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# Answers

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- 1 (a) Washi Co may want to invest in overseas projects for a number of reasons which result in competitive advantage for it, for example:

Investing overseas may give Washi Co access to new markets and/or enable it to develop a market for its products in locations where none existed before. Being involved in marketing and selling products in overseas markets may also help it gain an understanding of the needs of customers, which it may not have had if it merely exported its products.

Investing overseas may give Washi Co easier and cheaper access to raw materials it needs. It would therefore make good strategic sense for it to undertake the overseas investment.

Investing in projects internationally may give Washi Co access to cheaper labour resources and/or access to expertise which may not be readily available in Japan. This could therefore lead to reduction in costs and give Washi Co an edge against its competitors.

Closer proximity to markets, raw materials and labour resources may enable Washi Co to reduce its costs. For example, transportation and other costs related to logistics may be reduced if products are manufactured close to the markets where they are sold.

Risk, such as economic risk resulting from long-term currency fluctuations, may be reduced where costs and revenues are matched and therefore naturally hedged.

Washi Co may increase its reputation because it is based in the country within which it trades leading to a competitive edge against its rivals.

International investments might reduce both the unsystematic and systematic risks for Washi Co if its shareholders only hold well diversified portfolios in domestic markets, but not internationally.

*(Note: Credit will be given for alternative valid areas of discussion)*

**(b) Advantages**

Exchange traded options are readily available on the financial markets, their price and contract details are transparent, and there is no need to negotiate these. Greater transparency and tight regulations can make exchange traded options less risky. For these reasons, exchange traded options' transaction costs can be lower.

The option buyer can sell (close) the options before expiry. American style options can be exercised any time before expiry and most traded options are American style options, whereas over-the-counter options tend to be European style options.

**Disadvantages**

The maturity date and contract sizes for exchange traded options are fixed, whereas over-the-counter options can be tailored to the needs of parties buying and selling the options.

Exchange traded options tend to be of shorter terms, so if longer term options are needed, then they would probably need to be over-the-counter.

A wider range of products (for example, a greater choice of currencies) is normally available in over-the-counter options markets.

**(c) Report to the board of directors (BoD), Washi Co**

**Introduction**

This report evaluates whether or not Washi Co should invest in the Airone project and the amount of debt finance required of JPY 3,408.6 million (appendix 1) to fund the project. The evaluation considers both the financial and the non-financial factors.

**Evaluation of the preferred hedge choice and debt finance required**

The income from the sale of the European subsidiary is maximised when futures contracts are used. Therefore, these are chosen as Washi Co will borrow the least amount of debt finance as a result. However, compared to the forward contract, futures are marked-to-market daily and require a margin to be placed with the broker. This could affect Washi Co's liquidity position. The assumption has been made that basis reduces proportionally as the futures contracts approach expiry, but there is no guarantee that this will be the case. Therefore, basis risk still exists with futures contracts. Although forward contracts give a smaller return, there is no basis risk and margin requirements. However, they do contain a higher risk of default as they are not market traded. Options give the lowest return but would give Washi Co the flexibility of not exercising the option should the Euro strengthen against the Yen.

Although the EUR 80 million receipt from the sale of the subsidiary has been agreed, there may be a risk that the sale may fall through and/or the funds or some proportion of the funds are not received. Washi Co may need to assess and factor in this risk, however small it may be.

The amount of interest on deposit is based on the current short-dated Japanese treasury bills and the estimate of the borrowing requirement is computed from the predicted exchange rate between ARD and JPY in a year's time, based on the purchasing power parity. Both these estimates could be inaccurate if changes occur over the coming months. Although insufficient

information is provided for a financial assessment, Washi Co should explore the possibility of converting the EUR into ARD immediately on receipt and keeping it in an ARD bank account until needed, instead of first converting EUR into JPY and then into ARD.

Using debt finance to make up any shortfall in the funding requirement may be appropriate for Washi Co given that it is an unlisted company and therefore access to other sources of funding may be limited. Nevertheless, Washi Co should assess how the extra borrowing would affect any restrictive covenants placed on it and the impact on its cost of capital. Since the amount seems to be small in the context of the project as a whole, this may not be a major problem.

