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in the United Kingdom**

No 10

**THE STOCK MARKET AND MERGERS IN THE  
UNITED KINGDOM**

**E. Victor Morgan and Ann D. Morgan**

**Hume Occasional Paper No.24**

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INQUIRY INTO CORPORATE TAKEOVERS IN  
THE UNITED KINGDOM

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UNITED KINGDOM**

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**THE DAVID HUME INSTITUTE**

**1990**

# INQUIRY INTO CORPORATE TAKEOVERS IN THE UNITED KINGDOM

The David Hume Institute has been commissioned by The Joseph Rowntree Memorial Trust to conduct an Inquiry into the issues raised by Corporate Takeovers in the U.K. This paper is the tenth of a series presenting the results of research undertaken in the course of the Inquiry, and also submissions of opinion received from individuals and organisations which are thought to be of wide general interest. The Institute hopes in this way to keep the public informed of work in progress. The Final Report will appear in the late Spring of 1991.

A note on the Institute and a list of its publications appear on pp. 119-121.

The Institute has no collective views on any public policy question and is not committed to the views of any of its authors.

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# 1 INTRODUCTION

## 1.1 Scope of the Problem

British policy towards mergers rests on the assumption that, with few exceptions, the public interest is likely to be best served by leaving the outcome of takeover bids to be determined by market forces. The main objective of this paper is to assess the validity of this assumption by describing and analysing the way in which the UK stock market functions in relation to mergers; in particular we are concerned with how well the market can be expected to discriminate effectively between the mergers that are and those that are not in the public interest. Before settling down to the main topic, however, it should be noted that only a small fraction of all mergers, by number, are influenced by stock market valuations of the companies concerned.

In 1988, the Business Statistics Office (BSO) recorded 1,224 mergers in the UK that were reported in the press; but for every one that appears in the press, there are many that do not. Another study in this series (Bannock 1990) estimates that there were over 30,000 mergers in 1988. However, the parties to most of these came no nearer to a financial market than the office of their local bank manager. For such mergers, financial conditions influence the availability and terms of finance, but any process of selection by reference to prices determined by competitive bidding is wholly absent.

Such mergers are largely ignored in this paper for several reasons. They are individually minute, so that even a large number of them have only a very small impact on the disposal of total economic resources. The businesses concerned (which are often unincorporated) are normally owned by a single person or a very small group who are acting in their own interests and who generally have or can obtain all relevant information that is readily available. There are, therefore, no problems of misallocation of resources through conflicts of

interest or misinformation. Finally, though most people can call to mind individual examples, there is virtually no general information about them.

At the other end of the scale, there are the mergers between giant corporations, with assets sometimes running into billions of pounds, that have been a feature of recent years, and that are having a profound effect on the structure of the economy.

The large companies that are involved in such mergers have several features that may cause problems.

- They are normally managed by boards of directors who own only a small proportion of their shares and whose main income from the company is in fees and salaries (though they may also have profit-related bonuses and share option schemes).
- The companies have a very large number of shareholders many of whom are accustomed to doing nothing more active, in relation to their company, than banking their dividend cheques. It is the directors of a bidding company who propose bids; in some cases the approval of shareholders may be needed but this is seldom more than a formality. There may, therefore, be divergences of interest between management and shareholders.
- Though the majority of company shareholders are still private individuals, a majority of shares are owned by financial institutions, and managed by professional investment managers employed by these institutions. The career prospects of these people depend upon the performance of their funds so that, as shown in Chapter 4, they may have interests that diverge at times both from those of individual shareholders and of company management.
- In small firms some degree of harmony between the interest of employers and employees may be preserved both by personal relationships and by the possibility



of employees either becoming part-owners of their firm or setting up in business on their own. In large companies such bonds are much weaker and it is easy for confrontational attitudes to arise, seeing owners' and workers' interests as opposed and regarding profit as a form of exploitation.

These divergent and possibly conflicting interests raise important questions as to the role of corporate institutions in our society.

## **1.2 The Significance of Corporate Status**

Mr Jonathan Charkham, an advisor to the Governor of the Bank of England, recently asked: 'What is the purpose of companies?', and claimed to find different answers coming from industry and the City.

'Company management think they are there to provide goods and services for the community. Growth is implicit; if a thing is worth doing it is worth doing more of it. In other words for management profitability is essential for growth. The financial sector on the other hand thinks industry is there to make money and that growth is a product of and means to profitability'. (Charkham 1990 p.3)

Similar differences of view can be traced in different countries; the primacy of profits, for example, is much more widely accepted in Britain and the USA than it is in France, Germany or Japan.

Looking at the matter in a slightly different way, corporate status gives an institution 'legal personality', enabling it to own property in its own name, to enter into contracts, including purchases of shares in other companies, and to sue and be sued in the courts. Should such privileges be associated with responsibilities analagous to those which society normally expects of real persons? The actions of companies affect not only their shareholders but also employees, customers,

creditors, and the environment and the social life of the communities in which they operate. Most countries have laws protecting employees (e.g. safety, redundancy); customers (description and labelling of goods); creditors (prohibition of trading while insolvent); and the environment (control of pollution); but the coverage of such regulation tends to be narrower in Britain than in some other countries.

Social convention also influences the way in which companies actually behave and many companies go well beyond legal requirements, e.g. in working conditions and amenities for employees; in guarantees for customers; in assisting areas damaged by plant closures; in charitable donations; and in support for educational, cultural and social activities in their communities. Public opinion in favour of such actions is probably growing, but initiatives come from industry rather than financial markets.

For good or ill, those who operate in the UK equity market are concerned almost wholly with assessing the prospective earnings of companies and the degree of risk attaching to them. Share prices, therefore, depend on the market's evaluation of these two factors and very little else. Under present policies the outcome of takeover bids is determined, with very few exceptions, by the market. If society believes that (in some cases at least) a broader frame of reference is needed then, however efficiently the market may be doing its own job, there is a case for supplementing it by some other mechanism.

The circumstances in which such a broader frame of reference may be needed raise questions that are beyond the terms of reference of this paper, but they are an essential ingredient of merger policy. We therefore include as an appendix to Chapter 4 a brief discussion of the relationship of profit maximization and the public interest based on theoretical welfare economics.

### 1.3 current Mergers Policy

The powers and responsibilities of the Secretary of State for Trade and Industry and the Office of Fair Trading (OFT) derive mainly from the 1973 Fair Trading Act. During the first decade after the passage of the Act, a number of references to the Monopolies and Mergers Commission (MMC) were made raising various public interest issues. It was not always clear why one case had been referred and another not, and the authorities were accused of inconsistency. In July 1984 Mr Norman Tebbit, then Secretary of State, made a much-quoted statement in which he said: '...my policy has been and will continue to be to make references primarily on competition grounds'. He was careful to point out that 'primarily' did not mean exclusively but, nevertheless, the statement marked a change of policy - a narrowing of the grounds for reference - as well as an attempt at clarification. Similar statements have subsequently been made by other ministers, by the Director General of Fair Trading and in the paper on Mergers Policy published by the Department of Trade and Industry (DTI, 1988). Since 1984, very few references raising issues other than competition have been made.

The rationale of current policy is set out clearly and forcefully in Mergers Policy, and can be illustrated by a few short quotations:

'...broadly speaking the free commercial decisions of private decision-makers in competitive markets result in the most desirable outcomes for the economy as a whole'. (Para 2.8)

'...private decision-makers will usually seek (and will usually be best placed to achieve) the most profitable employment for their assets, and in competitive markets this will generally lead to the most efficient use of those assets, for the benefit both of their owners and the economy as a whole' (Para 2.9)

The paper admits that markets can make mistakes and indeed

it contains evidence, reviewed in Chapter 5, of the disappointing outcome of many takeovers. Nevertheless, it asserts that: '...the people best placed to make a judgement of commercial prospects are those whose money is at stake...' (Para 2.1). Finally, it is argued that '...the threat of takeover is a powerful spur towards efficiency in the management of UK companies' (Para 2.27).

These quotations illustrate both the strengths and weaknesses of current policy. Its strengths lie in respect for individual property rights and in keeping government intervention to a minimum. Its weaknesses are that markets are not always very competitive; that the threat of takeover may be a distraction as well as a spur to management; and, perhaps most important, that decisions on takeovers are made largely by people whose money is not at stake.

#### **1.4 Some Pertinent Questions**

The rest of this paper is largely concerned with the answers to three questions regarding current mergers policy.

- Has the market proved to be a good discriminator between bids that are and those that are not in the public interest?
- Does the market mechanism contain built-in bias towards either too much or too little merger activity?  
and
- Does market activity in relation to mergers produce significant 'side effects'?

To summarise our conclusions the answer to the first of these questions is almost certainly 'no'. The economic analysis of Chapter 4 shows several reasons why a market like that in UK equities would be unlikely to discriminate well; and the large empirical literature surveyed in Chapter 5 indicates that a high proportion of mergers would fail any reasonable public interest test.

This, in itself, is not a conclusive argument for a change in policy; the market may be a bad discriminator but other mechanisms might be no better or even worse. The case for a change depends also on the answer to our second and third questions.

The answer to the second is probably 'yes'. It is sometimes argued that the large transactions costs associated with bids act as a deterrent so that the market is biased on the side of too little merger activity. However, this argument is not very convincing since those who initiate bids seldom bear much, if any, of the cost. On the other hand, the management of acquiring companies gains an extension of its responsibilities, power and influence, and probably also an increase in its income. Moreover, merchant banks and other financial, legal and accounting advisers earn very large sums in fees and commissions from merger activity. Rewards are highest where bids are successful, but even an unsuccessful bid can be very lucrative. There is thus a group of influential persons and institutions with a strong financial incentive to seek out potential merger situations and encourage clients to make bids. Finally, it is difficult for shareholders in a bidding company - the people whose money is really at stake - to prevent a bid which they believe is not in their own best interest. On balance, we have very little doubt that the market is biased towards too much rather than too little merger activity.

The answer to our third question is also 'yes'. One beneficial side effect is the spur to managerial efficiency which Merger Policy sees in the threat of being taken over. But this danger may act as a distraction as well as a spur; it may cause boards to concentrate on short-term policies and to adopt defensive tactics that impair the working of the market and are harmful both to shareholders and to the economy.

## **1.5 Plan of the Paper**

In Chapter 2 we briefly describe the most relevant features of the UK equity market and of the takeover bids whose fate is

determined in that market. Chapter 3 gives a similar description of the advisory services available to companies and of the regulatory constraints imposed on the market by the Secretary of State for Trade and Industry, the OFT, the MMC, the Takeover Panel and the Stock Exchange.

In Chapter 4 we analyse the implications of the facts recorded in the two previous chapters and ask the question: 'Is it likely that a market such as we have found would discriminate well between takeovers that are and those that are not in the public interest?'. Chapter 5 discusses problems of empirical testing and surveys the substantial empirical literature that has grown up over the past two decades. In Chapter 6 we change our viewpoint and consider, not the effects of the market on mergers, but the effect of mergers on the market together with some other side effects. Finally, Chapter 7 summarises our conclusions and considers some possible policy changes.

A very important influence on future policy will be the proposals adopted by the Council of Ministers of the European Community in December 1989, and which come into force in September 1990. These provide for investigation by the Commission of large mergers that would have significant effects on more than one member state, but they will not affect primarily national mergers. They are the subject of a separate paper in this series and so are mentioned only incidentally here.

## **2 THE MARKET, SHAREHOLDERS AND MERGING COMPANIES**

### **2.1 The UK Equity Market**

The rationale of current UK merger policy depends on the shares of bidding and target companies being valued in competitive markets. We therefore begin this chapter by describing the main features of the UK equity market with particular reference to the nature and extent of competition. Not surprisingly, we shall find much more active competition

in the market for the shares of some companies than of others. Since information is a vital ingredient of competition, we addressed a questionnaire to investment managers about their sources of information, and the results are recorded in section 2.2. Finally, in section 2.3 we look at the available information bearing on the state of competition in relation to companies involved in takeovers.

Almost all domestic trade in the shares of UK public companies takes place through the institution whose official title is now the International Stock Exchange (ISE) though it is still generally referred to (as it will be here) simply as 'the Stock Exchange'. There is a very small 'over the counter' market operated by a few firms specialising in the provision of venture capital for small companies; there is an unknown, but almost certainly small, amount of 'off-exchange' business - direct deals between parties (usually financial institutions) that are not members of the Exchange; finally a few very large companies are listed on overseas exchanges so that occasionally dealings on these exchanges may influence the outcome of a bid.

There are a few large firms and a great many small ones that are unlisted and in the shares of which there is no organised market. Little is known about their number or capital value. Inland Revenue data show that in the mid-1980s they accounted for about 29 per cent of the total value of ordinary shares in the estates of deceased persons. However, this almost certainly over-states their importance since they are much more prominent in the portfolios of individuals than of institutions. A 1975 survey estimated that unlisted shares accounted for 20 per cent of all ordinary shares, and that the personal sector owned almost half of all unlisted ordinary shares (Economic Trends, November 1980). Most of the rest were owned by industrial and commercial companies. By the late 1980s, only 7 per cent of Investment Trust holdings were in unlisted shares and a memorandum by the ABI to the David Hume Institute gave insurance company holdings at only one per cent of their total equities.

Trading in ordinary shares on the Stock Exchange is currently organised in three sectors - the Official List, the Unlisted Securities Market (USM) and the Third Market, though the very small Third Market will cease to operate by the beginning of 1991. At the end of 1989 there were 2,474 companies with shares of a market value of £57 billion, distributed between the three markets as shown in Table 2.1. Companies on the Official List (generally known as 'listed companies') formed 79 per cent of all companies, but accounted for over 98 per cent of market capitalisation.

**TABLE 2.1: THE UK EQUITY MARKET: 31.12.89**

	Companies		Market Value	
	Number	% of total	£ million	% of total
<b>Listed</b>	1955	79.0	507,159	98.2
<b>USM</b>	448	18.1	8,975	1.7
<b>Third Market</b>	71	2.9	579	0.1

Source: *ISE Quality of Markets Quarterly*, Winter 1989.

Official data on share ownership treat ordinary shares, both listed and unlisted, and preference shares as a single group. These figures are shown in the first two columns of Table 2.2. In the two final columns of the table, the figures have been adjusted by reference to earlier data on holdings of listed and unlisted securities to provide estimates of holdings of listed securities alone.



**TABLE 2.2: OWNERSHIP OF UK SHARES: END - 1988  
MARKET VALUES**

	All ordinary & preference shares		Estimates for listed ordinary shares	
	£billion	%	£billion	%
<b>Financial institutions<sup>a</sup></b>	221.9	48.5	220.5	56.1
<b>Personal Sector</b>	128.0	28.0	102.5	26.1
<b>Industrial &amp; commercial companies</b>	46.4	10.1	25.0	6.3
<b>Other including overseas</b>	61.1	13.4	45.2	11.5
<b>Total</b>	<b>457.3</b>	<b>100</b>	<b>393.2</b>	<b>100</b>

<sup>a</sup>: *excluding banks*

Source: All shares data - *Financial Statistics*; total of listed ordinary shares - *ISE Quality of Markets Quarterly*.

Our estimates, which are subject to wide margins of error, suggest that individuals own only about 26 per cent of all listed equities and financial institutions (excluding banks) about 56 per cent. The remainder are owned by other companies, foreign persons and institutions, banks and charities. A figure often quoted is that 70 per cent of all UK equities are owned by institutions, but this is only true if the word 'institution' is interpreted very broadly. What is certain is that less than 30 per cent of voting rights of UK companies are in the hands of personal owners of the shares concerned.

Table 2.3 shows holdings of and transactions in ordinary shares (including unlisted shares) of the main types of financial

institutions and the holding periods implied by the latter. The holding period for all UK and Irish equities is included for purposes of comparison.

**TABLE 2.3: FINANCIAL INSTITUTIONS: SHARE HOLDINGS AND TRANSACTIONS, 1988**

	Holdings <sup>a</sup> £million	Sales £million	Estimated average holding period in years
<b>Unit trusts</b>	22,314	11,649	1.9
<b>Investment trusts<sup>b</sup></b>	8,160	2,840	2.9
<b>Insurance companies:</b>			
<b>long-term funds</b>	63,026	11,072	5.7
<b>other</b>	6,665	1,201	5.5
<b>Pension funds</b>	110,038	26,561	4.1
<b>Total above</b>	<b>210,203</b>	<b>53,323</b>	<b>3.9</b>
<b>All listed UK &amp; Irish equities</b>	<b>382,463</b>	<b>95,860</b>	<b>4.0</b>

<sup>a</sup> Average of holdings at beginning and end of year

<sup>b</sup> Listed shares only

<sup>c</sup> Including unit trust units

Source: Financial institutions - *Financial Statistics*, All Equities  
- *IS Quality of Markets Quarterly*

Unit trusts and investment trusts are the most active participants in the market with average holding periods of only 1.9 and 2.9 years respectively. The average for the four main groups of institutions, 3.9 years, is fractionally below that of the market as a whole. It is generally believed that personal shareholders are rather less active than others and this is confirmed by Stock Exchange transactions surveys. The

latest of these (ISE Quality of Markets Quarterly, Autumn, 1989) showed individuals, directly or through agents, providing just under 20 per cent of transactions by value, although we estimate that they own more than 25 per cent of shares. However, because individual bargains are on average, small, individuals still accounted for over 70 per cent of bargain numbers.

Since the so-called 'Big Bang' (October 27th 1987) dealing in UK equities has been organised on what is known as a 'competitive market maker' system. Before that date the Exchange operated on what was called 'single capacity'. Member firms had to choose between operating as brokers (who allowed to deal with the general public but only as agents) or jobbers (who were allowed to deal as principals with brokers and with one another but who could not deal directly with the general public at all).

Under the new system all member firms can operate in 'dual capacity'. They may choose to operate, like the old-style brokers, purely as agents, but they are allowed to deal with the public as principals provided that they inform clients that they are so doing, and that the deals are to the clients' 'best advantage'. Many firms deal occasionally on their own account when it suits them, but some assume additional obligations by registering with the Exchange as 'market makers'. Market makers enjoy some advantages in relation to settlement procedures and taxation (ISE Quality of Markets Quarterly, September 1984) and in return they are required to make continuous two-way (bid and offer) prices for securities in which they are registered.

These prices are displayed on video screens in the offices of brokers and institutional investors through the Stock Exchange automated quotations system (SEAO). These screens also display details of the size and price of latest deals.

At the end of December 1989 there were 28 market makers in the UK equities market. However, firms operate in only a

limited range of securities so the number making a market in the shares of any one company is substantially less than this. A few very large companies have as many as 20 market makers, but many small companies have only one, and some none at all.

The Stock Exchange classifies listed UK equities into four categories, 'alpha', 'beta', 'gamma' and 'others', taking into account turnover, market capitalisation, number of market makers and number of shareholders (ISE Quality of Markets Quarterly, Summer 1986). Table 2.4 summarises the situation with regard to the number of market makers in the four categories at the end of 1989. The 158 alpha stocks had an average of 13.5 market makers each, and none of them had less than 9. At the other end of the scale, however, 'other' stocks averaged only 1.1 and overall there were 1,530 securities, 65 per cent of the total, with three market makers or less.

