

Chapter

# 9

# Corporate Reorganisations

This chapter deals mainly with mergers and takeovers. It is very highly examinable. The discussion areas overlap with the business strategy paper, so don't be afraid to bring elements from business strategy into your answers.

The discussion areas usually carry more marks than numerical. The key to maximising your marks in this area is to think very broadly, incorporating all stakeholders and environment into your answer.

## 9.1 Mergers and takeovers

The terms mergers and takeovers are inter-related. When a company acquires the majority of the shares of another company, the acquired company is said to be taken over. Where two companies come together to operate as one entity, the term mergers is used.

The reason for mergers and takeovers is for **integration** and four types can be identified. The target company is the company being acquired and the predator company is the company doing the acquiring.

Integration leads to a more effective running of the business and thereby saving costs and increasing profits.

<u>Types of integration</u>	
<b>Horizontal</b>	The target company has same operations, and is in the same industry as the predator company. Greater economies of scale can be achieved. e.g. integration of two firms in exactly the same industry and at the same stage of production, such as Mars taking over or merging with Cadbury.
<b>Backwards vertical</b>	Predator moves back down its supply chain, so therefore purchases its suppliers ó to increase quality and have control of goods. e.g. a firm integrating backwards within the supply chain within its industry, with a supplier involved in a different stage of production, such as Mars integrating with a coco plantation or a coco wholesaler.
<b>Forward vertical</b>	Predator moves forward and buys its customers (ie brewery buying a pub chain) ó ensures control of market place, pricing etc. e.g. a firm integrating forwards within the supply chain within its industry, towards or closer to the customer involved in a different stage of production, such as Mars integrating with Thornton's retail shops.
<b>Conglomerate or lateral integration</b>	Predator wants companies in different industries, thereby reducing risk by diversification. e.g. integrating two organisations which are involved in different products and markets, such as Mars integrating with Next clothing stores.

When two or more companies join together there should be a synergistic effect. Synergy is when  $2 + 2 = 5$ . The net present value of the two companies combined is greater than the individual NPVs. This means gains to the shareholders are more with integration rather than separate. The combine results are better, than the results as if the companies were operating separately.

The main reasons for mergers and acquisitions, is to maximise shareholder wealth, otherwise it would not be worthwhile.

<b><u>Reasons for mergers and acquisitions</u></b>	
<b>Economies of scale</b>	Larger capacity results in reduced costs. With vertical integration it is easier to achieve this as duplication is avoided. For conglomerates, the combining of some of the departments will achieve this (centralised head office, HR department, Marketing etc)
<b>Increased market share</b>	Thereby increasing profitability and becoming a leader in the market, which improves earnings quality
<b>Improved efficiency</b>	Poor management and inefficient operations will be improved
<b>Reducing the competition</b>	Profitability can be increased if the competition was removed. However the implications from the competition commission need to be considered.
<b>Tax relief</b>	Group companies and taxation relief. A company not being able to obtain tax relief because it is not generating profits can acquire or merge with company which generates profits.
<b>Liquidity</b>	The target company may be cash rich and this will improve the group's statement of financial position (balance sheet)
<b>Asset stripping</b>	Acquiring another entity and then selling off their assets.
<b>Diversification</b>	This helps reduce risk by acquiring businesses in other industries.

**A useful matrix for acquisitions is Ansoff Matrix (business strategy knowledge)**

The Ansoff product/market growth strategies model is a framework for the creation of strategic options an organisation could pursue. It is primarily aimed at generating strategic options to provide growth for an organisation.

	<i>Existing Product</i>	<i>New Product / Service</i>
<i>Existing Market</i>	Market Penetration	Product / Service Development
<i>New Market</i>	Market Development	Diversification

### **Market penetration**

A strategy which seeks to increase sales of existing products or services to the same market.

- Price reduction strategies
- Aggressive sales promotion and advertising
- Brand building and customer loyalty schemes
- Sales fleet management to gain prime shelf position
- Horizontal integration e.g. buy out competition

### **Product development**

A strategy which seeks to increase sales by the development of new products or services to the same market e.g. an entirely new or improved existing product, with more features or modifications being sold.

- R&D and reverse engineering to build upon existing knowledge about consumers
- Modifications to products to reflect changing needs, wants or values
- Innovative change to products with novelty appeal e.g. new ranges or flavours

### **Market development**

A strategy which seeks to sell existing products in new geographical markets or new market segments. A strategy to find new uses for existing products or services.

- Entering new geographical markets
- Entering new customer segments

### **Diversification**

A strategy which seeks to move into new products and new markets in which the organisation is unfamiliar with.

- Related e.g. vertical forward or backward integration
- Unrelated e.g. Virgin Group, conglomerate growth or lateral integration

Mergers and takeovers will be for 4 strategic options as detailed above.

Acquiring or merging with companies that fit the strategic needs of the organisation is a quick way of achieving the strategic goal.

## 9.2 Factors to consider in a takeover / merger

Before a company decides to acquire or merge the following considerations need to taken:

<b>Cost of acquisition</b>	Can the company afford it, and is a worthwhile investment?
<b>Reaction of predator's shareholders</b>	How will the shareholders react, will they approve the bid? Is it going to increase their wealth?
<b>Reaction of target's shareholders</b>	Target shareholders need to approve the bid, so therefore it has to be financially worthwhile for them.
<b>Form of purchase consideration</b>	Cash, shares in predator company or both?
<b>Accounting implications</b>	Different accounting policies (ie treatment of development expenditure SSAP13), International accounting standards.
<b>Future plans</b>	Future policies on staff, integration, dividends etc

Takeovers and mergers have to confirm to the stock exchange rules. You are not required to have detailed knowledge of this.

## 9.3 Target company

The target company shareholders will have to approve the bid made by the predator company. The directors of the target company will have a big influence on their shareholders.

<b>Rejection of bid by target company</b>
<ul style="list-style-type: none"><li>▪ Unwillingness to sell by the shareholders</li><li>▪ The offer terms are not satisfactory. Initial rejection may lead to a better offer</li><li>▪ The target company can see no real post acquisition benefits</li><li>▪ The employees strongly appose the offer</li></ul>

A quoted company is always at the risk of being taken over due to the marketability of their shares.

Tactics can be employed by the company to protect itself.

## 1 Before the bid

<b>Types of Shareholders</b>	Having the right shareholders on board who can be influenced by the board not to sell their shares. Good relationship with the shareholders is vital and this is done through effective communication.
<b>AA</b>	Majority in articles of association can be set to high limits to approve an acquisition or merger.
<b>Poison pills</b>	Shareholders may be given rights to buy shares or convertible loan stocks which in the event of a takeover bid are exercised. This will increase share capital and require a larger offer from the predator company, thereby deterring them.
<b>Asset values</b>	Ensure asset values of the company are current so that a high price needs to be paid for them and the shareholders are aware of the true price of their share.

## 2 After the bid

Tactics can be undertaken by the directors to ensure that their shareholders do not accept the bid, if that is what they desire.

<b>Reject</b>	The shareholders can reject the bid within 14 days of the offer.
<b>Good forecasts</b>	Forecast better profits to raise the share price, therefore making it more expensive for the predator company. However the forecast has to be achievable or it could have an adverse affect on the management. Profit forecasts have to be endorsed by the company's financial advisors
<b>White knight</b>	Another company can be found who can make a bid for the target company, which will be more acceptable to the shareholders (õwhite knightö).
<b>Give bad publicity</b>	Attacking the predator company to give it a bad image, like criticise their management style and products in the papers. But could be faced with liable charges if accusations are unfounded.
<b>Competition commission</b>	Get the government involved and show that the takeover would not be in the interests of the public.
<b>Management buyout</b>	The management of the company can buy out their shareholders.

## 9.4 Predator shareholders

The predator company's shareholders may not approve the bid for various reasons.

<b>Reduction in EPS</b>	If consideration is in shares, the number of shares issued will increase, thereby reducing EPS.
<b>Risky</b>	The target company may be in a risky industry.
<b>Control</b>	There will be a change in effective control if more shares issued.
<b>Gearing</b>	If target company is highly geared, the predator company's gearing will change, and there will more financial risk.

## 9.5 Regulation

Mergers and acquisitions are regulated by:

<b>Competition commission</b>	If office of fair trading thinks the merger may be against public interest, it can refer it to the competition commission, which can accept or reject the proposal, or lay down certain conditions.
<b>City code</b>	This is a code which companies are expected to follow during a takeover or merger. Administered by takeover panel.
<b>European commission</b>	Act against competition restrictions in EU. If Commission finds mergers incompatible with common market, it can prevent them

## **Role of commission authorities**

The Competition Directorate is one of the independent public bodies which help ensure healthy competition between companies which then benefit the customers and the economy. The Government of most countries are committed to promoting competition in their economy to improve productivity, performance and to make markets work well for consumers so as to achieve prosperity for all.

The Competition Directorate will normally investigate the following areas:

### **(i) Mergers and takeovers**

This is when larger companies will gain more than say 25% market share and might prove anti-competitive.

### **(ii) Markets**

In markets when it appears that competition might be distorted or restricted in a particular market

### **(iii) Regulatory**

In regulatory affairs when the major regulated industries in the country may not be operating fairly.