Washi Co should also explore whether or not investing in the Airone project restricts its ability to fund other projects or affects its ability to continue normal business activity, especially if Washi Co is facing the possibility of hard capital rationing.

#### **Evaluation of the Airone project**

The net present value of the Airone project is estimated to be JPY (457) million (appendix 2). Given the negative net present value, the initial recommendation would be to reject the project. However, given that the result is marginal, Washi Co should consider the following factors before rejecting the project.

At present, Washi Co does not have a significant presence in the part of the world where Airone is located. Taking on the project may make good strategic sense and provide a platform for Washi Co to establish its presence in that part of the world.

Furthermore, once Washi Co has established itself in Airone, it may be able to develop further opportunities and new projects. The value of these follow-on options has not been incorporated into the financial assessment. Washi Co should explore the possibility of such opportunities and their possible value.

The financial assessment ends abruptly at the end of the four years. No indication is given on what would happen to the project thereafter. It may be sold as a going concern or, if closed, its land and assets may be sold. The cash flows from these possible courses of action need to be incorporated into the assessment, and these could make the project worthwhile.

A number of assumptions and estimates would have been made in the financial assessment. For example, the rate of inflation used for future figures is the current rate and the tax rate used is the current rate, these may well change in the coming years. Therefore, it is best to undertake sensitivity analysis and produce a number of financial assessments before making any firm commitment to proceed with the project or deciding to reject it.

#### **Conclusion and recommendation**

The income from the sale of the European subsidiary is maximised when futures contracts are used, but Washi Co should weigh this against the benefits and drawbacks of all hedging instruments before making a final decision.

Although the project is currently giving a negative net present value, rejecting it at the outset is premature. A number of factors, discussed above, need to be considered and assessed before a final decision is made. Sensitivity analysis would be very helpful in this respect.

Finally, Washi Co should consider alternative uses for the funding which will be dedicated to the project. These alternative uses for the finance need to be considered before any decision is made, especially if Washi Co is facing the possibility of hard capital rationing.

**Report compiled by:**

**Date**

#### **APPENDICES:**

##### **Appendix 1 (Part (c) (i)): Japanese Yen receivable from sale of European subsidiary under each hedging choice and the additional debt finance needed to fund the Airone project**

###### **Forward rate**

Since it is a EUR receipt, the lock-in rate of JPY125·3 per EUR will be used.

Expected receipt from sale: EUR 80m x 125·3 = JPY 10,024m

###### **Futures contracts**

The futures contracts need to show a gain when the Euro depreciates against the Yen, therefore a short position is needed, using the seven-month contracts. It is assumed that basis will depreciate proportionally to the time expired.

###### **Predicted futures rate**

$125·2 + 1/3 \times (126·9 - 125·2) = 125·8$

[Or:  $125·2 + 1/7 \times (129·2 - 125·2) = 125·8$ ]

Number of contracts sold = EUR 80,000,000/EUR 125,000 = 640 contracts

Expected receipt from sale: EUR 125,000 x 640 x 125·8 = JPY 10,064m

###### **Options contracts**

640 seven-month put options contracts will be purchased to protect against a depreciation of Euro.

If options are exercised:

EUR 125,000 x 640 x 126 = JPY 10,080m

Premium payable = JPY 3·8 x 125,000 x 640 = JPY 304m

Net income = JPY 10,080m - JPY 304m = JPY 9,776m

**Conclusion**

Futures contracts give the highest receipt and will, therefore, be used to hedge the expected Euro receipt.

**Receipt invested**

Invested for further six months till needed for the Airone project.

JPY 10,064m x (1 + (0·012/2)) = JPY 10,124·4m

Spot cross rates: 0·70 – 0·74 ARD per JPY 1

[92·7/132·4 = 0·70 and 95·6/129·2 = 0·74]

Expected ARD/JPY conversion spot rate in 12 months = 0·70 x 1·09/1·015 = 0·75

**Additional debt finance needed to fund Airone project**

Investment amount required = ARD 10,150m/0·75 = JPY 13,533m

Debt finance required = JPY 13,533m – JPY 10,124·4m = JPY 3,408·6m

**Appendix 2 (Part (c) (ii): Airone project net present value**

Project year	0	1	2	3	4
Cash flows in ARD (millions)	(10,150)	2,530	5,760	6,780	1,655
Future exchange rate ARD/JPY (W1)	0·75	0·81	0·87	0·93	1·00