**TABLE 2.4: MARKET MAKERS IN SEAQ  
SECURITIES: 31.12.89**

SEAQ category	No of securities	Average no. of market makers	No of securities with	
<b>Alpha</b>	158	13.5	8 or less	0
<b>Beta</b>	607	5.7	3 or less	340
<b>Gamma</b>	1,447	3.2	3 or less	1,055
<b>Others</b>	135	1.1	3 or less	135

Source: ISE *Quality of Markets Quarterly*, Winter 1989

Differences in the number of market makers reflect differences in the size of companies and in the amount of business that they provide. Whether we measure market capitalisation, value of turnover or number of bargains we find a few large companies and many small ones.

The size distribution of UK and Irish companies by the market value of their equity capital at March 31st 1989 is shown in Table 2.5. There were three companies with equity capital valued at more than £10,000 million, and a further 7 between £5,000 million and £10,000 million. These 'top ten' account for less than half of one per cent of all Stock Exchange companies but for over 20 per cent of equity capital. Company number 1,000, the Micro Focus Group, had equity valued at £25.9 million, only one sixty-fifth of that of number 1, British Telecommunications, and there were more than 1,100 companies smaller than this.

**TABLE 2.5: UK AND IRISH COMPANIES BY MARKET VALUE OF EQUITY CAPITAL: 31.3.89**

Value of equity £ million	Number of companies
10,000 and over	3
5,000 and under 10,000	7
3,000 and under 5,000	15
1,000 and under 3,000	78
100 and under 1,000	396
25.9 and under 100	491
Under 25.9 <sup>a</sup>	1169

<sup>a</sup> £25.9 million is the equity capital of company number 1,000 in Table 1, which is the main source of information

Source: ISE *Quality of Markets Companies Book 1989*

Unless otherwise stated, the Stock Exchange statistics report turnover as the sum of purchases and sales. Figures are reported for value, number of shares and number of bargains. Customer turnover is the sum of purchases by the public from members and sales by the public to them. Intra-market sales are transactions between members that may be either between

market makers or between market makers and other members who are dealing on their own account rather than as agents for the public.

Intra-market trading plays an important role. It enables market makers to handle larger bargains and to liquidate 'long' positions and so avoid tying up capital for long periods; and it is also part of the process of price formation. If market maker A is going long on a particular security while B is going short, the two can do a deal with one another with little if any effect on the price to the public. However, if market makers as a group are getting longer, this implies an excess of sales over purchases by the public and the price of the share will fall. Intra-market dealing as a proportion of total turnover is considerably higher for 'alpha' stocks, where average bargain sizes are larger and market makers more numerous, than elsewhere.

Turnover varies considerably between companies, and also fluctuates over time but the preponderance of large companies is a constant feature. In the six months to March 31st 1989, 'alpha' securities, which were only about 6 per cent of the total number, accounted for three quarters of the total turnover and 68 per cent of customer turnover by value. The twenty most active shares accounted for about 23 per cent of turnover value.

The preponderance of the largest companies is not quite so great in terms of the number of bargains but, even so, 'alpha' stocks generated more than half the total number of bargains, while the twenty most active securities accounted for 36 per cent of all 'alpha' bargains and 20 per cent of all equity bargains. Two companies, British Steel and British Gas, generated over 100,000 bargains; only one in the top 20 generated less than 10,000 and the average was 35,000 or 280 a day. The average for all 'alpha' securities was 13,315 or 107 a day.

At the other end of the scale, information published for the first time in the 1989 Companies Book enables us to look at

some of the least active companies. We found that 740 companies, more than a third of the total, had 200 or fewer bargains in the 125 working days covered by the figures, while 150 had 25 bargains or fewer. A disproportionate number were in two Stock Exchange categories, 84 (investment trusts) and 87 (miscellaneous financial). If these two categories are excluded, we are still left with 558 companies (30 per cent of the total), with less than two bargains a day, and 250 companies (14 per cent of the total) with less than one bargain a day. (ISE 1989).

This brief account makes it clear that we must qualify the usual idea of the Stock Exchange as a market in which share prices are the outcome of a continuous trading process involving many bargains between a large number of traders actively competing with one another. This is a good approximation to what actually happens in the market for shares in the twenty or so most active companies. However, the number of transactions and transactors falls rapidly as the size of companies diminishes. For several hundred at the bottom end of the scale, the share price resembles the negotiated prices found, for example, in the property market and the used car market more closely than the prices established in a continuous market.

The degree of competition also diminishes as we move down the size scale. At the top end, with a dozen or more market makers; with other members dealing on their own account; and with customer bargains running at several hundred a day, competition is intense. But, for 65 per cent of securities, there are three or fewer market makers, little intra-market trading, and only a few customer bargains a day; here, the position of the market maker is not dissimilar to that of, for example, an antique dealer.

There are elements of vigorous competition in the market, but there are also elements of oligopoly, which are enhanced by differences in size and resources between market makers.

Before the 'Big Bang', two firms of jobbers (the predecessors of present-day market makers) were believed to do about 80 per cent of the business. Very little is known about the size and market share of the present market makers. The 'Big Bang' almost certainly reduced concentration, but substantial differences in size remain.

Another important aspect of the way in which the market works is the provision of information. Until October 1986, the Stock Exchange operated fixed commission scales. Brokers, who were thus prevented from competing on price, competed in other ways, including the conduct of research and the provision of research-based recommendations to their clients. Since the 'Big Bang', commissions have been negotiated and those on large bargains have come down, but many large brokers have kept their research teams and still regard research as an important competitive weapon. Obviously it is only worth doing research on a company if there is a reasonable amount of interest in it among clients and a reasonable turnover in its shares. The activities of the largest companies are followed by analysts from a number of different brokers. Second line companies have fewer followers but may still attract competent research from brokers who specialise in their particular industry. But there are many smaller companies that are simply not worth an analyst's time, and so the market has little information other than that provided to the Stock Exchange and the press by the companies themselves.

This situation may be modified by the fact that a likely takeover often produces a dramatic rise in turnover, and an analyst who correctly predicts a bid and gets his clients into the target company will ensure them a substantial profit. On both counts, 'bid spotting' is likely to be a rewarding activity. Some economic consequences of the way in which the market generates information are discussed further in Chapter 4.



## 2.2 The Institutional Investors - Information and Attitudes

In order to learn more about the sources of information used by institutional investors and their general attitudes towards takeovers, a questionnaire was sent to 189 large institutions drawn from the ranks of merchant banks, insurance companies, pension funds, investment trusts and unit trust managers. Eighty-four usable returns were received, a very satisfactory response rate of over 44 per cent. The main findings are summarised here and the text of the questionnaire, together with a further analysis, will be published as a separate paper in this series.

Of 80 respondents who disclosed the size of the total funds under their management, 63 (79 per cent) had assets of £1 billion or over, and a further 12 (15 per cent) had between £0.5 billion and £1 billion. The corresponding figures for UK equities only were 68 per cent and 14 per cent respectively. We deliberately confined our questionnaire to large organisations, both because of their preponderance in the market and because of the practical difficulties of obtaining a representative sample of small institutions.

Investment management is the responsibility of a management team headed by a manager who reports either directly to the board or to an investment committee. Many institutions have rules or guide-lines on general policy; the most common were restrictions on the maximum proportion of the fund held in one company and the maximum proportion of a company's capital that might be held by a fund. Less common, but still significant, were restrictions on the proportion of a fund invested in any one industry and on holdings in politically sensitive companies. Within these very broad constraints, investment managers wield a lot of power. Of 77 respondents to a question on who made the ultimate decision to accept or reject a bid, 68 per cent said the manager and only 32 per cent an investment committee.

The main sources of information available to investment managers are in-house research, brokers' recommendations, advice from other advisers and media comment. Respondents were asked to indicate their reliance on these sources, both for ordinary investment decisions and for decisions on bids, on a scale of 'entirely', 'largely', 'a little' and 'not at all'. The 'entirely' and 'not at all' categories were very rarely used. The distribution of responses between 'largely' and 'a little' is shown in Table 2.6. The number of responses exceeds the number of respondents because some respondents indicated reliance on more than one source.

**TABLE 2.6: INVESTMENT MANAGERS' RELIANCE ON INFORMATION SOURCES**

Number of responses	Rely 'largely'		Rely 'a little'	
	Ordinary Mergers decisions	Ordinary Mergers decisions	Ordinary Mergers decisions	Ordinary Mergers decisions
<b>In-house research</b>	52	59	22	9
<b>Brokers</b>	45	18	37	48
<b>Other advisers</b>	5	7	47	40
<b>Media comment</b>	2	4	56	46

Source: Questionnaire survey

Clearly in-house research and brokers' recommendations are the major sources with only a very small number of responses indicating large reliance on either other advisers or the media. Reliance on in-house research was stronger and that on brokers weaker in the case of decisions on bids than on ordinary investment decisions. This is not surprising, since many brokers make a habit of regularly telephoning institutional clients with recommendations of shares for ordinary investment. When it comes to 'a little' reliance, brokers are much more prominent in relation to mergers, as are other

advisers and the media in relation both to mergers and ordinary investment.

Most large institutions obtain information from a substantial number of brokers. The average number employed by our respondents for normal equity dealing was 25, and the degree of dispersion around this figure was not great.

As a test of the resources available for in-house research, institutions were asked to give the number of their 'qualified staff'. A note to this question defined the phrase 'qualified staff' as: 'graduates in relevant subjects and members of relevant professional associations, e.g. Institute of Actuaries, Institute of Chartered Accountants'. The average number of qualified staff reported was 21, but there was a very wide dispersion. One respondent claimed as many as 150, and one had only one qualified staff member. A frequency distribution, analysed by size of fund is shown in Table 2.7. On the whole, the figures confirm the impression derived from casual empiricism that, while some funds are generously and many adequately staffed, there is still a substantial number of investment managers who have to deal with very large sums with very meagre resources. Over 30 per cent of all respondents reported 10 or fewer qualified staff, including nearly 20 per cent of those with funds of more than £1 billion. Moreover, some qualified staff were engaged in research on assets other than UK equities (e.g. overseas shares, fixed interest securities and property).

**TABLE 2.7: NUMBER OF QUALIFIED STAFF BY SIZE OF FUND**

Value of funds managed £ million	Number of qualified staff					Total
	1-5	6-10	11-20	Over	No	
				20	response	
<b>Under 100</b>	0	1	0	1	0	<b>2</b>
<b>100-499</b>	2	0	1	0	0	<b>3</b>
<b>500-999</b>	1	8	1	1	1	<b>12</b>
<b>1, 000 &amp; over</b>	6	7	22	26	2	<b>63</b>
<b>Not disclosed</b>	0	0	0	2	2	<b>4</b>
<b>Total</b>	<b>9</b>	<b>16</b>	<b>24</b>	<b>30</b>	<b>5</b>	<b>84</b>

Source: Questionnaire Survey

Among the questions asked in order to test investment managers' attitudes to bids was whether they would tend initially to support target companies or bidders in contested bids, or whether they would consider each case on its merits. As would be expected, a majority (75 per cent of the 80 respondents who answered this question) said they would consider each case on its merits. There were none who said their initial attitude was to support the bidder, and 20 who said it was to support the existing management. This provides some support for the statement by the ABI in a memorandum to the David Hume Institute that 'there is a strong tendency to support the existing company management' unless 'a balanced assessment suggests that the price offered for the shares is unlikely to be surpassed within the foreseeable future were the company to remain independent'.

In view of the fact that shareholders in bidding companies

often suffer a diminution in their wealth, investment managers were asked whether they opposed bids by companies in which they held shares if they believed them to be disadvantageous to the companies concerned. Eighty respondents answered the question, of whom 18 said that they often opposed such bids, and 60 that they 'sometimes' did so.

In another question on attitudes, investment managers were asked to rate the importance of a number of factors influencing their decision as to whether or not to accept a bid on a scale of 'very', 'moderate', 'little' or 'none'. The results are shown in Table 2.8. Despite prevailing accusations of 'short-termism', it was the long-term prospects of the target company that scored the highest percentage of 'very important' ratings, followed by the long-term prospects of the bidder, with the immediate value of the bid in only third place. The gearing of the bidder was regarded as very important by 43 per cent, and moderately important by 39 per cent of respondents. The nationality of the bidder, regional effects and effects on employment all secured few 'very important' ratings and in each case they were rated as of little or no importance by about three quarters of respondents. Investment managers were invited to specify and rate any other factors influencing their decisions, but this produced a very low response and there was no significant support for any other factor.

**TABLE 2.8: IMPORTANCE OF FACTORS IN BID DECISIONS**

Number of responses	Very	Moderate	Little	None	No
	response				
<b>Long-term prospects of bidder</b>	59	15	3	2	5
<b>Long-term prospects of target</b>	73	9	0	0	2
<b>Immediate value of bid</b>	56	22	4	0	2
<b>Gearing of bidder</b>	36	33	6	1	8
<b>Nationality of bidder</b>	1	13	35	31	4
<b>Regional effects</b>	0	10	33	38	3
<b>Effects of employment</b>	1	16	37	26	4
<b>Other</b>	8	3	0	5	68

Source: Questionnaire Survey

Major sources of information in takeover bids are, of course, the offer document and, in the case of contested bids, the defence document. In order to test the quality of this information, investment managers were asked to give their general view of the usefulness of these documents on a scale of 'very useful', 'moderately useful', 'little or no use' and 'positively misleading'. They were also asked to state in writing ways in which they believed that these documents could be improved. The general grading is summarised in Table 2.9. Of the 83 respondents answering the question, 67 (81 per cent) said that offer documents were generally either very useful or moderately useful, but 13 found them of little or no use and 3 said they were positively misleading. The rating of defence documents was very similar, except that rather more respondents said they were very useful.

**TABLE 2.9: INVESTMENT MANAGERS' RATING OF OFFER AND DEFENCE DOCUMENTS**

Number of responses	Offer Documents	Defence Documents
<b>Very useful</b>	8	11
<b>Moderately useful</b>	59	58
<b>Little or no use</b>	13	11
<b>Positively misleading</b>	3	3
<b>No response</b>	1	1

Source: Questionnaire Survey

Nearly three quarters of all respondents accepted the invitation to make written comments. The most common feature of comments on offer documents was a concern about information on the reasons for a merger, the medium and long-term benefits that the bidding company expected and the strategies by which it intended to attain them. This concern was expressed in several different ways. Some respondents criticised lack of objectivity in bidders' analysis of the past performance of target companies. 'Less of a slanging match and more constructive analysis' and 'more fact, less opinion' were two such comments. Some complained of the lack of any statement of the synergies that might be expected from the union of the two companies; others wanted more details of the steps that the bidder intended to take in order to improve the performance of the target company; while yet others asked for more and better financial and statistical information.

There were numerous complaints about the selection of time periods to suit the bidders' case and about the confusing or downright misleading use of statistics. There were also complaints about presentation. 'Less rhetoric. Read like advertising circulars' was one of several comments of this kind.

Comments on defence documents showed a similar concern for more objective information about the real advantages and disadvantages of a merger. Companies that had performed poorly in the past should give clear statements of the reasons for this and should show the steps they have taken to improve matters, their medium-term strategies and the reasons why they should remain independent. 'The target company often sets off on the premise that it has a right to remain independent' complained one respondent.

There were numerous complaints of selected time periods; confusing or misleading use of statistics; and over-optimistic profit forecasts and asset valuations. One of the more forceful comments was:

'It seems quite amazing that the company being bid for miraculously produces a profit in excess of all profit forecasts. Also, it is quite astounding how hidden assets in terms of property, etc, are suddenly truly valued'.

Finally, investment managers were asked whether or not they were satisfied with the working of the City Takeover Code, and invited to suggest improvements. Seventy-nine managers answered the first of these questions, of whom 61 (77 per cent) said they were satisfied. The invitation to suggest improvements produced only a poor response, and few useful comments. Two respondents said that the 30 per cent threshold for mandatory bids was too high; two criticised the code as 'too legalistic'; one expressed concern for small shareholders; and one described the code as 'designed to prevent information flowing to shareholders, rather than to inform and protect them'.

To sum up, in large financial institutions the decision to accept or reject a bid is, more often than not, made by a professional investment manager on his own authority. Managers have a lot of useful information at their disposal but there is also much that is irrelevant; in some areas there is a shortage of



'hard facts' and there is also some deliberate confusion and misinformation. In the best-managed funds, the investment manager is supported by a staff adequate in numbers and quality to 'sort out the wheat from the chaff' and make a thorough analysis of available and relevant information. There are, however, some large funds where the manager has only very slender resources, and the situation is likely to be worse in the smaller funds not covered by this survey.

### 2.3 Mergers in 1989-90

In this section, we look at the market in the shares of a number of companies that either acquired others or were acquired by others in the period from April 1st 1989 to March 31st 1990. The Stock Exchange publishes in its Quality of Markets Quarterly the names of companies removed from listing because of mergers, together with the name of the acquirer. The 1989 Quality of Markets Companies Book contains a large amount of hitherto unpublished information about individual companies, including turnover, number of bargains and number of market makers; this information is given for the six months from October 1st 1988 to March 31st 1989. It is thus possible to examine the market for companies involved in 1989-90 mergers as it was in the six months prior to April 1st 1989.

The Quality of Markets Quarterly records 101 cases of mergers between companies either on the official list or the USM during the year in question. This was made up of:

- 45 listed companies acquired by other listed companies
- 38 listed companies acquired by unlisted companies
- 1 listed company acquired by a USM company
- 15 USM companies acquired by listed companies
- 2 USM companies acquired by unlisted companies

The large number of acquisitions by unlisted companies includes takeovers by foreign companies and by new companies formed for the purpose (e.g. management buy-outs)

where the new company has not yet achieved a listing. There are also a few cases where a security (generally not an ordinary share) disappeared from the list as a result of a capital restructuring following an earlier merger, and some companies that merged early in 1989-90 are not included in the Companies Book tables.

When these cases are excluded, we are left with only 40 for which all the required information is available, and these are analysed in Tables 2.10 to 2.13.

**TABLE 2.10: RANKING OF MERGING FIRMS BY MARKET CAPITALISATION ON 31.3.89**

	Acquired	Acquirers
<b>£25 million or less</b>	24	8
<b>Over £25 million - £100 million</b>	5	13
<b>Over £100 million - £500 million</b>	9	11
<b>Over £500 million - £1000 million</b>	-	2
<b>Over £1000 million</b>	2	6

Source: ISE *Quality of Markets Companies Book 1989, Quality of Markets Quarterly*

Table 2.10 confirms the findings of almost all previous studies that acquiring companies tend to be larger than their targets. Twenty-four of the 40 acquired companies had a market capitalisation of £25 million or less, compared to only 8 of the acquirers. At the other end of the scale 8 acquirers and only 2 acquired companies had a capitalisation of more than £500 million. The average size was £204 million for acquired and £837 million for acquirers. There were only eight reverse takeovers.