The Competition Directorate will help the country by:

- Increasing the level of competition in the economy.
- Increasing the economic performance and productivity in the international economy, where competitive pressures are becoming increasingly global.
- By benefiting the economy through lower prices, wider range of choice, more innovation and higher quality products and services.

### **General principles of the city code**

- All shareholders treated similarly
- Information available to all shareholders and must be free of bias
- Shareholders are given sufficient information, advice and time.
- Private side deals and changes in the company's constitution are not allowed during a takeover period.
- Directors not to frustrate takeover or act illegally (e.g. secretly having shares bought to raise share price)

## 9.6 Purchase consideration

The type of offer made to the target company's shareholders will have a big influence on acceptance. Obviously the price has to be set first and various methods were looked at earlier on.

<b>Cash purchases</b>	The shareholders of the target company are bought out completely and have no further stake in the business. This is good if the predator shareholders want to retain effective control, however the company has to be cash rich, or raise more finance through debt or equity. This will impact on their capital structure.
<b>Share exchange</b>	Predator company offers their shares in exchange for target company's shares. So the target shareholders become part of the predator shareholders and therefore have a say. No cash is needed. Number of share offered depends on the valuation of the target company. The way that future gains of the combined entities are split is open to negotiation.
<b>Earn out arrangements</b>	The consideration could be delayed and paid only upon achievement of certain criteria. For example the predator company may pay additional cash if the acquired company achieves certain set profit levels. It is a type of contingent consideration. It will help the predator company as it delays cash dispersal, and also if the acquired company does not perform, the predator company has not paid too much.

Most commonly both cash and share exchange are used to make the offer more attractive.

Other forms of consideration include:

Paper consideration can be in the form of debt, preference shares and loan stock. This would mean the predator company issues these marketable securities in exchange for the target company to sell their shares. The predator company has to consider the impact on gearing and financial risk. The target company's preference on this would depend on the fact if the securities are attractive and how frequently they are traded on the stock market (how liquid they are).

## 9.7 Post acquisition effects

### Effect on EPS

If the consideration is all in shares, one of the effects will be a dilution in EPS suffered by the predator company. The effect of the dilution depends on the valuation of the target company, which PE ratio was used and how many shares issued.

### Worked example

	Company A	Company B
No. shares in issue	4 million	2 million
Market value per share	£3	£1.50
Total market value	£12 million	£3 million
Annual earnings	£2.4 million	£0.5 million
EPS	60p	25p
PE ratio	5	6

Company A wants to acquire company B, the consideration being in shares. Company A has valued B at £3.6 million.

#### 1 Number of new shares to be issued by A

Offer price / A's share price = £3.6m / £3 = 1.2 million new shares

#### 2 The offer terms to B's shareholders

1.2 million / 2 million = 0.6 to 1. This means for every one share held in B, 0.6 shares will be given in A. Another way of putting this, is offering 6 shares in A for every 10 shares in B.

#### 3 The effect to B's shareholders

Current share price = £1.50

After take over they will own 0.6 of A's share =  $0.6 \times £3 = £1.80$

This means after the takeover their value will increase by 30p (20%)

#### 4 Effect on EPS

After the take over	Earnings = (£2.4m + £0.5m)	=	£2.9m
	No. of shares (4m + 1.2m)	=	5.2m
	Revised EPS for A group (2.9 / 5.2) =		56p

This means A's shareholders have suffered a dilution in their EPS.

If target company's shares are bought at a higher P/E ratio than predator's shares, then predator company's shareholders will suffer a fall in EPS. (B's PE is 6, A's 5)

If target company's shares are valued at lower P/E ratio, predator company's shares will benefit from rise in EPS (bootstrapping).

If we assume that A will can maintain their PE ratio on the combined entity, a post-merger share price can be established  $\hat{=} 56p \times 5 = £2.80$

From A shareholders point of view this is a decrease of 20p (£3.00 - £2.80)

From B shareholders point of view this is an increase of 18p (£2.80  $\times$  0.6 - £1.50)

*\*Remember B shareholders own 0.6 of A shares, hence the adjustment – this is always the case in a share for share exchange.*

## 5 Post acquisition gains and splitting the gains.

Company A has estimated post acquisition synergy gains to have a present value of £0.8 million. This means that the combined value after the merger will be (£12m + £3m + £0.8m) £15.8 million. The gain of £0.8m can be split between the 2 sets of shareholder as follows:

	Company A	Company B	Total
No of shares after takeover	4m	1.2m	5.2m
As %	77%	23%	100%
£15.8m x % of shares	£12.2m	£3.6m	£15.8m
Market value before takeover	<u>£12m</u>	<u>£3m</u>	<u>£15m</u>
Gain split	<u>£0.2m</u>	<u>£0.6m</u>	<u>£0.8m</u>

As with most takeovers, the target company's shareholders benefit the most.

These calculations will be done before the bid and shown to both sets of shareholders to entice them into accepting.

Other ways of splitting the post acquisition gains would be to use their existing market values as a % of the total worth of the combined entities (combined NPV).

### Post-merger EPS and post-merger share price

An estimated post merger EPS can be calculated by:

$$\text{(Combined earnings) / total shares after merger}$$

An estimated post merger share price can also be calculated depending on the information given:

#### 1 Post merger EPS x parent's PE ratio

This is assuming that the parent (predator) company can maintain its price earning multiple on the combined entity.

#### 2 Post merger NPV / number of shares after the merger

The post-merger share price and the post-merger EPS can be compared against the share price and EPS for each entity before the merger to see if both sets of shareholders will agree to the sale.

Therefore in exam questions, when asked how the merger will affect both sets of shareholders in financial terms, the following must be calculated to gain full credit:

- Post-merger share price
- Post-merger EPS
- Split of post-merger gains

Other financial analysis could also be undertaken (i.e. ratio analysis). It is also important to then discuss the non financial factors (i.e. post merger integration)

### Lecture Example 9.1

Dr Evil plc takes over Minnime Ltd by offering 3 shares in Dr Evil plc for 2 shares in Minnime Ltd. Details of each company are as follows:

	Dr Evil plc	Minnime Ltd
Number of shares	5 million	1 million
Market value per share	£6	£12
Profit after tax	£1.2 million	£0.6 million
EPS	24p	60p
PE ratio	25	20

What is the combined group's result after the takeover, assuming the PE remains the same as Dr Evil plc? (Assume the acquisition produces no synergy)

A question may ask you to establish what the theoretical share price may be after the merger in a share for share exchange incorporating the effects of synergy. Adopt the 5 steps detailed below:

<b>Step 1</b>	Calculate the market values of both the companies before the merger i.e. no. of shares x share price
<b>Step 2</b>	Calculate the synergy effects; this usually involves future cash flows and discounting
<b>Step 3</b>	Add step 1 and step 2 to give total market value for both companies
<b>Step 4</b>	Establish the new number of shares that will exist after the merger
<b>Step 5</b>	Calculate the new share price step 3 / step 4

### Lecture Example 9.2

Dr Evil plc wants to make a bid for the share capital of Laser plc. Details of the 2 companies are as follows: -

	Dr Evil plc	Laser plc
Number of shares	15 million	30 million
Share price	£7.50	£1.50
Annual equity earnings	£12 million	£10 million

After the takeover Dr Evil has a reorganisation plan which involves the following:

- Sell a division of Laser plc, which generates annual equity earnings of £1 million.
- The sale of this division will be done immediately and raise £5 million in cash.
- Offices will be moved and one of the buildings will be sold immediately for £15 million.
- Laser plc's earnings after the sale of its division will increase by 25% due to efficiencies imposed by Dr Evil plc
- Other rationalisation costs will £3.5 million payable immediately.
- Dr Evil's cost of capital is 16%.

Required

- a) Calculate the effect on the current market share price of each company, if Dr Evil offers a 2 for 5 share offer.
- b) Discuss the pros and cons for cash offer instead a share for share exchange.

## 9.8 Post-acquisition integration

### How an acquisition should be implemented

In order to have constructive discussions between the organisations, it is strongly recommended that all participants in the process adopt a set of ground rules for the conduct of the takeover. The ground rules help allow everyone to be heard, while reducing emotions and making discussions more productive. Proactive communication about the potential for a takeover should occur with various stakeholders rather than trying to keep the entire process confidential. At the same time, active participants in the process must understand that some information is confidential and should not be disclosed. Communication does not mean telling everything to everyone.

1. The directors of the target company should be approached first and a firm offer of a price made on condition that all due diligence work has been completed.
2. The directors' participation in the communication to existing staff is recommended when breaking the news to staff within the target company.
3. Participation by staff should be encouraged to facilitate change, set objectives and timescales for successful integration of systems and staff by the two organisations.
4. Plan for integration e.g. for redundancy, retraining and the integration of two sub-cultures of workforce from two different organisations.
5. Review and control e.g. feedback over time obtained by staff interviews and observation by management to ensure the change process has been successful

**Peter Drucker gave five rules** for acquisitions to be more successful.

- **Contribution** e.g. the acquirer can add value to the target organisation other than just providing money.
- **Common core** e.g. the two organisations should have common markets, operations or technology for better synergy.
- **Value** e.g. the acquirer must value the products of the target organisation.
- **Management cover** e.g. top management of the acquirer must have the experience to manage the target organisation.
- **Linkage** e.g. the management of the acquirer must be able to integrate within two separate companies.

