

# Economics for Business & Management

Alan Griffiths  
& Stuart Wall

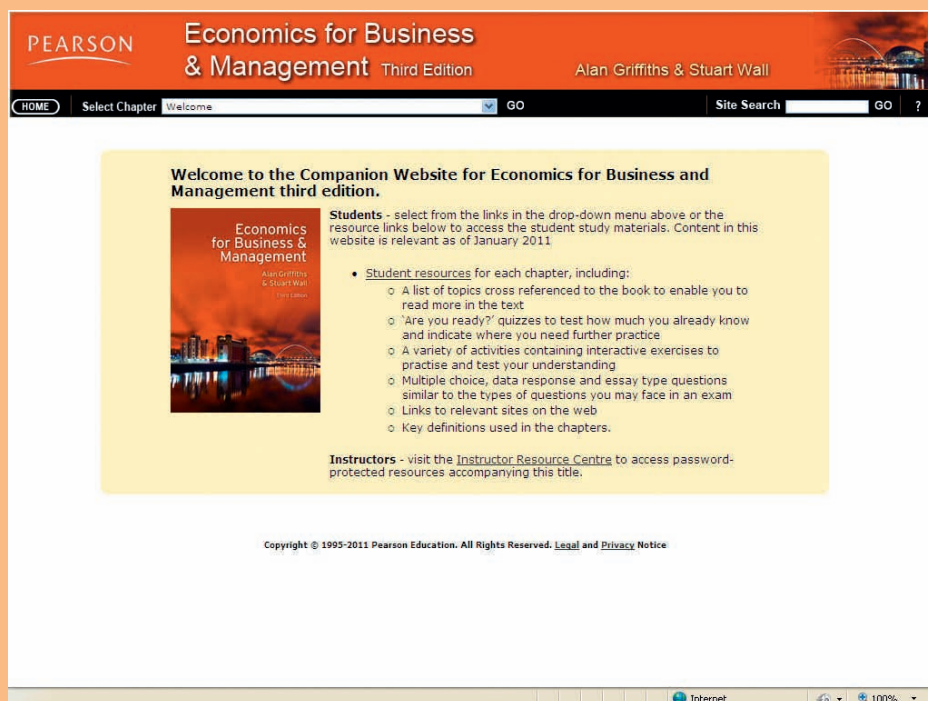
Third Edition



# Economics for Business and Management

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## Merger avoidance

Companies have become quite skilled in placing barriers in the way of unwanted takeover bids. Two of the most widely used involve the so-called 'poison pill' and 'staggered board' barriers.

### 'Poison pill' barrier

This often involves company rules that allow the shareholders to buy new shares in their company at a large discount, should that company be threatened by a hostile takeover. The now enlarged pool of shareholders makes it more difficult and more expensive for the acquiring firm to complete the takeover. In the US, some 40% of the 5,500 companies tracked by *Institutional Shareholder Service*, a research organisation, have been found to employ the 'poison pill'.

### 'Staggered board' barrier

These involve company rules which allow different groups of directors to be elected in different years. This is likely to deter hostile takeovers since it may be many years before the acquiring company will be able to dominate the existing boardroom of the target company. *Institutional Shareholder Service* estimate that some 60% of US companies have a staggered board. Lucian Bebchuk (2004) of Harvard Business School argues that staggered boards cost shareholders around 4–6% of their firm's market value by allowing entrenched managers and directors to resist takeover bids which would be attractive to the majority of shareholders.

## Types of merger activity

Four major forms of merger activity can be identified: **horizontal integration**, **vertical integration**, the formation of **conglomerate mergers**, and **lateral integration**.

### Horizontal integration

This occurs when firms combine at the same stage of production, involving similar products or services. Some 80% of mergers in the UK over the past decade have been of this type. The Hong Kong and Shanghai Banking Corporation's acquisition of Midland Bank to become HSBC in 1992, the merger of Royal Insurance and Sun Alliance to form Royal SunAlliance in 1996, the merger of Carlton and Granada broadcasting companies to form ITV PLC in 2004, and Air France merging with the Dutch carrier KLM in 2004 are all examples of horizontal mergers.

Horizontal integration may provide a number of cost-based economies at the level both of the plant (productive unit) and the firm (business unit).

- *Plant economies* may follow from the rationalisation made possible by horizontal integration. For instance, production may be concentrated at a smaller number of enlarged plants, permitting the familiar technical economies of greater specialisation, the dovetailing of separate processes at higher output, and the application of the 'engineers' rule' whereby material costs increase as the square but capacity as the cube. All these lead to a reduction in cost per unit as the size of plant output increases.

