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Strategic Interactions with Competition Authorities in the UK Alcoholic Beverages Industry

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Abstract

This central question addressed by this thesis is how and to what extent firms in a mature industry can pursue a corporate growth strategy through sequential mergers and acquisitions of competitors by influencing the outcome of competition authority enquiries to their benefit. First, by either ensuring that mergers and acquisitions are not referred to the competition authorities at all or second, if they are referred, that they transact subsequently with minimal requirement for adverse remedies.

The UK alcoholic beverages industry was examined in detail over the period 1969 - 2006 during which time there were 40 significant mergers and acquisitions, 26 of which were proposed in the UK the remaining 14 being cross-border deals in the US and/or Europe. Each of these transactions produced a rich array of quantitative and qualitative data. Discriminant analysis, a technique that has not traditionally been used in competition policy issues was applied to this data.

The findings of the discriminant analysis were then tested using two case studies that examined *i.* the emergence of Scottish & Newcastle, the smallest of the national brewers in 1969, as the largest UK brewer and one of the largest brewers in Europe and *ii.* the emergence of Diageo, formed by the merger of Grand Metropolitan and Guinness in 1997 as the dominant global spirits producer with a wide portfolio of leading brands in Scotch whisky, gin, vodka and liqueurs. Both case studies combined a descriptive analysis of the long term impact of the anti-trust enquiries that shaped the two respective segments of the industry and short term event analysis surrounding the specific mergers that created the leading firm in each industry. The case studies suggest that these two firms did influence the competition policy process to their advantage and, moreover, that this was an essential and deliberate component of their corporate strategy.

The analysis reveals that firms were able to maximise their chances of success in furthering their growth strategy through mergers and acquisitions by *i* merging with and or acquiring firms in markets where they had no previous dominant share, *ii* exploiting the political landscape, *iii* pursuing 'agreed' rather than 'hostile' bids and *iv* presenting 'upfront' competition remedies before or during the referral process.

Collectively, the analysis reveals that over a period of 35 years the UK alcoholic beverages industry was transformed from a fragmented national industry into one that is now dominated by two firms in their respective segments of international spirits and UK brewing. The success of Scottish & Newcastle and Diageo in achieving their merger and acquisition goals depended heavily on their ability to repeatedly and successfully interact with competition authorities. At the same time their major UK competitors, Allied Domecq, Bass and Whitbread were less successful at the key stages in their history in pursuing mergers and acquisitions. This led, within a matter of years to all those firms either exiting the alcoholic beverages industry completely or being subsumed into other firms.

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Thanks must also go to the many people I have met and spoken to in the UK and international alcoholic beverages industry over the past two decades; they have had a profound influence on this thesis. This is a great industry that gives so much pleasure to the majority of its consumers who imbibe sensibly. There is no doubt that the UK is a dominant force in this industry because of the enormous skill and dedication of the generations that have been entrusted to support its wonderful brands. I thank them all for the many hours they have spent talking to me.

I would also like to acknowledge the financial support of the Economic and Social Research Council that granted me a Research Studentship Award to cover three years of my research. Additional support was also provided by Warwick Business School and The University of Warwick Graduate Programme.

Finally, I owe a great debt of gratitude to my husband, without whose endless support I could not have imagined completing this work, least of all on time. He unselfishly withdrew from his own career to support me and our two children. I dedicate this thesis to John, Sebastian and Alexander.

Declaration

This thesis is wholly the author's own original work except for the acknowledged input of the thesis supervisors. Except for some references highlighted in the body of the text that relate to the author's previously published work none of the material presented in this thesis has been published previously or submitted for a degree at another university.

Chapter 1. Introduction

Merger and acquisition activity is an integral part of the growth and development process of most industries whereby weaker and inefficient firms are subsumed into larger more successful firms. The acquirers gain by growing far more quickly than could have been achieved by new product development and advertising and promotion of existing products. In the case of the UK alcoholic beverages industry, with long-established brand names supported by years of advertising, merger and acquisition activity has been the only realistic mechanism by which larger firms have been able to develop and extend their brand portfolios over the last three decades.

Acquisitive growth reaches a natural tipping point. At some stage a growth strategy based on mergers and acquisitions will be constrained by competition policy. This is especially true for firms operating in a single domestic market, where there may be a market share cap, or target minimum number of competitors that competition authorities impose. In such circumstances firms have tended to adapt their merger and acquisition strategies to include related – or unrelated in the case of conglomerate – target firms and sectors. Alternatively, firms have sought to extend their strategy into new geographies,

but this eventually leads to more complex interactions with competition authorities in multiple jurisdictions, often simultaneously.

1.1. Research objective

This central question addressed by this thesis is how and to what extent firms in a mature industry can successfully pursue a corporate growth strategy through sequential mergers and acquisition with competitor firms by influencing the outcome of competition authority enquiries to their benefit.

The UK alcoholic beverages industry has been chosen as the subject of this study because of its rich history of competition authority investigations over an extended period. Moreover, the world's largest spirits firm (Diageo) and a major international brewer of beer (Scottish & Newcastle) both originated from what were essentially medium-sized UK regional brewery businesses in 1969; the year that coincided with the first full anti-trust investigation into the UK brewing industry [*Beer: A Report on the Supply of Beer*, 1969]. Both grew into major international businesses in a matter of three decades. This phenomenal growth, in what for all intents and purposes is a mature industry, has been achieved in both cases as a result of an extensive and sustained period of merger and acquisition activity. On a more practical level, as the industry is a large employer and source of tax revenue, many of its mergers have been considered in great detail by a variety of competition authorities across a number of jurisdictions.

Consequently, a significant amount of industry data and official documentation is readily available in the public domain.

This research also draws on the author's own unique experience working for large investment banks in the City of London as an equity analyst in the alcoholic beverages sector during the 1990s. Case study analysis can therefore be supplemented by contemporaneous notes and commentary written by the author at the time; she was present at all public meetings of the firms and their major international competitors in the period 1992 - 1999. In addition, she also held many one-on-one meetings with both board, divisional and in-field managers during this period. This experience that spans one of the most significant periods of merger and acquisition activity for the major UK alcoholic beverages firms has given the author access to a body of information, insights and opinions that would not normally be available in academic research.

Over the period of investigation, which covers the years 1969 – 2006, there have been many mergers and acquisitions involving the UK alcoholic beverage industry. Two firms, Grand Met (one party to the merger that created Diageo) and Scottish & Newcastle placed a heavy reliance on mergers and acquisitions and have had more frequent interactions with the competition authorities than any other firms in the industry. It is their success in gaining either early approval for their proposed mergers and acquisitions (that is without referral to the competition authorities) or being able to complete those transactions with only modest remedies (that is with minimal intervention by the competition authorities after a referral) that has had the greatest

impact on the structure of the UK alcoholic beverages sector, not least in curtailing the subsequent strategic choices of their competitors.

A summary of the key mergers that have shaped Diageo and Scottish & Newcastle and their rationale is set out in Table 1.1 below. A further full summary of all mergers and acquisitions in the UK alcoholic beverages industry in the period 1969 - 2006, including those involving Diageo and Scottish & Newcastle's major UK competitors is set out in Chapter 4.

Table 1.1. The merger history of Diageo and Scottish & Newcastle

Year	Acquiror	Target	Merger Rationale	Outcome
1971	Grand Met	Truman	Entry into UK brewing and pub retailing	Transacted
1972	Grand Met	Watney Mann IDV	Extend brewing brands and pub presence in Southern region	Transacted
1984	Scottish & Newcastle	JW Cameron	Extend pub portfolio into adjoining North East region	Referred then abandoned
1985	Guinness	Arthur Bell	Entry into Scotch whisky industry	Transacted
1985	Scottish & Newcastle	Matthew Brown	Extend geographic and brand portfolio into North West region	Referred then transacted
1986	Guinness	Distillers	Extend Scotch presence internationally and access to maturing whiskies	Referred then transacted
1986	Scottish & Newcastle	Home Brewery	Extend geographic and brand portfolio into East Midlands region	Transacted
1987	Grand Met (Spirits)	Heublein	US expansion and control of brands already distributed in the UK	Transacted
1988	Grand Met (Spirits) (jv))	Irish Distillers	Control of Irish whiskey industry and distribution in Ireland	Referred then blocked
1988	Elders IXL	Scottish & Newcastle	Rationalisation of 'sleepy' UK brewing and platform for European expansion of Fosters	Referred then blocked
1990	Elders IXL (Courage)	Grand Met (Brewing)	Brewing-for-pubs' swap to improve operating efficiencies post 'Beer Orders'	Referred then transacted
1992	Grand Met (IDV)	Cinzano	Control of joint venture, ownership of brand and distribution in Italy	Transacted
1993	S & N (Retail)	Grand Met Retail	Establish distribution platform for beer brands in South	Transacted
1995	Scottish & Newcastle	Courage	Leadership in UK brewing by extending geographic coverage to South	Transacted
1997	Grand Met	Guinness	Create global distribution network supporting wide portfolio of leading brands	Referred US/EC then transacted
1999	S & N (Retail)	Greenalls Retail	Extend pub presence in North West region	Transacted
2000	Scottish & Newcastle	Danone Brewing	International growth and control of Kronenbourg already distributed in the UK	Transacted
2001	Diageo	Seagram Spirits	Addition of in-fill brands to give 25% share of US market	Referred US then transacted
2002	Scottish & Newcastle	Hartwall	Access to emerging beer markets of former Russian Federation via Finnish jv owner	Transacted
2003	Scottish & Newcastle	Centralcer	Access to another emerging beer market in Iberia	Transacted
2003	Scottish & Newcastle	HP Bulmer	Distribution and leading UK cider brand	Transacted

1.2. Research questions

This thesis proposes and tests a new theory of strategic interaction between otherwise competing firms in an industry in which they seek to maximise jointly their brand portfolio growth objectives by co-operating with each other to influence the outcome of competition authority enquiries. The explicit aim of the proposed cooperative strategy is

for both the acquiring firm(s) and the target firm to maximise the probability that multiple mergers will be allowed to complete without referral to the competition authorities and/or if they are referred minimise the impact of any remedies that may be proposed in the form of disposals of assets.

The theory is formulated from a case study analysis of the major firms in the UK brewing and spirits industries in which two dominant firms, Diageo and Scottish & Newcastle appear to have executed successfully this strategy since 1969 and today are ranked as leading global alcoholic beverages firms, despite the relatively small size of the UK as an alcoholic beverages market. The proposed theory is tested with a novel application of discriminant analysis, a statistical method which is particularly well suited to the interrogation of both quantitative and 'softer' qualitative data that is typically generated by case study research.

Both firms have deliberately instigated a series of mergers with and acquisition of other firms rather than relying on product innovation and organic growth. Indeed, given the mature nature of beer and spirits they appear to have had little option other than to pursue a strategy of growth through merger and acquisition of competitors. With their increasing scale, repeated successful interactions with the UK, EC and to some extent US competition authorities have been necessary to achieve their growth objectives. In stark contrast other firms in the same industry that failed in their interactions with either each other (Allied Domecq) and/or with the competition authorities (Bass and Whitbread) have exited the alcoholic beverages industry.

Given the deliberate and repeated nature of the growth process adopted by Diageo and Scottish & Newcastle and how their apparent success with the regulatory process appears to have influenced directly the exit of their major UK competitors it is possible to conclude that both firms have been able to adopt a successful strategy for managing interactions with the competition authorities. This thesis examines three questions:

i. What economic, political, and social factors should merging firms exploit to minimise the probability of a referral to, and minimise the impact of any remedies imposed by, the competition authorities?

ii. How should bidder and target firms in a merger organise themselves in presenting their case to the competition authorities?

iii. How should competition authorities respond to growing evidence of competitor firms co-operating with each other before and during a merger enquiry in the process of gaining clearance?

1.3. Research methodology

Given the longevity and scale of the UK alcoholic beverages industry and its major firms it possible to observe a significant number of mergers and acquisitions, often involving the same small group of firms, and the outcomes of their interactions with the competition authorities over an extended period. Each competition inquiry brings together industry, market and firm quantitative data, questionnaire information and the views, mainly qualitative, of suppliers, competitors and customers. This presents an

opportunity to construct a more complex and dynamic model of merger policy than could be achieved from either purely qualitative or purely quantitative (econometric) analysis.

The research presented in this thesis therefore adopts a two stage approach utilizing two different research techniques, neither of which has been used widely before in examining the operation of competition policy.

In the first stage, a multivariate statistical technique called 'Discriminant Analysis' is applied to a database of quantitative and qualitative factors that has been constructed from a detailed textual analysis of public and the author's own documents and numerical datasets pertaining to all the major mergers and acquisitions in the UK alcoholic beverages firms over the period 1969 – 2006. The objective is to identify a small subset of critical factors that determine the likelihood of success or failure in a firm interaction with the competition authorities once a merger or acquisition has been proposed.

The second stage of the analysis involves an in-depth case study of the two largest and most successful firms in the UK alcoholic beverages industry, Scottish & Newcastle and Diageo. The objective is to examine how each of these firms addressed and exploited the critical success factors identified in the discriminant analysis when interacting with the competition authorities and to what extent that allowed them to dominate and create value in their chosen sectors. The discriminant analysis and case study techniques are discussed in more detail below.

1.3.1. Discriminant analysis

Discriminant analysis is a multivariate statistical technique that is similar superficially to Regression Analysis; it is concerned with identifying statistically significant relationships between a set of independent (explanatory) variables and a dependent categorical variable. It has been chosen in this case because it is ideally suited to handling mixed datasets of qualitative and quantitative independent variables and, specifically, identifying which of those variables are most significant in discriminating between two alternative binary outcomes in the dependent variable. In the case of mergers and acquisitions analysis, presented here, the dependent variable consists of a series of observed outcomes from the interactions of firms in the UK alcoholic beverages industry with the competition authorities. The key question is what factors led to particular mergers and acquisitions being *Referred or Not Referred* to the competition authorities. A secondary question also addressed is what factors, following a referral, led to the merger or acquisition eventually being *Transacted* (that is completed successfully) or *Not Transacted* (that is being dropped or blocked completely).