Failure of takeovers and mergers often results from inadequate integration of the companies after the takeover has taken place.

After the acquisition, the acquired company needs to be integrated into the group. A detailed plan needs to be formulated for the integration stage. The plan must include the human factor as well. The welfare of the acquired company's employees is a crucial aspect to ensure that motivation does not suffer.

Post completion audits are undertaken to ensure control and feedback from the integration.

### **Post acquisition integration plan**

Keep all channels of **communications** open, by involving all staff and reinforcing the organisational structure

**Respect** the employees, products, customers and suppliers of the acquired company

Provide **support and training** for all the staff. Re-negotiate staff contracts to make it more attractive.

Install **effective management systems** so that control of integration program can be monitored

Ensure action is taken on all **feedback**.

### **Failure of mergers and takeovers**

**Poor strategic plan** will result in slow or failed integration. Integration must be planned well in advance and not be done on a 'make up as you go along' basis.

**Poor man management and lack of respect for staff.** This will be highly de-motivating for the staff and could result in loss of key staff

**Incompatible IT systems.** This could result in lost orders, despatching problems, invoicing problems etc. All resulting in loss of goodwill with customers, suppliers and de-motivating for the staff. Finally resulting in loss revenues and decline in profits.

**Lack of knowledge** of acquired company's products and market. Again this will result in loss of revenue and goodwill.

**Cultural differences.** Working ethos may be different especially for overseas subsidiaries, where language could also be a barrier.

**Lack of control and feedback.** Inadequate management systems will result in a lack of corrective actions being taken.

## 9.9 Other forms of company re-organisations

### 1 Divestment

A divestment or disinvestment is selling part of the business or subsidiary to another third party.

Features and reasons for divestments include:

- **Liquidate assets** e.g. Littlewoods liquidation of Indexø catalogue stores in 2005 due to failure to compete effectively with Argos. Also the liquidation of Woolworths in 2008. All the assets sold, liabilities settled and the company wound up. .
- **Sell off products or brands as a going concern** e.g. there was speculation by the media in 2004 that Nestle would sell its Perrierø brand.
- **Management buy out (MBO)** e.g. when an existing internal management team buy a large part or all of the shares in the company. New Look was the subject of a management buyout in 2004 by Tom Singh, the founder of the company who had floated it in 1998.
- **Management buy in (MBI)** e.g. management team from outside the company raises the necessary finance and buys a large part or all of the shares in the company.
- **Demerger (sale off or unbundling)** of divisions (business units) in a group e.g. Marriott Hotels was disposed off and demerged by the Whitbread Group in 2005. Retailing giant Kingfisher, which owns DIY group B&Q demerged Kesa Electricals in 2003 to concentrate on its core DIY business, this created two independent businesses with strong brands, they also demerged Woolworths in 2001.
- **Rationalisation** e.g. cost cutting and streamlining business activities to save cost and improve efficiency, B&Q closure of 10 unprofitable stores in 2005.

#### Benefits of divestment

- ✓ Releases cash tied up to finance more promising opportunities.
- ✓ Reduces diversification and complexity of a group in the case of a demerger.
- ✓ Could improve financial results e.g. by sale of a division or product that under achieves.
- ✓ Exit route for investorø e.g. MBO/MBI.
- ✓ Enables management to focus on core competences.
- ✓ Make the organisation leaner and more cost efficient -adding valueø to shareholders, stronger financial performance also can avoid a low share price making the organisation less prone to takeover by predator companies.

#### Potential drawbacks of divestment

- X There may be some loss of economies of scale. Fixed overheads will have a lower capacity to recover them.
- X The cash generated may not be put to suitable use thereby reducing the returns.

Sell-off is a form of divestment and is the sale of part of a company to a third party, normally for cash. It is a good way of raising cash and focussing on core business activities.

## 2 De-merger

This is the splitting up of a group into two or more separate bodies. The group is split into separate entities, but the shareholders remain the same. It is the opposite of a merger.

The reasons for a de-merger:

- Split a large conglomerate into focussed units so that they can be better managed
- The share prices will then reflect the true value of the business

## 3 Going private

A public company has its shares purchased by a small group of people and ceases to be listed on the stock exchange. This has many advantages including:

- ✓ No more stock exchange compliances
- ✓ Less admin costs
- ✓ Less likely to be taken over
- ✓ Concentrate on long term business needs rather than always trying to push up the share price which can be seen as short term.

## 4 Management buy-outs (MBOs)

The management of the company buy out the shareholders. The management will usually require financial backers (venture capitalist) who will want an equity stake in the business and a high return.

This is a good way for the management as they have a stake in the business that they are used to running.

<u>Advantages of MBO</u>	<u>Disadvantages of MBO</u>
<p>The sale can be arranged quickly</p> <p>The management will be highly motivated which is in the best interest of the company.</p> <p>The company will be well looked after as the management will be sensitive to the staff needs, products and markets.</p>	<p>The management may lack certain skills that the parent company had.</p> <p>The managers are not usually cash rich and so may have problems finding the money.</p>

## Considerations before a MBO

An MBO is like any other take over and the same consideration must be applied.

- (i) Potential of the business. Is it worth buying? What does the future hold for the business and what are the growth prospects.
- (ii) Does the management have enough skills to run the business on their own without support from the head office?
- (iii) Can the management afford the asking price? Who will fund the acquisition? Venture capitalists require equity stake and high returns. The bank may be unwilling to loan very large amounts.

## Financing MBO

There are several sources of finances available for an MBO

- ✓ Venture capitalists
- ✓ Bank loans
- ✓ Institutional investors like pension funds and insurance companies
- ✓ Merchant banks

## Considerations for the financiers of MBOs

Support of the MBO will depend on various factors:

- ✓ The reason for the sale of business. Is it falling on hard times? Is the group divesting to concentrate on core activities
- ✓ Forecasts profits and cash flows. Also future strategy and growth prospects
- ✓ The calibre of the management. Their keys skills and history of management.
- ✓ The price of the MBO and if it is reasonable

## Buy-ins

This is when third party management team make a takeover bid and then run the business themselves. Finance sources are similar to buy-outs. But external management may not be well received by the employees and they will lack the skills and history of running the business. But it is a useful way for the current management / shareholders to retire or sell their shareholding

## 9.10 Venture capitalists

Venture capitalists are organisations that take on risky business ventures. They provide the finance for and usually require a high return and even an equity stake in the business. This protects them from the high risk they are taking and may even be involved in some of the decision making process. Before Venture capitalist invests in a company they will require all the necessary information to assess the business including produces, markets, management skills, forecasts etc.

### Exit strategy

Venture capitalists and other financiers will negotiate an exit strategy at the point of advancing the money. The exit strategy will involve them realising their investment and getting their money back. Usually venture capitalists will invest for 5 to 10 years before exiting the company.

Valuations are required on the business when the exit date approaches.

**Exit strategy** for equity stake venture capitalists and other financiers may include:

- (i) Selling their shares to the public by getting the business to float
- (ii) Selling their shares to private investors or the management
- (iii) Selling their shares to another venture capitalist

The company will have to decide how to **finance the exit** of the financiers. Considerations include:

- (i) Selling shares to the public will result in dilution of control
- (ii) Additional finance may be required to buyout the financiers. This will impact on the capital structure, gearing and financial risk.
- (iii) The company will need valuing which may be difficult.
- (iv) Agreeing a share price will also prove to be difficult, as the management want the lowest price and financiers want the highest price.
- (v) The company may be forced to float.

### **Reconstruction and effect on share price**

A listed company facing reconstruction (divestment, demerger, MBO etc) will have informed the stock market in advance and the share price would have been adjusted accordingly then. As long as the plan is implemented effectively there should be no further major changes to the share price.

The stock market does not like uncertainties, so as long as the company keeps everybody informed with good quality information and its future intentions, the share price can be protected to some extent.

All reconstructions need to be carefully planned and the impact on the future performance, staff moral and share price need to be considered.

**Joint venture**

A joint venture is when a separate company is formed, in which each member holds an equity stake. Aera Energy is a joint venture between Exxon and Royal Dutch Shell.

- ✓ Synergy e.g. expertise of different parties
- ✓ Can reduce financial outlay for both parties
- ✓ Can reduce risk e.g. can strengthen and fortify position for both parties
- ✓ Good entry route for overseas development e.g. overcome government barriers about foreign competition
- ✗ Legal complexities and contractual disputes
- ✗ Collaboration can often be overridden by self interest
- ✗ Incompatibility of systems and culture to effectively work together
- ✗ Problem shared often means profits are shared

**Strategic alliance**

Two or more organisations agree to work and collaborate informally together, but remaining independent from one another. Similar to a joint venture but a less formal agreement e.g. a contract as opposed to a separate JV entity being formed. 'One World Alliance' and 'Star Alliance' are examples of strategic alliances in the airline industry.

**Franchise (licensing)**

The granting or licensing of the right to use systems, brands, expertise, know how etc, to another organisation, normally in return for a sales royalty or profit share e.g. authorisation to sell a company's goods or services in a particular geographical place. One of the most famous examples is McDonalds with more franchised restaurants than any other franchise network.