In JPY million

Project year	0	1	2	3	4
Cash flows	(13,533)	3,123	6,621	7,290	1,655
Lost contribution		(110)	(112)	(113)	(115)
Tax saving on lost contribution (30%)		33	34	34	35
Contribution: components (W2)		300	609	644	79
Tax on components cont. (30%)		(90)	(183)	(193)	(24)
Additional tax payable (15%) (W3)		(333)	(966)	(1,097)	(45)
Net cash flows	(13,533)	2,923	6,003	6,565	1,585
Present value (discounted at 12%)	(13,533)	2,610	4,784	4,674	1,008

Expected net present value is JPY (457)m

**Workings:****W1: Predicted future exchange rate (ARD/JPY)**

Project year	0	1	2	3	4
	0·70 x	0·75 x	0·81 x	0·87 x	0·93 x
	1·09/1·015	1·09/1·015	1·09/1·015	1·09/1·015	1·09/1·015
Exchange rate ARD/JPY	0·75	0·81	0·87	0·93	1·00

**W2: Components contribution**

Project year	1	2	3	4
In JPY millions				
Components revenue (post inflation)	1,200	2,436	2,576	314
Contribution (25%)	300	609	644	79

**W3: Additional tax payable**

Project year	1	2	3	4
Pre-tax profits (ARD m)	1,800	5,600	6,800	300
Additional tax payable at 15% (JPY m)	1,800/0·81 x 0·15 = 333	5,600/0·87 x 0·15 = 966	6,800/0·93 x 0·15 = 1,097	300/1·0 x 0·15 = 45

**Tutorial note:** Credit would have been awarded if the exchange rates for years 1 to 4 were based on 0·74 rather than 0·70, or even if a mid-rate of 0·72 were used instead.

- (d) It is difficult to conclude definitively whether a centralised treasury department is beneficial or not in all circumstances and for all companies. It depends on each company itself and the circumstances it faces. Washi Co should take this into account before making a final decision.

**Benefits of a centralised treasury department**

Having a centralised treasury management function avoids the need to have many bank accounts and may therefore reduce transactions costs and high bank charges.

Large cash deposits may give Washi Co access to a larger, diverse range of investment opportunities and it may be able to earn interest on a short-term basis, to which smaller cash deposits do not have access. On the other hand, if bulk borrowings are required, it may be possible for Washi Co to negotiate lower interest rates, which it would not be able to do on smaller borrowings.

A centralised treasury function can offer the opportunity for Washi Co to match income and expenditure and reduce the need for excessive risk management, and thereby reduce costs related to this.

A centralised treasury management department could hire experts, which smaller, diverse treasury management departments may not have access to.

A centralised treasury function may be better able to access what is beneficial for Washi Co as a whole, whereas local treasury functions may lead to dysfunctional behaviour.

#### **Benefits of separate (decentralised) treasury departments**

It could be argued that decentralised treasury departments are better able to match and judge the funding required with the need for asset purchases for investment purposes on a local level. Therefore, they may be able to respond quicker when opportunities arise and so could be more effective and efficient.

Individual departments within a subsidiary may have better relationships with the treasury departments of that subsidiary and are therefore able to present their case without lengthy bureaucratic delays.

Ultimately, the benefits may be implicit rather than explicit. Having decentralised treasury departments may make the subsidiary companies' senior management and directors more empowered and have greater autonomy. This in turn may increase their levels of motivation, as they are more in control of their own future, resulting in better decisions being made.

## **2 (a) Profitability**

Tillinton Co's chief executive is correct in saying that the absolute increase in revenue and gross profits on all products was greater in 20X3 than 20X2, but the % increase in revenue was smaller on all products, and the % increase in gross profit on toys was also lower. The % increase on the electronic toys shows the biggest fall, possibly indicating greater competition.

The improvements in operations mentioned by the chief executive seem to have maintained gross and operating profit margins and resulted in the absolute overall increases in gross and operating profits. However, this aspect of performance is almost all attributable to Tillinton Co's older products. The gross profit on electronic toys has hardly increased and the gross profit margin has fallen over the last two years. Although the margin remains higher than on the other products, even the 20X3 margin may not be sustainable. If competitors are starting to catch up with Tillinton Co, then the profit margin on the current range of electronic toys may continue to fall in future years, as prices fall to maintain market share.