Only some mergers and acquisitions are referred to the competition authorities. Not all referred bids are blocked and not all cleared bids then lead to completed mergers. Firms have pointed to lengthy investigations effectively derailing the merger process. Consequently there are bids that lapse even though they have regulatory clearance. Other bids succeed following a referral because they are cleared with or without the need for structural and/or behavioural remedies. Logically, a firm that has had repeated

success in having its deals passed by the competition authorities over an extended period is likely to be one that has addressed successfully the factors that influence the outcome of competition authority enquiries. Discovering which, if any, of the independent variable(s) in the assembled dataset is most strongly associated with successful transaction either in ensuring a proposed merger or acquisition is *Not Referred* or, if it is referred, leads to it eventually being *Transacted* is the essential purpose and output of the discriminant analysis. This informs directly the case studies of individual firms carried out in the second stage of the research. However, a crucial issue in carrying out discriminant analysis is identifying *a priori* a broad but relevant set of potential independent variables.

1.3.2. Potential factors that influence competition authority enquiries

Three broad groups of factors have been identified that might be expected to yield a subset of variables that are significant in determining whether a proposed merger or acquisition is referred to the competition authorities and, if it is referred, whether it is likely to be cleared subsequently or subjected to minimal remedies.

Dominance

Over the period of this study the legal frameworks for investigating mergers have changed several times. In addition, the availability of data and advent of computer processing has allowed ever more sophisticated economic analysis of mergers and their

likely outcomes to be employed in enquiries. Notwithstanding the progress of both the law and economics differences remain in defining and addressing dominance and the potential for the abuse of market power both within an industry, over time, and across various jurisdictions.

Defining and establishing the 'relevant market' in merger enquiries has been the subject of much academic and practitioner man-hours. In the early UK beer inquiries, definitions were wide; total share of beer production or sales. As consumption patterns changed splitting the market into on-trade and off-trade sales volume seemed logical progression, as did a distinction between traditional ale and lager consumption. By 2000, and the Interbrew/Bass Brewers proposed merger, Herfindahl-Hirschman Indices (HHI) were calculated for television regions, distinguishing on a sub-category of sub-category basis; premium and standard lager, and national and international brands.

While the haggling continued on the correct market definition, no enquiry deemed it necessary to consider the impact on beer prices – to brewers – of an industry with excess capacity both at home and on its European door-step with plants a long way from minimum efficient scale, and where supplier-buyer bargaining power had moved decisively downstream; the pattern of retail prices no longer can be viewed as a proxy for wholesale prices with the dismantling of the UK's traditional vertically integrated structure.

An added layer of complexity has accompanied recent spirits acquisitions, which by the nature of the products and portfolios being merged have required simultaneous investigation by the US and EC. The much heralded 'success' of the co-ordinated investigation of Diageo and Pernod Ricard's joint acquisition of Seagram's spirits assets has to be viewed against the backdrop of a completely different understanding of what constitutes the spirits industry and how it operates. Aside from definitional aspects of 'relevant market' in an industry with very distinct categories, the US does not recognise 'portfolio effects' at all, whilst the EC does – or at least did under Messrs Van Miert and Monti – but does not appear to be able to assess or quantify them.

In the midst of this dichotomy, it can be concluded that while there are specific and narrowly defined 'relevant markets', whether through product and geography, the overall market shares of broad categories remain important within the context of distribution. Both broad and narrow definitions need to be considered in the analysis.

Political and structural

Until the Enterprise Act 2002, the UK Competition Commission (CC) had to consider mergers not only with respect to their likely impact on prices and consumer choice but also with reference to wider public interest issues, for example, the impact on employment and support of regional businesses. In one specific case in the 1980s its predecessor, the Monopolies and Mergers Commission (MMC) was also charged with the task of investigating a merger on the basis of the prospective leverage of the acquirer

and how this might be expected to impact the brewing industry. This opened the door for political interference at all levels.

'The Beerage' was generally perceived as pro-Conservative, and this was supported by donations to the party. The extent to which the industry worked together as a powerful lobbying force was illustrated by the degree to which it was successful in mitigating partly the disruptive impact of the second major anti-trust investigation into the brewing industry by the MMC in 1989. Even after the MMC had published its findings [*The Supply of Beer: A Report on the Supply of Beer for Retail Sale in the United Kingdom into the Beer Market*] known as the 'Beer Orders' the industry was able to force a partial climb-down by the then Conservative government. However, by the 1990s the industry's political influence was waning. Those firms that had previously contributed to the Conservative party ceased to do so. Moreover, 1997 saw a transfer of power to the New Labour government. Despite intense lobbying for a re-appraisal of the 'Beer Orders' it took ten years to persuade government to carry out a review [*The Supply of Beer: A Report on the Review of the Beer Orders by the Former Director General of Fair Trading*, 2000].

Internationally the political environment is more difficult to assess and firms have not been obliged to disclose payments to either political parties or lobby groups. The major drinks (and food) firms are known to be aggressive sponsors of lobbyist in Washington. The US spirits industry, structurally still heavily influenced by Prohibition, offers several avenues for political interaction, not least at State level, with several states still

responsible for distribution and retailing of liquor. It is difficult to assess whether politics has had any bearing on European alcoholic beverages industry merger cases although the 1988 hostile approach by a Grand Metropolitan/Guinness/Allied-Lyons consortium was discussed in the Irish parliament a matter of days before the EC blocked the deal. Irish Distillers had lobbied hard aided by the '*Keep the Spirit Irish*' campaign.

Many researchers have identified 'waves' of merger and acquisition activity. Hoping to gain clearance for a deal during a more active M&A environment must balance two competing forces; on the one hand, a potentially more sympathetic environment for corporate activity, but on the other hand very busy authorities with a backlog of deals to investigate. Firms and advisors have commented that long delays can destroy much of the 'value' associated with acquisitions. Two aspects could be interesting in this regard. It is possible that the referral process can be speeded up or even prevented if firms show the willingness to compromise, by way of upfront remedies, in the first instance. In addition, there is likely to be a learning process for a new investigator or decision maker at the competition authority; how long such a key person has been in post might play a part in outcomes.

Finally deal structure is likely to be important. If the bid is hostile the target firm is motivated to call on all parties to thwart the deal. One key defence mechanism is to lobby the competition authorities to refer the bid for close scrutiny. It is notable that both of Elders IXL's bids for UK firms that were hostile were referred, while the counter bid from Scottish & Newcastle that was agreed some years later was not. As

time has moved on hostile bids have become rare, in particular in this industry. In their place has been an array of agreed bids, increasingly with complex joint venture arrangements. Latterly these have also involved joint acquisitions of a target with a pre-agreed split of assets that seem to have gained early regulatory clearance. The acquisition of Seagram's spirits operation by a joint venture of Diageo and Pernod Ricard, the first of its kind as an acquisition vehicle to gain regulatory approval, was copied in structure by Pernod Ricard and Fortune Brands in their 2005 acquisition of Allied Domecq, and seems likely to continue as the structure of choice in subsequent cross-border drinks deals.

Financial

Authorities everywhere are prepared increasingly to do their own analysis, and construct their own data sets from questionnaires and other sources rather than relying on that provided by firms or the wider industry. As the market has become more international, so has the scope of the analysis, such that in the investigation of Interbrew/Bass Brewers, for example, the CC decided for itself what it considered to be the 'right' price to pay for Bass Brewers given comparable deals in Europe and what this would infer for future pricing of beer based on estimated efficiency savings; a somewhat contentious finding.

As a general observation, firms have tended to err on the side of caution in estimating the efficiency gains they expect to make as a result of a merger. This is perhaps

understandable in light of the public interest issue of job losses, including the desire to allay fears within the merging organisations. But on several occasions, and most notably that of Interbrew, relatively small projected efficiency gains coupled with a perceptively high acquisition price have led the CC to conclude that exercising market power is the ultimate objective. By contrast the early UK brewing amalgamation of Grand Met/Courage was significantly more aggressive on cost cutting. Grand Met carried the aggression forward in the projected cost savings from both the Diageo merger in 1997 and the Seagram acquisition in 2000. In both cases the savings were made downstream in distribution and marketing where there appears to be less of a public interest debate surrounding the redundancy in contrast to the emotive and emotional appeals that have accompanied the potential closure of factories and plant in brewery mergers.

In the 1985 Elders IXL hostile bid for Allied-Lyons, the deal was referred as a result of the leveraged nature of the bid and concerns that it could destabilise the domestically important brewing industry if allowed to proceed. At the time – 1985 – when there was an economic and stock market boom, the use of debt and mezzanine finance was not uncommon, particularly in the US. However, by 1989, when Elders IXL bid for Scottish & Newcastle, the bid was blocked by the MMC. It is possible that the aggressive financial and balance sheet management of Elders played as much a part in this outcome as the competitive aspects of the bid. 1989 corresponded with the aftermath of the stock market crash and interest rates rising to 15%.

There is sufficient data and information to consider whether the operating ratios of both the bidder and target firms have an impact on referral. In addition, the financial leverage of a deal, modelled through the gearing of the bidding firm might also be significant.

1.3.3. Case study methodology

The US National Bureau of Economic Research (NBER) identified a significant gap in the literature and our understanding of mergers and acquisitions and sought to address this by funding in-depth case studies of specific industries that were presented in *Mergers and Productivity* [2000]. This compendium of US industry case studies, conducted by and commented on by a series of eminent US academics was edited by Professor Steven Kaplan of the University of Chicago who concluded that:

"*Large sample studies – whether accounting-based or stock-based – cannot possibly capture the richness of the economic effects of mergers. And, with some frequency, those large sample measures will not even capture the direction of the economic effect.....In sum, the voluminous economics, finance and strategy literatures on takeovers during the past twenty years offer little insight to practitioners or academics on what managers do to influence whether mergers succeed or fail*"

Kaplan and his colleagues argued that merger and acquisition activity was associated with either technological or regulatory shocks, and that a merger's success or failure was dependent on a thorough understanding of the target, including its corporate culture.

However, other academics concluded that the case studies did not generate substantial insights into exactly how mergers and acquisitions created value, and consequently assessed the Kaplan work as largely failing to deliver its objectives of filling the gap in the literature.

The research presented in this thesis builds on the methodology of Kaplan by carrying out in-depth case study investigations of the merger and acquisition strategy of both Diageo and Scottish & Newcastle. However, it aims to make the case study more robust and thereby address the criticisms made against Kaplan by focussing on how the firms exploited the specific success factors identified in the discriminant analysis when dealing with competition authorities. Ultimately, the aim of the case studies is to understand how each individual firm maximised the probability of success in their proposed mergers and acquisitions and how this led ultimately or otherwise to the creation of value.

What is clear is that both firms have created 'dominance' in their chosen segment of the UK alcoholic beverages industry by successive mergers and acquisitions and that the majority of their major UK competitors exited those sectors in a matter of a few years after Diageo and Scottish & Newcastle had established their respective positions.

1.3.4. Research Agenda

This research seeks to contribute in three ways:

Methodology and dataset

Academics from finance, strategy and industrial economics have pointed to the need for more in-depth industry studies into the motives and outcomes from merger and acquisition strategy. By utilising a mix of qualitative and quantitative data collected for one industry – alcoholic beverages – and one set of firms – the major UK brewing and spirits firms – this thesis offers insight into the firm and industry-level consequences of sequential mergers and acquisitions that have created leading international portfolios for two firms, using a combination of detailed case study and discriminant analysis.

Corporate strategy

While there is much literature investigating the role of mergers and acquisitions in achieving a firm's growth objective there has to date been little, if any, analysis of the impact of competition policy on a firm's merger and acquisition strategy. Specifically, how acquiring firms work with their targets, or otherwise, and increasingly how they work with a partner that is for all intents and purposes a competitor to achieve the desired outcome of little or no regulatory impact from their proposed mergers. Moreover, there does not appear to have been a consideration of the impact on value

creation of sequential mergers and acquisitions in building portfolios of brands and geographies.

Competition policy

Regulators have to assess mergers within every industrial sector. While the same industry and its firms present mergers to the authorities, new personnel are involved. Moreover, mergers require clearance in different jurisdictions, often at the same time, as has been the case for the recent spirits industry mergers. This thesis has collated information from all mergers and acquisitions over a thirty year time period, whether investigated in the UK, Europe or the US, and established the significant factors that led to referral or clearance in a discriminant analysis model. The variables include not only the routine dominance and financial ratio variables but other factors such as political party donations and the type of bid structure that was used.

1.4. Thesis Organisation

The remainder of this thesis is organised under the following chapter headings:

2. Alcoholic beverages industry structure and dynamics

This includes a general introduction to the production processes and marketing and distribution of beer and spirits. The structure of the UK brewing and spirits industry is

then described, together with details of consumption trends. Finally there is a section on anti-trust investigations that have addressed the structure of the beer industry and its impact on consumers.

3. Literature review

This is divided into four separate sets of literature. The legal framework of competition and anti-trust policy and how it has changed over time is discussed for the UK, European Union and the US, together with relevant law literature. The general economic principles that have shaped competition policy are then outlined, together with consideration of the quantitative and econometric techniques that have been influential in furthering policy, insofar as specific literature relates to consumer product mergers and the importance of 'portfolio effects'. The strategy literature pertaining to the two paradigms, 'Structure-Conduct-Performance' and the 'Resource-based view of the firm' are explained, and the role of government and politics in the development of corporate strategy has also been included. Finally, the impact of mergers and acquisitions on firm performance has been addressed by way of established academic finance literature.