- ✓ Rapid market expansion for the franchisor
- ✓ Expansion normally financed at least in part by the franchisee
- ✓ Entrepreneurial spirit of franchisee e.g. better than perhaps a bureaucracy of using internal staff to expand the organisation instead
- ✓ Economies of scale achieved e.g. management and overhead spread over more and more franchises as the organisation grows in size.
- ✗ Long-term loss of profit for franchisor
- ✗ Control over franchisor reputation can be costly to support

### **Sales agents**

Normally used for more effective sales and marketing activities for a product e.g. AVON (cosmetics) door to door agents in the UK.

- ✓ Flexible pool of labour to recruit from
- ✓ Commission only reduces risk e.g. financial flexibility of variable rather than fixed cost of paying representatives
- ✗ -Sales push cultures can harm the organisations reputation
- ✗ Loss of contact with the customer by the organisation
- ✗ Control over reputation can be costly to support e.g. recruitment and training for a geographically dispersed pool of self employed labour

### **Manufacturing overseas or exporting**

Dyson (appliances manufacturer) relocated UK production to Malaysia in 2002 but still retained its head office within the UK, due to the hard to imitate core engineering skills and experience the organisation had developed over past decades. Exporting could make use of sales agents or local distributors to improve effectiveness e.g. local knowledge of language, customs and traditions in their country.

### **Turnkey operations**

An example of a turnkey business would be a franchise e.g. immediate brand, product and systems with exclusive territory. A turnkey business is a business that includes everything you need to immediately start running the business e.g. a product or service which can be implemented with little no additional work required by the buyer, work initiated by just by just 'turning the key'. Another example of turnkey operations is -contract manufacturing- e.g. a third party performs production operations for a manufacturer or retailer, who then markets the final product under their own name.

## Measures of growth

- Sales or market share
- Profit
- Employees
- Number of products or markets
- Number of retail stores

## Reasons why organisations grow

- Customers are demanding more of the good or service supplied
- Possible to achieve economies of scale improving competitiveness
- Required to provide higher financial returns to investors e.g. increases the wealth of shareholders
- Managers desire it e.g. more status, power or reward
- Growth allows more specialisation to increase efficiency

## Large organisations

- ✓ Greater efficiency and productivity achieves economies of scale
- ✓ Easier to manage, organise and control workers through hierarchy, specialisation and rules/procedures
- ✓ Less reliance on key personnel
- ✗ Coordination and control complex and costly
- ✗ Remove initiative/workers lose control
- ✗ Boredom, frustration and de-motivation of workers e.g. feel like a small cog in a large machine

## Small organisations

- ✓ More creative and dynamic
- ✓ More flexible to adapt to environmental changes
- ✓ More informal and small e.g. some people like this as more relaxed rules
- ✓ More varied tasks for the workers as less specialisation
- ✗ More **reliance on key personnel**
- ✗ **Higher risk** therefore problems in raising finance
- ✗ Lack of economies of scale
- ✗ Problems of competing with larger companies because of **less brand recognition** or higher costs
- ✗ Often-poor financial controls and expertise leading to **high failure rates**

## **Internal development or ‘organic growth’**

The business grows using its own internal resources.

- ✓ Reduces the risk of the high cost of integrating culture, systems and commitment from other organisations
- ✓ More control over growth e.g. incremental change rather than all at once
- ✓ Avoids the premiums paid for established brands/organisations
- ✓ Develops existing core competences of the organisation over the long-term

## **Acquisition (takeover) or merger**

A merger is the combination or synergy of two companies which are roughly equal in size by consensus of the two organisations. A takeover is where one company acquires the other which is more hostile.

- ✓ Rapid acquisition or synergy of expertise/brands/market share
- ✓ Eliminates competition e.g. if horizontal integration
- ✓ Synergy/economies of scale as the merged entity increases in size
- ✓ Could be a bargain if target company an underachiever

## **9.12 Dealing with general risk**

Part of the strategic decision making process is to analyse all the risk factors involved with pursuing a particular course of action.

Risk is when the actual outcome differs to the expected outcome. Business will make a decision on which the outcome is not known with certainty, for example investing in a new project, entering a new market etc.

In order to grow some risk has to be taken, but the key is management of the risk and company's attitude towards risk (i.e. risk averse or risk seekers).

Questions often involve identifying general risk faced by an organisation and how they can manage this risk. When answering this type of question cover all aspects by doing a PEST analysis (political, economical, sociological and technological risk)

For overseas investments, identifying risk is crucial.

### **Environmental (external) analysis**

• A study which considers potential environmental effects during the planning phase before an investment is made or an operation started (CIMA)

It is useful to use Porter's PEST analysis

### PEST analysis

- **Political** e.g. political culture, bureaucracy of regulating competition
- **Economic** e.g. exchange rates, interest rates, taxation or business cycle
- **Social** e.g. demography, population and culture of country or market
- **Technological** e.g. existence, threat or opportunities of using it new technology

### PEST analysis and its derivatives

Such a process is needed for an organisation to be continually aware of the external factors within its general or industry environment in order to adapt or perhaps change its course of action as a result of such analysis e.g. to protect against threats or grasp new opportunities.

Environmental analysis should be a continuous activity for management, especially within uncertain or complex environments; many of the components used within the models discussed below are interrelated and will affect one another.

Models such as PEST or SLEPT analysis and other derivatives of these e.g. PESTLE or SLEEPT or STEEPLE can be used for analysing the general or industry environment. The models are suitable because they analyse a range of general environmental factors which help management concentrate and focus on factors which influence the organisation. An example of an industry analysis using the acronym SLEPT is illustrated below. The longest derivative of SLEPT is STEEPLE, the 2 extra Es include ethical factors e.g. morally acceptable behaviour, and ecological factors e.g. environmentalist or green issues

- **S** societal factors e.g. population, demography and culture of customers (customs, attitudes and beliefs) within the market. The organisation needs to continually react and reposition its products and features to the changing needs, wants and values of customers and society.
- **L** legal factors e.g. criminal, consumer, company and employment legislation which may change and therefore effect the organisation.
- **E** economic factors e.g. exchange rate values, interest rates, taxation rates (sales tax, tax on imports or exports, tax on profits etc), the business cycle or even protectionism measures (import quotas or tariffs) used by different countries may all have an impact on the market or industry. Within the labour markets the collective bargaining power of trade unions, as well as a surplus or shortages of skills can affect wage levels within an industry.
- **P** political factors e.g. political culture towards foreign ownership and investment, bureaucracy of regulating domestic or foreign competition, subsidies or tax breaks for long-term investment, education and training available, or grants available for relocation. Government agencies like the food standards agency (FSA) or office of fair trading (OFT) or industry regulators such as OFCOM e.g. independent regulator and competition authority for the UK communications industries. These all exist as political influences within certain industries.
- **T** technological factors e.g. existence, threat or opportunity of using new technology such as new materials, processes or software. Being aware of technology earlier can be a key influence to gaining competitive advantage e.g. Tesco, self scanning EPOS devices, or 3G technologies within mobile phones, to improve customer service.

## Country analysis and political risk

Country analysis could use tools such as PEST factors in order to strategically analyse countries.

### Political risk

Political risk is the risk that political or government action will effect the position and value of an organisation. The financial or other risk that a nations government changes its policies and procedures e.g. potential loss arising from a change in government policy regarding trade barriers such as foreign exchange controls, tariffs or import quotas.

Public policy of government can make and break companies and markets, due to its opaqueness and intangible nature it is often ignored or misunderstood by organisations.

### Examples of political risk within countries

- Outbreak of national **war**, civil war, unrest or riot.
- **Nationalisation of industries** e.g. confiscation of assets from private sector by a nations government to become state owned and controlled.
- **Enforcement of international trade barriers** e.g. imports and export tariffs and quotas, or exchange controls over a nations domestic currency to influence its exchange value.
- **Changes in taxation policy and regulations** e.g. the UK governments -windfall taxø based on "the excess profits of privatised utilities".
- **Restrictions on dividends or expropriation of assets** out of a country.
- **Political instability** e.g. elections may change policy.
- **New regulation or legislation** introduced e.g. changing laws about foreign ownership, competition and employment.
- **Conflict of interest** between a governments aims and the organisations aims.

## Risk management

Risk management is to recognise the risks to which the company is exposed to, consider the trade-off between risks and expected returns, and choose an appropriate course of action: -

### A process to managing risk

1. Risk committee set up to address risk issues identified e.g. regular risk audits, to identify and estimate the likelihood and consequences.
2. Risk register kept which documents:
  - All identified risks -ranked and prioritisedø
  - Significance and consequence of each risk reported.
  - Assigned responsibilities to individuals to manage different risks identified e.g. for greater accountability.
  - Documentation of measures and actions to be taken for each risk, in the event that it does occur e.g. risk management strategies.
3. Existing processes for risk management reviewed and refined over time e.g. continuous improvement.

## Risk management strategies

<b>Retain the risk</b>	If the risk is small and won't affect the company's profits, the company does very little and lives with it.
<b>Avoid risk</b>	Taking action to ensure all risk is avoided, but this will cost money and may inhibit growth i.e. invoicing overseas clients in sterling only.
<b>Reduce risk</b>	Ensuring the risk is minimised by training staff and having effective management control systems.
<b>Transfer risk</b>	Insurance and hedging, passes the risk to third party, but costs money.

