Analysing the suitability of financing alternatives
The requirement to analyse suitable financing alternatives for a company has been common in Paper F9 over the years. Indeed, it was examined again in December 2010 and will, I am sure, be examined again in the future. This is a key area in the Paper F9 syllabus and the requirement can be worth a significant amount of marks – for example, 15 marks in Question 2 of the December 2010 exam.

Unfortunately, many students struggle with questions of this nature and do not seem to know how to produce a good answer. This article will suggest an approach that students could use and will then finish with a worked example to demonstrate the technique discussed.

Financial performance and position
When considering the source of finance to be used by a company, the recent financial performance, the current financial position and the expected future financial performance of the company needs to be taken into account. Within an exam question, the ability to do this will be restricted by the information available. In some questions, details of recent performance and the current situation may be provided, while in other questions the current situation and forecasts may be provided.

Evaluating financial performance
Whether you are evaluating recent or forecast financial performance, key areas to consider include the growth in turnover, the growth in operating profit, the growth in profit after or before tax and the movement in profit margins. Return on capital employed and return on equity could be calculated. A key point for students to remember is that they only have limited time and it is better to calculate a few key ratios and then move on and complete the question than it is to calculate all possible ratios and fail to satisfy the requirement.

Evaluating the current financial position
The key consideration when evaluating the current financial position is to establish the financial risk of the company. Hence, the key ratios to calculate are the financial gearing, which shows the financial risk using data from the statement of financial position and interest cover, which shows the financial risk using data from the income statement. Equally, the split between short and long-term financing, and the reliance of the company on overdraft finance, should also be considered.
When evaluating financial performance and financial position, due consideration should be given to any comparative sector data provided. Indeed, if no such data is provided, I would recommend that you state in your answer that you would want to consider such comparative data. This is what you would do in real life and stating it shows that you are aware of this. If the examiner has not provided such data, it is simply because he is constrained by the need to examine many topics in just three hours.

**Recommendation of a suitable financing method**

When recommending a financing method, consideration should be given to a number of factors. These factors are key to justifying your choice of method and the examiner has in the past asked students to discuss these factors in an exam question. The factors include:

**Cost** – Debt finance is cheaper than equity finance and so if the company has the capacity to take on more debt, it could have a cost advantage.

**Cash flows** – While debt finance is cheaper than equity finance, it places on the company the obligation to pay out cash in the form of interest. Failure to pay this interest can result in action being taken to wind up the company. Hence, consideration should be given to the ability of the company to generate cash. If the company is currently cash-generating, then it should be able to pay its interest and debt finance could be a good choice. If the company is currently using cash because it is investing heavily in research and development for example, then the cash may not be available to service interest payments and the company would be better to use equity finance. The equity providers may be willing to accept little or no cash return in the short term, but will instead hope to benefit from capital growth or enhanced dividends once the investment currently taking place bears fruit. Also, equity providers cannot take action to wind up a company if it fails to pay the dividend expected.

**Risk** – The directors of the company must control the total risk of the company and keep it at a level where the shareholders and other key stakeholders are content. Total risk is made up of the financial risk and the business risk. Hence, if it is clear that the business risk is going to rise – for example, because the company is diversifying into riskier areas or because the operating gearing is increasing – then the company may seek to reduce its financial risk. The reverse is also true – if business risk is expected to fall, then the company may be happy to accept more financial risk.

**Security and covenants** – If debt is to be raised, security may be required. From the data given it should be possible to establish whether suitable
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security may be available. Covenants, such as those that impose an obligation on the company to maintain a certain liquidity level, may be required by debt providers and directors must consider if they will be willing to live with such covenants prior to taking on the debt.

Availability – The likely availability of finance must also be considered when recommending a suitable finance source. For instance, a small or medium-sized unlisted company will always find raising equity difficult and, if you consider that the company requires more equity, you must be able to suggest potential sources, such as venture capitalists or business angels, and be aware of the drawbacks of such sources. Furthermore, if the recent or forecast financial performance is poor, all providers are likely to be wary of investing.

Maturity – The basic rule is that the term of the finance should match the term of the need (the matching principle). Hence, a short-term project should be financed with short-term finance. However, this basic rule can be flexed. For instance, if the project is short term – but other short-term opportunities are expected to arise in the future – the use of longer term finance could be justified.