4. Discriminant analysis

This chapter presents the results of the statistical analysis of a dataset that contains both qualitative and quantitative factors drawn from the 35 year history of mergers and acquisitions of the UK major alcoholic beverages firms. A discriminant analysis was

performed that separated merger cases into '*Referred*' and '*Not Referred*' from a set of variables constructed from a total of 40 cases that spanned UK, European and US deals. The result of the subdivision of the dataset into 'UK Only' and 'Non-UK' cases is also presented.

5. Case study of Scottish & Newcastle

This chapter presents a detailed analysis of the growth by acquisition of Scottish & Newcastle into the largest UK and second largest European brewer. The significance of the acquisition of Courage in 1995, and how this led ultimately to the exit from brewing of Bass and Whitbread is discussed. The impact of the Courage acquisition and subsequent acquisitions in Europe is addressed with reference to divisional and group operating and cash performance of the firm and its major UK brewing competitors.

6. Case study of Diageo

This chapter presents a detailed analysis of the growth by acquisition of Diageo into the largest spirits producer in the world. The significance of the merger of Grand Metropolitan and Guinness in 1997 to form Diageo, and how this led ultimately to the exit from global spirits of Seagram and Allied Domecq is discussed. The impact of the formation of Diageo and the subsequent group restructuring and acquisition of the larger share of the spirits assets of Seagram is addressed with reference to divisional and group

operating and cash performance of the firm compared to its major UK competitor Allied Domecq.

7. Conclusions

A summary of the research findings and contribution in the fields of methodology, corporate strategy and competition policy is given. Further research avenues are identified including the need for similar validating analysis to be carried out in other industries.

Chapter 2. Alcoholic beverages industry structure and dynamics

Two UK firms, Diageo and Scottish & Newcastle, transformed themselves from vertically integrated UK brewing, pub retailing and leisure conglomerates to multinational consumer goods operators in a little over three decades. This was achieved through successive rounds of mergers and acquisitions in both the domestic market and latterly through cross-border deals. At the same time, Allied Domecq, Bass and Whitbread, their major domestic competitors have seen their original alcoholic beverages operations subsumed in whole or part into the businesses of other domestic or overseas firms.

This chapter outlines the changing face of alcohol consumption and pub retailing in the UK market that provided the backdrop to the structure and ownership of the industry. It considers not only consumption and production dynamics but also highlights the impact of regulation. Two major anti-trust inquiries into the supply of beer had a significant impact on market structure and firm strategy that has been manifest in a succession of mergers and acquisitions.

2.1. UK brewing industry

2.1.1 Brewing production processes

Beer originated in Ancient Egypt and is produced in nearly every country. Whilst there are differences in taste and style, the quality of beer around the world is fairly uniform. The basic ingredients of beer are cereals, usually malted barley, hops, yeast and water. The starch content of the cereal is converted to sugar with the subsequent extraction of the sugar solution, or 'wort', then boiled with hops and fermented by the addition of the yeast. Once cooled, yeast is added which begins the fermentation process during which sugar is turned into alcohol and carbon dioxide; it is this process that mainly determines the taste and type of the beer. Most brewers retain their own exclusive supply of yeast that is collected following each brew, dried down and then reused.

In traditional UK 'ale' breweries, fermentation tends to take place as a 'batch' process from a relatively small scale plant. Here the active yeast forms a thick foamy layer on the surface of the beer, so called 'top fermenting'. The process takes around five days to complete and occurs at 15 - 25 °C. Once the beer has fermented it still has to mature. Depending on the type of beer, the maturation or 'secondary fermentation' phase can take between one week and several months. Cask-conditioned, 'real ale' is matured in wooden barrels ('casks') where the remaining yeast continues to work on the 'wort' and more hops and liquid sugar is added.

In contrast, European-style 'lager' breweries use what could be classed loosely as a 'continuous' industrial process. After the 'wort' has been boiled with hops and cooled, 'bottom-fermenting' yeast is added which settles to the bottom of the fermenting vessel. Fermentation takes between six and 10 days and takes place at temperatures of 8 - 10°C. The secondary fermentation takes place in special conditioning tanks at around 0 °C, and lasts for a further four or five weeks. The product is then filtered and pasteurised (heated) to kill and remove any remaining yeast. It is essentially an inert product after that point so does not require the same careful handling as traditional ales that are 'live' products with the cask still containing some yeast.

Many of the larger UK brewers also produce hybrid 'nitro-keg' ale (such as Caffrey's and John Smith's Smooth) that has many of the characteristics of lager in that it is a filtered, inert product finished and transported in steel or aluminium casks that are pressurised with nitrogen gas before they are delivered to the retail outlet. Like lager they are typically served to the customer at around 5 °C in contrast to traditional ales that are served at a temperature of around 12 - 14 °C. Younger consumers are thought to find these products less 'challenging' than traditional cask-conditioned varieties.

A commonly held view in the brewing industry is that minimum efficient scale for lager production given current brewing technology is approximately seven million hectolitres (7mhl). Anheuser-Busch, the world's largest and most efficient brewer has 12 plants that produce approximately 117mhl, the largest of which accounts for around 12mhl. To put the UK into context, lager consumption is currently estimated at 38mhl per annum. At

present the largest lager brewery in the UK is 5mhl with the major UK brewers operating several sub-3mhl lager plants. Although cross-border comparisons are distorted by different accounting treatments, plant size explains largely why Anheuser-Busch has operating statistics up to twice the size of the largest UK brewers.

Establishing capacity utilisation and excess capacity for ale breweries is considerably more complicated given the 'batch' process and the variable use of two or three shift patterns. Interbrew, in its evidence to the CC (Interbrew SA and Bass Plc, 2001) estimated that the regional brewers held collectively 5mhl of excess capacity. Notwithstanding the fact that many ale breweries have closed since the 'Beer Orders' as a result of mergers and sale for alternative use, Figure 2.1. shows they have not disappeared as quickly as the tail off in demand for ale.

Table 2.1. Number of UK brewery companies and breweries

Year	Brewery companies	Number of breweries
1970	96	177
1980	81	142
1990	65	99
1995	64	93
2000	51	69
2002	48	63
2003	49	62
2004	46	60

Source: British Beer & Pub Association; HM Customs & Excise

Mainland Europe is also afflicted with excess capacity and inefficient plant, in particular in southern Germany, Spain and central Europe, primarily in the Czech Republic. Interbrew estimated that there was 30mhl of excess capacity in Western Europe in 2001. The largest and most efficient European breweries are operated by Heineken and

Kronenbourg (now owned by Scottish & Newcastle) near Rotterdam and Strasbourg, respectively, both sited strategically for export to other countries in either mainland Europe or further a field.

Imported beer into the UK remained at a benign level of around 5% until the 1990s. Over half of that figure was accounted for by exports of Guinness and other Irish ales from the Irish Republic. However, as Table 2.2 shows the level of imports started to rise sharply in the late 1980s and imports are now thought to represent close to 15% of total consumption, if cross-Channel shopping is included. Ireland remains the most important source of imports followed by Germany, the Netherlands, and France.

Table 2.2. Imported beer by country of origin

Country ('000s bls)	1970	1980	1990	2000	2001	2002	2003	2004
France	8	1	57	437	448	390	355	336
Germany	44	389	775	658	736	1071	910	838
Ireland	1268	1053	1369	1082	679	1359	1327	1315
the Netherlands	43	42	544	512	505	425	487	677
All Europe	1719	1543	2911	3139	2858	3782	3698	3984
All Imports	1723	1576	3096	3329	3052	3973	3949	4287
UK Production	34360	39614	37751	33777	34708	34628	35448	35109
UK Exports	409	459	992	2228	1952	2525	2142	2665
UK Consumption	35674	40731	40297	35867	35564	35748	36226	35860
Imports % Consumption	4.8	3.9	7.7	9.3	8.6	11.1	10.9	12.0

Source: British Beer & Pub Association

2.1.2. Beer marketing and distribution

Traditionally UK ale was not transported far after it had been produced because brewers owned chains of retail outlets (public houses or 'pubs') in the vicinity of the brewery

and finished ale was delivered in cask by the brewery's dray horses. With the emergence of lager as the preferred form of beer (along with the now fashionable 'nitro-keg') and the increasing use of bottles and cans it became possible for brewers to not only supply their own estate but also the pubs of others and the growing off-trade of supermarkets and off licences. Whilst independent wholesalers have always been a feature of the distribution mechanism they historically operated on the slimmest of margins. Few still remain in an industry that is now dominated by vertically integrated brewer/wholesalers and independent national pub chains ('PubCos') that perform secondary distribution to the tenant landlords ('tenants') that rent their pubs.

Brand support through direct advertising has until recently not been a feature of the UK or European brewing industry. Brands were local and volume driven as a function of a 'property tie' that is the brewer owns the pub outlet (UK, Germany) or through a 'loan tie' that is the brewer grants subsidised business loans to an independent pub outlet in lieu of exclusive beer supply (most of mainland Europe). In contrast, the US brewers, and in particular Anheuser Busch that developed a national and international presence as pure brewers have always relied on extensive marketing programmes. They have tended to spend at levels similar to that of Diageo – mid teens percentages of gross revenues. In contrast UK brewers, with the exception of Guinness, spent low single digit percentages, often as low as 1 - 2% in direct beer brand support.

2.1.3. UK beer consumption

Since peaking in the late 1970s at 69.4mhl, UK annual consumption of beer trended down during the 1980s and 1990s, as shown in Table 2.3 and now stands at less than 60mhl. Since 1960 there has been a marked change in the mix of consumption. In 1966, traditional ales (bitter, mild and strong) dominated with 90% market share. Stout accounted for 7% of the total with lager taking less than 4% of consumption (mainly due to lager's 12% share of the Scottish beer market). In 2002, lager accounted for 67.6% of total beer consumption, around 37% of this described as 'premium' lager.

Table 2.3. UK beer consumption

Year	Hectolitres (m)	Barrels (m)
1899	60.7	37.1
1904	58.0	35.4
1909	56.1	34.3
1914	56.9	34.8
1919	57.4	35.0
1924	43.8	26.7
1929	41.0	25.1
1934	34.1	20.9
1939	41.5	25.4
1944	51.3	31.3
1949	43.4	26.5
1954	39.2	23.9
1959	42.7	26.1
1964	48.3	29.5
1969	53.9	32.9
1974	65.3	39.9
1979	69.4	42.4
1984	62.4	38.1
1989	65.3	39.9
1994	60.6	37.0
1999	58.9	36.0
2000	57.0	34.8
2001	58.2	35.6
2002	59.4	36.3
2003	60.3	36.8
2004	59.2	36.2

Source: British Beer & Pub Association

Traditionally pub estates were operated and managed as an extension of the brewery to move as much volume in as tight a geographic area as possible. The emphasis was not on the retail environment and quality of service. During the 1970s pub-goers started to become more demanding. With international travel consumers experienced eating-out and café-style bars and expected similar service and offerings in the UK. The demise of the British manufacturing base, as seen in the falling consumption of beer, precipitated eventually a change in the role of pubs in society. Many smaller outlets could not survive in the new environment of declining beer consumption and were of insufficient size and poorly sited geographically to make the grade as prime leisure-retailing outlets. They were closed or sold for conversion to residential property. What was left was either repositioned or reformatted to cater for the increased demand for quality leisure facilities, eating-out, budget hotel accommodation and childcare amenities.

Table 2.4 shows that since the late 1960s there has also been a distinct shift in consumption from the 'on-trade' (primarily pubs and clubs) to the 'off-trade' (off license and supermarkets).

Table 2.4. UK beer sales analysed between 'on' and 'off' trade

Year	'Off' Trade (%)
1972	9.6
1977	10.8
1982	13.5
1987	17.8
1992	22.4
1997	28.7
2002	36.7
2004	40.0