**TABLE 2.11: RANKING OF MERGING FIRMS BY  
RATIO OF TURNOVER TO MARKET  
CAPITALISATION<sup>a</sup>**

	Acquired	Acquirers
Nil	4	-
1-25 per cent	18	12
26-50 per cent	15	16
51-75 per cent	2	10
76 per cent and over	1	2

<sup>a</sup> Total turnover, including market turnover, as a percentage of market capitalisation on 31.3.89

Source: *Quality of Markets Companies Book 1989; Quality of Markets Quarterly*

Table 2.11 shows the ranking of acquired and acquiring firms by the ratio of turnover during the six months to March 31st 1989 to market capitalisation at the end of the period. Turnover is as defined by the Stock Exchange (i.e. sales plus purchases) and includes market turnover (see p. 18 above). As would be expected, in view of their larger size, the market in the shares of acquiring companies is more active than that of acquired ones. Four out of our 40 acquired companies had no transactions at all in their shares in the six months while 22 had a ratio of less than 25 per cent. On the other hand 12 acquiring companies, against only 3 acquired, had ratios above 50 per cent.

**TABLE 2.12: RANKING OF MERGING FIRMS BY NUMBER OF CUSTOMER BARGAINS**

	Acquired	Acquirers
Up to 100	9	-
101 to 500	15	13
501 to 1000	9	7
1001 to 5000	6	14
Over 5000	1	6

Sources: ISE Quality of Markets Companies Book 1989;  
Quality of Markets Quarterly

Table 2.12 shows a similar ranking by number of customer (i.e. excluding intra-market) bargains. Twenty-four acquired companies had less than 500 bargains in the six months (approximately 4 per working day) and 9 had less than 100 (less than one per working day). Among acquiring companies, there were none with less than 100 bargains but 13 with less than 500. At the other end of the scale 6 acquirers had more than 40 bargains per working day, against only one acquired company.

Tables 2.11 and 2.12 indicate that the market in shares of acquiring companies is generally more active than that in targets, but they also show a significant proportion of acquiring companies with low turnover ratios and small numbers of customer bargains. This impression is reinforced when we look at the number of market-makers, shown in Table 2.13. Among acquired companies, 4 had no registered market makers and 20 had 3 or less; only 4 had 8 or more, and none had more than 12. There were no acquirers without any market maker; 11 had 8 or more and 5 had over 12. Even so, there were 12 acquirers with 3 or fewer market makers and 29 with no more than seven.

**TABLE 2.13: RANKING OF MERGING FIRMS BY NUMBER OF MARKET MAKERS**

	Acquired	Acquirers
0	4	-
1-3	16	12
4-7	16	17
8-12	4	6
Over 12	-	5

Source: ISE *Quality of Markets Companies Book 1989*; *Quality of Markets Quarterly*

The conclusions of this analysis are broadly similar to those for the market as a whole described in section 2.1. The view of share prices as being the outcome of a large volume of continuous trading in a highly competitive market is a good approximation to the real situation only in the case of a small number of mergers between large companies. In very many cases, the market in the shares of one or both the companies concerned is one where dealing is sporadic, the volume of transactions is low, and competition among market makers is oligopolistic.

### **3 ADVICE AND REGULATION**

#### **3.1 Financial Advisers**

Even when not involved in takeovers most substantial companies retain a bank specialising in corporate finance as a financial adviser and, when it comes to making or resisting a bid, these advisers play a crucial role. Advisers to bidding companies commonly assist in the selection of targets; advise on the desirability and feasibility of a particular bid, the

consideration that should be offered and the form that it should take; arrange bank finance and/or underwriting as needed; assist in the preparation of offer documents; and help in devising general strategies to ensure the success of a bid. Financial advisers to companies that are potential but not yet actual targets may advise their clients on strategies to reduce vulnerability (See Chapter 6 below). Once a bid is received, the financial adviser will assess it and recommend acceptance or rejection to the board and, through it, to the shareholders. If it is decided to resist a bid, the adviser will assist in drawing up the response to the offer document and, within the limits set by the Takeover Code, in devising and implementing defensive strategies.

Traditionally, advisers were drawn from the ranks of old-established merchant banks, but a number of changes have occurred in recent years. The big "high street" banks have increased their role in corporate finance either by acquiring established merchant banks or setting up their own; several big US banks have entered the market and their example is being followed by Europeans; also, since the "Big Bang" of October 1986 banks and merchant banks have become increasingly involved with brokers and security dealers.

The top twenty financial advisers involved in takeovers in 1989, as recorded by Acquisitions Monthly, are listed in Table 3.1. They include 12 old-established merchant banks, one of which (Samuel Montagu) is owned by Midland; one other subsidiary of a clearer (Barclays de Zoete Wedd); and 5 US investment banks, two of which were in third and fourth positions.

The recent increase in takeover activity has added greatly to the profits of financial advisers, while the advent of newcomers has made the market intensely competitive and has been associated with innovations in financial techniques and strategies. Perhaps the most important of these new techniques is the so-called "leveraged" bid supported by bank finance.

The outstanding example in the UK was the international banking syndicate organised by Hill Samuel to finance the bid by Elders IXL for Allied-Lyons. That bid was not renewed following a reference to the MMC but, in other cases, bank finance has made possible "reverse takeovers" and management buy-outs.

Financial advisers are naturally reticent about the size of their fees, though these are known to be related to the value of the consideration involved and to be higher for contested bids than for recommended ones. Success-related fees are becoming increasingly common. There has been at least one report of a merchant bank acting on a "no win, no fee" basis but this, if true, is very rare. Acquisitions Monthly (Jan 1990) gives typical figures for bids of less than £100 million as 0.75 to 1.0 per cent (recommended) and 1.25-1.5 per cent (hostile). For bids of over £100 million corresponding figures were 0.75 and 1.0 per cent respectively. Where a cash offer, or a cash alternative (financed by issuing new shares) is involved, an adviser can also expect to receive an underwriting commission (not counting the commission paid to sub-underwriters and brokers) of 0.5 per cent.

**TABLE 3.1: FINANCIAL ADVISERS 1989**

Rank by value of deals	Name	Deals	
		Number	Value £ billion
1	S. G. Warburg	36	26.2
2	Lazard Brothers	24	24.2
3	Goldman Sachs	5	19.7
4	Shearson Lehman Hutton	4	15.2
5	Hambros Bank	17	14.7
6	Schroders	27	14.4
7	Morgan Grenfell	29	14.3
8	Lazard Freres	8	10.4
9	Bankers Trust	11	10.2
10	Kleinwort Benson	16	10.2
11	N M Rothschild	18	7.5
12	Wasserstein Perella	3	6.1
13	Samuel Montagu	15	4.8
14	J O Hambro Magan	7	2.9
15	Baring Bros	12	2
16	Charterhouse Bank	15	1.3
17	Robert Fleming	11	1.0
18	Barclays de Zoete Wedd	20	1.0
19	Hill Samuel	7	0.6
20	Citicorp Group	7	0.5

Source: *Acquisitions Monthly*, January 1990



On the basis of these figures, Acquisitions Monthly estimates that financial advisers earned a total of about £800 million from merger activities in 1989.

### **3.2 Other Advisers**

Though merchant banks are the most prominent advisers in merger activities, accountants, lawyers and public relations consultants all play an important part. Accountants have the traditional roles of auditing accounts, analysing companies' financial records, and providing reports where these are needed to meet the requirements of the Stock Exchange or the Takeover Panel. Large companies tend to choose their auditors from the small group of international partnerships and, when they are involved in takeovers, they normally turn to their auditors for professional advice.

Accounting, like merchant banking, has been subject to rapid change. The number of leading city firms has been reduced by mergers, and the business has become more international and more competitive. Some firms have reacted to competitive pressures by setting up their own corporate finance departments and competing with the merchant banks. One, Deloitte, Haskins and Sells, has appeared in the Acquisitions Monthly list of the top 20 financial advisers (for the first half of 1988), but so far the accountants have not made big inroads into merchant banking territory. They have, however, adopted a higher profile and become more willing to take part in the polemics of takeover activity by publicly criticising the accounting techniques of their clients' opponents.

Lawyers always have some part in mergers, but they come into particular prominence when there is a referral to the MMC or when one side is trying to secure a reference and the other to prevent one. On these occasions, both solicitors and barristers are involved. The solicitors are mostly from one of a dozen or so leading city firms and, again, the number has been reduced by mergers. A substantial proportion of the barristers come from one set of chambers that specialises in

competition work.

Another feature of recent takeovers is the importance of public relations - advertising; inducing journalists and broadcasters to write articles or produce programmes favouring one side or the other; and lobbying large shareholders, MPs and other influential persons. This is the territory of about half a dozen firms of financial public relations consultants. Two of them, Charles Barker and Dewe Rogerson, have become particularly well-known, but several others have been concerned in big takeover battles.

Taking all these activities together, most of the services performed for companies in relation to those takeovers that come into the organised market are supplied by a small, compact group of merchant bankers, lawyers, accountants and public relations consultants. The number of firms can be counted in tens; the principal actors are a fairly small number of hundreds, though they are supported by many more juniors and administrative staff. The leading performers are mostly well known to one another, and all have a strong financial interest both in the total volume of takeover activity and in their own share of the market.

At his recent trial, Mr. Ernest Saunders, chief executive of Guinness at the time of their bid for Distillers, told the jury: "I would have to toss up whether Morgan Grenfell, the merchant bank; Bain and Co, the management consultants; or Cazenove, the stockbrokers were the more pushy and bullish about getting into the bid" and "... their mouths would be watering at the fees they could obviously get ..." (Financial Times, 7.6.90).

Mr Saunders is not an impartial witness, but the situation we have described can hardly fail both to generate a "hot-house" atmosphere for takeovers in general, and to encourage individual firms to take optimistic views when advising clients. Some possible effects of this on the operation of the market are discussed in Chapter 4.

### 3.3 Takeover Costs

Besides fees and commissions to merchant bankers, noted above, the costs of making or defending against a bid include fees to lawyers, accountants, public relation consultants, and sometimes to economists and other specialist consultants; advertising expenses; and (for a bidder) underwriting commissions to sub-underwriters and brokers. Examples of costs to individual firms can be obtained from company reports. For instance, Elders IXL disclosed spending of £30 million on its bid for Allied Lyons, while the target company spent £14 million on its defence. Argyll spent £48 million on its unsuccessful bid for Distillers and Guinness £110 million on its successful bid for that company. Hanson Trust spent £30 million on its bid for Imperial Group and Hoylake was reported already to have spent £140 million on its struggle for control of BAT before the bid was abandoned (Independent on Sunday 15.4.90). John Kay gives a figure of £500 million for the total cost of takeover activity in 1986, and describes this as, 'reasonable and, if anything, conservative.' (Kay 1988). As noted in section 3.1, Acquisitions Monthly gives an estimate for 1989 of £800 million for financial advisers only.

These figures raise two questions relevant to our study. First, they represent the use of expensive and scarce real resources, which is a waste for the community unless it improves the performance of the market in discriminating between bids that are and those that are not in the public interest.

Secondly, it is sometimes argued that the high cost of bidding may act as a deterrent, leading to less merger activity than would be in the public interest. In assessing this argument, three things must be kept in mind.

First, bidders are in a "no win, no fee" situation with regard to defenders' costs. If a bid succeeds the winner usually, though not invariably, pays the loser's costs but, if it fails, the successful defender is left with all his own costs.

Secondly, on whichever company the costs fall they are unlikely to fall personally on the directors and senior executives who influence decisions; the decision-makers are seldom "playing with their own money".

Thirdly, the sums that are costs to bidding and target companies are revenue to the group of advisers described in sections 3.1 and 3.2 above; the larger they are, the greater is the incentive for members of this group to seek out merger possibilities and to encourage companies to make and persist in bids.

There is no objective way of testing which of these influences is the stronger but it is certainly possible, and in our opinion probable, that this feature of the system acts as an encouragement to takeovers and so creates a bias towards too much rather than too little merger activity.

### **3.4 Government and its Agencies**

The OFT under its Director General is responsible for monitoring merger activity, investigating those mergers that appear to come within the scope of the Fair Trading Act 1973 (qualifying mergers) and advising the Secretary of State as to whether or not a reference should be made to the MMC. If a reference is made, the Commission must report on whether or not the merger would operate or might be expected to operate against the public interest. If the Commission's recommendation is adverse, the Minister may (not must) prohibit the merger or impose conditions on the merging companies; if the Commission clears a merger, however, the Minister has no further power.

A merger comes within the provisions of the Act if either the merged company has a market share of any good or service (product) of more than 25 per cent in the UK or a substantial part thereof or if the total value of the assets taken over exceeds £30 million<sup>1</sup>. It should be noted that the product test raises

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1 Special conditions apply to newspaper mergers, that are not discussed here.

some very difficult problems of definition both of the geographical coverage of a 'market' and, still more, of a 'product' e.g. is one brewer's bitter the same product as that of another, and are mild, bitter, stout and lager all varieties of one product, beer, or are they distinct products?

A merger, in the sense in which the word is normally used, occurs only when a bidder acquires more than 50 per cent of voting rights in a target, but a qualifying merger under the 1973 Act may arise in the case of minority holdings that give the acquirer 'de facto control' or even 'material influence' over the policy of the company whose shares are held. These terms are not defined in relation to size of holdings, but the OFT has indicated that any acquisition amounting to 10 per cent or more 'is likely to be considered by the office' (OFT, 1985a). Two well-known recent cases where the acquisition of a minority holding was referred to the MMC are Kuwait/BP and Elders IXL/Scottish and Newcastle.

The number of qualifying mergers and of references to the Commission under the Fair Trading Act 1973 during the past five years, is shown in Table 3.2 below.

**TABLE 3.2: QUALIFYING MERGERS AND MERGER REFERENCES TO THE MMC 1985-1989**

Year	Number of Qualifying Mergers References	
1985	192	6
1986	313	13
1987	321	6
1988	306	11
1989	281	14

Source: Annual Report of the Director General of Fair Trading 1989

Note: Figures exclude mergers involving newspapers or public bodies.

The Minister is not obliged to refer every case recommended but, in his last five annual reports, the Director General records only two cases in which a recommended reference has not been made.

Government policy on the reasons for references remains as stated by Mr. Tebbit in 1984 (see Chapter 1, p. 5 above). The Director General obviously follows similar policies in his examination of mergers, though the OFT guide to procedure mentions efficiency, employment, regional considerations and international competitiveness, as well as competition in the UK, as matters on which he may comment in making a recommendation (OFT 1985a).

The OFT is prepared to give informal and confidential advice to potential bidders on whether or not a reference is likely. This has led to what some critics have called 'plea bargaining'. The phrase is probably too strong, but companies can and do reduce the likelihood of a reference by, for example, disposing

or undertaking to dispose of assets in order to reduce the merged company's market share in some products.

Bids lapse automatically on a reference to the Commission, though they can, of course, be renewed if cleared. If a bidder announces that he does not intend to renew, whatever the Commission's decision, a reference is normally set aside, but some bidders prefer to await a report before making a decision. In the five years 1984-9 there were 50 references; 13 were set aside, 22 were allowed unconditionally, 9 were allowed subject to certain conditions and only 6 were blocked completely. An examination of more recent reports suggests that the Commission's attitude may be growing even more benign. In the fourteen reports published between the beginning of 1989 and the end of April 1990, 9 mergers received unconditional clearance; 4 were cleared subject to not very onerous conditions; and only one was blocked.

Section 84 of the 1973 Fair Trading Act states that in considering the public interest 'the Commission should take into account all matters which appear to them in the particular circumstances to be relevant'; and it goes on to specify the desirability of :

- Maintaining 'effective competition' among suppliers of goods and services in the UK;
- Promoting the interests of consumers in respect of price, quality and variety;
- 'Promoting through competition, the reduction of costs and the development and use of new techniques ....';
- 'Maintaining and promoting balanced distribution of industry and employment...'; and
- Promoting the competitiveness of UK firms in international markets.

Despite this very wide remit, recent reports contain few references to matters other than competition in the UK market.

The Commission's attitude towards competition is, paradoxically, both broad and narrow. It is narrow in that it is confined to the particular 'product' under consideration. In merger references, unlike monopoly ones, the product is not specified in the reference, and the Commission has to make up its own mind whether two goods or services are sufficiently alike to be classed as a single product. In the case of conglomerate mergers, the merging companies may have few if any products in common. If there were no common products at all, it is most unlikely that a reference would be made, but some recent references have been made in cases where the degree of overlap has been small. An extreme example is the case of Glynwed International and J B and S Lees (MMC 1989a). The Commission reported that it was 'concerned primarily' with the supply of only one product, 'hardened and tempered steel strip', used in making of saw blades and other small cutting tools. This accounted for less than 0.5 per cent of Glynwed's turnover and only 3.6 per cent of Lees'.

This narrow approach has two important consequences. First, companies involved in conglomerate mergers can frequently either avoid a reference or make virtually certain of a clearance by disposing of activities that employ only a small part of their total assets. Secondly, and even more significantly, the broader effects exerted by mergers on the structure of industry and the nature of competition are never examined by the regulatory authorities. An outstanding example is the merging of retail chains that the Director General, himself, has described as a "major restructuring" of retail trade (OFT 1985b).

Within its narrow definition of competition, however, the Commission generally takes a broad view. It appears to be mainly concerned not with market share (several recent mergers have been cleared despite shares of well over 25 per cent) but with the ability of companies to exploit a dominant position by raising prices. Circumstances that have led the Commission to conclude that this power would not be substantially increased by a merger include not only



competition from other UK suppliers of the same product but also competition from other products; competition from abroad; low barriers to entry; the bargaining power of large buyers; users' ability to perform an activity themselves; and competition in final products that feeds back to sellers of components. This combination of the broad and the narrow is an obvious recipe for clearances.

The only issue, other than competition, that has figured at all prominently in recent references is financial gearing. This arose in both the Elders references and also in the smaller Strong and Fisher/Pittard Garner case. In Elders/Allied Lyons the Commission cleared the bid despite objections from some quarters to Elders' financial proposals. The Elders' bid for Scottish and Newcastle was blocked on competition grounds, so the financial proposals were not considered. On the Strong and Fisher proposals the Commission was divided but the bid was, nevertheless, cleared. The Secretary of State has since announced that he will not make references purely on the issue of gearing (MMC 1989b).

To sum up: the regulatory regime as currently operated concentrates almost wholly on rather limited aspects of competition in the UK market; wider effects of mergers on the structure of the economy and of other aspects of the public interest are almost wholly ignored. Only a very small proportion of qualifying mergers is referred to the MMC and most of those are cleared. Companies involved in mergers can often avoid a reference or make clearance virtually certain by complying with a few not very onerous conditions. In short, the regulatory regime makes only trivial differences to the operation of the market.

### **3.5 The City Code on Takeovers and Mergers**

The City Code on Takeovers and Mergers is issued and administered by the Panel on Takeovers and Mergers (the Panel). The Panel consists of a Chairman, Deputy-Chairman

and one other member appointed by the Governor of the Bank of England, together with representatives of a dozen associations, regulatory organisations and professional bodies covering banking, insurance, investment management, securities dealing, accounting and industry. Day-to-day operations are in the hands of an executive staff headed by a Director General. The Code 'does not have and does not seek to have the force of law', but, as the Panel points out, disregard of it may carry severe sanctions. In extreme cases these could be, for companies, denial of access to the capital market and, for financial institutions, withdrawal of authorisation by the various regulatory organisations set up under the 1986 Financial Services Act (Takeover Panel 1988).