Despite the emphasis on developing the products, the revenue generated by electronic toys is still below the revenue generated by non-electronic toys.

Asset turnover and return on capital employed have risen significantly over the last two years. However, part of the reason for the 20X3 increases was the significant increase in current liabilities. The further amount of investment which the chief executive appears to be contemplating suggests that asset turnover and return on capital employed may fall in future years, particularly if profit margins on electronic toys cannot be sustained.

#### **Liquidity**

The figures for other current assets seem to support the chief executive's contention that working capital is being managed better, as other current assets are falling as revenue and gross profits are rising.

However, the fall of the current ratio from 1.52 to 0.64 is significant, and the biggest reason for the fall in 20X3 was the large increase in current liabilities. Cash balances have remained at a low level, despite higher revenues and profit. Possibly there is now a bank overdraft, which could have contributed to the significant increase in finance costs between 20X2 and 20X3. It would seem that cash reserves have been exhausted by the combination of investment in non-current assets and the payments to finance providers (both interest and dividends), and Tillinton Co is more dependent on short-term liability finance. Slowdown in any product area, particularly electronic toys, may result in significant liquidity problems.

#### **Solvency**

Gearing has fallen over the last two years, but this is due to share price increases which may not be sustainable. If book values rather than market values are used to calculate gearing, the fall in gearing is much smaller. More information is needed about why finance costs have increased so much, leading to the deterioration in interest rate cover. Tillinton Co has only taken out an additional \$30 million in long-term loans. Although costs on these may be higher than on its current loans, this would not account for all the increase in finance costs. As discussed above, Tillinton Co may be making use of overdraft finance. The fact that current liabilities have increased much more than non-current liabilities could be an indication that Tillinton Co is having problems raising all the longer term loan finance which it requires.

The figures suggest that Tillinton Co's board needs to review future financing carefully if the company wants to make further investment in electronic products. At some stage, the board will have to consider raising further finance, either through an issue of shares or through selling off parts of its operations.

#### **Investor ratios**

Both earnings and dividends per share have risen since 20X1, which could help explain the significant increase in share price. Dividend cover has remained around 2.0 despite an increase in earnings. Although dividends have increased, dividend yield has fallen since 20X1. The increase in total shareholder return is due solely to the increases in share price, which have also resulted in the price-earnings ratio increasing in 20X3. The current rate of share price increase does not appear to be warranted by the most recent results and may be partly due to generous dividend levels, which may not be sustainable if more cash is required for investment.

**Conclusion**

Despite the chief executive's optimistic message in the annual report, the benefits from the electronic toys development may be short-lived. There appears to be a mismatch between investment, dividend and financing policies. As discussed, margins on current products may fall further and there is no guarantee that margins on new electronic toys or other products will be higher if competition generally is increasing.

Further significant investment in electronic toys or other goods may be difficult to finance. Increased reliance on short-term finance is clearly not sustainable, but obtaining more debt may be problematic, particularly if gearing levels rise as share prices fall. Tillinton Co seems reluctant to take advantage of high share price levels to issue equity capital. This, plus the increase in dividends, may indicate Tillinton Co's board is unwilling to risk upsetting shareholders, despite the large increases in share price. The chief executive may be right in saying that funds may have to be obtained by selling off one of the other parts of the business, but revenue and profits from the older products may be more sustainable. An increased concentration on electronic products may be a high-risk strategy. Possibly, if investors become less positive towards the electronic goods sector, they may realise this, resulting in an increase in cost of capital and a fall in share price.