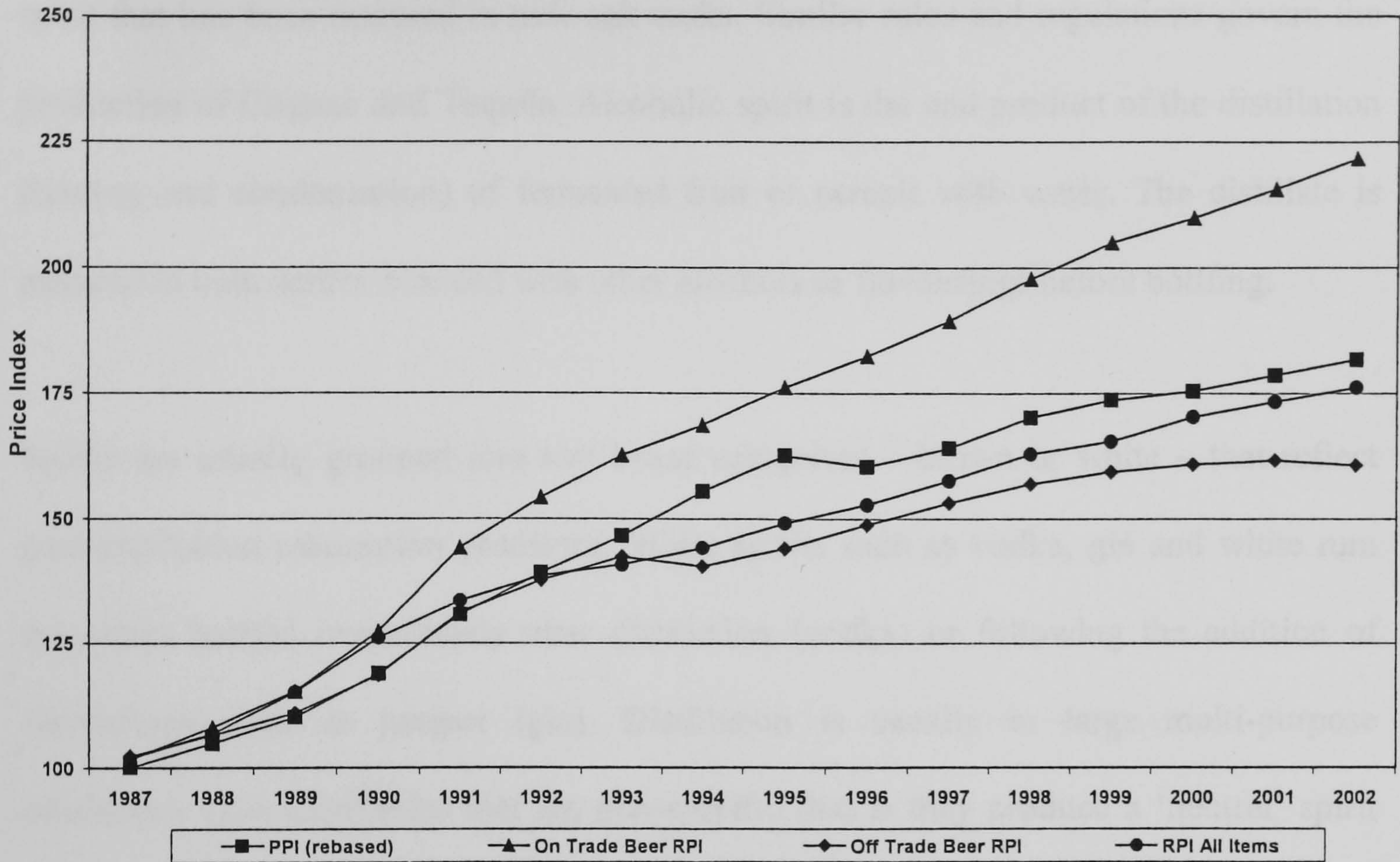
Source: British Beer & Pub Association

This has accelerated since the mid-1980s and has been attributed to the growing importance of home entertainment, although the gap between the equivalent price of a pint in the on and off trade has undoubtedly played a part. The supermarket groups have been taking an increasing share of beer sales. They are particularly adept at exploiting suppliers in industries with excess capacity, and where marketing and branding strategies are underdeveloped. Whilst own label beer has remained relatively small by comparison, in particular, to other alcoholic beverages segments, the supermarket groups have been able to command the highest level of discounts often coupled to brewer-funded so called 'below-the-line' marketing that is designed to increase volume. A common example of such marketing initiatives is 'buy one get one free' (bogof).

Discounts to large free trade customers such as working men's clubs, national cinema chains, and the former British Rail had long been a feature of the UK beer market, and were discussed in some detail in the 1969 Beer inquiry, twenty years before the 'Beer Orders'. The aftermath of the 'Beer Orders' corresponded to a sharp downturn in the UK economy and the levels of discounts from wholesale list prices and their availability started to widen significantly.

As illustrated in Figure 2.1., a combination of these consumption and production trends has underpinned a dramatic negative pricing environment for wholesale beer supplies during the 1990s, captured only to a degree by official statistics that use list rather than clean selling prices. This contrasts with a real upwards trend in pub beer prices over the same period, only some of which can be explained by increases in excise duty.

Figure 2.1. Price Trends between 'on' and 'off' trade



Source: British Beer & Pub Association; National Statistics

2.2. Spirits industry

2.2.1. Spirits production processes

Unlike beer, where the production process is relatively straightforward and where maturation is completed within a matter of weeks, the production and maturation of spirits, in particular, brown spirits, takes much longer and is far more complex. Moreover, some types of spirits are protected in terms of their origin and maturation process by trade laws. For example, for a product to be labelled 'Scotch' it must contain grain and/or malt spirit produced in distilleries in Scotland, and have been matured for at

least three years. Bourbon must have been produced and distilled in Kentucky from rye spirit that has been matured in new oak casks. Similar rules and regulations govern the production of Cognac and Tequila. Alcoholic spirit is the end product of the distillation (heating and condensation) of fermented fruit or cereals with water. The distillate is matured in bulk and/or blended with other alcohols or flavourings before bottling.

Spirits are usually grouped into two broad categories – brown or white – that reflect post-distillation maturation processes. White spirits such as vodka, gin and white rum are either bottled immediately after distillation (vodka) or following the addition of flavourings such as juniper (gin). Distillation is usually in large multi-purpose continuous flow distilleries that are non-specific that is they produce a 'neutral' spirit that can be made into vodka, gin or rum. Their production is relatively straightforward and is consequently, ubiquitous. The original and subsequently added ingredients determine the category.

Brown spirits tend to be matured for a minimum fixed term period in 'natural' containers, such as oak barrels, the maturation process being responsible for the colouring and flavouring. The differences between the various categories, whisk(e)y, brandy and dark rum reflect the original ingredients, malted barley, eau de vie (grape) and sugar, and the types of barrels used in maturation, new oak (Bourbon) or re-used oak and sherry barrels. Since production and maturation is more complex, greater skill and know-how is required to make brown spirits. Moreover, many categories are protected by law and have their own equivalent of 'Appellation d'origine contrôlée'

status that provides effective barriers to supply-side substitution. This applies to Scotch, Cognac, and Bourbon. Of the white spirits categories Tequila now has a similar status, in addition to London gin.

Considering in more detail the production of the most important international spirit, Scotch, there are two types of whisky, malt and grain, produced from different raw materials and production processes. Malt whisky is made from malted barley, water and yeast by distilling twice in copper stills. This is a batch process from small-scale production assets. Grain whisky is made from malted and unmalted barley and other cereals, water and yeast in a 'Coffey' still. Distillation is a continuous process and the plant is large scale. This has had a bearing on the structure and ownership of not only distilleries but also brands of Scotch whisky.

With the exception of William Grant and Robertson & Baxter the owners of grain distilleries are the large multinational drinks firms, Diageo, Allied Domecq and Kyndall (formerly part of Jim Beam Brands). Diageo's leading position is entirely attributable to the former Distillers Group, bought by Guinness in 1986. Until 1885, Distillers Company Ltd, the forerunner of Distillers Group, was a monopoly supplier of grain spirit to blenders and other distillers. Smaller blenders consequently established the North British Distillery as a trade cooperative, with shareholders including IDV (J&B Rare), Seagram (Chivas Regal), William Lawson (part of the Bacardi group), Robertson & Baxter/Highland Distillers (The Famous Grouse) and Glenmorangie. William Grant and Whyte & Mackay established their own grain distilleries in the 1990s. North British

was subsequently renamed Lothian Distillers and is now owned and controlled by Robertson & Baxter. At grass roots level the firms trade regularly with each other through whisky swap arrangements; only Diageo is fully self-sufficient with respect to filling its blends, although it sells excess whisky to the industry, often under long-term supply agreements.

Single malt whisky until recently remained an insignificant category in its own right with the output from malt distilleries serving to feed the blenders requirements for major Scotch brands such as Bell's, Johnnie Walker, and Ballantine's. These brands usually contain 30 or 40 different whiskies split roughly 60:40 grain to malt. The grain spirit adds little to the flavour of the blend, acting merely as a 'base'. Beyond the three year minimum maturation period grain spirit improves little for the extra years in barrel. This is in contrast to malt whisky; single malts are rarely released at less than 10 years (for the UK market) and most frequently at 12 years. Leading blends typically contain whisky that is a minimum of six years old; with the exception of Bell's (eight years old) there is no specific age statement.

2.2.2. Spirits marketing and distribution

The major spirits firms rely heavily on the international reach of their leading brands and spend many millions of pounds on integrated marketing campaigns, aligned to heavy distribution infrastructure capability, such as dedicated sales teams.

In many countries there are advertising restrictions on alcoholic beverages, in particular, spirits. In the US and UK until recently the industry itself had imposed an advertising restriction on broadcast media. In such cases firms have to be more creative in their brand support, relying more on bar promotions and tastings, in addition to 'below-the-line' volume building support, such as couponing and multi-buy promotions. In total firms tend to spend of the order of 15% of gross revenues on all marketing initiatives. In the case of Diageo this is over £1bn per annum. Consistent and successful marketing of key brands is a major source of competitive advantage in an industry that is characterised by the longevity of its leading brands.

Within Europe, the major spirits firms spent most of the 1980s and 1990s buying up independent distributors so that most are now vertically integrated, using wholly owned subsidiaries to effect exclusive distribution of their products at national level. Integration into distribution allows the firms to control fully the marketing and positioning of their brands in all parts of the market and allow the rapid dissemination of demand characteristics such that shipments and depletions are balanced (this reduces working capital and the need for 'destocking', historically a common ailment in the industry).

There are some countries in Europe where the state does not allow independent firms to conduct their own distribution, preferring to keep the state's role in alcoholic beverages distribution and retailing central. This is the case, for example in most of Scandinavia. It is also a feature of the US, where there are two types of regulatory control, Open States and Control States. Open States form the bulk of the US market for alcohol consumption

because of the size of California and Florida. Firms are allowed to sell spirits, wines and beer directly to independent distributors in what is known as the 'three tier distribution system'. There are super-distributors that span various states and they have tended to represent more than one spirits firm with competing brands. In Control States spirits firms have to sell their brands directly to the state that might be responsible for both wholesaling and retailing of alcohol, in much the same way as in Scandinavia. Beer is distributed on an Open State basis and wine varies, although it is not necessarily the case that a Control State for spirits purposes is also Control for wine.

Distribution in Asia/Pacific, Latin America and Eastern Europe is complex and idiosyncratic, frequently with multi-layer distribution systems involving one or more state enterprises. Although generally the attitude towards alcohol is less puritanical than in the US, domestic interests tend to be afforded some protection through the excise tax system (that may also incorporate bonded warehousing provisions).

2.2.3. Spirits consumption

Branded spirits represent a very small fraction of the total consumption of spirits globally, with extensive pockets of locally-produced spirits in most of Asia, the former Eastern Bloc and Latin America.

As summarised in Tables 2.5 and 2.6., total consumption of spirits globally is of the order of 2bn cases (9 litres) per annum. However, consumption of 'international' style

spirits amounts to 200m cases (excluding vodka in the former Soviet republics, and 'new world' rum). Scotch, the largest international category accounts for approximately 70m cases, with international grade vodka a close second.

Table 2.5. Global market share of major spirits categories

Category (m litres)	1997	1998	1999	2000	2001	% World
Whiskey	1664	1679	1712	1781	1857	9.8
Brandy/Cognac	1025	1013	1019	1025	1035	5.5
White spirits	3951	3987	4325	4220	4181	22.0
Rum	1234	1235	1143	1215	1234	6.5
Tequila/Mezcal	170	187	212	203	201	1.1
Liqueurs	785	787	756	776	791	4.2
Other	11954	10814	10457	9965	9689	51.0
Total	20782	19702	19625	19185	18988	100.0

Category (US$ m)	1997	1998	1999	2000	2001	% World
Whiskey	51102	47441	49156	48863	48495	24.3
Brandy/Cognac	20082	18338	18344	17607	17662	8.8
White spirits	43064	39840	41615	40877	42556	21.3
Rum	15104	14163	14337	14555	14896	7.5
Tequila/Mezcal	5309	5478	6198	6128	6543	3.3
Liqueurs	18331	18133	18055	17269	17531	8.8
Other	66149	58093	57851	55134	52184	26.1
Total	219139	201486	205556	200432	199868	100.0

Source: Euromonitor

Scotch whisky is the most international of the spirits categories and has consequently been the bedrock for the expansion of the UK drinks companies into overseas markets, as shown in Figure 2.2. With large and well-established brands (as shown in Table 2.7), the category underpins the distribution of other brands and categories such as gin and vodka. It is the UK's third largest export earner with annual revenues in 2001 of close to £2.3bn.

As per capita incomes rise in developing markets above $1000 per annum, international spirits start to become affordable. There is a body of evidence that shows that international spirits displace rapidly consumption of local spirits by up to 30 - 40% if

import restrictions, including differential excise taxes, are removed. Whilst this undoubtedly reflects aspirational consumption in many emerging markets, there is a quality issue underpinning the switch, in contrast to the beer market.