The operations of the Panel and the Code are the subject of another paper in this series, so we note here only points that are particularly relevant to our main theme.

First, we should note the self-imposed limitations under which the system operates. 'The Panel and the Code operate principally to ensure fair and equal treatment of all shareholders in relation to takeovers. The Code also provides an orderly framework within which takeovers are conducted'. Specifically excluded from its influence are the desirability or otherwise of particular mergers (a matter for the market) and competition policy (a matter for the government).

The Code takes the form of ten 'General Principles' followed by a set of rules and notes. The principles are 'expressed in broad general terms'. The rules are rather more specific but 'they are expressed in technical language and, like the General Principles, are to be interpreted to achieve their underlying purpose'.

The ten General Principles are set out below.

1. All shareholders of the same class of an offeree company must be treated similarly by an offeror.
2. During the course of an offer, or when an offer is in

contemplation, neither an offeror, nor the offeree company, nor any of their respective advisers may furnish information to some shareholders which is not made available to all shareholders. This principle does not apply to the furnishing of information in confidence by the offeree company to a bona fide potential offeror or vice versa.

3. An offeror should only announce an offer after the most careful and responsible consideration. Such an announcement should be made only when the offeror has every reason to believe that it can and will continue to be able to implement the offer: responsibility in this connection also rests on the financial adviser to the offeror.
4. Shareholders must be given sufficient information and advice to enable them to reach a properly informed decision and must have sufficient time to do so. No relevant information should be withheld from them.
5. Any document or advertisement addressed to shareholders containing information or advice from an offeror or the board of the offeree company or their respective advisers must, as is the case with a prospectus, be prepared with the highest standards of care and accuracy.
6. All parties to an offer must use every endeavour to prevent the creation of a false market in the securities of an offeror or the offeree company. Parties involved in offers must take care that statements are not made which may mislead shareholders or the market.
7. At no time after a bona fide offer has been communicated to the board of the offeree company, or after the board of the offeree company has reason to believe that a bona fide offer might be imminent, may any action be taken by the board of the offeree company in relation to the affairs of the company, without the approval of the shareholders in general

meeting, which could effectively result in any bona fide offer being frustrated or in the shareholders being denied an opportunity to decide on its merits.

8. Rights of control must be exercised in good faith and the oppression of a minority is wholly unacceptable.
9. Directors of an offeror and offeree company must always, in advising their shareholders, act only in their capacity as directors and not have regard to their personal or family shareholdings or to their personal relationships with the companies. It is the shareholders' interests taken as a whole, together with those of employees and creditors, which should be considered when the directors are giving advice to shareholders.
10. Where control of a company is acquired by a person, or persons acting in concert, a general offer to all other shareholders is normally required; a similar obligation may arise if control is consolidated. Where an acquisition is contemplated as a result of which a person may incur such an obligation, he must, before making the acquisition, ensure that he can and will continue to be able to implement such an offer (Takeover Panel 1988).

When stripped of their expressions of piety, the General Principles contain several points of interest. Principle 1 is based on a concept of fairness that is widely prevalent but the logic of which is not obvious. Different holders will attach different values to their shares. To be successful, a bidder must acquire the shares of the most reluctant seller needed to provide a majority. He must obviously pay that seller whatever price is necessary to induce him to part with his shares, but why should he be obliged to pay that price to other shareholders who would have been quite content with a lower one?

Principle 2 is expressed in a way which allows the boards of

target companies to seek better offers on behalf of their shareholders or, in the case of hostile bids, to search for a 'white knight'. It does, however, have very serious implications which raise a fundamental problem about the working of the so-called 'market in corporate control'. In the theoretical model of the capital market all information is known to everyone. In practice, much information is confidential and to make all of it public might be very damaging to the company concerned. Yet if the market does not have all the relevant information, it cannot bring about an optimal allocation of resources, however, efficient it may be in other ways.

Principles 3, 4 and 5 are expressions of piety to which everyone pays lip service, but they are so broadly drawn that they impose few constraints on directors or advisers extolling the virtues of their own company or denigrating rivals. Principle 3 places some obligation on advisers as well as on the directors of the companies concerned. Principle 4 conflicts with 2; shareholders cannot be given enough information 'to enable them to reach a properly informed decision' if there is relevant knowledge that is withheld from them but may be imparted, in confidence, to others.

Principle 6 is, again, one that would command general acceptance, though there have been flagrant violations of it, notably in the Guinness/Distillers case. However, all laws have their law breakers, and what is more important than the occasional scandal is the large 'grey area' between honest differences of opinion strongly expressed and deliberate attempts to mislead.

Principle 7 together with the rules related to it (see below) raises important issues. It clearly implies the possibility of conflicts of interest between the directors of target companies and their shareholders. Shareholders in a target company who accept an offer normally secure a premium over the market price of their shares before the announcement, a premium that may disappear if the offer lapses. Principle 7 is intended to

ensure that shareholders are not deprived of their premium through any action of their directors. There is no similar rule applying to offer companies, and this one-directional constraint may create a bias in favour of takeover. Moreover, the rule applies only after an offer has been announced or when a board has reason to believe that one may be imminent. There is nothing to stop directors from taking action at other times to make their company less vulnerable to a takeover.

Principle 8 and the first part of 9 are yet more statements of general piety, and call for almost superhuman virtue on the part of directors. The second part of Principle 9, together with Rule 24 that is related to it, are the only parts of the code that recognise the existence of any interest in a company other than that of its shareholders.

Finally, Principle 10 states that when an acquirer gains control of a company, he is normally required to make a general offer to all other shareholders. This clearly derives from the Code's objective of equal treatment for all shareholders, but it is hard to see that any important public interest issues are involved.

A few points of particular relevance in our present context arise from the rules attached to the Code:

Financial advisers. Rule 3 provides that the boards of target (offeree) companies must appoint competent financial advisers and must communicate the substance of their advice to shareholders. A similar obligation is imposed on bidding companies (offerors) only in the case of reverse takeovers (the takeover of a large company by a smaller one) or where there are conflicts of interest. This is another example of the special concern for the interests of shareholders in target companies noted above.

Prohibited or restricted dealings in securities Among the transactions prohibited or restricted are:

- Sales by a bidding company of shares in its target (Rule 4)

- The issue of authorised but unissued shares of the target company, or the granting of rights over such shares, except with the consent of shareholders in a general meeting (Rule 21)
- The redemption or re-purchase of securities by a target company except with the consent of shareholders at a general meeting (Rule 37)

Other prohibited dealings Rule 21 also prohibits, except with the consent of shareholders in a general meeting:

- The sale of material assets by a target company
- Entering into contracts other than in the normal course of business

Mandatory offers Mandatory offers for the whole of a company's share are required when either:- a person (or group acting in concert) previously holding less than 30 per cent of voting rights in a company, acquires shares that raise his total holding to 30 per cent or more, or a person holding more than 30 per cent but less than 50 per cent of voting, acquires rights during any period of 12 months, shares that raise his holding by 2 per cent or more of these rights. (Rules 5 and 9) These rules are clearly designed to limit the building-up by a company of large minority stakes in another. The general case for and against large minority holdings is debatable. The relevance of the matter here is that in some cases, companies that might otherwise have been content with a minority stake may find themselves driven into a full takeover.

Minimum consideration An offer price must not normally be lower than that at which the offeror has recently bought shares in the market. If, during an offer period, a bidder buys in the market at a price above the offer price, then the offer must be raised accordingly. (Rule 6).

Form of consideration In the case of mandatory offers the consideration must be in cash or in shares with a cash alternative (Rule 9). A similar rule (Rule 11) applies to

voluntary offers, though with some exceptions.

Documents and forecasts A number of rules stress the need for care and accuracy in the preparation of documents and the making of forecasts. The boards of the issuing companies are responsible for their documents, though financial advisers have a responsibility for ensuring that forecasts are prepared 'with scrupulous care and objectivity' (Rule 28) and auditors and consulting accountants have their usual responsibilities for checking accounting information. The content of documents is set out in general terms but usually in less detail than by the Stock Exchange (see section 3.6 below).

Statements of intention Rule 24 requires that the bidding company should state its intentions with regard to:

- Any major changes to be introduced in the business, including any redeployment of the fixed assets of the offeree company;
- The long-term commercial justification for the proposed offer; and
- The continued employment of the employees of the offeree company and of its subsidiaries. Together with Principle 9, this is the only reference in the Code to the long-term consequences of a merger or to any public interest issues other than those of the shareholders.

MMC An offer lapses automatically, if a reference to the MMC is announced before it becomes unconditional or before the first closing date (Rule 12).

Timing There are a number of rules dealing with the timing of the exchange of documents, revisions of offers and closing dates. These help to provide the 'orderly framework', which is one of the objects of the code but are not significant in the present context.

To sum up, the Code is concerned almost wholly with ensuring



fair treatment of shareholders, especially those in target companies; it takes very little account of any broader public interest issues. The rules on disclosure reflect a fundamental problem in relation to the efficiency of the market in allowing information that is withheld from the public at large to be disclosed in confidence to some people. The restrictions imposed on directors of target companies may limit their range of defensive strategies, and the rules on mandatory offers may induce some companies to bid for full control when they might otherwise be content with a minority stake. In these ways the Code contributes to the bias towards merger activity that exists in the system as a whole.

### **3.6 The Stock Exchange Listing Requirements**

The influence of Stock Exchange rules on the conduct of mergers flows from the obligations imposed on companies by the listing requirements, so this section first gives a general account of the requirements and then considers their application to mergers. As with other sections of this chapter, we attempt no more than to draw attention to points that are particularly relevant to our main theme; readers requiring details should consult 'Admission of Securities to Listing' - the Stock Exchange Yellow Book (ISE 1984).

The objectives of the Stock Exchange and the Takeover Panel complement one another. As shown in the last section, the Panel is mainly concerned with ensuring fair and equal treatment for shareholders in companies that are involved in mergers.

The concerns of the Stock Exchange are rather broader - safeguarding the interests of shareholders in general; and maintaining a market that functions efficiently for the benefit of investors, of companies and other institutions wanting to raise capital, and, of course, of member firms who depend on it for their living.

New applicants for listing must be sponsored by a Stock

Exchange member firm, which is responsible for ensuring that the company is suitable for listing, that all necessary documents are properly prepared and include all required information, and for lodging documents with the Exchange.

Basic requirements for suitability include:

- A minimum size (currently £700,000 for equity issues);
- That shares are issued in accordance with the law and the articles of the company; and
- That they are sufficiently widely held to enable a market to be established.

In addition, 'Sponsors should pay particular attention to the composition of the board of the applicant and to whether the range of skills and experience necessary to the board is available'. (ISE 1984 p.102).

Besides satisfying the basic conditions, company applicants must provide extensive information which has to be approved by the Exchange before publication. The main areas covered are: the names and addresses of the company, its directors and advisers; particulars of the securities for which listing is sought; details of the company's capital structure, including the names of holders of 3 per cent or more of voting rights; comprehensive information on the company's activities, finances and management; and a report on recent developments and prospects. Longer-term forecasts are not required and the inclusion of profit forecasts is optional.

Apart from the initial obligations, listed companies have continuing obligations, failure to comply with which could, in extreme cases, lead to suspension or cancellation of listing. The general obligation is set out as follows:

'Generally, and apart from compliance with all specific requirements which follow, any information necessary to enable holders of the company's listed securities and the public to appraise the position of the company and to avoid the

establishment of a false market in its listed securities must be notified' (ISE 1984 p.5.05). The 'specific requirements' include notification both of any information that is required to be notified by the Takeover Code and of substantial acquisitions or disposals of assets (either securities or physical assets) that fall short of changes in control. The stringency with which the requirements are applied varies with the importance of the transaction, as measured by five different ratios.

1. Value of assets acquired to total assets of acquirer (read 'disposed of' and 'disposer' as appropriate for disposals).
2. Net profits attributable to assets acquired to total net profits of acquirer.
3. Value of consideration payable to total assets of acquirer.
4. Equity issued as consideration to total equity of acquirer.
5. (For takeovers only) 'gross capital' of company acquired to gross capital of acquirer. 'Gross capital' is defined for acquirer as equity (at market value immediately before announcement) plus debt securities plus other liabilities other than current ones. For the acquired company the definition is similar, except that the value of the consideration is substituted for the value of equity.

There are alternative tests for property companies.

If any of the above tests produces a ratio of 25 per cent or more, the transactions are classed as 'super class one'. Such transactions require an immediate announcement to the Stock Exchange and the press; a detailed circular, approved by the Stock Exchange before issue, to shareholders; and approval by shareholders in a general meeting.

If any test produces a ratio between 15 per cent and 25 per cent, it is classified as 'class one'. Class one transactions also

require an announcement, followed by a circular to shareholders, but the information is less detailed than in the case of 'super class one'. Shareholders' approval is not required.

'Class two transactions' (5 per cent but less than 15 per cent) require only an announcement and a summary statement of particulars. Finally, if none of the tests produces a figure as high as 5 per cent, the transaction is 'class three' and no action is required unless the consideration is in shares for which a listing is sought.

There is a special category known as 'class four'. A 'class four party' is defined as a director, a substantial shareholder (holding 10 per cent or more of voting rights) or an associate of either.

Regardless of tests 1 to 5 above, transactions with such parties require prior consultation with the Stock Exchange, a circular to shareholders, and approval by shareholders at a general meeting.

In order to appreciate the significance of these requirements, we need to bear in mind the very uneven size distribution of companies shown in Chapter 2. Any company in the top 20 by market capitalisation could probably bid for any outside the top 100 (more than 2,300 companies in all) without creating a 'super class one' case and for any outside the top 200 without creating a class one situation. At the other end of the scale there are more than 1,300 listed and USM companies that could be taken over by any of the top 500 without creating a 'super class one' situation. The requirements begin to 'bite' when a company bids for a target about 15 per cent of its own size, but the most serious test (the requirement of shareholder approval) only comes into effect at the 25 per cent level. The rules thus favour takeovers of small companies by larger ones, and leave very large firms with an enormous range of possible targets for which they could bid without encountering any significant obstacle from Stock Exchange rules.

The remaining requirements summarised in this chapter are primarily designed to ensure that any information that is published is accurate and readily available to all interested parties. As shown in Chapter 4 this is very important for the short-run 'efficiency' of the market, but has little relevance to the long-term valuation of companies.

## **4 ECONOMIC ANALYSIS**

### **4.1 Introduction: The Efficient Market Hypothesis**

The logical justification for current merger policy depends on three premises:-

- That, provided it is not achieved by abusing monopoly power, maximising the profitability of capital is in the public interest;
- That the securities market is an efficient institution for that purpose; and
- That one of the ways by which the market achieves that purpose is through mergers.

The first of these premises is discussed in the appendix. The second and third form the main subject of this chapter.

If mergers are to increase the profitability with which capital is employed, the market must provide 'correct' valuations of potential bidding and target companies. Otherwise some undervalued companies will be vulnerable and will be taken over when they ought not to be taken over, while companies that are over-valued will not only be largely immune from being taken over themselves, but will be able to take over when they ought not to take over. Economists use the term 'efficiency' to describe how well the market measures the value of companies. Unfortunately, however, the 'correct' value of a company is a complex notion, and there are several different versions of the 'efficient market hypothesis'. Two of them that are particularly useful here have been described by James Tobin as 'information-arbitrage efficiency' and 'fundamental-

valuation efficiency' (Tobin, 1984<sup>2</sup>)

## 4.2 Information-Arbitrage Efficiency

Information-arbitrage efficiency is the weakest form of the efficient market hypothesis. It says that prices respond quickly and fully to new published information, with the result that price movements follow a random pattern, and it is impossible regularly to 'beat the market' except by insider trading. All that is needed to achieve this kind of efficiency is quick and wide publication and a prompt response by investors.

To illustrate: suppose that *'The Financial Times'* carried a news item favourable to a particular company on a Monday; that some investors bought at once, some did not read their paper until Tuesday and then bought, while others 'thought it over' until Wednesday and Thursday; while yet others called a trustees meeting for Thursday and did not act until Friday. Alternatively one might suppose that information was first carried in a medium that was seen by only a few investors and spread more widely only after a delay. In either case the results would be the same - the share price rise would not be quick and 'once for all' but would be spread over a number of days; statisticians would detect correlations between price changes on successive days; and alert investors who got into the market quickly would make money. Such a market would clearly be 'inefficient' according to the 'information-arbitrage' criterion.

However, one would not expect the Stock Exchange, or other well-developed securities markets, to suffer much from this kind of inefficiency. Stock Exchange rules require that information disclosed by companies should be announced in ways that make it readily available to anyone who is interested; price-sensitive information is reported widely on the

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2 Tobin also has two other concepts that he calls 'full insurance efficiency' and 'functional efficiency' but these are not directly relevant here.

Exchange's own SEAQ and TOPIC services, by news agencies such as Reuters, and both in specialist financial publications and in the financial columns of the ordinary press. At least for the larger companies, there is also a substantial number of analysts in the offices of market makers, brokers and fund managers whose job it is to keep up to date with price-sensitive information and make quick assessments of its implications. The expectation that markets are information-arbitrage efficient is generally confirmed by empirical tests (see Chapter 5 below).

Unfortunately, the fact that a market is efficient in this sense has very little to do with its ability to discriminate between takeovers in relation to the public interest. All it says is that, if an item of information comes to light that distorts the balance of supply and demand for a security at the ruling price, then the market will quickly establish a new price which will restore the balance, and which will continue until that balance is again disturbed by another item of information. It says nothing about the relevance or accuracy of the information or the quality of the analysis by which it is interpreted.

### **4.3 Fundamental-Valuation Efficiency**

Fundamental-valuation efficiency is much more relevant in our present context but, unfortunately, much more difficult to attain. It is defined by Tobin as follows:

'A market in a financial asset is efficient if its valuation reflects accurately the future payments to which the asset gives title - to use currently fashionable jargon, if the price of the asset is based on "rational expectations" of these payments' (Tobin, 1984 p. 126)

Since it is impossible to know in advance how much a company will earn in the future, earnings have to be predicted. One way of doing this is by means of a 'model'. This much-used (and much-abused) word means, in this context, a statement - usually though not necessarily in the form of mathematical equations of relationships between causes (independent

variables) and effects (dependent variables) that the analyst regards as relevant to his problem.

Some of the concepts and the difficulties involved can be illustrated by a grossly over-simplified example. Suppose that we want to value company A on the basis of:

$$PA = EA_1 + \left( \frac{EA_2}{1+r} \right) + \left( \frac{EA_3}{(1+r)^2} \right) \dots \left( \frac{EA_n}{(1+r)^{n-1}} \right)$$

where PA is the value of the company,  $EA_1 \dots EA_n$  its earnings in successive time periods, and r a rate of discount. Our forecast of earnings in period 2 as a percentage of period 1, and similarly for later periods, is:

$$EA_2 = EA_1 + ax + by + cz$$

where x is the growth of output in the industry in which the company operates; y is the FT/SE 100 share index, and z is GNP, all in percentage changes; and a, b and c are parameters.