*Note: Credit will be given for relevant, alternative approaches to the calculations and discussion.*

**Appendix**

	20X1	20X2	20X3
<b>Profitability</b>			
% increase in revenue		18·1	17·0
Gross profit %	27·5	27·6	27·6
% increase in gross profit		18·4	17·1
Operating profit %	14·8	15·4	15·7
% increase in operating profit		22·9	19·0
Asset turnover (revenue/(total assets – current liabilities))	0·65	0·73	0·81
Return on capital employed % (operating profit % x asset turnover)	9·6	11·2	12·7
<b>Liquidity</b>			
Current ratio	1·52	1·15	0·64
<b>Solvency</b>			
Gearing (non-current liabilities/(non-current liabilities + market value of share capital)) %	29·4	25·8	22·0
Gearing (non-current liabilities/(non-current liabilities + book value of share capital + reserves)) %	43·3	43·0	42·2
Interest cover	4·5	5·0	4·5
<b>Investors</b>			
Earnings per share (\$)	0·15	0·19	0·21
Dividend per share (\$)	0·075	0·09	0·105
Dividend cover	1·98	2·10	2·01
Market price per \$0·50 share	2·76	3·49	4·44
Price/earnings ratio	18·4	18·4	21·1
Dividend yield % (dividend per share/share price)	2·72	2·58	2·36
Share price gain/(loss) %	10·40	26·45	27·22
Total shareholder return %	13·12	29·03	29·58
<b>Types of product</b>			
<b>Electronic toys</b>			
% increase in revenue		28·1	22·3
Gross profit %	40·2	35·1	29·0
% increase in gross profit		12·0	1·0
<b>Other toys</b>			
% increase in revenue		15·9	15·4
Gross profit %	23·8	25·1	26·0
% increase in gross profit		22·2	19·3
<b>Clothing</b>			
% increase in revenue		15·9	15·8
Gross profit %	25·1	26·0	27·7
% Increase in gross profit		20·1	23·5

*(Note: Credit will be given for alternative, relevant, calculations and discussion. Candidates will not be expected to complete all the calculations above to obtain 10 marks.)*

- (b) Tillinton Co's shares may be overvalued because share prices generally are too high. The situation may be a stock market bubble. Share prices have been rising consistently recently and this could be encouraging investors to buy more shares, further increasing share prices.

The bubble could be more localised. Tillinton Co seems to be positioning itself as much in terms of producing technologically-advanced electronic products as manufacturing toys. The electronic goods sector may be more likely than other sectors to attract investors on the basis of future profit potential, with investors possibly following a herd instinct, investing because others have been investing in the expectation of future gains.

Possibly, investors are more persuaded by the chairman's confident language and future promises than they are by the concerns the figures suggest. They may also be paying excessive attention to the most recent set of results, rather than seeing them in the context of whether they can be sustained in the future.

If investors are attempting to make a valuation, they could prefer using a model which confirms what they believe the shares are worth (confirmation bias), rather than one which gives a more reliable indication of value. As discussed above, shareholders may be basing their estimates of value on the recent increases in dividend, even though it may be doubtful whether this is sustainable.

- 3 (a) (i)** Selorne Co current equity value = 50m shares x \$6.50 = \$325m  
 Chawon Co current equity value = \$7 million x 1.03/(0.15 - 0.03) = \$60.1m  
 Selorne Co free cash flow to equity = \$325m/8 = \$40.6m  
 Combined company valuation = (\$40.6m + \$7m + \$5m) x 8 = \$420.8m  
 Additional value created = \$420.8m - \$325m - \$60.1m = \$35.7m
- (ii)** Chris Chawon will hold 2m x 5 = 10m shares in combined company  
 Value per share in combined company = \$420.8m/(50m + 10m) = \$7.01  
 Value of Chris Chawon's shareholding = 10m x \$7.01 = \$70.1m  
 Gain created for Chris Chawon = \$70.1m - \$60.1m = \$10m  
 Gain created for Selorne Co shareholders = \$35.7m - \$10m = \$25.7m  
 Chris Chawon will have a 16.7% (10m/(50m + 10m)) shareholding in the combined company but 28.0% (\$10m/\$35.7m) of the gain on the combination will be attributable to him. Shareholders who are doubtful about the merger may question whether this is excessive, as possibly Chawon Co's desire to sell is being prompted by the company struggling to remain solvent.

**(b) Reliability of synergy estimates**

The reliability of the estimates may vary depending on the synergies involved. The synergies relating to size and services offered will depend on the ability to gain large contracts and neither company has had recent success in doing this. However, the contracts recently bid for by Chawon Co might have been won if the larger combined company had bid. The synergies relating to operations and working practices may be difficult to obtain if it is difficult to change the employment conditions of Selorne Co drivers. Claims that improved driver utilisation may reduce spare capacity may be true, but there is likely to be less spare capacity anyway if more contracts are won.