Table 2.6. Major spirits markets

Country (m litres)	1997	1998	1999	2000	2001	% World
China	7329	6120	5252	4721	4261	22.4
Russia	2281	2345	2552	2451	2413	12.7
Brazil	1398	1453	1503	1545	1533	8.1
US	1217	1230	1260	1293	1310	6.9
South Korea	915	921	1068	937	1040	5.5
Thailand	807	775	873	947	972	5.1
Japan	909	893	904	919	929	4.9
India	410	446	496	567	650	3.4
Phlippines	470	476	485	492	499	2.6
Ukraine	343	353	440	457	479	2.5
Germany	504	494	476	467	447	2.4
France	457	445	434	440	445	2.3
Mexico	279	302	320	315	317	1.7
Poland	380	342	330	308	297	1.6
Spain	282	284	285	284	285	1.5
Others	2809	2822	2948	3042	3112	16.4
Total	20787	19702	19625	19185	18988	100.0

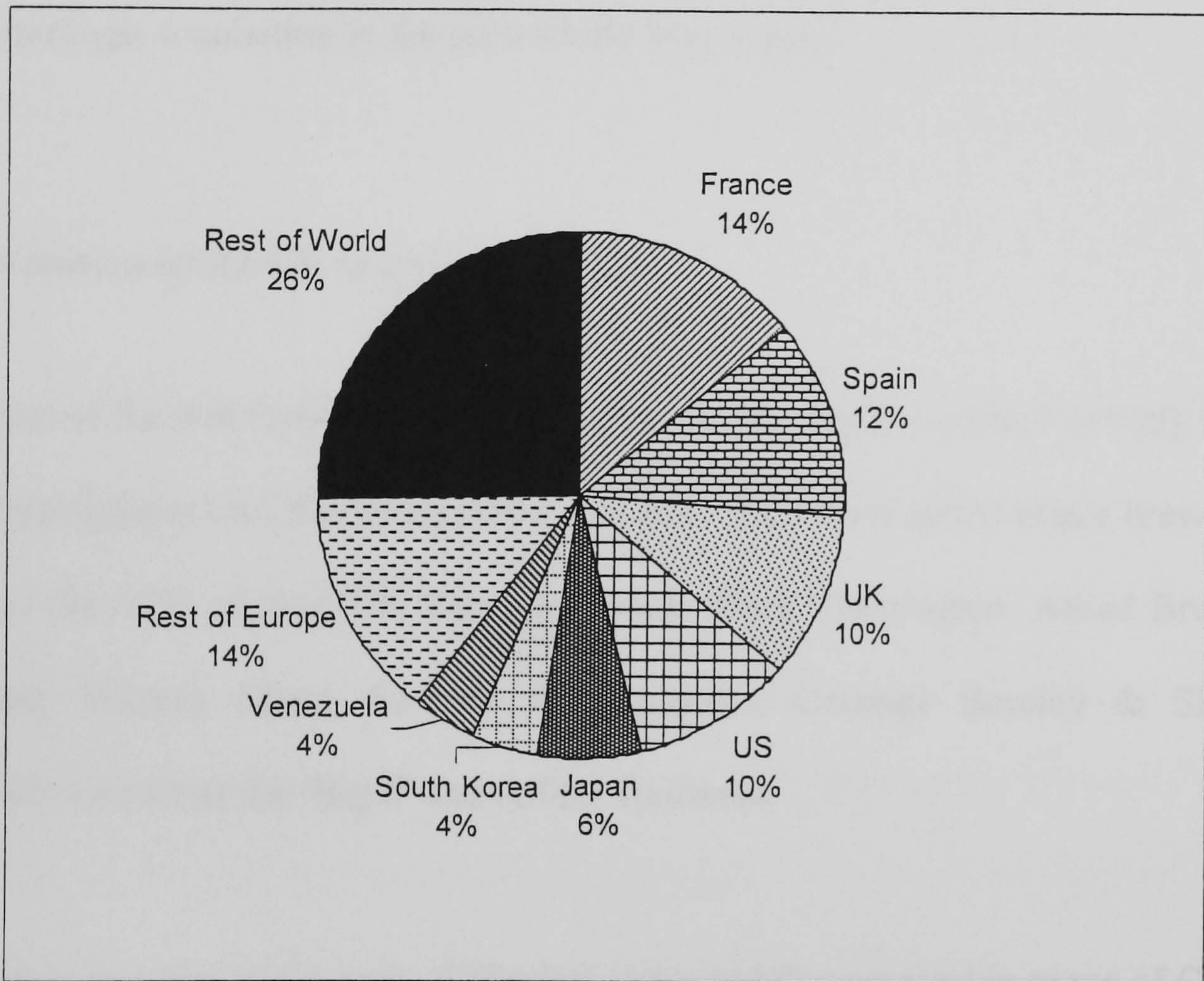
Country (US$m)	1997	1998	1999	2000	2001	% World
US	31068	31923	33680	35051	35875	18
Japan	21967	19587	22269	23469	20863	10
Russia	16757	13678	15988	16245	17299	9
China	25114	20492	17603	15874	14646	7
France	16061	15613	14777	12154	12693	6
South Korea	9972	6146	8911	9553	9711	5
UK	10920	10516	10433	9880	9511	5
Brazil	8627	8852	7217	8278	7288	4
Mexico	5224	5267	5676	5647	6153	3
Poland	5661	5568	5410	5471	6131	3
Spain	5279	5603	5616	4740	5080	3
Germany	6862	6747	6264	5007	4984	2
India	3042	2984	3305	3762	4334	2
Canada	3983	3775	3856	3944	3944	2
Thailand	4160	2958	3548	3659	3351	2
Others	44454	41777	41003	37697	38004	19
Total	219151	201486	205556	200431	199867	100

Source: Euromonitor

Scotch and Cognac have tended to dominate international spirits growth. These categories through age and quality statements appeal initially to business people and more affluent consumers (who, by definition, tend to be older). As the market develops

further, and assuming that import restrictions are partially or fully lifted, consumers are attracted to other spirits categories, in particular, vodka and liqueurs.

Figure 2.2. Major scotch markets by volume in 2001



Source: Scotch Whisky Association

Table 2.7. Estimate of sales volumes of major Scotch brands

Brand	Owner	Volume (millions of cases)
Johnnie Walker Red & Black	Diageo	13.7
J&B Rare	Diageo	5.9
Ballantine's	Allied Domecq	5.3
Chivas Regal	Pernod Ricard	3.9
Grant's	William Grant	3.8
Dewar's	Bacardi/Martini	3.1
Bell's	Diageo	2.7
The Famous Grouse	Robertson & Baxter	2.2
Cutty Sark	Berry Brothers & Rudd	1.9

Source: Industry estimates

2.3. Industry structure

Diageo (formed from the 1997 merger of Grand Metropolitan and Guinness), and Scottish & Newcastle have a joint heritage in what is known as 'The Beerage', the family-owned collection of regional brewers that amalgamated into national brewer-retailers through acquisition in the post-World War II era.

2.3.1. Evolution of the UK brewing industry

At the time of the publication of '*Beer: A Report on the Supply of Beer*' [1969], the first MMC investigation into the UK brewing industry, there were seven major brewers that accounted for 73% of total UK beer production; Bass Charrington, Allied Breweries, Whitbread, Watney Mann, Scottish & Newcastle, Courage Barclay & Simonds, collectively known as the 'Big 6' and Arthur Guinness.

After further mergers in the early 1970s that expanded the geographic scope of Courage, and saw the entry of hotel and property conglomerate Grand Metropolitan to 'The Beerage', the rest of the 1970s was characterised by relative merger inactivity, with brewers being content to rationalise and develop their estates through the Brewers Society-sponsored swap system that came into operation in the aftermath of the 1969 investigation that had prompted an interim review of the licensing system.

Merger and acquisition activity returned with a vengeance in the 1980s in line with the more general 'merger wave' that was evident in both the US and UK economies.

Moreover, in the years running up to '*The Supply of Beer: A Report on the Supply of Beer for Retail Sale in the United Kingdom*' [1989] the second anti-trust investigation by the MMC that culminated in what is referred to as the 'Beer Orders', the industry was struggling to cope with overcapacity and falling plant efficiencies in the face of declining beer consumption and pub going. In addition, profit margins were also under pressure from the emergence of the large supermarket groups as key buyers in the take-home or 'off trade'.

A string of mergers and acquisitions during the 1990s followed on from the upheaval created by the 'Beer Orders' and by 2001, of the original six national brewer-retailers, only Scottish & Newcastle remained as a dedicated, UK-owned brewer, incorporating the former Courage and Grand Metropolitan brewing businesses. Carlsberg was in full control of the former Allied Breweries, and the bulk of Bass and Whitbread's brewing operations had passed to Belgium-based Interbrew. While some smaller regional brewers remain, two of the larger regional brewers, Greene King and Wolverhampton & Dudley have gradually absorbed many of the independent firms that existed at the time of the 'Beer Orders'. Figure 2.3 shows the trail of mergers and acquisitions that led to the formation of the major UK brewers today.

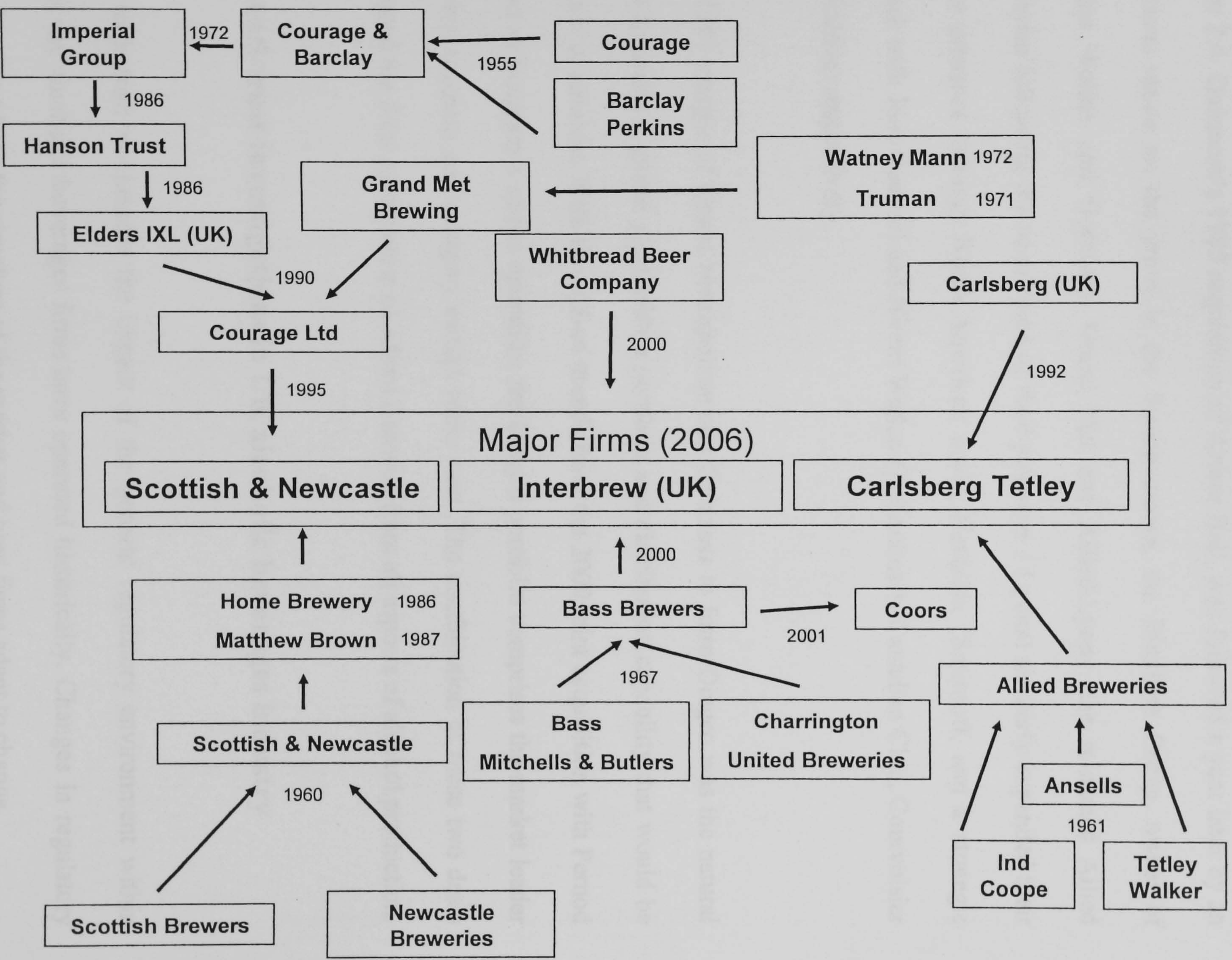
The UK brewers had always sought a foothold in the international brewing trade, and with Scotland's status as a major exporter of spirits, a wider involvement in an increasingly global spirits market also seemed a natural progression. Allied Breweries had been in the forefront of international expansion. At the time of the 1969 enquiry it

was the second largest brewer in the Netherlands with a 20% market share. It had also founded the Skol consortium that brewed Skol lager in 16 countries. Others had followed suit with Watney Mann owning two Belgian brewers. Whitbread had entered a partnership with Heineken to buy breweries in South Africa. Courage similarly had entered into a joint venture with another Dutch brewer, Amstel (now part of Heineken) to further the ambitions of both companies outside their home markets. Bass had formed links with a French brewer to create a platform for brewing Bass brands for French consumption. These arrangements were in addition to the already substantial overseas presence of Guinness.

2.3.2. The emergence of the UK spirits industry as an international force

The brewers started to develop wines and spirits businesses following the ending of supply restrictions after World War II. While this initially went no further than bulk buying and bottling for resale under private label within their tied estates, it extended quickly to acquisitions of wine shippers and off licence chains. Allied Breweries bought Grant's of St. James and Victoria Wine and Whitbread purchased Stowells of Chelsea and Threshers. However, 1968 established 'The Beerage' as a major spirits producer and brand owner. Watney Mann acquired a 38% shareholding in International Distillers & Vintners (IDV), owner of J&B Rare, Gilbey's, Smirnoff and Hennessy. Allied Breweries acquired Showerings, Vine Products and Whiteway's, at the time, the largest wines and spirits business in Europe and owner of Babycham, Gaymer's, Harvey's Bristol Cream and Britvic.