Students should always consider the maturity dates of debt finance in questions of this nature as it is an area the Paper F9 examiner likes to explore. For instance, in Question 2 of the December 2010 exam the company was considering raising more finance but at the same time the existing long-term borrowings were scheduled to mature in just two years and, hence, consideration needed to be given to this issue. Equally, in previous questions, a company had been considering raising finance for a period of perhaps eight years and an examination of the company’s statement of financial position shows that the existing debt of the company would also mature in eight years. Obviously it is unwise for a company to have all its debt maturing at once as repayment would put a considerable cash strain on the company. If the debt could not be repaid, but was to be refinanced, this could be problematic if the economic conditions prevailing made refinancing difficult.

Control – If debt is raised then there will be no change in control. However, if equity is raised control may change. Students should also recognise that a rights issue will only cause a change in control if shareholders sell their rights to other investors.

Costs and ease of issue – Debt finance is generally both cheaper and easier to raise than equity and, hence, a company will often raise debt rather than equity. Raising equity is often difficult, time-consuming and costly.
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The yield curve – Consideration should be given to the term structure of interest rates. For instance, if the curve is becoming steeper this shows an expectation that interest rates will rise in the future. In these circumstances, a company may become more wary of borrowing additional debt or may prefer to raise fixed rate debt, or may look to hedge the interest rate risk in some way.

While this list is not meant to be exhaustive, it hopefully provides much for students to think about. Students should not necessarily expect to use all the factors in an answer.

Suitable financing sources
Students must ensure that they can suggest suitable financing sources. For each source, students should know how and when it could be raised, the nature of the finance and its potential advantages and disadvantages. Combined with a consideration of the factors given above, this knowledge will allow students to recommend and justify a source of finance for any particular scenario. A discussion of each finance source is outside the scope of this article, but students can read up on this area in any good study manual.

Worked example
The following forecast financial position statement as at 31 May 2012 refers to Refgun Co, a stock exchange-listed company, which is seeking to spend $90m in cash on a permanent expansion of its existing trade.

<table>
<thead>
<tr>
<th></th>
<th>$m</th>
<th>$m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td><strong>Equity and liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Total equity</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term borrowings</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade payables</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>234</td>
<td></td>
</tr>
</tbody>
</table>

The forecast results for Refgun Co, assuming the expansion occurs from 1 June 2012, are as follows:
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<table>
<thead>
<tr>
<th>Year ending 31 May</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$71.7</td>
<td>$79.2</td>
<td>$91.3</td>
<td>$98.6</td>
</tr>
<tr>
<td>Operating profit</td>
<td>$24.4</td>
<td>$28.5</td>
<td>$33.7</td>
<td>$37.1</td>
</tr>
</tbody>
</table>

Notes:
1. The long-term borrowings are 8% bonds that were issued in 1996 with a 20-year term
2. The current assets include $18m of cash, of which $15m is held on deposit
3. Refgun Co has consistently grown its profits and dividends in real terms
4. No new finance has been raised in recent years
5. The sector average financial gearing (debt/equity on a book value basis) is currently 85%
6. The sector average interest cover is currently 2.9 times
7. The company estimates that it could borrow at a pre-tax rate of 7.2% per year
8. The company pays tax on its pre-tax profits at a rate of 28%

Required:
Recommend a suitable method of raising the finance required by Refgun Co, supporting your evaluation with both analysis and critical discussion.
Prior to reading the suggested solution students should carry out their own evaluation of the forecast financial performance and the current and forecast financial position. A consideration of the factors discussed earlier should lead students to a justified recommendation.

Suggested solution
Refgun Co is seeking to spend $90m on a permanent expansion of its existing trade. It should be noted that the company has significant retained earnings, $15m of which is held in cash on deposit. This could presumably be used to help fund the expansion and, if this is the case, the need for additional finance would be reduced to $75m. However, the company may have a reason for holding cash – for example, to meet budgeted cash payments in the near future.

Forecast financial performance
The forecast financial performance of Refgun Co will be a key consideration to potential finance providers. Analysis of the forecast performance of Refgun Co gives the following information:
Geometric average growth in turnover = \((98.6/71.7)^{1/3} - 1\) = 11.2%
Geometric average growth in operating profit = \((37.1/24.4)^{1/3} - 1\) = 15.0%
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<table>
<thead>
<tr>
<th>Year ending 31 May</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating profit margin</td>
<td>34.0%</td>
<td>36.0%</td>
<td>36.9%</td>
<td>37.6%</td>
</tr>
</tbody>
</table>

The forecast income statements for the years ending 31 May 2012 and 2015 are shown below. Two income statements have been prepared for 2015, one assuming the expansion is funded by debt and the other assuming the expansion is funded by equity:

<table>
<thead>
<tr>
<th>Year ending 31 May</th>
<th>2012 $m</th>
<th>2015 – debt $m</th>
<th>2015 – equity $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating profit</td>
<td>24.4</td>
<td>37.1</td>
<td>37.1</td>
</tr>
<tr>
<td>Interest</td>
<td>(5.6)</td>
<td>(11.0)</td>
<td>(5.6)</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>18.8</td>
<td>26.1</td>
<td>31.5</td>
</tr>
<tr>
<td>Tax – 28%</td>
<td>(5.3)</td>
<td>(7.3)</td>
<td>(8.8)</td>
</tr>
<tr>
<td>Profit after tax</td>
<td>13.5</td>
<td>18.8</td>
<td>22.7</td>
</tr>
</tbody>
</table>

The interest charge for 2012 is assumed to be \( (70 \times 8\%) = 5.6 \)m.