The earnings forecast thus involves several stages: specifying the right independent variables; estimating the right parameters; and obtaining relevant information about the independent variables. The list of variables in our example is far too short - for instance the rate of growth of export markets, the exchange value of sterling, the prices of raw materials, and even the weather can have an important influence on the success of many companies. Similar problems arise in giving values to the parameters, that is in deciding how important is the influence of each variable on the final outcome. Statistical analysis of the past can help, but only to a limited extent. Relationships that appear to have held good in the past cannot always be relied on to do so in the future and, in any case, the relationships between different activities and different agents in an economy are so numerous and so complex that it is rarely possible to isolate a simple chain of cause and effect. Hence economists can hold and continue to hold widely differing views; obvious examples are the differences about



the causes of inflation and the reasons why economic growth has been slower in Britain than in other industrial countries. These have continued, despite a vast amount of theorising and statistical work for more than forty years. Similar divergences can exist in relation to company profits e.g. do wage increases reduce profits or merely raise prices?

When it comes to information about the chosen variables, the same problems repeat themselves all over again; the figures that the modeller puts into his equation are all forecasts.

Before leaving the question of profit models we should briefly mention the phrase 'rational expectations' that occurs in our quotation from Tobin. In this context it means simply that expectations should be derived from models that are internally consistent and that fit all the facts known at the time, and that these theories should, when necessary, be revised to take account in a logically consistent way of new information. In fact, the so-called 'models' used by analysts range all the way from highly sophisticated attempts to generate 'rational expectations' to little better than guesses.

Modelling can be helpful, if only to a limited extent, in predicting the way in which company earnings are affected by the external environment. But different companies respond to their environment in very different ways, and the influences that determine these responses cannot be modelled because they cannot be quantified. No one can put a number on, for example, the administrative skill and adaptability of a managing director, the innovative capacity of a design team or the effectiveness of an R&D programme. The most that an analyst can do is to make a subjective judgement based on a careful study of a company's track record and on such personal contacts as he can build up with management (always within the law on insider trading). There are obvious limits to the value of such judgements, however carefully they are made and, at the worst, some 'expert' assessments of company management are based on little more than casual conversation

over a rather alcoholic lunch.

These problems have been familiar for a long time and a number of distinguished economists, who in general appreciate the virtues of a market economy, have been sceptical of the stock markets' ability to produce accurate long-term valuations and so to achieve the allocation of resources that would be produced in a theoretically competitive model. (Baumol 1965; Little (1962); Little and Rayner 1966).

#### **4.4 Short-Term Speculation**

Besides the inherent difficulty of foretelling the future and defects in available information, there are other obstacles to attainment of fundamental-valuation efficiency, including short-term speculation and conflicts of interest.

The market may fail to attain fundamental-valuation efficiency simply because this is not an objective, or at least the primary objective, of participants. As shown in Chapter 2 the average holding period of UK equities is only four years. A great many investors buy shares not in the hope of enjoying an income stream over many years but of selling at a profit after a quite short time. Their direct interest is not in fundamental valuation but in the actual value that the market will put upon their shares in the short and medium-term. In a passage that has often been quoted but is worth quoting again, J.M. Keynes described their activities as follows:

'professional investment may be likened to those newspaper competitions in which competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he, himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view....

We devote our intelligences to anticipating what average opinion expects the average opinion to be' (Keynes 1936 p. 156).

This raises the question of how investors form their own expectations and also how they believe others do so. Suppose, for example, that all investors used a rational expectations model that took full account of all the information relevant to company X that was available at time T. The market in the shares of company X would then be fundamental-valuation efficient and the share price at time T would reflect the present value of the company's rationally-expected future earnings. If this behaviour continued to time T+1, the market would remain fundamental-valuation efficient and any change in the price of X shares between the two periods would reflect only changes that were known at T + 1, but could not reasonably have been foreseen at T.

Consider, now, an individual investor, A. So long as he believes that everyone else is using a rational expectations model he will do so himself for (unless he believes himself to be endowed with supernatural powers) he has no better way of forecasting X share prices at T + 1. His transactions will not, therefore, be influenced by speculation about other people's opinions. If, however, he believes that the price will be influenced by the conversation at stockbrokers' lunch tables, then he will try to find out what that conversation is like and will modify his model accordingly. It follows that the type of 'Keynesian' behaviour described above could be consistent with fundamental- valuation efficiency if, but only if, a market is efficient and is generally believed to be so. Once the seeds of doubt are sown, market practitioners have an incentive to behave in ways that are inconsistent with efficiency; and when a market is inefficient, this type of behaviour will prevent the attainment of efficiency.

## 4.5 Conflicts of Interest

There are at least six different and possibly conflicting interests involved in a takeover bid - the management of the bidder; the management of the target; the shareholders of the bidder; the shareholders of the target; the financial and professional advisers; and the professional fund managers and analysts.

The interests of managers of bidding companies are mainly in career prospects. If a management team wants the challenge of a larger enterprise, it may find expansion easier through takeovers than by internal growth. A larger empire offers more power, and almost certainly more pay, to those at the very top; more variety, a wider choice of good jobs and better promotion prospects to those on the way up. This does not imply that managers would deliberately sacrifice the interest of their shareholders for personal ambition, but it does mean that they have a strong incentive to take an optimistic view of the benefits of any merger that they may be considering.

The situation between bidders and targets is not symmetrical. A takeover is often followed by job losses or demotions among the target management team and, if the motive for a merger is to correct management failure, some such changes will be necessary. However, in some agreed mergers, the two management teams work closely together and share the benefits of the enlarged undertaking. Even where the management of the target company loses most of its power, the process may be sweetened by the creation of well-paid but largely honorific posts and by 'golden handshakes'. Finally, where managers own shares or share options, they stand to gain by the large premium over the previous market price which bidders almost always offer. The incentive for target managers to take a pessimistic view of a bid is thus less strong than that of bidding managers to take an optimistic view. Nevertheless, the Takeover Panel regard it as strong enough to require firm rules against frustrating tactics (See Chapter 3 p. 52).

Somewhat different considerations arise in so-called 'management buy-outs'. Here managers of a company (often a subsidiary of which a parent conglomerate wants to dispose) buy the company. They normally require outside finance but arrange this on terms that leave much of the equity in their own hands. Here, the buyers' interest is clearly to acquire the company as cheaply as possible. Management buy-outs can be useful e.g. in rescuing operations that might otherwise be closed down, but they create obvious dangers of conflicts of interest.

There is a big difference between shareholders in bidding companies and target companies. Target shareholders are almost always offered a substantial premium over the pre-bid price of their shares. Shareholders in bidding companies obviously do not receive a premium; the price changes of their shares (relative to the market as a whole) are usually quite small, and often negative (see Chapter 5). The position of shareholders also varies according to whether they are direct owners; beneficiaries of taxed funds; or beneficiaries of 'gross' funds. However, these differences seem unlikely to have any systematic effects on the takeover market.

The activities and remuneration of financial and other advisers were described in Chapter 3. We pointed out there that these advisers form a closely knit and powerful group with very strong interests in takeover activity. In relation to bids they have an incentive to look for likely situations, to encourage their clients to make offers, and to use all their powers of influence and persuasion to ensure that these offers succeed. Advisors acting for target companies have incentives to encourage resistance but, on balance, the system seems to generate strong pressures on the side increasing takeover activity, and we believe it likely that these pressures outweigh any inhibiting effects that may be produced by high takeover costs.

Finally, there are the investment managers and their teams

who are responsible (possibly subject to review by directors or trustees) for decisions as to whether a bid should be accepted or rejected. There may be special circumstances affecting individual funds but, broadly speaking, the success (and the career prospects) of management teams depends on the extent to which they can increase the value of their funds. If this is the only objective, the logical decision rule in the case of a cash bid is to accept unless it is believed either that a better bid is likely or that the expected income stream from the holding in the target company is better than that from any other asset that could be bought for the sum of money on offer. The investment manager has no need to concern himself in the least with the merits of the merger or the long-term prospects of the merged company.

In the case of share-exchange offers, there is an asymmetry about possible outcomes that causes investment managers to expose themselves to more risk of blame and less chance of praise (with effects on career prospects) by rejecting a bid than by accepting it. In considering an offer an individual manager, M, has to face four possibilities:-

- 1 He accepts but the bid fails.
- 2 He rejects but the bid succeeds.
- 3 He accepts and the bid succeeds.
- 4 He rejects and the bid fails.

The first two cases are barely relevant. In case 1, there will be no deal; in case 2 the bidder will normally acquire the shares at the offer price despite the initial rejection; in both cases, M can expect neither praise nor blame.

The asymmetries arise with cases 3 and 4. In case 3, the fund willingly acquires shares in the bidding company. If that company does well, everyone is happy, though carping critics may argue that the target would have done equally well on its own. If it does badly, M may be accused of taking a wrong decision, but he could, of course, argue that the target company

might have done equally badly on its own and that, even if he had rejected the offer, this would not necessarily have led to the failure of the bid.

In case 4, the fund remains the owner of shares in the target company. Again, if that company does well, everyone is happy but, in this case, 'doing well' has a rather special meaning. Once a bid fails and the prospect of a premium vanishes, shares in target companies almost always fall - often nearly to and sometimes below the pre-bid price. Even if earnings performance is good, the shares are likely to take some time to recover to the offer price while, if earnings performance is poor, the fund may never again have the opportunity to realise its holding on such favourable terms.

In that case the investment manager will have to do a lot of explaining. On balance, an investment manager who wants a quiet life can best secure that objective by accepting, or recommending acceptance of a bid. Even for those who are more ambitious, the best probabilities of advancing career prospects seem to lie with acceptance. Here is yet another way in which the system is biased towards merger activity.

#### **4.6 International Takeovers, Interest Rates and Exchange Rates**

Cross-frontier takeovers involve matters of company organisation and company law that are outside the scope of this paper, but there are also complications and possibilities of financial distortion arising from differences between countries in their interest rates and from fluctuations in exchange rates. Interest rates and exchange rates are closely related to one another, and both are strongly influenced by inflation. The inter-relationships between the three are far too complex to analyse in detail here; but we need to note some of the more likely distortions in relation to mergers that may arise.

A fall in the exchange value of sterling makes British companies cheaper for potential overseas bidders, just as it makes British

manufactures and British holidays cheaper for overseas buyers. However, a lower exchange rate also reduces the foreign currency value of sterling earnings. Thus a fall in the exchange rate that was expected to be 'once and for all' would not affect the sterling price that a foreign bidder would be prepared to pay, and would not increase the vulnerability of UK companies. However, a fall that was expected to be only temporary would give foreign companies an opportunity for picking up bargains. This situation is analogous to the vulnerability of an individual company whose earnings are temporarily depressed by a misfortune outside its own control, except that in this case all companies are equally affected. When a currency fluctuates as violently as sterling has done over the past decade, there are bound to be times at which it is under-valued, and these will provide bargain-hunting opportunities for overseas companies.

In a 'fundamental-valuation efficient' capital market the value of a company is its rationally expected income stream discounted at an appropriate interest rate. For a domestic company contemplating a bid, the appropriate rate is that prevailing for the relevant type of securities in the domestic market. For a foreign bidder the appropriate rate is that prevailing in its own market. Hence, companies in a country with high interest rates are, other things being equal, vulnerable to bids from countries with lower interest rates. This is understood to have been an important factor in the Nestlé takeover of Rowntree.

As noted earlier there is a close connection between interest rates, exchange rates and inflation. To illustrate let us make the following drastic assumptions;

- Country A has an increase in inflation, while country B does not.
- The rationally expected earnings of country A's company X rise in proportion to A's inflation.
- Interest rates in A rise in proportion to inflation while



those in B remain unchanged, thus keeping real rates constant in both countries.

- A's exchange rate against B falls in proportion to A's inflation, thus maintaining purchasing-power parity.

A domestic company contemplating a bid for company X would thus find that his discount rate had risen, but that there had been an equi-proportionate rise in expected earnings, so that the amount he could afford to pay in A currency would be unchanged. A potential bidder in country B would find that expected earnings had risen but that there had been an equi-proportionate fall in the value of A currency, so earnings in currency B would be unchanged. However, he could now get more A currency per unit of B, so that the amount he could pay in A currency for the company would rise.

These assumptions are, of course, greatly over-simplified. Changes in inflation rates, interest rates and exchange rates, are all subject to many influences, by no means all of which are fully understood. The most we can say of the real world is that they tend to be related in the way we have assumed, though changes are certainly not equi-proportional. There is, therefore, probably a tendency for companies in countries like Britain with relatively high inflation and interest rates and weak and volatile currencies to be more vulnerable to foreign takeovers than those in countries with low inflation, low interest rates and strong currencies, such as Germany and Japan.

## **APPENDIX: Profits and the Public Interest**

The DTI paper, Mergers Policy, refers to private decision-takers seeking the most profitable employment for their assets and states that 'in competitive markets this will generally lead to the most efficient use of these assets for the benefit of both their owners and the economy as a whole'. This raises the fundamental question of whether an increase in profits from assets owned by an individual or a group necessarily, or even

probably, implies a benefit to society as a whole.

There is a very complex and controversial branch of economic theory, known as welfare economics, the primary aim of which is to investigate relationships between private and social benefits in a market economy. One approach to this problem is to set up a 'model' of an optimum allocation of resources - an allocation that would provide the maximum attainable social benefit, given the resources available. However, different people have very different views of what is a benefit and what is not. In order to avoid such value judgements the optimum allocation is defined as one in which it would be impossible to make one member of society better off in his or her own opinion without making someone else worse off, again in his or her own opinion.

Such a definition would clearly rule out some possible increases in profitability, for example those that might be gained by coercing employees into working for wages less than the 'disutility' to them of the effort involved; or from exploiting consumers by charging prices above the costs of production. Such increases in profits would not only be ruled out as contributions to social benefits, but they would also be prevented from arising, under the conditions required by the model, by competition in the various markets concerned.

Unfortunately, the conditions that would be necessary if a market system were to generate an optimum allocation of resources are very stringent. They include requirements that:

- All inputs and outputs could be provided and traded in very small units
- There should be a large number of transactors in each market
- All transactors should have perfect information
- There should be separate markets in all possible 'states of the world'. A 'state of the world' is defined in relation to time, place and circumstance; for example,

I should be able to buy, now, the right to an umbrella at Epsom if it is raining there on Derby day, 2010.

The first three of these conditions are met to varying degrees in the real world, though never perfectly and sometimes very imperfectly. The fourth requires forward trading and insurance, which are available only in a very limited range of goods and services.

We can deduce from economic theory that, in a system that generated an optimum allocation of resources, all capital assets would be employed so as to make the highest attainable profits; but this does not help much, since no real world system can generate an optimum allocation of resources.

The practical question that has to be decided is whether, in the real world, a change that increases the profit from particular assets implies a move towards an optimum allocation or not. Welfare economists have put a lot of effort into devising a theory of 'second best' but have not produced general tests that can be applied to real world conditions. Theoretical economics cannot prove that an increase in the profit derived from particular assets is in the public interest but it is a widely-accepted, and we believe sensible, act of faith to assume that this is likely to be so, subject to two very important conditions:

- That a merger does not lead to a diminution of competition. The government would claim that this is allowed for in its competition policy though, as shown in section 3, some MMC decisions imply a lenient interpretation; and
- That there are no harmful externalities (i.e. effects on other parts of the economy which do not appear in the accounts of the companies concerned). In fact there are numerous possible externalities. Mergers may affect the structure and performance of industry and commerce in ways much broader than the rather narrow view of competition taken by the OFT and the MMC; and they may also have effects on

employment; the regional balance of economic activity, and on the capital market itself. Some of these effects are discussed in Chapter 6. They are seldom allowed for and, in this respect, policy is deficient.

A capital market that was 'fundamental-valuation efficient' would not generate either an ideal allocation of investment or an ideal selection of mergers, but it would tend to select mergers that were likely to improve profitability. However, in Chapters 4 and 5 we have given strong 'a priori' reasons and some empirical evidence to support the view that the capital market is not efficient in this sense, and also that it is biased towards takeover activity. Official policy takes no account either of the inefficiency or the bias.

This is not a reason for dispensing with the market; experience of other ways of deciding such matters suggests that this would be profoundly wrong. There are, however, ways of reducing bias and increasing efficiency, and these are discussed in Chapter 7.

## **5 EMPIRICAL EVIDENCE**

### **5.1 Simplistic Observations**

This chapter attempts the formidable task of summarising the large volume of empirical evidence that has been accumulated about various aspects of 'the market for corporate control'. We begin with two observations that are simple to the point of naiveté and go on to more complex matters and more sophisticated techniques later.

First, it is generally agreed that 'hostile' takeovers have been and still are much more common in the USA and the UK than in continental Europe and Japan. The government's paper on merger policy (DTI 1988) claims that these takeovers improve the general quality of management, both because some poor managers are removed and because the possibility of being taken over causes others to mend their ways. If this were true

one might expect that the quality of management would be higher and economic performance better in the USA and the UK than, say, in Germany or Japan. This, to say the least, is implausible.

Secondly, if share prices established in the market were an accurate reflection of a company's rationally-expected future earnings, bidders would know that they could not acquire shares at less than the market price, but would be unwilling to offer much more. They might be willing to pay a small premium if they believed that a company could contribute more to the joint earnings of a merged enterprise than it could earn independently, but we should not expect premiums to be large and, once bids had been made, we should not expect them to be dramatically revised. Actual premiums as reported by Acquisitions Monthly are shown in Table 5.1.

**TABLE 5.1: PREMIUMS PAID OVER PRE-BID SHARE PRICES**

Years	Quarters	Average premiums as % of share price	
		One day before offer	One month before offer
1989	I	34	49
	II	31	45
	III	28	40
	IV	18	18
1988	I	37	48
	II	31	45
	III	23	28
	IV	21	27
1989	I	37	43
	II	26	39
	III	25	31
	IV	29	34

Source: *Acquisitions Monthly*, February 1990

In 1989 premiums averaged 29 per cent over the price ruling on the day before the offer, and 37 per cent above the price a month before. Moreover, bids are often raised substantially, sometimes as a result of skilled manoeuvring by financial advisers and PR consultants. For example, when British Airways' bid for British Caledonian was cleared by the MMC, BA made an offer of 147 pence a share, but this was eventually raised to 250 pence; and an original offer of 22.8 pence for Dunlop was raised nearly threefold to 66 pence.

## **5.2 Testing Information-Arbitrage Efficiency**

In a market that is efficient in this sense, prices adjust quickly and fully to new information; there is no correlation between price changes on one day and those on previous days; and it is impossible to make money by 'playing the market' except by insider trading. On the whole, empirical tests have confirmed that these conditions are satisfied in the London market. Dryden (1970) found a weak correlation between price changes on one day and those on the two previous days. Dimson and Marsh (1984) found that a portfolio composed of brokers' recommendations performed marginally better than the market. A later study (Dimson and Fraletti 1986) failed to find any benefit from brokers' recommendations, though it has been argued (Ashton 1988) that this may have been due to the statistical techniques that were used. These results are, however, exceptional. The general consensus is that prices follow a 'random walk'; that adjustments to new information are rapid; that brokers' recommendations have no general value; and that professionally-managed funds do not consistently out-perform the market. After an exhaustive review of the literature, the Wilson Committee concluded that: 'There is now a growing body of empirical evidence to support the view that the Stock Exchange is efficient in the technical sense described'. (Wilson 1980 para 646). There is little in later work to suggest that this verdict was unsound.