Figure 2.3. Development of the major UK brewers by merger and acquisition



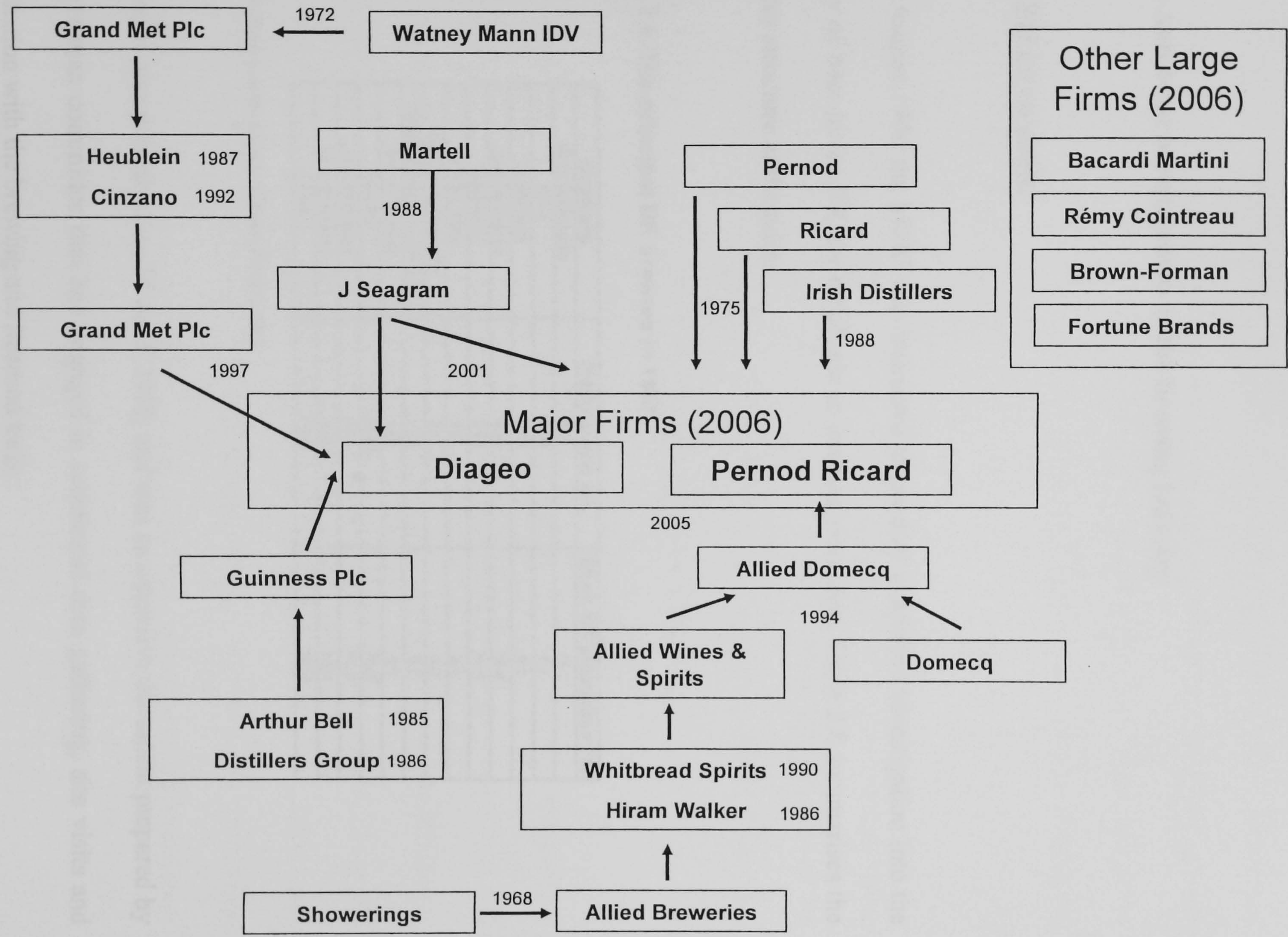
By the mid 1980s the brewers were ready to make major spirits acquisitions that would ultimately transform them into global leaders in alcoholic beverages as illustrated in Figure 2.4. Guinness's 1985 acquisition of Arthur Bell, was followed a year later by an audacious move on the jewel in the Scotch crown, the Distillers Group, owner of Johnnie Walker and Gordon's. Grand Met and Allied-Lyons (the re-named Allied Breweries following the acquisition of food producer J Lyons) similarly expanded their spirits presence through North American deals, Heublein (Smirnoff, and a strategic alliance with José Cuervo) and Hiram Walker (Ballantine's, Canadian Club, Courvoisier and Kahlua) respectively.

The 1997 merger of Grand Metropolitan and Guinness to form Diageo was the natural move to create a global giant with a portfolio and distribution capability that would be difficult to emulate. With the add-on brands from the 2000 joint acquisition with Pernod Ricard of Seagram's spirits operation, the Diageo portfolio comprises the market leader in every segment and category except white rum. The combination of these two deals prompted the final capitulation of Allied Domecq from all aspects of alcohol production.

2.4 Anti-trust investigations in UK alcoholic beverages industry

It is important to consider the impact of the general regulatory environment within which the alcoholic beverages firms have operated historically. Changes in regulatory attitudes shape both the structure of the market and how firms adapt to change.

Figure 2.4. Development of the major spirits industry firms by merger and acquisition



This industry has been the subject of two major anti-trust investigations into UK brewing and pub retailing, in 1969 and 1989.

2.4.1. Anti-trust investigations in the brewing industry

The 1969 investigation

On 2 August 1966 the MMC was instructed to conduct a detailed investigation into the supply of beer in the UK for retail sale in licensed premises. Table 2.8 summarises the industry structure at the time.

Table 2.8. The principal UK brewers in 1967

Company	Production m bls	Share UK production (%)
Bass Charrington	5.64	18.1
Bass	*3.05*	*9.8*
Charrington	*2.59*	*8.3*
Allied Breweries	4.83	15.5
Whitbread	3.46	11.1
Watney Mann	2.94	9.4
Scottish & Newcastle	2.51	8.0
Courage Barclay & Simonds	1.78	5.7
Arthur Guinness	1.53	4.9
Total 'Big 7'	22.69	72.7
Next 11 brewers	4.46	14.3
Final 93 brewers	4.06	13.0
Total	31.20	100.0

Source: A Report on the Supply of Beer, HMSO, 1969

The report was published on 24 April 1969, and was an extensive document prepared by an eight-man committee that had engaged in substantial data gathering, site visits and consultation with the brewing and licensed trade.

The brewing and pub trade had been regulated since the passing of the Finance Act 1880 that required anyone producing beer for resale to obtain an excise licence. As an industry it was deemed important to the UK not least for the benefits to The Exchequer from excise taxes, but because the UK was at the time the world's third largest national beer market or seventh largest on a per capita consumption basis. In 1984, it accounted for £1bn in VAT, £1.8bn in excise duty, employing 300,000 people, and accounting for 4% of total consumer expenditure.

In the period 1881 to 1967 the number of excise licences contracted sharply from approximately 17,000 to 240, with the largest seven brewers responsible for 70 of the total, representing 73% of production (68% if Guinness is excluded). These firms form the basis of the UK brewing operations of today's UK brewing industry.

In 1967 the market shares of the seven reflected their regional strengths with only a handful of what would constitute 'national' brands, such as Guinness, bottled Bass and Worthington. This was the period prior to the emergence of lager as an important beer category in England and Wales, with imported beer (excluding stout exported from the Irish Republic) accounting for less than 1% of total consumption. Regional taste preferences coupled with the difficulties in transporting draught ales had limited the scope for the development of national brands. In total there were around 3,000 different brands.

During the 1960s complaints began to surface about anti-competitive behaviour in the brewing industry due to powerful market positions of the seven large brewers. With the exception of Guinness these firms had vertically integrated businesses that encompassed brewing, wholesaling and retailing. 66% of beer sold went through tied estates with the free trade supplied increasingly by the 'Big 6'. They offered wider portfolios of brands as a result of 'factoring' that is supplying other brewers' brands from reciprocal or straight buying-in arrangements. A gap in wholesale pricing and choice of brands was already apparent in favour of the larger free trade customers. Generally, the larger brewers charged their own tenants a considerable (up to 17%) premium over prices charged to free trade accounts for factored non-reciprocal brands such as draught or bottled Guinness.

The MMC compiled its own data base of retail prices across a range of products and across the country, using information supplied by the brewer-retailers and their tenants. It concluded that prices in Scotland were generally the same as those in England and Wales, but that in Northern Ireland prices were higher. Interestingly, both Scotland and Northern Ireland always were (and have remained) largely free-trade areas with only limited tied outlets. Both Northern Ireland and Scotland were virtual duopoly markets for Guinness and Bass, and Bass and Scottish & Newcastle respectively.

In its conclusions the MMC highlighted the anti-competitive nature of UK licensing law that limited new entry to the pub trade and protected individually and collectively licensed retail outlets. Whilst all operators of licences were afforded such protection, the

brewers as producers and wholesalers of beer and other alcoholic beverages were given a wider protection albeit tempered by competition from the free trade, the independent club trade and the off trade. Overall, however, the MMC considered that pubs, clubs and off-licences were in different 'relevant markets' and that the free trade tended to "*compete defensively from positions of relative weakness*". Geographically competition was greater in urban areas, where several brewers tended to own pubs in close proximity to each other, with notable exceptions such as Bristol and Birmingham. Competition was less intense or non-existent in thinly populated (country) areas.

As technological changes in brewing prompted process efficiencies, in addition to a consumption trend towards lager it became possible to transport beer over a wider area. Greater brewery capacity fuelled the need for larger tied estates. Given licensing restrictions, this could only be met by acquiring smaller brewers, keeping their estates and closing their less efficient brewing capacity. As a result of this brewing-led, as opposed to a retail-led strategy, the larger brewers had amassed what the MMC described as a 'haphazard' geographic mix of outlets. Moreover, the MMC found that consumer choice and expectations were curtailed by the brewers that were not driven by maximising retailing profits in their own right. Overall, the MMC found that few positive advantages stemmed from this structure, apart from a general contribution to overall standards in pub amenities and the preservation of some isolated pubs that might not have survived except in brewer ownership.

To remedy the identified adverse public interest issues, the MMC considered the full dis-aggregation of brewing and retailing assets, the abolition of the tie and two lesser remedies associated with ending the tie on non-beer supplies, or the prohibition of 'wet rent' (in favour of 100% fixed rents) arrangements in tied outlets. However, it concluded that none of these remedies was a practicable alternative in the context of the restrictive licensing laws that prevailed and would provide a greater advantage over the disadvantages of the current system. In effect, the only way to solve the adverse effects of the tie was to open up the licensing system, including relaxing opening hours and the types of operators that could gain full on-licences.

<u>The 1989 anti-trust investigation into the brewing industry (the 'Beer Orders')</u>

A 1977 Price Commission report 'Beer Prices and Margins (Report No 31; summarised in the appendix to the MMC report into the merger of Scottish & Newcastle and Matthew Brown in 1985), pointed to the adverse effect of a combination of high concentration and vertical integration in the brewing industry, reinforced by restrictive licensing laws, on prices of beer in public houses. It laid the blame at the door of the brewers' pricing decisions in their managed houses that accounted for around 25% of their total estates (although a much larger percentage of sales). Subsequently the brewers co-operated in a Brewers Society sponsored programme of pub swaps to reduce the concentration of ownership by any one brewer to a maximum of 50% of the pubs in certain areas. The definition of 'area', however, was somewhat opaque and open to interpretation.

By the early 1980s the brewing industry in aggregate had reduced its share of full on-licences from 78% in 1967 to 60%. However, in the six year period 1977 - 1983, following the publication of the Price Commission Report, pub prices of draught bitter (net of excise duty and VAT) continued to rise considerably ahead of the increase in the Retail Price Index.

On 4 August 1986 the OFT referred to the MMC the matter of the existence or possible existence of a monopoly situation in the supply of beer within the UK for retail sale in pubs. This followed the emergence of increasingly larger acquisitions of UK brewers from existing and overseas brewers (Elders IXL) and ahead of the establishing of the single European market in 1992.

Whilst referring to the significant changes in UK beer consumption – the 'on-to-off trade' and 'ale-to-lager' switch – the MMC characterised the UK beer market as one with strong regional tastes and preferences that naturally supported a wide variety of ales, with the pub remaining 'central' to the nation's beer drinking habits. Notwithstanding the recommendations of the first full-scale investigation 20 years earlier, licensing laws had not been relaxed with respect to full on-licences. Consequently although the numbers of restricted on-licences, club licences and off licences had all grown significantly, pub licences had increased by no more than 7%. The brewers still owned the lion's share of these licences albeit there had been a natural reduction as smaller non-viable outlets were sold or closed. Consequently, as Table 2.9 shows, the national brewers had retained or increased their share of beer sales relative to

their position in the 1960s. Collectively, the 'Big 6' national brewers accounted for 75% of beer production in 1985 compared to 68% in 1967.

Table 2.9. The principal UK brewers in 1985

Company	Production m bls	Share UK production (%)	Share UK sales (%)
Bass	8.37	22.9	21.7
Allied-Lyons	4.68	12.8	13.1
Whitbread	4.02	11.0	11.3
Scottish & Newcastle	3.89	10.6	10.1
Grand Met (Watney Mann)	3.21	8.8	12.0
Courage	3.17	8.7	9.0
Total 'Big 6'	27.33	74.8	77.2
3 Brewers Without Tied Estates	3.14	8.6	3.1
11 Regionals	4.02	11.0	12.5
41 Local Brewers	2.12	5.8	7.4
Total	**36.61**	**100.0**	**100.0**

Source: The Supply of Beer, HMSO, 1989

The MMC issued its provisional findings in December 1987 and argued that a complex monopoly existed in the UK beer market. The Brewers Society issued a response on behalf of the industry and its members in which it refuted these claims forcefully. The MMC commented "*we were struck by the vigour and thoroughness of The Brewers Society response to the many questions we asked and the points we put back to it.....the Society is formidably effective in championing its members' interests*" [MMC, 1989]. It pointed to the wide choice for consumers from both other types of drinking establishment, and other sources of leisure and entertainment. Moreover, it drew on the findings of the European Commission in Regulation 1984/83 in granting 'Block Exemption' status to the UK's vertically integrated structure until 1997. Some of its other arguments were, perhaps, weaker in particular that the brewing industry had an 'excellent record of product innovation and amenity improvement' and that vertical

integration had permitted brewers to achieve beneficial cost improvement throughout the supply chain.