### 9.13 Exam questions

Questions in this area are very common. As mentioned at the start, numerical answers don't usually carry as high marks as the discussion part.

You will need to think broadly when answering the discussion parts and try to go into as much depth as possible. Answers will be varied as each student will have their own interpretations.

The difficulties in business valuation questions include the **lack of information**. This reflects real life situations as access to internal information on other companies is not possible. To deal with this it may be necessary for you to make bold assumptions, state them and answer the question.

Maximising marks on discussion areas
1 State the relevant point
2 Go into detail with the point, by explaining the meaning and its implications
3 Relate it to the scenario and give your conclusion and recommendation if required

This is necessary for every point that you make (in all your discussions!). The examiner has often complained of the lack of depth of discussions by students.

### Lecture example 9.3 – Venture capitalist (November 2006 CIMA)

VCI is a venture capital investor that specialises in providing finance to small but established businesses. At present, its expected average pre-tax return on equity investment is a nominal 30% per annum over a five-year investment period.

YZ is a typical client of VCI. It is a 100% family owned transport and distribution business whose shares are unlisted. The company sustained a series of losses a few years ago, but the recruitment of some professional managers and an aggressive marketing policy returned the company to profitability. Its most recent accounts show revenue of \$105 million and profit before interest and tax of \$28·83 million. Other relevant information is as follows:

- For the last three years dividends have been paid at 40% of earnings and the directors have no plans to change this payout ratio;
- Taxation has averaged 28% per annum over the past few years and this rate is likely to continue;
- The directors are forecasting growth in earnings and dividends for the foreseeable future of 6% per annum;
- YZ's accountants estimated the entity's cost of equity capital at 10% some years ago. The data they worked with was incomplete and now out of date. The current cost could be as high as 15%.

Extracts from its most recent balance sheet *at 31 March 20X6* are shown below.

	\$ million
<b>ASSETS</b>	
<b>Non-current assets</b>	
Property, plant and equipment	35·50
<b>Current assets</b>	
	<u>4·50</u>
	40·00
<b>EQUITY AND LIABILITIES</b>	
<b>Equity</b>	
Share capital (Nominal value of 10 cents)	2·25
Retained earning	<u>18·00</u>
	20·25
<b>Non-current liabilities</b>	
7% Secured bond repayable 2016	15·00
<b>Current liabilities</b>	
	<u>4·75</u>
	40·00

*Note:* The entity's vehicles are mainly financed by operating leases.

YZ has now reached a stage in its development that requires additional capital of \$25 million. The directors, and major shareholders, are considering a number of alternative forms of finance. One of the alternatives they are considering is venture capital funding and they have approached VCI. In preliminary discussions, VCI has suggested it might be able to finance the necessary \$25 million by purchasing a percentage of YZ's equity. This will, of course, involve YZ issuing new equity.

Required:

(a)

Assume you work for VCI and have been asked to evaluate the potential investment.

(i) Using YZ's forecast of growth and its estimates of cost of capital, calculate the number of new shares that YZ will have to issue to VCI in return for its investment and the percentage of the entity VCI will then own. Comment briefly on your result.

(9 marks)

(ii) Evaluate exit strategies that might be available to VCI in five years' time and their likely acceptability to YZ.

(6 marks)

Note: Use sensible rounding in your calculations. (Total for requirement (a) = 15 marks)

(b)

Discuss the advantages and disadvantages to an established business such as YZ of using a venture capital entity to provide finance for expansion as compared with long term debt. Advise YZ about which type of finance it should choose, based on the information available so far.

(10 marks)

(Total = 25 marks)

A report format is not required for this question.

## Lecture example 9.4 – Scenario based question (May 2006 CIMA)

### Scenario

### PM Industries plc

#### Background

PM Industries plc (PM) is a UK-based entity with shares trading on a UK Stock Exchange. It is a long established business with widespread commercial and industrial interests worldwide. It had a modest growth and profitability record until four years ago when a new Chief Executive Officer (CEO) was appointed from the United States of America (US). This new CEO has transformed the business by divesting poor performing, or non-core, subsidiaries or business units and focusing on volume growth in the remaining units. Some of this growth has been internally generated and some has come about because of financially sound acquisitions. A particular area of strength is in non-drug pharmaceutical materials such as packaging. PM now controls the largest share of this market in the UK and Europe.

#### Financial objectives

PM's current financial objectives are:

- To increase EPS by 5% per annum;
- To maintain a gearing ratio (market values of long-term debt to equity) below 30%;
- To maintain a P/E ratio above the industry average.

#### Proposed merger

The senior management of PM is currently negotiating a merger with NQ Inc (NQ), a US-based entity with shares trading on a US Stock Exchange. NQ is an entity of similar size to PM, in terms of revenue and assets, with a similar spread of commercial and industrial interests, especially pharmaceutical materials, which is why PM originally became attracted to NQ.

NQ has had a less impressive track record of growth than PM over the last two years because of some poor performing business units. As a result, PM's market capitalisation is substantially higher than NQ's. Although this will, in reality, be an acquisition, PM's CEO refers to it as a 'merger' in negotiations to avoid irritating the NQ Board, which is very sensitive to the issue.

NQ holds some software licences to products that the CEO of PM thinks are not being marketed as well as they could be. He believes he could sell these licences to a large software entity in the UK for around £100 million. He does not see the commercial logic in retaining them, as information technology is not a core business. The value of these licences is included in NQ's balance sheet at \$US125 million.

Both entities believe a merger between them makes commercial and financial sense, as long as terms can be agreed. The CEO of PM thinks his entity will have the upper hand in negotiations because of the share price performance of PM over the last 12 months and his own reputation in the City. He also believes he can boost the entity's share value if he can convince the market his entity's growth rating can be applied to NQ's earnings.

<b>Summary of relevant financial data</b>				
<b><i>Extracts from the Income Statements for the year ended 31 March 20X6</i></b>				
		PM	NQ	
		£ million	\$ million	
Revenue		1,560	2,500	
Operating profit		546	750	
Earnings available for ordinary shareholders		273	300	
<b><i>Extracts from the Balance Sheets as at 31 March 20X6</i></b>				
		£ million	\$ million	
Total net assets		2,000	2,100	
Total equity		850	1,550	
Total long term debt		1,150	550	
<b><i>Other data</i></b>				
Number of shares in issue				
Ordinary shares of 10 pence		950,000,000		
Common stock of \$1			850,000,000	
Share price as at today (24 May 20X6)		456 pence	450 cents	
High/low share price over last 12 months		475 pence/326 pence	520 cents/280 cents	
Industry average P/E ratio		14	13	
Debt traded within last week at		£105	Par	
<b><i>Five-year revenue and earnings record</i></b>				
Year ended 31 March		PM (£m)	NQ (US\$m)	
	Revenue	Earnings	Revenue	Earnings
20X2	1,050	225	1,850	250
20X3	1,125	231	1,950	265
20X4	1,250	245	2,150	280
20X5	1,400	258	2,336	290
20X6	1,560	273	2,500	300
The two entities' revenue and operating profits are generated in the following five geographical areas, with average figures over the past five years as follows:				
		PM	NQ	
Percentage of total:		Revenue	Revenue	Profits
UK		30	20	17
US		22	75	76
Mainland Europe		20	5	7
Asia (mainly Japan)		18	0	0
Rest of World		10	0	0

### Economic data

PM's bankers have provided forecast interest and inflation rates in the two main areas of operation for the next 12 months as follows:

	Interest rates Current forecast	Inflation rate Current forecast
UK	4.5%	2.0%
US	2.5%	1.5%

### Terms of the merger

PM intends to open the negotiations by suggesting terms of 1 PM share for 2 NQ stock units. The Finance Director of PM, plus the entity's professional advisors, have forecast the following data, post-merger, for PM. They believe this is a conservative estimate as it excludes their estimate of value of the software licences. The current spot exchange rate is \$US1.85 = £1.

<b>Market capitalisation</b>	<b>£6,905 million</b>
<b>EPS</b>	<b>31.65 pence</b>

A cash offer as an alternative to a share exchange is unlikely, although the CEO of PM has not ruled it out should the bid turn hostile. However, this would require substantial borrowing by PM, even if only 50% of NQ's shareholders opt for cash.

Except for the potential profit on the sale of the licences, no savings or synergies from the merger have as yet been identified.

### Required:

Assume you are one of the financial advisors working for PM.