**Example****Microchip manufacture**

The huge fabricated chip manufacturing plants ('Fabs') cost over \$3bn each, roughly twice as much as previous plants, but are able to produce over three times as many silicon chips per time period. These 'plant economies' have reduced the unit cost per chip by over 40%.

- *Firm economies* result from the growth in size of the whole enterprise, permitting economies via bulk purchase, the spread of similar administrative costs over greater output, the cheaper cost of finance, various distributive and marketing economies etc.

**Example****Air France–KLM merger**

The re-named and expanded Air France–KLM airline formed in 2004 estimated cost savings from 'firm economies' of around €300m (around £200m) over the following five years from functional areas such as sales and distribution, IT and engineering.

**Make a note**

Plant economies are sometimes called 'technical economies' and firm economies are sometimes called 'non-technical economies' or 'enterprise economies'.

As well as these cost-based economies, new revenue opportunities may present themselves for the now enlarged company.

- *Revenue-based synergies.* Horizontal (or vertical – see below) acquisitions may enable companies to develop new competencies which may in turn enable them to command a price premium (via increased market power, higher innovation capabilities) or to increase sales volume (via increased market presence – both geographically and in terms of an extended product line).

**Example****Kraft–Cadbury merger**

Kraft, the US food giant, acquired Cadbury, the UK confectioner, for £11.9bn in 2010, becoming the world's largest confectioner. Cost savings of \$675m per year were identified from rationalisation and scale economies, together with an increased global market presence, e.g. Cadbury has a much stronger presence in Europe, Latin America and China than Kraft, increasing projected sales revenue to such an extent that Kraft paid 50% more in January 2010 than the firm's stock market value in September 2009 before the bidding started.

Below is a list of some other examples of horizontal integration.

- Japanese *Shiseido*, the cosmetic company, bought Californian rival *Bare Escentuals* for \$1.7bn (£1bn) in 2010. This made Shiseido the world's fourth largest cosmetic company behind L'Oreal, Procter and Gamble, and Unilever.
- In the UK, the *Co-Operative Society* took over *Somerfield* stores in 2009 to give it an 8% share of the UK's grocery market. The £1.6bn takeover makes the Co-operative Society the fifth largest food chain in the UK.

- *Lafarge SA*, the leading French global cement company, acquired the Egyptian company *Orascom Cement*, the leading cement group in the Middle East and Mediterranean for \$12.8bn in 2008, in order to strengthen its presence in the region.
- *E.ON AG*, the German electricity services giant, acquired *Endesa*, the Spanish electricity and gas company, for €11.5bn in 2008.
- Belgium-based brewer *InBev* took over *Anheuser-Busch* of the US for \$52bn (£35bn) to form Anheuser-Busch InBev in 2008. The new giant company sells such drinks as Budweiser, Becks, Hoegaarden and Leffe across the globe.
- *Morrisons*, the UK supermarket, acquired *Safeway*, another UK supermarket, for £3bn in 2004, almost doubling its market share to 20% in the UK.
- *British American Tobacco* (BAT) acquired *RJReynolds*, America's second largest tobacco group for \$6.2bn in 2003.
- *SAB Miller*, the London-listed second largest brewer in the world, acquired *Birra Peroni*, Italy's number two brewer in 2003.

## Vertical integration

This occurs when the firms combine at different stages of production of a common good or service. Only about 5% of UK mergers are of this type.

- **Backward vertical integration.** Firms might benefit by being able to exert closer control over quality and delivery of supplies if the vertical integration is 'backward', i.e. towards the source of supply. Factor inputs might also be cheaper, obtained at cost instead of cost + profit.
- **Forward vertical integration.** Of course, vertical integration could be 'forward' – towards the retail outlet. This may give the firm merging 'forward' more control of wholesale or retail pricing policy, and more direct customer contact. An example of forward vertical integration towards the market was the acquisition by the publishing company Pearson PLC of National Computer Services (NCS) in 2000 for £1.6bn. NCS was a US global information service company providing Internet links and curriculum and assessment testing facilities for schools. The takeover allowed Pearson to design integrated educational programmes for schools by providing students with customised learning and assessment testing facilities. It could also use the NCS network to reach both teachers and parents. In this way, Pearson was able to use its NCS subsidiary to sell its existing publishing products while also developing new online materials for the educational marketplace.