If debt finance is used the interest charge from 2013 onwards is assumed to be \( (70 \times 8\%) + (75 \times 7.2\%) = 11.0 \)m.

Note: While it would be good to forecast the income statement for each year, time pressure may mean this is not possible.

This analysis shows that the growth in revenue caused by the expansion is exceeded by the growth in operating profit due to a steady rise in the operating margin of the company. This may be a result of the company benefiting from economies of scale as a result of the expansion. Whether debt finance or equity finance is used, both the returns to all investors (operating profit) and the return to the equity investors (profit after tax) both show considerable growth.

Current and forecast financial position

The gearing (D/E) is currently \( 70/146 = 47.9\% \) on a book value basis. If debt finance is raised this would rise to \( (70+75)/146 = 99.3\% \), while if equity finance was used it would fall to \( 70/(146+75) = 31.7\% \). Even if debt finance was raised the gearing level would rapidly fall again as the company makes and retains profits.

The interest cover is currently \( 24.4/5.6 = 4.4 \) times. If debt finance is used then this would fall to \( 28.5/11.0 = 2.6 \) times in 2013. However, by 2015 it would have recovered to \( 37.1/11.0 = 3.4 \) times. If equity finance were to be used the interest cover would consistently improve.
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Refgun Co currently has less financial risk than the sector average and the financial risk would decline even further if equity finance was used. If debt finance is used then the financial risk would initially rise slightly above the sector average but would soon return to the sector average level or below.

Factors that Refgun Co should consider prior to choosing a financing method

Cost and cash flows – Refgun Co would seem to have the capacity to raise more debt as the non-current assets exceed the existing debt by $60m. Furthermore, the company seems to be cash-generative in that it is currently holding $15m on deposit, despite not having raised any finance for several years. Hence, the company may be wise to take advantage of cheaper debt.

Risk – As the company is expanding its existing trade there should be no material change in business risk. If debt finance is chosen the directors should ensure that the shareholders are happy with the extra financial risk. Given the analysis above, this seems likely.

Security and covenants – As long as the expansion involves investing in some non-current assets there should be sufficient security available for potential lenders. The company should check what potential covenants might be imposed and ensure that they would be happy to live with them.

Availability and maturity – Given the recent performance and the good forecasts, the company is likely to have many finance sources available to it. Debt providers should be willing to lend and shareholders would be likely to support a rights issue. Equally, other investors may well wish to invest in the equity of the company. As the finance is required to finance a permanent expansion of the company, long-term finance should be raised. To the extent that the expansion requires investment in additional working capital, some short-term finance could be raised. Consideration should also be given to the fact that the existing bonds of the company are due to be repaid in 2016. Subject to early redemption penalties, it may be worth looking into refinancing this debt at the same time as raising the new debt especially as the cost of new debt appears lower.

Control – If debt is issued, no change would occur to control. A rights issue would also have little impact on control while the issue of shares to new investors may cause control issues.

Costs and ease of issue – A debt issue is likely to be cheaper and easier than an equity issue and, hence, may well be favoured by the directors.
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Yield curve – The directors of Refgun Co should consider the yield curve if it is decided to raise debt.

Recommendation of a suitable financing method
From the analysis and discussion above, it would seem that Refgun Co should seek to finance the expansion by raising long-term debt secured on the existing non-current assets of the company and the new non-current assets acquired during the expansion. At the same time as raising the new debt, the refinancing of the existing debt should also be considered. If shareholders and other key stakeholders are concerned about the financial risk exceeding the industry average, then Refgun Co could raise some short-term debt with the aim of repaying it as soon as more cash is earned. The impact on gearing could also be reduced by acquiring some assets on operating leases, or by the sale and lease back of some existing assets. The directors should take action to manage the interest rate risk that Refgun Co will suffer.

I hope that this article has provided students with an approach that they can use when answering a question of this nature. All too often students have a feel for the type of finance that may be suitable for a company, but cannot support or justify what they are proposing and, hence, cannot earn the marks that are available.

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