### 5.3 Testing Fundamental-Valuation Efficiency

The fact that the UK equity market may be information-arbitrage efficient is not enough to make it a good discriminator between mergers that are and are not in the public interest. For that, we need fundamental-valuation efficiency; and this is a hypothesis that is much more difficult to test.

A market is fundamental-valuation efficient if share prices reflect the rationally-expected future earnings of the companies concerned. Applying this criterion to mergers, we would need to ask: Have the subsequent earnings of the merged group been in line with the expectations implied in the share prices at the time of the takeover?

Any attempt to answer this question has to face an insoluble problem. A company's future performance may differ from the expectations implied at a particular time for three reasons that are not mutually exclusive:

- Because the market is inefficient, e.g. information is not made fully available, or investors behave in the manner described by Keynes (see Chapter 4);

- Because investors form their expectations using models that are not truly rational;

- Because of good or bad luck.

In theory, it should be possible to eliminate the influence of luck by taking a large enough sample, though in practice companies differ so much and in so many ways that it is often difficult to find large numbers that are comparable one with another.

Even if luck is eliminated, however, market efficiency and model rationality remain inextricably intertwined. The future performance of a company may differ from the expected performance implied in its share price either because of market inefficiency or because participants have formed expectations using inadequate models, or both. Hence, all tests relying on

comparisons of performance with expectations implied in share prices both in merger situations and elsewhere are not tests of the efficient market hypothesis but joint tests of this hypothesis and of the expectations models used by market operators (Summers 1986).

Incidentally, this implies that market analysts have no means of distinguishing between prices that reflect rational expectations of future earnings and those that do not, so that prices that are 'wrong' are unlikely to be corrected by arbitrage dealing. This is another 'a priori' reason, in addition to those discussed in Chapter 4, for believing that the market is not fundamental-valuation efficient.

One small piece of empirical evidence pointing to a lack of efficiency is the size of the bid premiums and of adjustment to some initial bids reported in section 5.1. Another is the concentration of financial gains from takeovers on shareholders of target companies (section 5.6); and a third is the volatility of markets (section 5.7). Apart from this there is very little empirical evidence. There are powerful reasons for believing that equity markets, in the UK and elsewhere, are unlikely to be fundamental-valuation efficient but, in view of the difficulty of testing and the paucity of factual evidence, the question must remain open.

#### **5.4 Post-Merger Performance: Managers' Views**

One way of assessing post-merger performance is by discussion with the managers concerned. G.D. Newbould undertook 38 such case studies in 1967-8. He found that two years after the completion of a merger, although half the merged companies said they were pleased with the result, nearly half (17 out of 38) could not identify any positive benefit at all, while a quarter described their merger as a failure (Newbould 1970).



## 5.5 Post-Merger Performance: Profitability

A more common method of assessing the effects of mergers is by the accounting rate of return (ARR) on capital employed. The basic method is to compare the combined rate of the two companies over a pre-merger period with the consolidated rate over a post-merger period. In order to eliminate the effects of general economic fluctuations, the comparison is often made in relation to a control group. There are, however, a number of problems that complicate both the calculations and their interpretation.

First, an increase in profitability may occur as a result of circumstances that are not in the public interest, e.g. an increase in monopoly power. A merger may also have consequences that are relevant to the public interest but are not reflected in the profit and loss account or the balance sheet, e.g. effects on employment or on the regional balance of industry.

In order to develop a practical policy we need to accept that an increase in profitability is in the public interest unless other adverse features can be shown to exist, but there still remain problems of measuring profits. The accounting rate of return (ARR) as usually measured may differ from the internal rate of return (IRR) commonly used as an economic criterion of efficient investment. Such differences can arise, particularly in periods of high inflation, from differences in the timing of investment and in depreciation. They may be important for individual companies but probably do not impart any systematic bias to the analysis of mergers where samples are fairly large.

At least two accounting problems create biases that are peculiar to mergers.

First, when a merger takes place during a financial year, the profits of the acquired company are usually taken into the profit and loss account for the unexpired part of the year, but the capital appears in the balance sheet

only at year end. The resulting bias may be either upward or downward, but it affects only the merger year.

Secondly, when a company is bought for more than its book value, the difference commonly comes into the consolidated accounts of the merged group under the heading of 'goodwill'. This imparts a downward bias to the ARR calculation that persists until the 'goodwill' is written off.

Most, though not all, of the studies mentioned below attempt to get rid of these sources of bias by 'normalising' the relevant figures.

Having obtained ARRs for a chosen sample of merging companies before and after the merger, it is still necessary to choose a period of comparison and a control group. Ideally, the merger sample should comprise companies that have made only one merger during the period; the control group should comprise companies that have made no merger, but that exactly match the sample in other respects, e.g. size and industry; and the period should be long enough to avoid undue distortion by random influences in particular years. With mergers as frequent as they now are this ideal is seldom attainable.

Considering differences in the periods covered and the ways of tackling the problems outlined above, the general results of the studies we have surveyed show a surprising degree of unanimity. The general results are:

A majority of companies in the mergers samples showed a decline in profitability, relative to the control group, in the post-merger period, but a substantial minority (in one case as large as 48 per cent) showed an improvement; and

Average profitability relative to the control group declined, though the decline was generally small and, in some cases, not statistically significant.

Three interesting qualifications to these general results have been found. Meeks (1977) and Cosh, Hughes and Singh (1980) found a difference between horizontal and non-horizontal mergers. For horizontal mergers, Meeks found a decline in post-merger performance, while Cosh, Hughes and Singh found no significant change. For non-horizontal mergers, however, both found small but significant improvements. A possible explanation suggested by Hughes is that acquiring firms in non-horizontal mergers had a better pre-merger profits record than those in horizontal mergers in both samples; this may have signified superior management, the merits of which were carried over to the merged group. (Hughes 1989).

In one study (Cosh, Hughes, Kumar, and Singh 1985) the authors split their sample into cases where the acquiring companies had a large institutional shareholding and others. Those with relatively small institutional holdings conformed to the general pattern established by other studies - a small decline in post-merger performance. Those with large institutional holdings showed a small improvement in profitability, though this was not statistically significant.

Finally, in one study (Hall and Pickering, 1986), the authors examined the performance of companies involved in failed mergers as well as in completed ones. They compared matched samples of 50 successful and 50 failed bids. The successful sample showed the usual preponderance of companies with falling post-merger profitability, but there was a widespread improvement in performance among both bidding and target companies in the 'failed' sample. The authors conclude that this is evidence of the disciplinary role of the market in improving the efficiency of management, though the conclusion seems rather dubious.

To sum up, accounting studies of profitability have provided very little help in assessing the performance of mergers in relation to the public interest. In view of the conceptual and practical problems outlined at the beginning of this section, a

strong conclusion one way or the other would be needed in order to carry much conviction. In fact, the conclusions of these studies could hardly be weaker. Mergers appear to have very little effect either way on profitability and such effect as they do have is, more often than not, harmful. The findings on non-horizontal mergers, on holdings by financial institutions, and on failed bids are interesting but they need a lot more support from other work if they are to become more than 'straws in the wind'.

## 5.6 Shareholders' Wealth

The difficulties of using accounting information to assess post-merger performance have led to a number of studies, both in the UK and the USA, that have used stock market data. The essential feature of such studies is that they compare the returns to shareholders in a sample of merging companies either with a matched control group or, more usually, with the market as a whole. The return to shareholders is made up of dividends (assumed to be reinvested) and the change in share prices over the period that is being studied.

The price of shares in a particular company is affected by circumstances peculiar to that company (e.g. a change of management or a merger) and those that are common to the market as a whole (e.g. a business boom or recession). However, a further complication arises because shares of some companies are more sensitive than those of others to changes in the general level of the market. Hence, it is usual to compare with the market return not the actual return on the shares of a particular company but a return that is 'normalised' using a coefficient representing the company's sensitivity to market fluctuations. In a widely-used model known as the 'capital assets pricing model' (CAPM) this coefficient is known as the company's 'beta' value<sup>3</sup>.

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3 For a definition of this and other models see Fairburn & King, 1989.

The difference between a company's normalised return in any time period and the market return is known as the abnormal return (AR) and the accumulation of such returns as the cumulative abnormal return (CAR). The existence of a positive CAR over a substantial period of time is regarded as an indicator of the success of a merger.

By far the largest study of this kind using UK data is by Franks and Harris (1986). They examined nearly 1,900 mergers that occurred in the thirty years 1955-85. They found very substantial abnormal returns to shareholders in target companies. Over a period beginning 4 months before a bid these averaged 30 per cent, with 85 per cent of the sample showing a positive AR. Some of the benefits of a bid were apparently discounted by the market in the run-up period, but there was still an average AR of 22 per cent in the bid month.

Positive ARs for bidding companies in the bid month averaged only 1 per cent and accrued to only half the sample. Over a period of six months, beginning four months before the bid, ARs averaged 7 per cent and accrued to 65 per cent of companies. The authors point out that part at least of these gains may have arisen not from the market's anticipation of the bids, but because managers tend to make bids when their shares are highly valued for other reasons. A study of post-merger performance over two years shows that acquiring companies performed slightly better than the market as a whole but less well than they, themselves, had done before the merger. In a subsequent publication, the authors describe their work as showing 'positive gains to shareholders in merging firms with most if not all of the gain going to acquiree shareholders' (in Fairburn & King, 1989, p. 158).

No one has questioned the finding that shareholders in acquired companies make large gains from mergers. Indeed, some studies find these gains to be even more widespread than do Franks and Harris. One major study of 434 mergers

found positive ARs in no less than 431 cases (Firth, 1980).

There is less unanimity as to the effect on acquiring companies. Franks and Harris found a small positive effect in the month of the merger, but Firth and others have found negative ones. Firth found net abnormal losses for 350 of his 434 cases. There is widespread agreement, however, that post-merger performance tends to deteriorate, relatively to the market, over a period of up to two years following an acquisition.

Since acquiring companies are usually much larger than targets, a large percentage gain by acquirees can be offset by a small percentage loss by acquirers. Franks and Harris found net gains in the short run, while Firth found net losses.

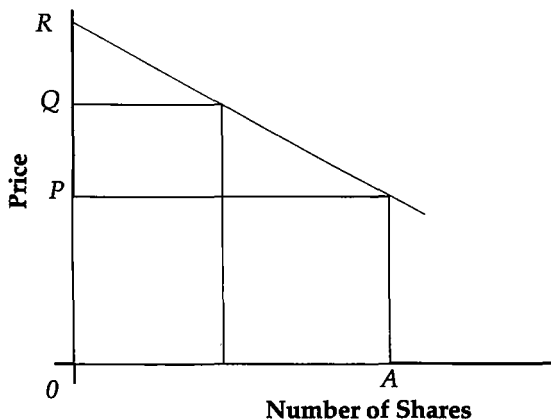
The evidence can be summarised as follows.

- Mergers usually produce large abnormal returns to shareholders in target companies both in the run-up to a bid and at the time of the announcement.
- This is particularly so in the case of contested and revised bids.
- Positive abnormal returns to shareholders in bidding companies are often found in the few months prior to a bid, but these may be due to other circumstances.
- Abnormal returns to bidding companies in the month of an announcement are usually small, and it is uncertain whether gains or losses predominate.
- Post-merger performance of acquiring companies tends to deteriorate relatively to the market over a period of up to two years from an acquisition.
- The net effect of mergers on shareholder wealth is uncertain and probably small. There is a balance of evidence that abnormal gains are positive in the short run, though this is far from conclusive. It is fairly certain that net gains decline over time and, in the longer run, they may well be negative.

Studies using stock market data provide little evidence that mergers, at least in the UK, have significant effects in either direction on shareholders' wealth. Moreover, even if a positive wealth effect could be established it tells us very little about the relationship between mergers and the public interest. If the stock market were fundamental-valuation efficient, a positive wealth effect would indicate an improvement in rationally expected profitability of the real capital assets owned by the merging companies and, subject to the qualifications stated in the Appendix to Chapter 4, this could be accepted as in the public interest. But we have shown in Chapter 4 that there are strong a priori reasons for believing that the market is not efficient in this sense, and this belief is supported by the size of premiums and the frequency with which bids are revised.

In an efficient market there would be a single price representing the present value of rationally expected future earnings. In the real world, it seems likely that there will be a variety of expectations formed on varying amounts of evidence and with varying degrees of rationality. If this were so, we should expect a downward-sloping demand curve for the shares in a company, as shown in Figure 5.1.

**Figure 5.1**



If the total number of shares were OA, the price would be OP. Those whose expectations implied a higher price would be shareholders, while those with more pessimistic expectations would not. A bidder who wanted a controlling interest would have to offer OQ, while one who wanted to acquire the entire shareholding would have to offer OR. Moreover, bidders would not know the exact position of the demand curve so we should expect that they would often make mistakes and need to revise bids in order to attain their objectives.

This hypothesis fits the facts with regard to premiums, but it implies either that the market is not fundamental-valuation efficient or that investors' models are defective. In either case, the market cannot distinguish between bids that are made in the expectation that they will increase efficiency and those that are made in the pursuit of monopoly power or simple empire-building. In the words of Alan Hughes: 'The existing UK stock price information does not help us to distinguish between them. It is an act of faith to argue on the basis of it alone that acquisitions have in general allowed companies to reap economic or efficiency gains'. (in Fairburn & King, 1989, p. 95).

## 5.7 Market Volatility

A very common criticism of equity markets is that they overreact to information about medium and long-term prospects both for the economy as a whole and for individual companies. A glaring example in the UK was the bear market of 1972-4. Between August 1972 and December 1974 the FT Actuaries 500 share Index fell from 222.4 to 68.4 while the general price level rose by 35. (Morgan, 1987). The implication is that the real value of prospective dividends from Britain's 500 leading public companies had fallen by 77 per cent. Even when the market as a whole is fairly steady, a quick glance at the London share service of The Financial Times shows many companies with a yearly high price 50 per cent or more above their yearly low. It is hard to believe that changes of this magnitude and



frequency arise solely from rational assessment of new information.

A more scientific investigation using US data has been made by Robert J. Shiller (Shiller, 1981). Using the Dow Jones industrial average and actual dividends paid by the companies covered by the index, he found that price fluctuations were from five to thirteen times greater than would have been 'justified' by subsequent variations in dividends.

These results are not, of course, a test of the efficient market hypothesis, since Shiller used actual dividends, (with hindsight), not those which might have been rationally expected at the times of his price observations. However, this degree of volatility implies that, if prices were indeed based on rational expectations, then these expectations must have been formed either on the basis of very inadequate models or very misleading information.

Shiller's work has not been repeated using UK data, but a recent paper by Bulkeley and Tonks investigated the possibility of improving the performance of a portfolio by buying when the market was low and selling when it was high. (Bulkeley and Tonks, 1989). They devised a 'buy low, sell high' rule which, had it been applied to a representative portfolio over the period of their investigation, would have produced a significantly better result than a 'buy and hold' rule. It should not, of course, be possible to make such gains in an efficient market and these findings contrast with those noted earlier - that it is not possible to make abnormal gains by 'playing the market' in the short run. The volatility evidence thus supports the view that, even though the market has a high degree of information arbitrage efficiency, it is not fully efficient in the fundamental-valuation sense.

## **5.8 Merger Waves**

During much of the period since 1945, and even going back to the beginning of the century, merger activity has shown

strongly marked cycles which correspond fairly closely with cyclical movements of Stock Exchange prices. Table 5.2 shows from 1963 to 1989 the annual average value of the FT Actuaries All-share Index and the number of acquisitions identified in the DTI Business Monitor (now Business Bulletin). If other measures of merger activity are used (e.g. spending on acquisitions as a proportion of GDP or of company assets) the pattern is slightly different but the broad picture is much the same.

**TABLE 5.2: SHARE PRICES AND MERGER ACTIVITY, 1963-1989**

Year	Share-price index <sup>a</sup>	No of mergers	Year	Share-price index <sup>a</sup>	No of mergers
1963	100.61	888	1977	191.91	482
1964	104.68	940	1978	216.68	567
1965	99.08	1000	1979	245.52	534
1966	100.46	807	1980	271.32	469
1967	107.32	763	1981	307.96	452
1968	151.01	946	1982	324.24	463
1969	148.82	846 b	1983	434.71	447
1970	134.90	793	1984	516.67	568
1971	164.49	884	1985	631.95	474
1972	212.66	1212	1986	782.10	696
1973	184.61	1205	1987	1025.07	1125
1974	106.75	504	1988	931.67	1224
1975	133.11	315	1989	1110.29	1039
1976	153.04	353			

<sup>a</sup> FT-Actuaries All-share Index (10.4.62=100) annual average

<sup>b</sup> Prior to 1969 acquisitions by quoted companies only

Sources: Prices - *Financial Statistics*, Mergers - *Business Bulletin*; Acquisitions and Mergers (previously *Business Monitor* MQ7)

There were peaks in merger activity associated with high share prices in 1964-5, 1968 and 1972-3. The big 'bear market' of 1973-5 was accompanied by a sharp fall in the number of mergers and this remained low during the late 'seventies and the dear money period of the early 'eighties. There was a strong upsurge in share prices and mergers during the mid-'eighties, culminating in the stock market crash of October 1987. Thereafter, the pattern was different from that of most earlier booms and slumps. The downward movement of share prices, though very steep, was short-lived, and the number of mergers was actually greater in 1988 than in 1987.

The causal relationships involved here have aroused controversies that are beyond the scope of this paper. It is possible that rising share prices stimulate mergers, or that mergers stimulate rises in share prices (see Chapter 6). It is also possible that both rising share prices and rising merger activity are symptoms of rapid monetary expansion and a high degree of liquidity in the economy. It does not, however, seem credible that either the competence of company management or opportunities for improving the use of real resources through mergers change in cycles that resemble those of share prices. The existence of this cyclical pattern must, therefore, be taken as further evidence that the market is not a good selector of the mergers that are in the public interest.

## **5.9 Characteristics of Merging Firms**

At first sight, it might appear that an examination of the characteristics of companies involved in mergers should provide useful insights into the working of the 'market in corporate control'. There have been numerous studies of this kind but the results have generally been disappointing, partly because of measurement problems and partly because of the diversity of motives that may lead to mergers. Different motives will cause acquiring companies to look for different characteristics in their targets. For example, a board seeking to enhance the long-run value of its shareholders' assets by

the use of its own management skills would look for a target with a poor profit record. One that wanted a quick boost to its own earnings (possibly to conceal its own shortcomings) would look for a profitable target with a low price-earnings (PE) ratio. Hence, a sample of mergers is likely to include companies with many different and sometimes opposite characteristics. It is not surprising that analysis of such samples has often yielded results that are not statistically significant or are significant only at a low level of confidence.