Other synergies may be easier to obtain. Duplication of premises in some locations should be eliminated easily, providing Chawon Co does not have onerous rental contracts and there is space on Selorne Co's sites. Combining central administrative functions should reduce some staffing costs, although these are likely to be smaller synergies than the potential operational synergies.

**Problems with achieving synergies**

A significant problem may be lack of unity at the top of the company. Selorne Co's directors are not all keen on the acquisition and this may spill over into being unable to agree on a clear post-acquisition plan. If lack of unity at board level becomes apparent to staff, it may be difficult to achieve unity at employee level.

Chris Chawon's role in the combined company may also make synergies difficult to achieve. He will have a significant shareholding and a place on the board, so it will be difficult for him not to be involved. Possibly he has the abilities and desire to achieve changes in operational practices which other board members lack. However, if Chris is given the leading role he requires, there may be a change in management style which may upset long-serving Selorne Co staff. Some may leave, jeopardising the continuity which seems to have been an important part of Selorne Co's success.

Another reason for possible problems with staff is the differing remuneration arrangements. Selorne Co's staff may have stayed with the company because both their job prospects and their remuneration have been safe. Attempts to change their employment conditions may lead to resistance and employee departures. Ex-Chawon Co employees who have been with the company for a while may expect salaries to be increased to be more in line with Selorne Co's employees, particularly if bonus arrangements become less generous.

The success of the acquisition may also depend on how well the staff of the two businesses integrate. Integration may be difficult to achieve. Many of Chawon Co's staff will not have the necessary licence to drive the Selorne Co lorries and may not wish to go through the process of obtaining this licence. Selorne Co drivers may be reluctant to drive the smaller vehicles. Staff sticking to what they have been used to driving is likely to prolong a 'them and us' culture.

**(c) Availability**

Although the finance director has identified possible sources of finance, there is no guarantee that they will necessarily be available. The success of a rights issue may well depend on the willingness and ability of the director-shareholders to subscribe. It may be difficult to find others willing to take up the directors' rights if they do not subscribe, as the directors' unwillingness may be seen as indicating a lack of confidence in the business. A rights issue may also take longer to arrange than other methods, which may be significant if Selorne Co needs the finance quickly to complete the acquisition.

Obtaining a bank loan or mezzanine finance may be difficult if Selorne Co takes on Chawon Co's debt and is viewed as too highly geared as a result. The success of a convertible debt issue may depend on the terms, also how possible subscribers view the future prospects of Selorne Co and the marketability of the shares.

**Cost**

Cost will be another significant factor. The cost of equity will normally be viewed as higher anyway than the cost of debt. Issue costs of equity are likely to be higher than those of debt. As Selorne Co's share price is stable, its current external shareholders appear content with the dividends paid, so there does not appear to be pressure to increase them. In any case, the board is not required to pay dividends every year.

Fixed interest cost on the bank loan may become a burden if interest rates fall, but the cost can be forecast with certainty. Because the mezzanine finance is unsecured, it is likely to have a higher interest cost than the bank loan. The rights of conversion to shares attaching to the convertible debt will mean a lower rate can be set for this, but the cost will depend on how appealing the possibility of conversion is. Again, the finance cost of debt will depend on the finance providers' attitude towards the increased debt burden resulting from the acquisition of Chawon Co.

**Director preferences**

The choice will also be determined by Selorne Co's board's attitude to gearing as well as how the possible finance providers view the company's gearing level. The board may feel that Selorne Co has reached, or exceeded, the gearing level which it would regard as desirable by taking on Chawon Co's debt. If this is the case, the board would have to use equity finance. The board may also be influenced by how gearing is likely to change over time. Over the next few years gearing may fall as Selorne Co makes profits and (hopefully) its share price increases. Chawon Co's debt may be repaid and not replaced. The convertible debt and mezzanine finance will also not be long-term sources of debt finance.

**Control of Selorne Co**

Selorne Co's board decision may also be determined by the implications of the different sources of finance for control of the company. The directors' control of the company will not be diminished if a rights issue is used and they take up their rights. An issue of shares arising from the convertible debt would change the balance of shareholdings, so the directors would have to decide how significant this would be. Mezzanine finance may also offer conversion rights, but possibly these could only be exercised if Selorne Co defaulted, which the board may view as unlikely.