(a)

(i) Explain, with supporting calculations, how the Finance Director and advisors of PM have arrived at their estimates of post-merger values. (10 marks)

(ii) Calculate and comment briefly on the likely impact on the share price and market capitalisation for each of PM and NQ when the bid terms are announced. Make appropriate assumptions based on the information given in the scenario. (4 marks)

(iii) If NQ rejects the terms offered, calculate

- the maximum total amount and price per share to be paid for the entity; and
- the resulting share exchange terms PM should be prepared to agree without reducing PM's shareholder wealth. (6 marks)

(Total for part (a) = 20 marks)

b) Write a report to the Board of PM that evaluates and discusses the following issues:

(i) How the merger might contribute to the achievement of PM's financial objectives, assuming the merger goes ahead on the terms you have calculated in (a) (iii). If you have not managed to calculate terms, make sensible assumptions; (12 marks)

(ii) External economic forces that might help and/or hinder the achievement of the merger's financial objectives. Comment also on the policies the merged entity could consider to help reduce adverse effects of such economic forces; (8 marks)

(iii) Potential post-merger value enhancing strategies that could increase shareholder wealth. (10 marks)

(Total for part (b) = 30 marks)

Up to 4 marks are available for structure and presentation - (total = 50 marks)

## Key summary of chapter “corporate re-organisations”

### **Mergers and takeovers**

The reason for mergers and takeovers is for **integration** and four types can be identified. The target company is the company being acquired and the predator company is the company doing the acquiring. Integration leads to a more effective running of the business and thereby saving costs and increasing profits.

### **Types of integration**

- Horizontal
- Backwards vertical
- Forward vertical
- Conglomerate or lateral integration

### **Reasons for mergers and acquisitions**

- Economies of scale
- Increased market share
- Improved efficiency
- Reducing the competition
- Tax relief
- Liquidity
- Asset stripping
- Diversification

### **Factors to consider in a takeover / merger**

- Cost of acquisition
- Reaction of predator's shareholders
- Reaction of target's shareholders
- Form of purchase consideration
- Accounting implications
- Future plans

### **Rejection of bid by target company**

- Unwillingness to sell by the shareholders
- The offer terms are not satisfactory. Initial rejection may lead to a better offer
- The target company can see no real post acquisition benefits
- The employees strongly oppose the offer

**Tactics can be employed by the company to protect itself before the bid**

- Types of shareholders
- Articles of association stipulations
- Poison pills
- Asset values

**Tactics can be employed by the company to protect itself after the bid**

- Reject
- Good forecasts
- White knight
- Give bad publicity
- Competition commission
- Management buyout

**The predator company's shareholders may not approve the bid for various reasons**

- Reduction in EPS
- Risky
- Control
- Gearing

**Mergers and acquisitions are regulated by**

- Competition commission
- City code
- European commission

**Purchase consideration**

- Cash purchases
- Share exchange
- Earn out arrangements

If the purchase consideration is share for share exchange, some important calculations include:

### **Post-merger EPS and post-merger share price**

An estimated post merger EPS can be calculated by:

$$\text{(Combined earnings) / total shares after merger}$$

An estimated post merger share price can also be calculated depending on the information given:

#### **1 Post merger EPS x parent's PE ratio**

This is assuming that the parent (predator) company can maintain its price earning multiple on the combined entity.

#### **2 Post merger NPV / number of shares after the merger**

The post-merger share price and the post-merger EPS can be compared against the share price and EPS for each entity before the merger to see if both sets of shareholders will agree to the sale.

Therefore in exam questions, when asked how the merger will affect both sets of shareholders in financial terms, the following must be calculated to gain full credit:

- Post-merger share price
- Post-merger EPS
- Split of post-merger gains

Other financial analysis could also be undertaken (i.e. ratio analysis). It is also important to then discuss the non financial factors (i.e. post merger integration)

### **Post acquisition integration plan**

- Communications
- Respect
- Support and training
- Effective management systems
- Feedback

### **Failure of mergers and takeovers**

- Poor strategic plan
- Poor man management and lack of respect for staff.
- Incompatible IT systems.
- Lack of knowledge
- Cultural differences.
- Lack of control and feedback.

### **Other forms of company re-organisations**

- Divestment
- De-merger
- Going private
- Management buy-outs (MBOs)
- Buy-ins
- Venture capitalists

### **Other options available for growth**

- Joint venture
- Strategic alliance
- Franchise (licensing)
- Sales agent
- Manufacturing overseas or exporting
- Turnkey operations

### **Dealing with general risk**

#### **PEST analysis**

- Political e.g. political culture, bureaucracy of regulating competition
- Economic e.g. exchange rates, interest rates, taxation or business cycle
- Social e.g. demography, population and culture of country or market
- Technological e.g. existence, threat or opportunities of using it new technology

**Solution to Lecture Example 9.1**

Number of new shares being issued in Dr Evil =  $3 / 2 \times 1 \text{ million} = 1.5 \text{ million}$

	Dr Evil Group
Number of shares (5 + 1.5)	6.5 million
Combine PAT (1.2 + 0.6)	£1.8 million
EPS (1.8 / 6.5 )	27.7 p

The EPS for the Dr Evil shareholders has increased to 27.7p from 24p (this is known as boot strapping & increasing EPS by acquiring a company with a lower PE ratio). If the same PE ratio is maintained (25), the market value of their share will be {25 x 27.7p} £6.93.

This is 93p more than before the takeover, so therefore the take over will be acceptable to Dr Evil's shareholders.

For Minnime's shareholders the effect of the take over is as follows:

Before takeover	1 share	=	£12.00
After take over	1.5 shares x 6.93	=	£10.40

This will not be acceptable to the shareholders. However an important point is that does the current share price of £12 include the impact of the takeover? If the price includes it, the market may have increased the share price in anticipation of a successful bid.

## Solution to Lecture Example 9.2

a) Effect on the current market share price of each company

The question is asking the post merger effect. This is a very common question and the best way of doing this is to apply the following technique.

Step 1 ó Calculate the market values of both the companies before the merger ie no. of shares x share price.

Step 2 ó Calculate the synergy effects, this usually involves future cash flows and discounting.

Step 3 ó Add step 1 and step 2 to give total market value for both companies.

Step 4 ó Establish the new number of shares that will exist after the merger.

Step 5 ó Calculate the new share price step 3 / step 4

### Step 1 – MV of both companies

<b>Laser plc</b>	£000
Existing market capitalisation 30 m x £1.50	45,000
<b>Dr Evil plc</b>	
Existing market capitalisation 15m x £7.50p	<u>112,500</u>
Total existing market capitalisation	<b><u>157,500</u></b>

### Step 2 – PV of synergy effects

	£000
1 Sale of division	5,000
2 PV of loss of earnings {£1m / 0.16}	(6,250)
3 Sale of building	15,000
4 Efficiency increase in earnings {25% x (£10m - £1m (sale of div) / 0.16}	14,063
5 Rationalisation costs	<u>(3,500)</u>
<b>PV of synergy effects</b>	<b><u>24,313</u></b>

### Step 3

Total combined market capitalisation after re-organisation {157,500 + 24,313} **181,813**

### Step 4 – New number of shares

Total number of shares after take over will be:

Laser plc 2 for 5 offer = 30m x 2/5	=	12million
Dr Evil plc existing shares	=	<u>15million</u>
Total shares		<b><u>27 million</u></b>

### Step 5 – New share price (ie theoretical share price)

Theoretical share price (181,813 / 27,000) = £6.73

Dr Evil plc current share price = £7.5, therefore £0.77 worse off after merger

Laser plc new share price will be  $2/5 \times £6.73 = £2.69$ , which is better than current share price of £1.50 by £1.19

**b) Cash offer**

- Most investors are risk averse, therefore cash is more attractive.
- Also it takes time for merger synergies to materialise; therefore returns to shareholders will take longer.
- Cash offer avoids transaction costs for investors, when they want to sell new shares.
- Capital gains tax will be incurred immediately, therefore makes cash offer less attractive

**Solution to lecture example 9.3**

a(i) YZ require \$25 million investment. To establish the number of new shares that will be issued to VCI, the value of the share firstly needs to be established. There is enough information to value the shares using the dividend valuation model with growth.

Exam formula (share value with growth)

$$P_0 = \frac{d_0(1+g)}{k_e - g}$$

Where

- $P_0$  = market share price now (ex div)
- $d_0$  = current dividend (W1)
- $k_e$  = cost of equity ó use both 10% and 15%
- $g$  = constant growth rate in dividends ó 6%

**Working 1 Current dividend payment**

31 <sup>st</sup> March 20X6	\$m
Revenue	105.0
Profit before interest and tax	28.8
Interest (15 x 7%)	<u>(1.1)</u>
Profit before tax	27.8
Tax (27.78 x 28%)	<u>(7.8)</u>
Profit after tax	20.0
Dividends (20 x 40%)	(8.0)

Using the dividend valuation model, value for YZ are as follows using 2 cost of equities.

- 10% cost of equity    YZ value =  $(8 \times 1.06) / (0.10 \text{ ó } 0.06) =$     \$212 million
- 15% cost of equity    YZ value =  $(8 \times 1.06) / (0.15 \text{ ó } 0.06) =$     \$94 million

### Solution to lecture example 9.3 cont.....

The number of shares to be issued can now be calculated

	Value of \$94 million	Value of \$212 million
Value per share ( / 22.5 m shares)	\$4.18 per share	\$9.42 per share
New shares to issue (\$25m / share value)	6.0 million shares	2.7 million shares
Current shares in YZ	22.5 million shares	22.5 million shares
Total shares in YZ after new issue	28.5 million shares	25.2 million shares
VCI % in equity	21.1%	10.7%

#### Comment

YZ will have to issue between 2.7 million to 6 million shares to VCI. The dividend valuation model has been used to value the shares of YZ and due to the uncertainty of the cost of equity, 2 share values have been calculated.