Vertical integration can often lead to increased control of the market, infringing monopoly legislation. This is undoubtedly one reason why they are so infrequent. Another is the fact that, as Marks & Spencer (M&S) have shown, it is not always necessary to have a controlling interest in suppliers in order to exert effective control over them. Textile suppliers of M&S send over 75% of their total output to M&S, which has been able to use this reliance to their own advantage. In return for placing long production runs with these suppliers, M&S have been able to restrict supplier profit margins while maintaining their viability. Apart from low costs of purchase, M&S are also able to insist on frequent batch delivery, cutting stockholding costs to a minimum.

## Conglomerate integration

**Conglomerate integration** involves each firm adding different products and activities to those with which it was previously involved. The major benefit is the spreading of risk for the respective firms and shareholders. Giant conglomerates like Unilever (with interests in food, detergents, toilet preparations, chemicals, paper, plastics, packaging, animal



feeds, transport and tropical plantations – in 75 separate countries), are largely cushioned against any damaging movements which are restricted to particular product groups or particular countries.

### Example

#### Procter & Gamble moves into beauty products

Procter & Gamble (P&G), the US multinational, is the world's largest consumer group conglomerate, owning brands such as Pringles crisps, Pampers nappies and Crest toothpaste. In recent years it has broadened its portfolio of products still further into haircare, acquiring Nioxin, a US scalp care company in 2009, Gillette hair care products in 2005, the German hair care company, Wella, in 2003 and Clairol in 2001.

The various 'firm (enterprise) economies' outlined above may also result from a conglomerate merger. P&G expects to save €300m annually from its purchase of Wella by economies from combining back-office activities, media buying, logistics and other purchasing activities.

The ability to buy companies relatively cheaply on the stock exchange and to sell parts of them off at a profit later is another important reason for some conglomerate mergers. The takeovers by Hanson PLC of the Imperial Group, Consolidated Goldfields and the Eastern Group, in 1986, 1989 and 1995 respectively, provide good examples of the growth of a large conglomerate organisation which subsequently demerged the acquired businesses. Similarly, P&G has developed a strategy of divesting itself of brands in slower growth markets and focusing on sectors with faster future growth potential, such as beauty products.

Despite these benefits of diversification, times of economic recession (e.g. the early 1990s in the UK) often result in firms reverting back to their more familiar 'core' businesses. Only some 10% of UK mergers over the past decade can be classified as conglomerate mergers and some conglomerates have moved in the opposite direction. For example, the de-merger of Hanson PLC in 1996 produced four businesses with recognisable 'core' activities, namely tobacco, chemicals, building and energy.

## Lateral integration

This is sometimes given separate treatment, though in practice it is difficult to distinguish from a conglomerate merger. The term 'lateral integration' is often used when the firms that combine are involved in different products, but in products which have some element of *commonality*. This might be in terms of factor input, such as requiring similar labour skills, capital equipment or raw materials; or it might be in terms of product outlet. For example, the takeover of Churchill Insurance by the Royal Bank of Scotland (RBS) for £1.1bn in 2003 is arguably an example of lateral integration. Churchill gave RBS a presence in the *general household insurance* business for the first time, complementing its existing presence in motor insurance via its earlier acquisition of Direct Line. Direct Line dominates the market in selling insurance to careful, budget-conscious motorists, while Churchill is widely used by buyers of household insurance in which Direct Line is less strong. For example, in 2003 Direct Line insured 6 million motorists but only 1.6 million households, whereas Churchill insured 5 million households but only 2 million motorists.

The takeover of Clerical Medical, the life assurance company, by Halifax Building Society for £800m in 1996 was also an example of lateral integration, involving the linking of companies with different products but within the same financial sector. The increase in savings by an ageing population, together with a reduction in mortgage business, meant that the Halifax had surplus funds which it could now direct into insurance policies using Clerical Medical's strong presence among independent financial advisers. These advisers could also act as distribution channels for other Halifax products as well as for those of its Clerical Medical subsidiary.

However, the Swiss company TetraLaval's offer for the French company Sidel in 2001 (which was finally cleared by the EU competition authorities in 2002) provides an example of the difficulty of distinguishing the concepts of conglomerate and lateral integration. TetraLaval designs, manufactures and sells packaging for liquid food products as well as manufacturing and marketing equipment for milk and farm products. Sidel designs and sells machines used in the manufacture of plastic bottles and packaging. The European Commission regarded the merger as conglomerate in that the companies operated in different sectors of the market and were to be organised, post-merger, into three distinct entities within the TetraLaval Group. However, it was still the case that the merger would resemble a case of lateral integration in that the companies had a commonality of experience in the package and container sector.

