash flows and the appropriate discount rate.

Companies may have formal investment appraisal systems but their implementation may be influenced by the “political” status of the individuals or the department that is sponsoring the project.

Apart from forecasting and capital considerations, arguments can be put forward to use more basic techniques such as payback for certain projects or to dispense with formal appraisal altogether because the project is required for safety or for strategic purposes.

Some projects may not be individually profitable, but may be undertaken because they are considered to benefit the company as a whole.

Sometimes a project may be undertaken to achieve synergy or compatibility with other projects undertaken by the company.

- 20** (i) The valuation on the basis of profit times a notional price/earnings ratio takes account of the future earnings potential of the company.

Arguably, the P/E ratio effectively discounts all future earnings back to their NPV.

This approach could be influenced by the accounting policies of the companies involved

but is otherwise theoretically sound because nothing is omitted from the calculation.

The P/E model ignores the possibility that the deceased proprietor may have had a substantial input into the earning capacity of the business.

His absence may reduce future profits.

It also ignores the possibility that the son who inherits the business may have to work full-time in order to bring about the future profits and this model would include the value of his labour along with the inherent value of the company.

The asset based valuation restricts the valuation to those assets that can be measured in the financial statements.

It ignores factors such as goodwill and staff skills.

It is also highly open to influence from accounting estimates and assumptions.

The asset basis may be more appropriate if the business is to be sold as it stands and if the new owner will have to replace the input provided by the founder.

- (ii) Given that the P/E model takes account of all of the future cash flows and profits,  
it would normally give a much higher valuation than the asset basis.
- (iii) With most information gathering systems there is normally a trade-off between reliability and cost.  
Financial statements are prepared on the basis of historical costs because these can be determined reasonably quickly and easily.  
They are not necessarily the most relevant basis for most decisions, but it is argued that they are generally prepared for stewardship purposes and so any inaccuracy is unlikely to undermine their relevance.  
Past performance is not necessarily a guide to future performance, and it is future performance that is relevant to valuations.

The financial statements are generally prepared on the basis of highly subjective estimates about such issues as asset lives.  
These could have a significant impact on the profit figure and balance sheet valuations, all of which could affect any company valuation.  
Typically, financial statements omit balances, such as internally generated goodwill,  
which would be difficult to value in any meaningful way. That further undermines their relevance to company valuations.

- (iv) All companies confer the privilege of limited liability on their owners.  
It is important that anyone dealing with the company has some protection from the potential abuses associated with limited liability.  
Reliable financial statements are one such source of protection, particularly when combined with agreements that can be expressed in terms of accounting numbers.  
For example, a bank might grant a loan in return for an agreement that the gearing ratio will be kept below a particular percentage.

The financial statements enable shareholders to make decisions about their relationship with the company.

They can decide whether to support the present management or call for a change on the basis of the figures in the annual report.

Companies also require financial statements in order to pay tax.  
It would be difficult for tax authorities to know how much to levy without formal financial statements.

## **END OF EXAMINERS' REPORT**