Characteristics of bidding and target companies in a sample can be compared with one another and either with the whole population of companies outside the sample or with a matched control group. Cosh, Hughes and Singh (1980) examined a group of mergers occurring in 1967-9 with results that can be summarised as follows:

<b>Size</b>	Bidders > targets $\geq$ others
<b>Profitability</b>	Others > targets; others $\geq$ bidders; bidders $\geq$ targets
<b>Profit variability</b>	targets > others $\geq$ bidders
<b>Growth</b>	bidders > targets; bidders > others; others $\geq$ targets
<b>Leverage</b>	Bidders > targets > others

The findings with regard to size get strong support from other studies; the number of 'reverse takeovers' has grown somewhat, but there is still a very strong tendency for acquiring companies to be larger than those which they acquire, as was shown in the examination of merging companies in Chapter 2. On the other hand, this relationship does not hold so strongly as between targets and others; being small, in itself, does not seem greatly to increase a company's vulnerability to a bid. These findings are not surprising; large companies have fewer

potential predators and are more difficult to absorb. They also say very little about the public interest, unless we are prepared to accept either that 'big' is necessarily 'good' or necessarily 'bad'.

The evidence on profitability is much less clear. Some studies show target companies as less profitable than the average but at least one (Levine and Aaronovitch, 1989) found them more so. The statistical relationships in either direction tend to be weak.

One study (Meeks, 1977) found that target companies tended to be less than averagely profitable in the year immediately before the merger but more than averagely profitable over the preceding two years. This, together with the findings of Cosh, Hughes and Singh on profit variability, suggest that a fall in profits makes a company vulnerable to a takeover. Falling profits may be a sign of deteriorating management, but a sudden fall is more likely to be the result of adverse events over which management has little if any control.

The evidence with regard to acquiring companies is also mixed. Some studies have shown them as more than averagely profitable in the period before a merger, but others have cast doubt on this. On the whole, the evidence on profitability gives very little support to the hypothesis that, 'good companies take over bad ones' and so mergers serve the public interest by correcting management failure.

There is widespread, though again not universal, acceptance of the view that acquiring companies show more rapid growth than either their targets or companies in general. There seems, however, to be little difference in growth rates between target companies and the general population. Growing slowly (like being small) does not in itself appear greatly to increase vulnerability. The rapid growth of acquiring companies may indicate that their managements are more than averagely efficient, or simply that it is often easier to expand by

acquisition than by internal growth. The evidence with regard to profitability and post-merger performance strongly suggests the latter.

There is also widespread agreement that acquiring companies tend to be more highly geared (have a lower proportion of equity to total liabilities) than average, though this characteristic has been less widely studied than others.

So far, we have considered only characteristics of companies themselves; it is also relevant to consider how companies are valued by the securities market. The two measures commonly used for this purpose are the price-earnings ratios (PE) and the valuation ratio (VR). The PE ratio for a single share is its price divided by equity earnings per share; for a company as a whole this would amount to market value of equity/earnings for equity. Theoretically, the valuation ratio should be defined as market value of equity/replacement cost of equity assets but, because of the difficulty of measuring replacement cost, book value is commonly used. It is important to note that VR comparisons between companies can be severely distorted if book valuations are made on different bases.

In an efficient capital market the market value of a company's equity would be the present value of rationally expected future earnings when discounted at a risk-adjusted interest rate. A company could, therefore, have a low PE ratio because:

- It was believed by the market to have a high systematic risk (a high 'beta' value in terms of the CAPM, as defined on p. 91);
- It was engaged in activities that did not have good growth prospects (e.g. because they were exploiting wasting assets or making goods for which demand was static); or
- Its management was not expected to take full advantage of future earning opportunities.

Only the last of these reasons would make a valid case for a takeover. In an efficient market where managers were pursuing the interests of their shareholders, we should, therefore, expect that target companies would have low PE ratios but that by no means all companies with low PE ratios would become targets.

In an efficient market with a VR based on replacement cost a company would have a low VR (less than unity) if the value of its expected future earnings, discounted at the prevailing rate, was less than the replacement cost of its assets. However, this might say that these assets ought not to be replaced (at least in their present form), not that the company ought to be taken over. A reason for a takeover would only arise if the existing management was not expected to make the best possible use of its assets. In the real world, however, low valuation ratios could occur either because book values are unrealistically high or because the market is inefficient. From the point of view of a bidding company, but not from that of the public interest, a case for a takeover would arise if its management believed that a low VR was the result of an under-estimate by the market of the future prospects of the target. Again, therefore, we should expect that target companies would have below average valuation ratios but that by no means all companies with low valuation ratios would become targets.

Yet again, the empirical evidence is conflicting. There have been about half a dozen substantial studies using UK data. The majority have found a general tendency for target companies to have low PE ratios and low VRs. However, one found that above-average PE ratios predominate and one found a similar result for VR ratios. All found a substantial number of cases where targets had average or above average ratios (Hughes 1989). There is, of course, no way of knowing whether such cases arise because of market inefficiency or because managers are pursuing objectives other than the interests of their shareholders.

## 5.10 Other Evidence

We conclude this chapter by briefly noting the results of a few studies that do not fit conveniently into any of our earlier categories. Most of the work reviewed so far has involved the use of statistical techniques to analyse fairly large numbers of mergers. K. Cowling has used a different technique involving very detailed case studies. He found 'one or two' cases where efficiency appeared to have improved because of superior management in the acquiring company, but his general conclusion was:

'Taking a broad sweep of the results the picture is one in which it is difficult to sustain the view that mergers are a necessary or sufficient condition for efficiency gain. In many cases efficiency has not improved, in some cases it has declined, in other cases it has improved but no faster than one would have expected in the absence of merger' (Cowling, 1980 p 370).

A small number of studies have looked at investment and technological change, and have found that where profitability has improved after a merger this tends to be associated with a rise in investment and an acceleration of technological change. This is hardly surprising, but it does not take us very far. As we have seen, many mergers have not been followed by higher profitability; moreover, where they have been and where there has also been a rise in investment we do not know which is cause and which effect, or how far either should be regarded as consequences of the merger.

Finally, a number of case studies have investigated regional effects. As one would expect, there is general agreement that mergers are often followed by redundancies, but there is no consensus as to whether the burden falls more heavily on regions of high unemployment than elsewhere. Mergers, however, are usually followed by restructuring in which the acquiring company takes over a number of key decisions and the management services that go with them (e.g. corporate



treasury, legal department, insurance department). The result is a reduction in the number of responsible and well-paid jobs in areas where acquired companies operate. Insofar as acquiring companies are more concentrated in the South East than acquired ones, mergers could thus have a damaging effect on the outlying regions.

## **6 SOME BROADER ASPECTS OF MERGERS**

### **6.1 Mergers and Share Prices**

In this chapter we comment very briefly on some effects of mergers on financial markets and on the economy, most of which are on or near the periphery of our terms of reference.

In section 5.7 we quoted evidence that the equity market produces price fluctuations larger than seem justified by underlying fluctuations in companies' earning prospects, and in section 5.8 we showed that there is a close association between these price fluctuations and the level of merger activity. There are good reasons why merger activity should be high during stock market booms, but can the process also work the other way? Can mergers and rumours of mergers generate rises in share prices and so increase the amplitude of fluctuations?

We have not been able to find any objective way of testing this hypothesis, but there are some suggestive 'straws in the wind'. For obvious reasons, the announcement or even the rumour of a bid produces a sharp rise in both the price and volume of transactions in the shares of the target company, and this is likely to have a 'knock-on' effect on the shares of other companies in the same market sector. 'Merger hunting' is a popular and lucrative sport among brokers and market analysts; the sport is more rewarding and more widely practised in times of high merger activity and this widens the range of shares that are affected by rumours.

All this is easy to accept; it is less easy to see why it should lead to a general 'inflation' of share prices, rather than to changes in relative prices with shares that are regarded as good takeover prospects going up and others going down. One possible explanation is that the frequent occurrence of takeovers in which shares change hands at a large premium over their pre-bid price encourages a belief that shares in general are under-valued. This is not a very attractive idea to purist supporters of rational expectations but it could, nevertheless, be true.

Another and perhaps more convincing hypothesis, is that mergers increase the flow of funds seeking investment in equities either by diversions from other sections of the capital market or through monetary expansion. A very high proportion of recent mergers has resulted either from cash offers or from share exchanges with a cash alternative. The bidder sometimes raises cash by a rights issue but more often deals are financed either by drawing on liquid assets already held by the bidder or by loans. Cash received by shareholders in target companies is very likely to be re-invested in the equity market, so the net result of merger transactions is likely to be an increase in total demand for ordinary shares.

There is a well known relationship between rising transaction volumes and rising prices for the market as a whole, as well as for individual shares, and press comments when the market is booming abound in phrases such as 'the market moved ahead strongly on takeover talk' or 'takeover rumours pushed shares upward'. Whatever the truth of the matter, many market participants and commentators certainly believe that merger activity stimulates price rises as well as deriving stimulus from them.

## **6.2 Short-Term Views**

There are long-standing differences of opinion between leaders of some City institutions and their opposite numbers in industrial and commercial companies. It is alleged that, by

comparison with some other countries, British industry spends 'too little' on research and development and/or on long-term investment, and that 'The City' is in some way to blame for this. These controversies have been blown up by academic and media comment and have now even acquired their own 'ism'; 'short-termism' has joined 'racism' and 'sexism' among the latest disfigurements of the English language.

Both the allegations themselves and the supposed causal relationship should be treated with caution. The results of research and development can be bought, and it may be cheaper to buy the results of successful R & D rather than doing it oneself. Moreover, long-term investment is not desirable merely because it is long-term, especially in periods of high real interest rates.

Critics vary in the way in which they suppose that City attitudes affect business decisions. Some lay at least part of the blame on the direct influence of analysts on the managers whom they visit. Analysts are alleged to express little or no interest in hearing about R & D or about the long-term future of companies, and to concentrate almost wholly on short and medium-term prospects. (DTI 1990). This is alleged to breed a similar attitude among industrial managers.

Even if such allegations are true they have little relevance to mergers. Much more relevant is the contention that institutional investors expect their companies not only to earn high profits but to pay high dividends. The pressure to earn profits is alleged to discriminate against investment projects with a long pay-off period. The pressure to pay dividends arises from the fact that companies that pay out only a small proportion of their earnings generally have lower PE ratios and lower valuation ratios than otherwise similar companies that distribute a larger proportion of their earnings. Companies whose shares are under-valued in this way are, of course, more vulnerable than others to takeovers. Hence, the threat of takeover is one of the ways in which the market exerts pressure

on directors to pay out a proportion of earnings that it regards as reasonable.

Critics of the institutions argue that they expect companies to pay out too high a proportion of their earnings, and that this leaves them starved of funds to finance investment, especially long-term investment. The more a company paid in dividends, the more new money it would need in order to finance a given amount of investment, but the easier would new money be to raise. Hence, it does not necessarily follow that high dividends mean low investment.

Allegations of short-term policies can be and often are carried too far. After all, the long term is made up of a series of short terms and one good reason for concentrating on the short term is the extreme difficulty, both for company directors and investment managers, of making long-term forecasts. Mergers and the threat of mergers are ways in which the market puts pressure on company boards to earn profits and pay dividends but, insofar as industry is myopic, excessive takeover activity is probably not a major cause; rather, merger activity and myopia are common symptoms of a lack of fundamental-valuation efficiency in the equity market.

Institutional investors certainly do not see themselves as interested only in the short term. As recorded in Chapter 2, our questionnaire survey showed long-term prospects of targets and bidders with much the highest importance rating among factors influencing the decision to accept or reject a bid.

Nevertheless, it is true that many financial institutions have short holding periods; that shares of companies paying out a high proportion of their earnings tend to be highly priced; and that there is a real belief among many responsible people in industry and commerce that City institutions take too short a view. The situation is well summed up by a very restrained critic, Mr David Walker of the Bank of England, who refers to 'an attitude that attention to the longer run is a luxury and risk that can be indulged only within tight limits, especially

by companies that see themselves as potential takeover targets'. (Walker, 1985, p.573).

### **6.3 Defensive Reactions**

There are many possible measures that directors may take in order to repel a hostile bidder or to diminish the likelihood of a bid. Some of these are likely to be harmful to the operation of the capital market or to the economy or both.

Among the long-term strategies to reduce a company's vulnerability to a bid are, paradoxically, both acquisitions and de-mergers. The objective of the former is to make a company too big for a rival to absorb. The latter involves selling off 'jewels of the crown', subsidiary companies or other assets that are believed to make a company particularly attractive to a potential bidder. A special case of this is the management buy-out. Once directors have received a bid or know one to be imminent, they are prevented by the Takeover Code from selling their company's assets without the consent of shareholders at a general meeting (see Chapter 3), but the Code does not restrict sales before a bid is known to be imminent, or acquisitions at any time.

Sales of assets, like acquisitions, are sometimes presented as part of the process by which 'the market in corporate control' promotes a rational allocation of real capital resources. We have already seen many reasons for doubting the efficiency of this market in relation to acquisitions. Most of these also operate in the case of disposals. It is because disposals during the course of a contested bid are likely to cause conflicts of interest between management and shareholders that there are restrictions on them in the Takeover Code.

Other long-term strategies include the adoption of a capital structure including non-voting shares and even refraining from a stock market flotation altogether. Such policies reduce the role of the market and may make it more difficult and/or

expensive for a company to raise capital. However, they are probably not very important. Companies with non-voting shares are comparatively rare and are probably becoming fewer rather than more numerous. There is, of course, no way of telling how many companies are deterred from coming to the market by the fear of being taken over.

When an unwelcome bid is announced or expected, companies often look for a 'white knight', i.e. another bidder more acceptable to the management. The Takeover Code authorises directors to give unpublished information in confidence to potential bidders. The reason for this is that, since a 'knight' would have to outbid the original bidder, his advent must benefit shareholders in the target company. However, it does not at all follow that he would run the company better than his rival. Indeed, if the target company had become vulnerable because of managerial shortcomings, the success of the friendly bidder would probably be against the public interest, since he would be likely to make less drastic changes.

The defence against a hostile bid may also involve denigration of the opposition, sometimes even extending to the personal lives of directors; glowing claims for the company's products and long-term prospects; asset revaluations; and optimistic profit forecasts; all in a highly charged atmosphere of lobbying and advertising. The Takeover Code lays stringent obligations on both directors and their financial advisers in relation to information, and particularly, to financial forecasts; but this does not always prevent the issue of grossly over-optimistic statements. The Sketchley case is the latest example. All this can only impair the quality of information available to the market.

#### **6.4 Industrial Structure and Consumer Choice**

Mergers that lead to the creation of very large companies can have effects on the structure of economic activity and on consumers that are not taken into account by the market and

that are far more subtle and far more widespread than are captured within the concept of competition as interpreted by the OFT and the MMC. It is often pointed out that even large British companies are small by comparison with the biggest in, for example, the United States, Germany and Japan. While this is true, it is also true that the British market is comparatively small; that the share of small firms in Britain's national output is lower than in the US, Germany and Japan; and that British industry is relatively highly concentrated. It is not so much the absolute size of particular companies as the balance between different sizes of enterprise and different types of activity that is important.

The present system of merger regulation is biased in favour of conglomerates with the result that many large companies created by mergers have only a quite small share in the market for any one product or service. Nevertheless, large conglomerates may have a degree of market power that is unhealthy for the rest of the economy. For example, a large retail chain may have excessive bargaining power in relation to small suppliers; a large manufacturing conglomerate may be in a similar position with regard to producers of raw materials or components; and a company paying large sums in rates and making a large contribution to local employment can bring pressure to bear on local authorities and even on central government. These advantages may be increased by the ease of access to credit and by the ability of large companies to require prompt payment from smaller customers while delaying the settlement of their own accounts. Finally, the very diversity of a conglomerate's activities may enable it to pursue 'predatory' policies in order to defend or strengthen its position in some of its activities.

These structural effects are not confined to particular companies or particular industries but can spread in a cumulative fashion from one economic activity to another. Consider, for example, an economy in which many manufacturers (some large, some small) supply many retailers (some large, some small) through

numerous wholesalers and merchants. Such a system may fail to attain all the economies of scale that are technologically possible, but it provides small manufacturers with ready access to markets; provides retailers with a variety of products and sources of supply; and offers consumers a wide range of choice both in the design and quality of products and in the amenities (e.g. range of products; information; and credit, delivery and after-sales service) offered by retailers.

Suppose, now, that this balance was disturbed by a few large mergers creating big retail chains which dealt directly with manufacturers. A series of changes, probably extending over many years, might be expected. The opportunities open to wholesalers would be restricted, and their numbers and product ranges would decline. This would have adverse effects both on manufacturers and on the remaining independent retailers. Manufacturers would find that their access to markets was restricted unless they made direct arrangements with the new large retailers. Some would probably do this even though they would be in a weak bargaining position. Others might combine in order to attain 'countervailing power', and yet others would be likely to disappear. The remaining independent retailers would find both the number of their potential suppliers and their available product ranges restricted, and would probably also be at a cost disadvantage because of the superior bargaining position of their new competitors over suppliers. Many would struggle on but some would probably either form new multiple chains, sell out to the multiples, or go out of business.

For the consumer, the effects of these changes would probably be a reduction in the number of retailers from which he can choose; a diminution in the variety of retail services on offer; a reduction in the range of design and quality, and a growing standardisation of products. These are trends that are very apparent in the British economy.

Somewhat similar trends can be seen in relation to services.



Many large firms have their own departments performing legal, computing, property management, transport, printing and other services that are also supplied by outside specialists, usually partnerships or small companies. Large companies have the option of either performing services in-house or buying them from outside; small firms generally do not. Thus, other things being equal, a rise in the number of large companies is likely to lead to a fall in the number of specialist suppliers of services on which small firms depend for their very existence.

The changes described are the result of many influences of which mergers are only one; but mergers have been and still are a major factor in the emergence of large companies, and so must be important agents of structural changes. These changes are 'externalities' in that they are not taken into account by directors or shareholders of either bidding or target companies; they go far beyond the concept of competition as used by the government, the OFT and the MMC; and they are insidious because they are cumulative. The effect of a single merger may not be great, but each one contributes something to a deterioration of the economic climate in which small firms have to operate.

## **7 SUMMARY AND RECOMMENDATIONS**

### **7.1 The 1988 Review of Mergers Policy**

In its 1988 paper on Mergers Policy (DTI 1988) the DTI stated its belief that:

'...private decision-makers will usually seek (and usually be best able to achieve) the most profitable employment for their assets, and in competitive markets this will generally lead to the most efficient use of those assets for the benefit of both their owners and the economy as a whole', and that

'...the people best placed to make a judgement of

commercial prospects are those whose money is at stake'.

This study has shown that, when applied to mergers, the second of these quotations is almost wholly irrelevant, while the first requires major qualifications.

## **7.2 A Competitive Market ?**

Decisions of companies on whether or not to make a bid and the outcome of bids that are made are both determined mainly by the market values placed on shares on the Stock Exchange. The Stock Exchange is often thought of as a market in which prices are the outcome of a process of continuous competitive trading involving a large number of transactions. This is a fair approximation to the truth in the case of a few large companies. But the business of the Exchange is highly concentrated; in the period studied, 158 'alpha' shares (only about 6 per cent of the total) accounted for three quarters of total turnover. None of these companies had less than 9, and some as many as 20 market makers. At the other end of the scale, trading in the shares of a large number of companies is sporadic and the number of market makers is small. There were 3 market makers or less in 1,530 securities (65 per cent of the total) and more than a third of all shares had less than 200 bargains in the 125 working days between October 1st 1988 and March 31st 1989.