#### Make a note

Mergers and acquisitions can take a variety of formal and less formal structures, with 'alliances' (see Chapter 14, pp. 501–503) sometimes a more accurate term for the emerging relationship. Microsoft and Yahoo entered into an internet search alliance in 2010, approved by US and EU regulation authorities. Daimler and Renault (pp. 503–504) entered into a cross-shareholding alliance in March 2010 to gain scale economies in small car production, as did Mazda and Toyota in 2010 to share expensive R&D investment costs for hybrid and electric cars.

#### Stop and think

5.3

Can you find additional examples of these four different types of integration?

## Explanations of merger activity

A number of theories have been put forward to explain the underlying motives behind merger activity. However, when these various theories are tested empirically the results have often been inconsistent and contradictory.

### The value discrepancy hypothesis

The **value discrepancy hypothesis** is based on a belief that two of the most common characteristics of the industrial world are imperfect information and uncertainty. Together, these help explain why different investors have different expectations of the prospects for a given firm.

The *value discrepancy hypothesis* suggests that one firm will only bid for another if it places a greater value on the firm than that placed on the firm by its current owners. If Firm B is valued at  $V_A$  by Firm A and  $V_B$  by Firm B then a takeover of Firm B will only take place if  $V_A > V_B + \text{costs of acquisition}$ . The difference in valuation arises through Firm A's higher expectations of future profitability, often because A takes account of the improved efficiency with which it believes the future operations of B can be run.

It has been argued that it is in periods when technology, market conditions and share prices are changing most rapidly, that past information and experience are of least assistance in estimating future earnings. As a result, differences in valuation are likely to occur more often, leading to increased merger activity. The value discrepancy hypothesis would therefore predict high merger activity when technology change is most rapid, and when market and share price conditions are most volatile.

## The valuation ratio

Another factor which may affect the likelihood of takeover is the **valuation ratio**, as defined below:

$$\text{Valuation ratio} = \frac{\text{market value}}{\text{asset value}} = \frac{\text{no. of shares} \times \text{share price}}{\text{book value of assets}}$$

If a company is 'undervalued' because its share price is low compared to the value of its assets, then it becomes a prime target for the 'asset stripper'. If a company attempts to grow rapidly it will tend to retain a high proportion of profits for reinvestment, with less profit therefore available for distribution to shareholders. The consequence may be a low share price, reducing the market value of the firm in relation to the book value of its assets, i.e. reducing the valuation ratio. It has been argued that a high valuation ratio will deter takeovers, while a low valuation ratio will increase the vulnerability of the firm to takeover. In the early 1990s, for example, the property company British Land purchased Dorothy Perkins, the womenswear chain, because its market value was seen as being low in relation to the value of its assets (prime high street sites). After stripping out all the freehold properties for resale, the remainder of the chain was sold to the Burton Group.

In recent years the asset value of some companies has been seriously underestimated for other reasons. For example, many companies have taken years to build up brand names which are therefore worth a great amount of money; but it is often the case that these are not given a money value and are thus not included in the asset value of the company. As a result, if the market value of a company is already low in relation to the book value of its assets, then the acquirer gets a double bonus. One reason why Nestlé was prepared to bid £2.5bn (regarded as a 'high' bid, in relation to its book value) for Rowntree Mackintosh in 1988 was to acquire the 'value' of its consumer brands cheaply, because they were not shown on the balance sheet. Finally, it is interesting to note that when the valuation ratio is low and a company would appear to be a 'bargain', a takeover may originate from within the company; in this case it is referred to as a management buyout (MBO).

### Stop and think

5.4

Can you name any recent examples of management buyouts?

Case Study 5.4 looks at the merger of Geely, the Chinese car maker, with Volvo, the Swedish car maker.

### Case Study 5.4

### Premium car deal fills a hole at Geely

FT

Successful cross-border vehicle company mergers can be counted on the fingers of one hand. When one famous car brand buys another – whether General Motors and Saab, Daimler and Chrysler, or Ford and Volvo – one of the most common by-products is buyer remorse.

Perhaps the March 2010 Geely–Volvo deal will go down in automotive history as just another mergers and acquisitions lemon – or maybe it will help make Geely, and its head Li Shufu, household names. Either way, the \$1.8bn deal is likely

to mark a significant shift in the global industry to the East. China has the world's largest auto markets; now it owns one of the world's best known premium car brands.

On paper, the deal makes sense: Geely makes cheap small cars; it is developing a line of new mid-sized cars; what it lacks is a premium brand, strong in all the areas where Chinese carmakers still trail: technology, research and development, service and quality. Geely planned to nearly double the loss-making Swedish carmakers' sales to