The MMC restated its provisional findings of a complex monopoly that restricted competition at all levels of the industry. Specifically, ownership of managed and tenanted assets precluded freedom of supply, and loan tying in the free trade had a similar effect. In aggregate this led to wholesale prices that were higher than would otherwise be the case, and that this in turn led to higher retail beer prices. The structure further precluded the operation of an effective independent wholesale trade that might be expected to restrain wholesale prices. High wholesale prices supported by loan-tying (as opposed to discount from list price in the alternative) had additional adverse effects in that they prevented the development of an independent retail sector. In summary, brewers with tied estates had been able to frustrate the growth of brewers without tied estates, independent wholesalers, manufacturers of the other normally tied drinks, cider and soft drinks, and independent retail chains.

Mindful of the arguments from various quarters of the industry the MMC compromised in deciding to leave the tie in place but to limit to 2000 the number of on-licences (pubs, hotels and any other type of on-licensed premise) that could be operated by any brewer. At that time no regional brewer, including Scottish & Newcastle, had an estate of more than 2,000 pubs. The estimated 22,000 pubs surplus – roughly 30% of such premises in England & Wales – would have to be divested within three years. The MMC did not believe that the UK property or capital market would have “any difficulty in absorbing

the change". In addition, the complete abolition of loan tying was recommended in order to make the free trade genuinely 'free' and encourage the development of a viable independent wholesale sector.

While leaving the property tie in place its scope would be reduced to allow tenants the opportunity to buy a brand of draught beer outside the tie, that is a 'guest beer', and to have complete freedom to choose its own supplier of non-alcohol and low-alcohol beers, wine, spirit, cider, soft drinks and mineral water. Brewers would be forced to publish their wholesale price lists, setting out discounts that were generally available. Independent wholesalers would be allowed to collect beer direct from a brewery or brewer-operated depot at a price below delivered prices. Finally, tenancies of all on-licensed premises would be brought within the provisions of the Landlord and Tenant Act 1954 Part II.

With the exception of one dissenting opinion, who thought that the order to divest 22,000 pubs was draconian, the MMC thought these remedies would increase competition in brewing, wholesaling and retailing, encourage new entry, reduce prices and widen choice for consumers while still preserving the unique regional heritage of the industry. In the absence of change, it believed it was "*inevitable that a very small number of brewers will increasingly dominate the supply of beer in the UK*"

Following intense lobbying from all quarters of the brewing industry in the aftermath of the publication of the 'Beer Orders', Lord Young, the Secretary of State for Trade and

Industry while welcoming the thrust of the proposed changes, paved the way for a partial climb-down. On 31 October 1989, the new Secretary of State (Nicholas Ridley) announced that the 'draconian' condition on divestment of all estates above the 2,000 limit would be amended to half of the excess over 2,000 by 1 November 1992.

2000 review of the Beer Orders

The 1989 'Beer Orders' was designed to remove once and for all the stranglehold over the UK brewing industry that the major brewers had held for over a century by forcing them to free up a significant part of the pub market. Its timing coincided with the adverse shift in popularity and usage of pubs, and the majors were already in the process of reducing the vertical tie by divesting underperforming outlets.

The 'Beer Orders' forced a reappraisal of the vertically integrated structure of the industry. With imposed licence limits, pub retailers had to choose carefully which assets they retained, which were converted and which were sold. Unsurprisingly, huge swathes of tenanted and smaller outlets were sold or released from tie and the outcome is shown in Table 2.10. By this stage the eating-out market had grown and developed sufficiently to support 'branded' pub retailing. This shifted the emphasis to operating larger managed sites.

Table 2.10. Pub ownership by brewers

Year	Brewers			Pub Cos			UK Full Licence	% Brewers	% Pub Cos
	Managed	Tenanted	Total	Managed	Tenanted	Total	Total		
1967	13829	44696	58525				75001	78.0	0.0
1971	13900	40800	54700				73116	74.8	0.0
1981	13800	34700	48500				77230	62.8	0.0
1990	13800	29700	43500				82890	52.5	0.0
1991	11600	17900	29500	3200	9500	12700	83699	35.2	15.2
1992	11100	14600	25700	3300	12600	15900	83400	30.8	19.1
1993	11800	14400	26200	2200	12600	14800	84087	31.2	17.6
1994	11900	14100	26000	2300	12400	14700	84845	30.6	17.3
1995	9800	12400	22200	4800	14000	18800	84784	26.2	22.2
1996	10400	11900	22300	4500	14000	18500	86273	25.8	21.4
1997	10400	11500	21900	4600	14300	18900	87761	25.0	21.5
1998	10200	9500	19700	4900	16800	21700	87435	22.5	24.8
1999	11300	9100	20400	3700	18000	21700	87314	23.4	24.9
2000	5300	5900	11200	9100	21300	30400	87249	12.8	34.8
2001	4400	5700	10100	8300	23300	31600	87884	11.5	36.0
2002	4000	5800	9800	7700	23800	31500	89361	11.0	35.3
2003	2500	5800	8300	8800	23700	32500	91114	9.1	35.7
2004	2700	6200	8900	8000	23700	31700	90649	9.8	35.0

Source: British Beer & Pub Association

As the major brewers divested large blocks of tenanted pubs they were quickly snapped up by newly formed pub companies known as 'Pubcos' that were essentially property finance vehicles. During the 1990s the Pubcos were aggressive purchasers of pub assets that were recycled during brewery mergers but increasingly from their own amalgamation. Their position was underpinned by the increased ability to achieve significant discounts for beer supplies, and reduced financing costs from the combination of lower interest rates and a new market for 'securitisation' of asset-backed cash flow businesses.

Consequently the pub market has reconsolidated in the hands of a few companies; not brewers but special purpose property and finance operations. Conversely, with the exception of one or two of these groups, landlord tenants had seen none of the benefits of lower wholesale prices, the quality of their assets has remained relatively poor, and although more choice was available, retail prices continued to rise ahead of inflation.

In December 2000 the Office of Fair Trading published a review of the 'Beer Orders' (*The Supply of Beer: A Report on the Review of the Beer Orders by the Former DGFT*). He recommended that the Supply of Beer (Tied Estate) Order (TEO) and its 1997 amendment (AO) that capped pub ownership at 2,000 outlets and introduced the 'guest beer' provision be revoked in entirety, and that Article 3 of the Supply of Beer (Loan Ties, Licensed Premises and Wholesale Prices) Order (LTO) that dealt with restrictions on pub use following a divestment from a brewing estate also be revoked. He recommended, however, that the parts of the LTO that dealt specifically with loan tie agreements, the publication of wholesale list prices and refusal to supply beer (envisaged as likely to encourage the growth of independent wholesalers in the 1989 MMC report) remained in the interests of competition.

Pressure had been building in the brewing industry for a review of the 'Beer Orders' since shortly after the November 1992 deadline for compliance on pub numbers, but the government had refused. By 2000, several transactions had resulted in only one of the 'Big 6' remaining in brewing, Scottish & Newcastle. Simultaneously, pub ownership had shifted almost entirely out of the hands of the original large brewer-retailers. Whilst consumers had seen a considerable increase in choice in terms of both type of pub outlet and what was sold in individual pubs, an anticipated competitive pricing environment had failed largely to develop. The DGFT was satisfied that price was less of an issue now for consumers given that the quality of the pub offering had improved considerably as a result of capital spending. Moreover, with demarcation lines increasingly blurred

between cafés, bars, clubs, pubs and other leisure establishments, there was generally more competition for the consumer's money.

2.4.2. Investigations in the spirits industry

To date there has been no full-scale anti-trust investigation into the spirits industry in the UK, US or Europe. There may be several reasons for this. One is that there is no apparent conflict with the consumer as a result of property (UK, Germany) or loan-tying (most of Europe) that is a feature of beer production and distribution. In addition, differential excise tax systems in most markets have forced higher retail prices for spirits compared to other alcoholic beverages categories, as shown in Table 2.11.

Table 2.11. Excise duty rates in the European Union

Country	Beer p per pint	Wine p per 75cl	Spirits £ per 70cl
Austria	9.4	0.0	1.9
Belgium	8.1	24.5	3.2
Cyprus	9.4	0.0	1.2
Czech	3.8	0.0	1.7
Denmark	13.4	42.8	3.9
Estonia	7.3	34.5	1.9
Finland	38.3	110.1	5.5
France	5.1	1.8	2.8
Germany	3.7	0.0	2.5
Greece	5.3	0.0	2.1
Hungary	8.1	1.7	1.5
Ireland	39.1	141.8	7.6
Italy	9.3	0.0	1.5
Latvia	3.4	22.4	1.5
Lithuania	4.0	22.6	1.8
Luxembourg	3.7	0.0	2.0
Malta	3.5	0.0	4.5
Netherlands	9.9	30.7	3.4
Poland	8.1	17.6	2.2
Portugal	6.2	0.0	1.8
Slovakia	0.0	1.3	19.0
Slovenia	0.0	1.4	20.0
Spain	3.6	0.0	1.5
Sweden	31.8	126.2	10.7
UK	36.7	125.8	5.5

Source: British Beer & Pub Association

Moreover, the pricing structure in spirits is somewhat more complex than in beer, with age statements and quality being a major factor in consumption, and with supply and demand frequently imbalanced. This has a knock-on effect on prices, both up and down, that can last for several years.

Chapter 3. Literature review

The first section of this chapter contains a brief summary of the major legal principles that govern anti-trust policy and how the law has changed to incorporate the latest thinking in industrial economics. The main focus is on the US as it was the first nation to formalise a structured response to firm dominance and the exploitation of market power. The background to the development of the European Union's legal framework and that of the UK is also considered.

The second section discusses the economic analysis that accompanies an anti-trust or merger investigation. Specific reference is made to academic studies of the economics of highly differentiated product mergers, with some notable econometric analysis of the UK brewing industry.

The third section focuses on the firm. Mergers and acquisitions represent a major, if not the most important aspect of many firms' strategies for growth. The corporate strategy literature is a starting point for this review. However, merger and acquisition analysis goes beyond a core strategy debate, incorporating aspects of political science as well as accounting and finance.

The final section deals with the research literature on discriminant analysis and case study method. Both are techniques that have been widely used in other fields but rarely in competition policy analysis which has tended to be dominated by standard equilibrium economic and econometric approaches.

It is at the interface of these diverse bodies of literature that this thesis makes its contribution; given the legal and economic framework how firms have managed interaction with the competition authorities as part of their strategy for growth by merger and acquisition.

3.1. The law of anti-trust

3.1.1. The US anti-trust and mergers framework

The relevant law

The origins of US anti-trust and merger policy date back to the passing of the Sherman Act in 1890, and the Federal Trade Commission (FTC) and Clayton Acts of 1914. The acts have been amended over time to incorporate new developments and best practice. In particular the Robinson-Patman Act of 1936 authorised the FTC to prevent certain specified practices involving discriminatory pricing and product promotion. The Hart-Scott-Rodino Anti-trust Improvements Act of 1976 amended the Clayton Act by requiring firms to file pre-merger notifications with the FTC and Anti-trust Division of the Department of Justice (DoJ). More recently, the International Anti-trust Enforcement

Assistance Act of 1994 authorised the FTC and DoJ to enter selectively into mutual assistance agreements with foreign anti-trust authorities. The latest legal principles are outlined in "*A Brief Overview of the Federal Trade Commission's Investigative and Law Enforcement Authority*", [2002].

In a detailed review of the origins of US anti-trust law and enforcement, Winerman [2003] discusses how competition policy moved to centre stage in the US following a period of unprecedented corporate consolidation between 1898 and 1902. Opposition to the concentration of economic power in large corporations and in groups of related firms led Congress to pass the Sherman Act to allow the elimination of such practice at the interstate level. By 1890 Standard Oil had built an unassailable position in petroleum refining and similar trusts controlled whisky, sugar and tobacco. The act authorised the federal government to institute proceedings against trusts in order to dissolve them although this power was blocked by the Supreme Court until the 1904 dissolution of the Northern Securities Company. The highest profile actions brought under the Act remain the 1911 cases that dissolved Standard Oil and the American Tobacco Company.

The 1914 Clayton and FTC Acts were enacted to clarify and supplement the Sherman Act. The Clayton Act prohibited exclusive sales contracts, local price cutting to freeze out competitors, rebates and inter-corporate stock holdings (excluding trade unions and agricultural co-operatives). The 1936 Robinson-Patman Act enhanced the Clayton Act by forbidding price discrimination where the effect would be to 'lessen competition' or 'create a monopoly'. Sometimes referred to as the "Anti-Chain-Store Act", it was

directed at protecting independent retailers from chain store competition. The Act was also influential in protecting independent wholesalers from the threat of chain store buying power.

The anti-trust and merger process

The purpose of merger regulation is to prevent anti-competitive mergers whilst seeking not to deter pro-competitive or competitively neutral mergers. In 1968 the DoJ introduced Merger Guidelines to inform business of the analysis it applied to mergers under federal anti-trust law. In its own words, these guidelines "*fell into disuse ... as they were eclipsed by developments in legal and economic thinking about mergers*". In 1982 substantially revised Merger Guidelines were introduced, with the FTC releasing simultaneously its Statement Concerning Horizontal Mergers that referred specifically to the DoJ's guidelines. In 1984 amended Merger Guidelines were released that "*refined and clarified the analytical framework of the 1982 Merger Guidelines*".

In 1992, the DoJ and FTC issued jointly new 'Horizontal Merger Guidelines' revising the two agencies thinking on horizontal mergers (the pre-existing guidelines still deal with non-horizontal or vertical mergers). The 1992 modifications that remain in place today were designed to explain clearly how mergers may lead to adverse competitive effects and how particular market factors relate to the analysis of those effects. A second main revision sharpened the distinction between the treatments of various types of

supply responses and articulated the framework for analysing the timeliness, likelihood and sufficiency of market entry.