Using a bank loan will have no impact on share capital, but the bank may impose restrictions which the directors are unwilling to bear, particularly if high gearing is an issue. These conditions could include restrictions on the sale of assets, limitations of dividends, or requiring accounting figures, for example, liquidity or solvency ratios, not to go beyond certain levels.

**Mix of finance**

Ultimately the board may also consider the possibility of a mix of finance. The offer could be backed by a core of equity finance from a rights issue, but if Selorne Co has to pay a higher price than expected, the difference could be made up by mezzanine finance.

*Note: Credit will be given for alternative, relevant answers.*



**Strategic Professional – Options, Paper AFM  
Advanced Financial Management**

**September 2018 Marking Scheme**

		<i>Marks</i>
<b>1</b>	<b>(a)</b> 1–2 marks per valid point	Max <u>5</u>
	<b>(b)</b> Advantages	2–3
	Disadvantages	<u>2–3</u>
		Max <u>5</u>
<b>(c)</b>	<b>(i) (Appendix 1)</b>	
	Amount to be received based on forward rate	1
	Decision to go short on futures	1
	Estimate of futures rate in six months based on basis	1
	Amount to be received based on futures market	1
	Decision to purchase put options	1
	Premium payable	1
	Amount to be received based on options market	1
	Decision: select appropriate hedge instrument	1
	JPY receivable following further six months of investment	1
	Estimate of current cross rate(s)	1
	Estimate of ARD/JPY rate in one year's time	1
	Debt borrowing required	<u>1</u>
		<b>12</b>
	<b>(ii) (Appendix 2)</b>	
	Estimate of future ARD/JPY rates	1
	Lost contribution	1
	Tax saving on lost contribution	1
	Contribution from sales of components	2
	Tax on contribution from components sales	1
	Additional tax payable in Japan	2
	Present values and net present value	<u>1</u>
		<b>9</b>
	<b>(iii) (Report on project and funding evaluation)</b>	
	Evaluation of hedge choice and debt finance required	3–4
	Evaluation of Airone project	3–4
	Conclusion	<u>1–2</u>
		Max <u>8</u>
	<b>Professional marks for part (c)</b>	
	Report format	1
	Structure and presentation of the report	<u>3</u>
		<b>4</b>
<b>(d)</b>	Benefits of a centralised treasury department	3–4
	Benefits of decentralised treasury departments	2–3
	Over-arching commentary	1
	<i>(Note: Max 6 marks if no over-arching commentary)</i>	
		Max <u>7</u>
	<b>Total</b>	<b><u>50</u></b>

		<i>Marks</i>
<b>2</b>	<b>(a) Ratios</b>	
	Profitability	2–3
	Liquidity	1
	Solvency	1–2
	Investor	3–4
	Other ratios and trends including product type split	2–3
	<b>Max</b>	<u>10</u>
	<b>Discussion</b>	
	Profitability	3–4
	Liquidity	2–3
	Solvency	2–3
	Investor	2–3
	Conclusion	2–3
	<b>Max</b>	<u>10</u>
	<b>(b) Up to 2 marks per relevant point</b>	<b>Max</b> <u>5</u>
		<b>Total</b> <u>25</u>
<b>3</b>	<b>(a) (i)</b>	
	Valuation of Selorne Co	1
	Valuation of Chawon Co	2
	Valuation of Selorne Co FCFE	1
	Valuation of combined company	1
	Additional value created	1
		<u>6</u>
	<b>(ii)</b>	
	Value per share combined company	1
	Value of Chris Chawon's shareholding in combined company	1
	Share of gain created for Chris Chawon	1
	Share of gain created for Selorne Co shareholders	1
	Comments	2
		<u>6</u>
	<b>(b) Up to 2 marks per relevant point discussed. Discussion must be related to Selorne Co to obtain 2 marks for a point.</b>	<b>Max</b> <u>7</u>
	<b>(c) Up to 2 marks per relevant factor discussed</b>	<b>Max</b> <u>6</u>
		<b>Total</b> <u>25</u>