VCI will either control 10.7% or 21.1% of YZ which is would give VCI a significant stake in YZ at 21.1%. This would enable VCI to have a board representative who will be involved in the financial and operating policies of YZ. This may not please YZ's owners.

#### a (ii) Exit strategies

Venture capitalists VCI will negotiate an exit strategy at the point of advancing the money. The exit strategy will involve them realising their investment and getting their money back. Usually venture capitalists will invest for 5 to 10 years before exiting the company.

Valuations are required on the business when the exit date approaches.

Exit strategy for VCI may include:

- (i) Selling their shares to the public by getting the YZ to float in 5 years time
- (ii) Selling their shares to private investors or the management (MBO)
- (iii) Selling their shares to another venture capitalist

YZ will have to decide how to finance the exit of the VCI. Considerations include:

- (i) Selling shares to the public will result in dilution of control
- (ii) Additional finance may be required to buyout the financiers. This will impact on the capital structure, gearing and financial risk.
- (iii) The company will need valuing which may be difficult.
- (iv) Agreeing a share price will also prove to be difficult, as the management want the lowest price and financiers want the highest price.
- (v) The company may be forced to float.

The return that VCI can achieve can be established using the forecast figures. VCI requires an average per-tax return on equity investment of 30% per annum over the 5 year period.

**Solution to lecture example 9.3 cont.....**

Assume that the growth in earnings will be 6% as per the information given.

Year	Profit before tax \$m	VCI stake at 21.1%	% return (return / investment)	VCI % stake at 10.7%	% return (return / investment)
1 - 31-03-07	$(27.8 \times 1.06) = 29.5$	6.2	$(6.2 / 25)$ 25%	3.2	$(3.2 / 25)$ 13%
2 - 31-03-08	$(29.5 \times 1.06) = 31.3$	6.6	26%	3.3	13%
3 - 31-03-09	$(31.3 \times 1.06) = 33.2$	7.0	28%	3.6	14%
4 - 31-03-10	$(33.2 \times 1.06) = 35.2$	7.4	30%	3.8	15%
5 - 31-03-11	$(35.2 \times 1.06) = 37.3$	7.9	32%	4.0	16%

VCI would only achieve its target pre-tax return with a 21.1% and only from year 4 onwards.

**(b)**

**Advantages** of using venture capitalist (VCI) to provide finance:

- (i) VCI will have experience and skills that would be of use to YZ and could help to improve their efficiency and profitability. This new introduction of management may increase profits higher than 6% per annum.
- (ii) Once the contract is signed YZ will have immediate access to the funds and it will be quicker to arrange than taking out a long term loan.
- (iii) Gearing will reduce with an increase in equity shares. Currently the gearing is  $(15 / 20.25)$  74%, which is very high for YZ so any further borrowings will introduce additional financial risk to YZ.
- (iv) YZ will not be obligated to pay interest payments and dividends can be withheld if profits are low, although this may not please the venture capitalists!

**Disadvantages** of using venture capitalist (VCI) to provide finance:

- (i) Dividend payments are not tax allowable whereas interest payments on debt is tax allowable, thereby increasing profits.
- (ii) YZ will lose some control to VCI and conflicts may occur to do different management styles.
- (iii) VCI may sell their shares to another party which YZ may not like, thereby causing more hostilities.
- (iv) VCI may force YZ to float which would mean additional administration and loss of control.
- (v) Valuation of VCI's share in 5 years may be difficult

Taking out long term debt will avoid the control issue and valuation of YZ later on. However as mentioned earlier YZ is very highly geared and the bank may be reluctant to advance a loan of \$25 million. If YZ issue debt on the stock market, it may not be successful.

My recommendation in this case would be for YZ to take up the venture capitalist as an investor, even with the disadvantages noted above; it may be the only choice available to YZ.

### Solution to lecture example 9.4

**a (i) Explain, with supporting calculations, how the Finance Director and advisors of PM have arrived at their estimates of post-merger values. (10 marks)**

- PM's financial director and professional advisors estimates of post merger values are:  
Market capitalisation of £6,905 million  
EPS of 31.65 pence per share
- Assumption is that PM's PE ratio will be applied to NQ's earnings.
- Exchange rate of translating NQ's figures to sterling is \$1.85 / £1

	PM	NQ
No. shares in issue	950 million	850 million
Market value per share (pre merger)	£4.56	\$4.50/1.85 = £2.43
Total market value (pre merger)	£4,332 m	£2,065.5 m
Annual earnings	£273 m	\$300 / 1.85 = £162m
EPS (earnings / no of shares)	28.7p	19.1
273 / 950		
162 / 850		
PE ratio (SP / EPS)	15.89	12.72

If NQ is valued using PM's PE ratio then the value of NQ is:

$$\begin{aligned}
 \text{Value of NQ} &= \text{Earnings} \times \text{PM's PE ratio} \\
 &= £162 \text{ million} \times 15.89 \\
 &= £2,574 \text{ million}
 \end{aligned}$$

$$\begin{aligned}
 \text{Total value post merger} &= \text{Value of PM} + \text{value of NQ} \\
 &= £4,332 \text{ m} + £2,574 \text{ m} \\
 &= \mathbf{£6,906 \text{ million}}
 \end{aligned}$$

Allowing for rounding differences this is equal to the value established by PM's financial director and the advisors. The offer price is £2,574 million and share for share exchange of 1 for 2.

**Post merger EPS = Total earnings / no. of shares**

$$\begin{aligned}
 \text{Total earnings} &= 273\text{m} + £162\text{m} &= & £435\text{m} \\
 \text{Number of shares} &= 950 \text{ million} + (850 / 2) &= & 1,375 \text{ million}
 \end{aligned}$$

Post merger EPS = £435m / 1,375m = **31.64p per share** (allowing for differences).

### In conclusion

The current total market values of PM and NQ is (4,332 + 2,066) £6,398 million whereas the post merger values are calculated as £6,906 million. The difference is £508 million and this is explained by the fact the PM has used its own PE ratio to value the earnings of NQ. PM has higher PE ratio than NQ. The difference in the PE ratio is 3.17 which when multiplied by the earnings of NQ give the difference in the post merger value (£162 m x 3.17 = £513 m allowing for differences).

**Solution to lecture example 9.4 cont....**

**a) (ii) Calculate and comment briefly on the likely impact on the share price and market capitalisation for each of PM and NQ when the bid terms are announced. Make appropriate assumptions based on the information given in the scenario. (4 marks)**

As no savings or synergies have been identified and assuming that the market is unaware of the sale of the licences for £100m, the post merger value should be equal to the combined value of the entities before the merger ie £6,398 million

The affect on the share price and market capitalisation is as follows:

	PM	NQ	Total
No. shares after merger	950 million	425 million	1,375 million
%	69%	31%	100%
£6,398 m x %	£4,415 m	£1,983 m	£6,398 m
Value before merger	£4,332 m	£2,066 m	6,398
Post merger split	£83m	(£83m)	0
Share price post merger	£4.65	£2.33	
£6398m / 1,375m			
£6398m / 1,375m /2			
Share price before merger	£4.56	£2.43	
Difference	£0.09	(£0.10)	
	2% increase	4% decrease	

**a) (iii) If NQ rejects the terms offered, calculate**

- the maximum total amount and price per share to be paid for the entity; and
- the resulting share exchange terms PM should be prepared to agree without reducing PM's shareholder wealth. (6 marks)

If NQ rejects the terms offered then PM could offer them additional amount to incorporate the value of the software licences.

The current offer as per part a(i)	£2,574 million
Add software licences	<u>£ 100 million</u>
New offer	<u>£2,674 million</u>

The maximum price is £2,674 million which is equal to £3.15 per share.

Share for share exchange therefore is  $£3.15 / £4.56 = 0.69$  shares in PM for every one held NQ. This equates to 1.4 shares in NQ for every one share in PM.

## Solution to lecture example 9.4 cont....

b)

### Report

**To:** Board of Pm plc  
**From:** Financial Advisor  
**Date:** May 20X6  
**Subject:** Merger with NQ inc.

#### Introduction

This report will evaluate the proposed merger with NQ inc. I will address the following issues

- (i) How the merger might contribute to the achievement of PM's financial objectives.
- (ii) External economic forces that might help and/or hinder the achievement of the merger's financial objectives.
- (iii) Potential post-merger value enhancing strategies that could increase shareholder wealth.

The workings are attached in appendix 1

#### 1.1 How the merger might contribute to the achievement of PM's financial objectives.

PM's current financial objectives are:

- É To increase EPS by 5% per annum;
- É To maintain a gearing ratio (market values of long-term debt to equity) below 30%;
- É To maintain a P/E ratio above the industry average.

##### Increase in EPS by 5% per annum

PM's earnings have increased by above 5% over the past 4 years. NQ's earnings have decreased over the past 5 years with only around 3% to 4% increases in the past 2 years.

The earnings as a % of revenue has decreased for both organisations with NQ having a much lower earnings as a % of revenue at an average of 12% compared that to PM's 17%.

PM has higher revenue increases which means it is selling aggressively and also at the same time maintaining its costs effectively. NQ may have the problem of cost controls and ineffective sales strategy. This is something that PM could improve if it merges with NQ.