Information plays a vital role in the working of competitive markets. The Stock Exchange listing agreement requires listed companies to provide a substantial amount of information about their current performance and much of this is distributed on screens by the Exchange's TOPIC service as well as by commercial services and by the media.

In order to learn more about the sources of information used by the investment managers of the large institutions whose operations are predominant in the market, a questionnaire survey of investment managers was conducted. The response indicated that managers relied mainly on in-house research

both for ordinary investment decisions and for decisions on takeover bids. Brokers' recommendations were the other major source with other advisers and media comment playing a smaller part. There is a large amount of good broker research on leading companies, but both the quantity and quality falls off rapidly as one moves downward to medium and smaller companies.

An important source of information in relation to mergers is offer documents and, in contested bids, defence documents. Most investment managers said that these documents were either 'very' or 'moderately' useful, but more than one in five said that they were of little or no use or even positively misleading. The main criticism related to a lack of objective assessment of the reasons for a merger (or for remaining independent) and a lack of information about companies' medium and long-term strategies.

Investment managers were also asked about the resources available, in terms of professionally qualified staff, for in-house research. Many appeared to be well equipped but some had to manage large funds on very slender resources. Out of 63 respondents with funds over £1 billion, 13 reported that they had 10 or fewer qualified staff.

Information recently published by the Stock Exchange enabled us to analyse, for 40 mergers occurring in the year to 31st March 1990, the quality of the market in which they operated in the six months prior to March 31st 1989. The analysis confirmed the general view that acquiring companies tend to be larger than those acquired and also indicated that targets had lower turnover/capitalisation ratios, fewer bargains and fewer market makers. Twenty-four out of 40 target companies had less than 4 bargains per working day, 9 had fewer than 1 per day and 4 had none at all in the six months. Four of the target companies had no registered market makers and 20 had three or less.

The general impression is very mixed. The market in the shares of larger companies, both those that are involved in mergers and those that are not, is strongly competitive; but among medium and small companies trading is often sporadic, there are few if any market makers, and there are strong elements of oligopoly. Such conditions are found more often in the market for target companies than for acquiring ones. There is a large amount of information available, but there are variations both in its quality and the capacity of market operators to use it. Short-term information is both more abundant and of better quality than medium and long-term and, particularly in relation to mergers, there is some that is irrelevant and some that is deliberately misleading.

### **7.3 Whose Money is at Stake?**

The decision on whether to make a bid lies with the board of the bidding company. In the case of what are called 'super class one situations' the Stock Exchange listing agreement requires that companies should obtain the consent of shareholders at a general meeting, but this applies to only a very few cases. Directors seldom have large shareholdings in their companies. Their personal economic incentive lies in the enlargement of their responsibilities, and hence their salaries, rather than in enhancing the value of their own shares. This may be reinforced by a desire for power, or a desire to make their company less vulnerable to being itself taken over. This is not to say that directors would make bids which they did not believe to be in the interest of their shareholders, but at least they have incentives to take an optimistic view.

The decision to recommend acceptance of a bid or to contest it rests with the board of the target company. If a 'hostile' bid succeeds, directors of target companies may lose their jobs or, at best, face a deterioration in career prospects. However, in a friendly bid that may not be so and, in any case, there are often compensations in golden handshakes and in the rise in the prices of such shares as directors may personally own. In

general, therefore, the incentive for the boards of target companies to take a pessimistic view is weaker than that for the boards of bidding companies to take an optimistic view, and this tends to impart a bias to the system in favour of mergers.

This bias is strengthened by the existence of a fairly small but very influential group of merchant bankers, brokers, lawyers, accountants, and other advisers which makes a great deal of money out of mergers, and whose members have very strong financial incentives to seek out potential takeover situations and encourage clients to participate in them.

The ultimate fate of a bid depends, of course, on the proportion of a company's voting shares that the bidder succeeds in buying. In the great majority of cases, the decision to sell or not to sell is made by a professional investment manager who does not have a personal holding of the shares concerned, and whose career prospects depend not on the fortunes of any one company but on the return he can obtain on his fund as a whole.

At all stages of the takeover process the key decisions are made by people who are seldom 'playing with their own money' to any substantial extent, and whose interests certainly differ from and may at times conflict with those of the shareholders whose money is really at stake.

#### **7.4 Profits and the Public Interest**

Mergers Policy refers to 'the most efficient use of those assets for the benefit both of their owners and the economy as a whole'. The most efficient use from the point of view of the owners is that which brings them the greatest profit. Welfare economics cannot prove that an increase in the profitability with which an asset is employed is necessarily in the public interest, but it is a sensible act of faith to assume this to be so, provided that the increased profits are not gained from an increase in monopoly power, and that there are no harmful

externalities, i.e. costs or dis-benefits to society that do not appear as costs to the owner.

The first of these provisos is supposed to be covered by the government's competition policy, but in fact this policy has had only a very modest effect. Out of more than a thousand mergers identified by the DTI in each of the last three years, several hundred have been reviewed each year by the OFT but only 31 have been referred to the MMC; and the great majority of these have been allowed to go ahead either unconditionally or subject to not very onerous conditions. The main reason for this is that the regulatory authorities have concentrated almost wholly on competition, and have adopted a concept of competition that is too simple to catch the more subtle anti-competitive effects on the structure of the economy that may result from large mergers.

Government policy in recent years has paid hardly any attention to externalities that may arise in relation to mergers. Examples of such externalities that have been ignored are the aggravation of imbalances in economic opportunities between regions; and damage to independent retailers and consumers from the adverse effects of large retail mergers on wholesaling.

These policy defects impair the ability of the stock market to discriminate between mergers that are and are not in the public interest, however well that market may perform the functions proper to it.

## **7.5 Stock Exchange Rules and the Takeover Code**

The Stock Exchange listing requirements and the Takeover Code complement one another. The Code is primarily concerned with ensuring that shareholders in takeover bids receive fair and equal treatment. The listing requirements of the Stock Exchange apply both to mergers and to the ordinary operation of the market, and are primarily designed to ensure that all users and potential users of the market have access to adequate information; to prevent insider trading; and to avoid

the development of 'false markets'. The two sets of rules, together, go a long way towards ensuring that the market is information-arbitrage efficient, but they have very little to do with fundamental-valuation efficiency.

The takeover rules discriminate to some extent in favour of mergers by restricting the defensive measures allowed to targets once a bid has been made or is known to be imminent, and the mandatory bid rules may force some companies to make a full bid when they might otherwise have been content with a minority holding. The stringency of Stock Exchange requirements in relation to mergers varies with the relative size of bidder and target, as measured by several different criteria. When a very large company takes over a small one the requirements are minimal. The rules thus encourage large companies to grow still larger by acquisitions.

## **7.6 Market Efficiency**

A securities market is said to be information-arbitrage efficient if prices adjust quickly and fully to available information, so that price changes follow a 'random walk' and it is impossible consistently to make money by 'playing the market', except by insider dealing. The evidence points strongly to the London equity market being efficient in this sense. This type of efficiency is a necessary condition for the market to be a good selector of mergers that are in the public interest but, unfortunately, it is not nearly sufficient.

If the market is to perform well its main function of steering economic resources into their most profitable uses, it must also be fundamental- valuation efficient, i.e. the share prices that it generates must be the present value, discounted at an appropriate rate of interest, of the rationally expected flow of future dividends from the companies concerned. There are many reasons why stock markets are unlikely to attain a high degree of fundamental-valuation efficiency, including the complexity of the influences that determine future dividend

payment; differences of opinion among economists about the way in which different variables interact upon one another; the difficulty of forecasting even individual variables; short-term speculation; and conflicts of interest.

This version of the efficient market hypothesis cannot be tested by reference to post-merger performance, since performance could differ from that implied at the time of a bid either because the market was not efficient, or because of defects in the 'models' by means of which market operators formed their expectations. Nevertheless, there are several pieces of evidence that point to a lack of fundamental-valuation efficiency. These include the size of premiums over the pre-bid prices that occur in most bids, the size and frequency of revisions to bids; market volatility and the tendency of mergers to occur in cycles that are closely related to fluctuations in share prices.

## **7.7 Post-Merger Performance**

There have been many studies of post-merger performance using different techniques and different sources of information. The two most important groups are those that use accounting data to establish the effect of mergers on profitability, and those using stock market data to establish effects on shareholders' wealth. Both have encountered problems that are described in Chapter 5.

Accounting studies generally take a sample of companies that have been involved in mergers and compare their rate of return on capital with that of a control group composed either of industry and commerce as a whole, or a matched sample of companies that have not been involved in mergers. The general conclusions are that a majority of merging companies suffered a decline in profitability relative to the control group, though a substantial minority achieved an improvement. Average profitability of the samples compared with that of the control group declined, though in most studies the decline was small and in some it was not statistically significant.



Studies of stock market data calculate a rate of return earned by shareholders in a merging company (made up of dividends plus capital appreciation) and compare this with the rate of return on the market as a whole, usually with some adjustment for risk. The difference is known as an abnormal return.

There is general agreement that shareholders in target companies reap large abnormal returns in the run-up to a merger. There is less unanimity about bidding companies; some studies have found net abnormal gains in the run-up period, while others have found a preponderance of losses. In either case the average gain or loss has been small. Since large companies tend to take over small ones, a large gain by the target shareholders may be offset by a small loss to those in the acquirer. Some studies have found small net gains, others net losses.

In the post-merger period, the largest and most recent study (Franks and Harris 1986) found that acquiring companies' performance over a period of two years was, on average, slightly better than that of the market as a whole, but less good than their own performance before the merger. Some other studies have found a deterioration compared to the market.

If we accept either accounting rates of return on capital or stock market return to shareholders as criteria of the public interest, the empirical evidence is that, taken overall, mergers have neither done much harm nor much good, but that the effects of an individual merger are rather more likely to be harmful than beneficial.

All this is, of course, well known to the DTI. A green paper published twelve years ago reviewed the evidence then available and concluded that mergers in general were failing to generate economic benefits (DTI 1978). More recently, the 1988 DTI paper concludes that:

'Evidence on post-merger performance that has emerged

since the Green Paper supports the earlier findings of disappointing or inconclusive performance. Indeed, the consistency of the results of the various studies and the wide range of approaches used tends to reduce the force of the methodological limitations and to increase the robustness of the findings'. (DTI 1988 p.38).

There is a striking difference between this cool assessment of the evidence and the wild claims quoted at the beginning of this chapter.

### **7.8 Some Side-Effects of Mergers**

One of the arguments used in support of the existing regime is that it not only removes some inefficient managers but also, by example, imposes a healthy discipline on others. On the other side, it is argued that the risk of a hostile takeover diverts the attention of company boards from their proper job of running their businesses efficiently; encourages those seeking to expand to do so by acquisition rather than by investment and competition; leads to the introduction of defensive measures that may be harmful to the capital market and to the economy; encourages the taking of short-term views; and inhibits expenditure on R & D and on capital projects that have long pay-off periods. All these arguments are intuitively plausible, but the evidence is anecdotal rather than scientific.

There are also reasons for believing that there is a two-way relationship between merger cycles and share price cycles, and that merger waves contribute to market instability. Again, however, the hypothesis has not been, and possibly cannot be, rigorously tested.

Finally, mergers of the size that has become quite common in recent years have subtle and far-reaching effects on the structure of the economy and the nature of competition. A detailed examination of these would be far beyond the scope of this paper, but a few examples have been given in Chapter 6.

## 7.9 Remedies

The best that can be said of the present regime for mergers is that it leads to the spending of a lot of time and money for very little good; at the worst the results are positively harmful. One should not, however, be too sanguine over the prospects for improvement. Sorting out mergers that are in the public interest from those that are not is an immensely complicated process and it may be that no human institution can offer much more than a fifty-fifty chance of success. However, the analysis of this paper suggests possibilities of at least an improvement and the following paragraphs put forward some suggestions for further consideration under three headings:

The removal of bias,

Improvements in the quality of and use of information,  
and

Changes in the regulatory framework.

Removing bias The present regime is biased in several ways in favour of takeover activity, and such bias ought to be removed as far as possible. One source of bias is the incentives that the management of acquiring firms have to take an optimistic view of the benefit of a bid. A sign of the power of these incentives is that shareholders in acquired companies nearly always get substantial abnormal returns while those in acquiring companies seldom gain much, and often lose. In these circumstances, it is odd that the boards of acquiring companies do not encounter more resistance, not from target companies but from their own shareholders. Stock Exchange requirements in 'super class one' situations oblige bidding enterprises to issue a circular giving details of a bid to all shareholders and to obtain their approval in a general meeting. It would be desirable to extend this requirement to cover a much wider range of situations. A further improvement could come from the presence on more company boards of a larger number of non-executive directors, which has been widely advocated on other grounds. In order to strengthen further the hand of the

non-executive directors, it might be desirable to have a rule that circulars sent by a bidding company to shareholders should include a statement by the non-executive directors of the reasons why they believe the bid to be in their shareholders' interest.

Institutional investors might also play a larger part in opposing bids which they believed would not benefit shareholders. 18 of the 84 respondents to our questionnaire survey said they often opposed such bids and 60 said that they sometimes did. Suggestions for improving information and increasing collective action made in subsequent paragraphs could help to make such opposition more frequent and effective.

Bias can also arise from the operations of financial and other advisers who make money out of merger activities. This is a matter that cannot be dealt with easily by rules, but it should be possible to create a rather more healthy climate of opinion. If this is to be done, more publicity is needed. It would be desirable that documents sent by a bidding company to its shareholders should contain information about contracts with and remuneration of advisers, and institutional investors and the media would no doubt make directors aware of their views.

The mandatory bid rules and the constraints on defensive action by target companies in the Takeover Code also discriminate in favour of mergers, though this is not their intention. The former are designed to prevent directors of one company influencing the operations of another in a way that might be against the interest of a majority of the other's shareholders; the latter are intended to prevent shareholders in target companies being deprived of the abnormal returns they would otherwise get because of conflicts of interest between them and their directors. Careful consideration would be needed to see whether these objectives could be achieved in ways that would reduce the bias in the rules.

The quality and use of information Information in relation to ordinary investment decisions helps to determine the prices of

shares in different companies and hence the bids that are likely to be made. Information specific to companies involved in bids obviously helps to determine the outcome of those bids. Both kinds of information are, therefore, important if the market is to perform its functions well. Despite occasional lapses, the quantity and quality of short-term information is generally good, partly thanks to the vigilance of the Stock Exchange and the Takeover Panel. However, information in merger documents is inevitably presented with a 'gloss' to suit the case of the parties concerned. Our questionnaire survey also found criticism by a substantial number of investment managers of the lack of objective analysis of the reasons for merging or for remaining independent, and a lack of information about the medium and long-term strategies of companies.

There are also differences in the resources in qualified staff available to institutions to enable them to make efficient use of the information available. Even among the large funds that we surveyed, there were some that were operating on very slender resources, and the position is almost certainly worse among medium and small investors.

These defects cannot be remedied by dramatic changes in laws or regulations, though some changes will be needed from time to time to meet changing conditions, e.g. recent amendments to the Takeover Code to strengthen its control over conflicts of interest that may arise in management buyouts.

The main action must, however, come from the investment management industry itself. It is obviously up to individual funds to see that their investment managers have adequate supporting staff, but there is also a case for more co-operation. Less duplication of research could free resources for more in-depth studies and collective pressure on companies and their advisers could improve the quality of documents and elicit more information about strategies and about the logical basis for proposing or opposing mergers.

Unfortunately, competition may inhibit such developments. The performance of investment managers is under continuing scrutiny not only by their directors or trustees but also by specialist financial journals; and there are strong pressures either to beat an index or to secure high positions in the various league tables run by the journals. Investment managers therefore want not only to perform well but to perform better than their rivals, and anyone who believes he has a good idea has a strong incentive to keep it to himself.

However, co-operation and competition are not irreconcilable as many a joint venture in research and development has shown. The recently re-formed Institutional Shareholders' Committee may provide a vehicle for co-operation at the industry level, especially where there is a need to bring pressure on unsatisfactory companies or for the drawing up of general guidelines, e.g. the Committee's recent paper on management buyouts. The various trade associations, if their members so desired, could provide assistance with the analysis of takeover documents; brokers could specialise more and market their research more widely than they do; individual funds could reach understandings with one another to specialise in their in-house research and pool their results; and there may be scope for a small number of 'research boutiques' selling information and analysis, on a non-confidential basis, to clients.

Changes in the regulatory framework It has been argued in this paper that the regulatory framework operated by the Minister for Trade and Industry, the OFT and the MMC suffers from an inadequate concept of competition and an almost total neglect of externalities. These defects could be remedied, without revolutionary changes, by one substantial alteration to the rules coupled with a change of emphasis in the way in which the OFT and the MMC interpret their roles.

The so-called 'mega-mergers' of recent years have reached a size at which even one of them can have far-reaching effects

and two or three together can change the whole structure of major economic sectors. Moreover, a few companies have attained a great size by means of a large number of relatively small acquisitions. There are limits to how far both these processes should go without enquiry. Our recommended rule change (which might require a minor change to the 1973 Fair Trading Act) would be the setting of thresholds beyond which a merger should be automatically referred to the MMC without prior investigation by the OFT, unless the Minister specifically asked the Director General for a recommendation, and he recommended against referral. The thresholds could be applied either to the assets of the acquired company or those of the acquiring company or to some combination of the two. The figures would have to be reviewed from time to time, but our present suggestion is that automatic reference should occur:

- (a) If the assets acquired had a value of more than £500 million; or
- (b) The assets of the acquiring company exceeded £1 billion and the assets acquired exceeded £10 million. Present procedures would, of course, still operate for other mergers.

The setting of a numerical threshold could produce distortions in that some companies might make acquisitions to bring them above the threshold simply to ensure that they could not be taken over without a reference. Such distortions could be minimised by the use of the discretionary powers of the Minister and the Director-General. It could be made clear that any acquisition that appeared to be primarily intended for this purpose would normally be referred.

An alternative would be a set of criteria, such as that established by the European Community, based on turnover. In any case, assets criteria and turnover criteria should bear a reasonable relationship to one another so that mergers of the types described above incur scrutiny either by the MMC or the Commission of the Community.

The changes of emphasis should be, first, a modification of the concept of competition so as to pay less exclusive attention to market share and pricing policy and more to other aspects of market power and, secondly, a broadening of the issues considered by the Commission. In Section 84 of the 1973 Fair Trading Act (quoted on p.47 above) the Commission is given a list of five matters of which it must take account in considering a merger reference and, besides these specific obligations, it is stated that: 'The Commission shall take into account all matters which appear to them in the particular circumstances to be relevant'. As shown in Chapter 3 the Minister, in making references, the Director General in making recommendations, and the Commission in its enquiries have rarely considered issues other than those within their rather narrow definition of competition, even though wider issues have been drawn to their attention by some of the parties concerned. This has led both to the failure to refer some mergers that raised important public interest issues (e.g. Rowntree/Nestlé) and to the clearing of some (e.g. Allied-Lyons/Elders) that would probably not have been cleared had the Commission conducted its investigations more in the spirit of the 1973 Act.



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