The forecast projections of the combined entities would be as follows (based on PM's finance directors forecasts):

Projected EPS	=	31.65 pence per share
No. of shares after merger	=	1,375 million
Forecast earnings = £0.3165 x 1,375 million shares	=	£435 million

This is an increase of 59% from PM's individual earnings, so this will achieve the financial objective.

### **Solution to lecture example 9.4 cont....**

The combined earnings of 20X6 for PM and NQ are  $(273 + \$300/1.85) = \text{£}435\text{million}$ , which is the same as the Finance Director's forecast.

If the current increases in earnings is taken then the combined forecast earnings are as follows:

PM's forecast earnings based on 20X6 increase  $\text{£}273\text{m} \times 1.0581 = \text{£}289\text{m}$

NQ's forecast earnings based on 20X6 increase -  $\$300 \times 1.0357 = \$311 / 1.85 = \text{£}168$

Total =  $\text{£}457\text{million}$ .

This is also a higher increase than the merger forecast data. It is more likely than not that the increase in earnings will be greater than 5% after the merger. We have taken a very conservative estimate of the post merger figures and PM can increase sales and earnings of NQ after the merger with their expertise.

Currently NQ does not have any sales in Asia and rest of the world, only selling to UK and US. There is a potential to sell their products to this huge market and thereby increasing sales and earnings further.

### **To maintain a gearing ratio (market values of long-term debt to equity) below 30%**

If the merger is undertaken by a share for share exchange then the gearing level will decrease from their current levels.

The current gearing level of PM is:

Market value of debt	=	$\text{£}1,150 \times 105 / 100$	=	$\text{£}1,207.5\text{million}$
Market value of equity	=	$\text{£}4.56 \times 950\text{m shares}$	=	$\text{£}4,332\text{million}$
Gearing (debt / equity)	=	$\text{£}1,207.5 / \text{£}4,332$	=	27.8%

If the bid does turn hostile then PM will have to issue a cash offer. 50% of the NQ shareholders would take up this cash offer, the effect on gearing is as follows:

Offer price	=	$\text{£}2,574\text{million}$
Half of this in cash (increase in debt)	=	$\text{£}1,287\text{million}$

#### **Increase in equity**

NQ shares being bought out	$\text{£}850\text{million shares}$
Offer terms is 1 for 2	- 425 millions shares issued by PM
Half of the NQ shareholders take up offer in shares	$\text{£}212.5\text{million shares}$

Revised equity ( $\text{£}4.56 \times (950 + 212.5)$ )	=	$\text{£}5,301\text{million}$
Revised debt ( $\text{£}1,287 + 1,207.5$ )	=	$\text{£}2,494.5\text{million}$

Revised gearing $\text{£}2,494.5\text{m} / \text{£}5,301\text{m}$	=	47.1%
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The gearing would increase if the bid turned hostile and PM had to offer cash instead of shares. So in conclusion, the gearing level would be below 30% if the offer terms were for share for share only, but if a cash offer was made, the gearing level would increase to around 47% which means greater financial risk to PM shareholders.

## Solution to lecture example 9.4 cont....

### To maintain a P/E ratio above the industry average

The current PE ratio as per part a (i)

	PM	NQ
PE ratio (SP / EPS)	15.89	12.72
Industry averages	14	13

Currently PM has a higher PE ratio than industry average and NQ is just slightly lower than industry average.

The share price is really left to the markets to determine and is something outside the control of PM. However if this merger is seen to be a positive one by the market, then there is no reason why the PE ratio of PM is not maintained in the future or even increased.

PM needs to insure that it informs the market with good quality information so that they can price the shares accurately.

In order for PM to have a higher PE ratio than industry average means that PM has to ensure the successful integration of NQ and therefore carefully planning and implementation is required.

### **1.2 External economic forces that might help and/or hinder the achievement of the merger's financial objectives**

The external economic forces include the foreign currency rates, interest rates and inflation rates.

NQ is a US based company and therefore the shareholders all deal with US\$ currency. If the NQ shareholders do accept the bid, they will be receiving dividends in foreign currency (£) and their share prices will be quoted in £. This means they are exposed to any adverse exchange rate movements between the £ and \$. This may put off the NQ shareholders from accepting the bid.

According to interest rate parity the country with the lower interest and inflation rates will have a stronger economy and therefore stronger currency. The forecast data shows that both inflation and interest rates are lower in the USA, which suggests that the US\$ will strengthen against the £.

NQ's revenues are 75% in the USA and movements in exchange rates could mean higher or lower receipts when converted to UK£.

PM's current financial objectives are:

- É To increase EPS by 5% per annum;
- É To maintain a gearing ratio (market values of long-term debt to equity) below 30%;
- É To maintain a P/E ratio above the industry average.

The currency risk could affect the first financial objective depending on whether the exchange rates moved in favour of PM or against PM. The revenues and costs in foreign currency generally will be impacted by currency risk and to manage this risk PM will need to hedge all its foreign currency. PM could hedge foreign currency risk by taking out forward contracts with its bank, or it could start dealing in future contracts or money market hedges. Considering that

### **Solution to lecture example 9.4 cont....**

PM's current revenues are 70% overseas, PM would already have currency risk management in place.

The gearing ratio would also be affected by the economic factors. If there were exchange losses then equity would be reduced which increases gearing. If PM and NQ have long term debt which is at variable interest rate, then this would increase the liability in the balance and therefore increase gearing. Under IAS 32 and IAS 39 financial instruments, long term debt has to be measured at fair value and incorporated in the balance sheet.

To manage against interest rate risk, PM can ensure that it hedges against this risk by taking out various hedging devices like forward rate agreements with banks, interest rate options or swaps.

The economic factors would also affect the PE ratio. Exchange gains and losses on currency, the impact of inflation on growth and sales (especially in unstable areas like Asia and Rest of World) and also the impact of interest rates can increase or reduce the earnings which will impact the PE ratio. The general economic factors also affect the stock market which prices the shares. This is something that PM would not be able to control.

Considering that the acquisition is of an overseas company and that this company has significant revenues and earnings, ideally PM should finance this investment with an overseas loan. This would create a natural hedge against currency risk and would manage one of the major economic risks facing PM.

### **1.3 Potential post-merger value enhancing strategies that could increase shareholder wealth.**

Failure of takeovers and mergers often results from inadequate integration of the companies after the takeover has taken place.

After the acquisition / merger, NQ needs to be integrated into the group. A detailed plan needs to be formulated for the integration stage. The plan must include the human factor as well. The welfare of the acquired company's employees is a crucial aspect to ensure that motivation does not suffer.

Strategies for enhancing the value of the combined group are as follows:

- 1 Keep all channels of communications open, by involving all staff and reinforcing the organisational structure. There will be cultural difficulties so it's important that PM has a detailed plan. The quicker the integration is implemented the quicker shareholders and the market will be satisfied.
- 2 Respect the employees, products, customers and suppliers of the acquired company. PM needs to be very careful when it changes anything, discussions are required with the affected parties. PM is intending to sell the software licences that NQ holds, and this may cause conflict with the NQ management. However the sale of the software licences will bring an immediate increase in shareholder wealth.
- 3 Provide support and training for all the staff. Re-negotiate staff contracts to make it more attractive. NQ staff may lose motivation after the acquisition and it is important that PM has a clear and affective human resource policy.

### Solution to lecture example 9.4 cont....

- 4 Combine business functions. Duplication can be eliminated especially with marketing, human resources, finance, IT and management departments. This will save costs and increase profitability. Again detailed plans need to be in place before the bid is finalised.
- 5 Sell products in different markets. NQ's products can be marketed by PM in Europe, Asia and the rest of the world. This will increase sales and shareholder wealth. PM does have existing markets here so it should not be too costly to do this.
- 6 Disposal of assets may also release vital cash and streamline the business. PM needs to evaluate all the assets it controls and make decisions on realising some cash which it can use to pay off its debt or reward their shareholders.
- 7 With the acquisition of NQ, PM is more diversified and this reduces the risk of PM which also reduces the cost of capital. This in turn should increase share price.

### Conclusion

The merger with NQ will achieve most of the objectives that PM has. NQ is a major investment with significant revenues and earnings. This major acquisition will have huge risks involved which have been identified in the report.

It would be very useful to have work done on the synergy benefits as this would add a great deal to shareholder wealth and could be used in the bidding process.

I would recommend that PM goes ahead with the merger of NQ, but also to ensure that it has identified all the risks involved and have in place strategies to manage these risks.

Signed

Finance Advisor

### Appendix 1

PM					
	Revenue	% increase	Earnings		Earnings as % of revenue
20X2	1050		225		21.43%
20X3	1125	7.14%	231	2.67%	20.53%
20X4	1250	11.11%	245	6.06%	19.60%
20X5	1400	12.00%	258	5.31%	18.43%
20X6	1560	11.43%	273	5.81%	17.50%

  

NQ					
	Revenue	% increase	Earnings		Earnings as % of revenue
20X2	1850		250		13.51%
20X3	1950	5.41%	265	6.00%	13.59%
20X4	2150	10.26%	280	5.66%	13.02%
20X5	2336	8.65%	290	3.57%	12.41%
20X6	2500	7.02%	300	3.45%	12.00%