Whilst the regulatory authorities have attempted progressively to create a systematic and consistent basis for the analysis of all mergers through the standards of the Guidelines, in keeping with latest economic thinking and methodology, their aim is to act "*reasonably and flexibly to the particular facts and circumstances of each proposed merger*".

Firms must pre-notify the FTC of their intention to merge. The FTC then conducts a five-stage process designed to answer the fundamental question of whether the merger is *likely* to create or enhance market power or to facilitate its exercise before deciding on whether to challenge the merger. The process is as follows:

i. An assessment of whether the merger would significantly increase concentration and result in a concentrated market, properly defined and measured;

ii. An assessment of whether the merger, in light of concentration and other factors that characterise the market, raises concerns about potential adverse competitive effects;

iii. An assessment of whether entry would be timely, likely and sufficient either to deter or to counteract the competitive effects of concern;

iv. An assessment of any efficiency gains that reasonably cannot be achieved by the parties through other means; and

v. An assessment of whether, but for the merger, either party to the transaction would be likely to fail, causing its assets to exit the market

Market definition focuses solely on demand substitution factors. Supply substitution is considered further down the chain in addressing concentration and market power. The FTC delineates the relevant market by what is referred to as the 'SSNIP' or 'Hypothetical Monopolist Test', specified as follows:

'*a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-maximising firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a "small but significant and nontransitory" increase in price, assuming the terms of sale of all other products are held constant.*'

The FTC assesses whether in response to a price increase a reduction in the sales of the product are large enough such that a hypothetical monopolist would not find it profitable to impose such an increase in price of typically 5%. In such a case the FTC adds to the product group the product that is the next-best substitute for the merging firm's product in considering the boundaries of the relevant market.

Having defined the relevant market, the FTC then considers the scope of the market in terms of concentration and market shares. Market participants can include firms that are not currently producing in either the relevant product or geographic market, but which

would be likely to do so in the event of a 'small but significant non-transitory' increase in price. Such 'uncommitted' entrants must face minimal or non-existent (sunk) entry and exit costs and could enter the relevant market rapidly (typically within one year). They may currently be producing a different product but one that would rank as an acceptable substitute in the event of a lasting increase in price of the merging firms product(s). Consequently, in calculating market shares, an element of spare capacity that could influence the relevant market is included.

Market concentration is calculated by reference to the Herfindahl-Hirschman Index (HHI) that is derived from summing the squares of the individual market shares of all participants in the relevant market (that is $30^2+20^2+10^2+10^2+10^2+10^2+5^2+5^2 = 1750$). This therefore gives proportionately greater weight to the market shares of the larger firms; the underlying premise is that this approximates their relative importance in competitive interactions. As discussed later, this has been challenged by leading academic econometricians in particular with regard to branded goods industries where the merging firms own portfolios of differentiated products.

In looking at the competitive state of the relevant market before and after merger, the FTC considers three broad regions of concentration. A market with an HHI of below 1000 is 'unconcentrated'; an HHI between 1000 and 1800 is 'moderately concentrated' and an HHI in excess of 1800 is 'highly concentrated'. If the post-merger HHI is in the moderately concentrated range and rises by less than 100 points as a result of the merger, the merger is usually cleared with no further analysis. In the event the HHI rises

by more than 100 points, there are potentially significant competitive concerns that may require further investigation to establish for example, whether there is the potential for '*significant lessening of competition*' through either tacit or express collusion within the industry. For a highly concentrated market where the post merger HHI is raised by less than 50 points, the merger is usually cleared with no further analysis. Where the post-merger HHI exceeds 1800 and is raised by more than 100 points, however, a fuller investigation is usually undertaken.

In 2006, the DoJ and FTC published jointly "*Commentary on the Horizontal Merger Guidelines*" that followed as a direct consequence of a series of workshops with leading antitrust practitioners and economists that sought to educate the business community thoroughly with the analytical frameworks used by the authorities. While the agencies concluded that there was no reason to revamp the Guidelines, it thought it necessary to describe in detail, and with reference to previous US cases, exactly what type of analysis it conducted in order to aid 'transparency'.

3.1.2. The European Union anti-trust and mergers framework

The relevant law

In the aftermath of World War II, France and Germany were keen to rebuild Western Europe through a process of what Cini and McGowan [1998] describe as 'institutionalised co-operation'. This led to The Schumann Plan, a framework within

which both countries pooled their coal and steel resources, handing over control of those resources to a supranational authority. The ECSC Treaty of 1951 brought Italy, the Netherlands, Belgium and Luxembourg into this supranational mechanism.

During the 1950s attempts were made to extend the ECSC to other nation states as well as other sectors of the economy. Eventually, after much debate the EEC Treaty, known as 'The Treaty of Rome' was signed by major Western European nations in 1957. Its aim was to create a common market that would free up trade between the participating countries while sustaining post-War reconstruction and political reconciliation. The UK and Ireland ratified the Treaty of Rome in 1973.

From the outset the Treaty of Rome contained anti-trust legislation that applied across the EEC. Article 81 (formerly known as Article 85), was concerned with restrictive practices. Article 82 (formerly known as Article 86) contained the EEC's abuse of dominance (monopoly) policy.

Article 81(1) provides that certain actions are prohibited as being incompatible with the common market. Namely, all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their objective or effect the prevention, restriction or distortion of competition within the common market. In practice this usually entails price fixing, adoption of quotas, sharing of markets or territories, and rigging markets. Article 81(1) extends to both horizontal and vertical agreements. It applies to parent

companies, including those based outside the Community, for the behaviour of their subsidiaries operating within the EU, since the undertaking as a whole is active there. Concerted practices that lead to anti-competitive prices through co-ordination or collusion are also covered by Article 81(1).

There are conditions under which agreements are exempted from the general prohibition of Article 81(1). Such 'block exemption' regulations are covered by Article 81(3) and include certain categories of vertical agreement. There are horizontal agreements that also possess a block exemption, such as technology transfer and research and development agreements. Other agreements not covered by a block exemption can be granted an individual exemption if their restrictive effect on competition is counterbalanced by contribution to 'general welfare' (improved production or technical or economic progress). In addition there are *de minimis* agreements, or agreements of minor importance that are granted exemption because they are incapable of affecting competition in the common market while encouraging co-operation between small and medium-sized enterprises.

Article 81(3) is of particular relevance to the UK brewing industry whose contracts were granted 'block exemption' status on 1 July 1983 under Regulation 1984/83 (exclusive purchasing). Regulation 1984/83 was due to expire on 31 December 1997, but was extended to 31 December 1999. The provision is now covered by UK domestic anti-trust law in so far as there remain brewer tied estates above the *de minimis* threshold. It was

considered justified to apply special rules to beer supply agreements since exclusive purchasing obligations usually entail advantages for the supplier as well as the reseller. Formerly known as Article 86, Article 82 is concerned with an 'abuse of a position of dominance' in a relevant market by one or more undertakings. There are no exceptions or block exemptions under this regulation. It is under Article 82 that merger regulations, discussed below, are judged, with regard to creating or strengthening a dominant position, either solely or collectively.

According to Fox [2002] it is clear from the wording of Article 82 that it is intended to regulate the conduct of dominant firms and to prevent them from using their power inappropriately, not merely to prevent them from expanding or protecting their power. Consequently, in EU law, exclusionary contracts and practices represent an abuse of dominance. This is in contrast to the legal base in the US. In this sense, the difference of focal point creates the potential to produce two different outcomes from the US and EC when investigating an abuse of dominance case.

The Treaty of Rome did not provide for advance vetting of mergers by the Community authorities. The gap was filled initially by European Court of Justice case law. It was not until 1989 that Merger Regulation 4064/89 was adopted. It stipulated that a 'concentration' with a Community dimension that created or strengthened a dominant position as a result of which effective competition was significantly impeded was incompatible with the common market. Since March 1998 such concentrations with a Community dimension are defined as those where either:

i. the combined aggregate world-wide turnover of all undertakings concerned exceeds $5bn and the aggregate Community-wide turnover of each of at least two of those undertakings is more than €250m; or

ii. the combined aggregate world-wide turnover of all undertakings concerned exceeds $2.5bn and in each of at least three Member States the combined aggregate turnover of all those undertakings is more than $100m (with two in aggregate accounting for at least $25m)

For deals involving smaller concentrations or where each of the undertakings concerned achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State, jurisdiction for the merger falls on the competition authorities in the domestic market on the basis of its own legislation. Consequently, the majority of the mergers of UK brewing/retailing fell naturally for investigation by the UK authorities. [Although in the case of Interbrew/Bass Brewers, as discussed below, Interbrew notified the EC and sought investigation under EC merger control notwithstanding a clearly UK/UK merger]

The anti-trust and merger process

Since the publication of Regulation 4064/89 the EC has issued a series of notices designed to explain to firms the circumstances in which a merger would trigger competition concerns. Perhaps the most significant of these was Commission Notice 97/C 372/03 the purpose of which was to set out the EC's guidance for the definition of

the relevant product and geographic market for anti-trust purposes. It is this definition that makes it possible *inter alia* to calculate market shares that would convey meaningful information regarding market power for the purposes of assessing dominance or for the purposes of applying Article 81.

With regard to products:

'A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use'

With regard to geography:

'The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products and services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciable different in those areas'

In defining the relevant market, the EC assesses the impact of three restraining factors on pricing power: demand substitutability, supply substitutability and potential competition. Demand substitutability seeks to define the boundaries of the product or geographic market by establishing *inter alia* the impact of a small (5 - 10%) but

permanent relative increase in price on consumer switching behaviour. By a process of trial and error the market is bounded by an area that includes all close substitutes that serve to deter such pricing decisions. Once that boundary is crossed, a company would find it profitable to enact a small but permanent relative price increase.

Supply substitutability focuses on whether other manufacturers not obviously competing currently in the defined market could switch their productive capacity towards the market in the event that the incumbent(s) firm can establish a small but permanent increase in relative price. If such manufacturers' switching costs are relatively low and/or riskless, their capacity and products are included in the definition of the market for merger purposes. Potential competition through new entry is not taken into account when defining markets.

In June 2000, the EC launched a major review of the Merger Regulation, issuing a Green Paper, followed by a period of public debate. Particular problems encountered during the first ten years of the EC merger regulation process were addressed. In particular, Mr Mario Monti, European Competition Commissioner wanted to reflect on "*how effective a legal instrument the substantive test has been in tackling the competition problems which concentrations can give rise to*" [2002].

On 1 May 2004 Regulation 139/04 was introduced, replacing existing Regulation 4064/89. Most notable was the removal of the 'dominance' test that had transferred in wording, if not application, from the provisions for monopolisation in Article 82. In its

place is a 'significantly impede effective competition' test, similar, albeit not exactly the same wording as the US and UK 'significant lessening of competition' test. According to Mr Monti, the call for change was most lauded by law firms and academics who regarded the SLC wording as "*better suited to the kind of micro-economic analysis required in merger cases*".

Vickers [2004] explains that the problem with the 'dominance' test was that numerous mergers could jeopardise competition without crossing the threshold of dominant market power as traditionally understood. In response, the EC established a 'collective dominance' test. While in principle this made sense, in practice, referring specifically to the Airtours case, establishing collective dominance is not an easy task, particularly where the case rests on non-coordinated industry effects that are likely to create an anticompetitive environment on a post-merger basis.

In practice, those who were opposed to change, largely industry respondents, feared that a change to SLC would have given the Commission "*too broad a margin of discretion …… (resulting in)…an unacceptably interventionist merger control policy*". Perhaps motivated to change towards 'significant lessening of competition' as a result of high profile challenges to the EC's analysis at the Court of First Instance (Airtours, Tetra Laval and GE/Honeywell), the new regulation has adopted a half-way house through the 'significantly impede effective competition' test. In addition, the Merger Task Force has been dissolved as a separate entity within the EC, and a Chief Competition Economist

post created, to "*ensure a more central role for economic analysis*" (Vickers [2004]). The development of EU merger policy is summarised in Table 3.1.

Table 3.1. Milestones in EU merger policy

Year	Act
1962	Articles 85 (81) and 86 (82) established
1990	European Union Merger Regulation (ECMR) introduced
1992	Nestlé / Perrier: First successful 'collective dominance' case
1998	European Court of Justice upholds 'collective dominance' under ECMR
1998	New directive on what constitutes 'community dimension' in merger cases
2001	Green Paper on modifying ECMR
2002	Publication of ECMR reform proposals
2004	New ECMR introduced

Source: Vickers [2004]

3.1.3. The UK anti-trust and mergers framework

The relevant law

A consistent approach to anti-trust and merger policy in the UK has been a post-World War II phenomenon, with 'independence' only being achieved with the recent passing of the Enterprise Act 2002 (cf. in the US the 1914 Clayton Act created an independent regulator to administer antitrust policy). According to Wilks [1999], in the early post War years, UK policy makers looked consistently at developments in the US but did not like what they saw, believing it to be 'anti' everything. The efficiency defence, always

incorporated into UK decisions was only introduced into US policy as a result of the increasing influence of the Chicago School in the late 1970s. The development of UK competition policy prior to 1997 is summarised in Table 3.2.

Table 3.2. UK competition policy legislation prior to 1997

Year	Act
1948	Monopolies and Restrictive Practices (Inquiry & Control) Act
1953	Monopolies and Restrictive Practices Commission Act
1956	Restrictive Trade Practices Act
1964	Resale Prices Act
1965	Monopolies and Mergers Act
1968	Restrictive Trade Practices Act
1973	Fair Trading Act
1976	Resale Prices Act, Restrictive Trade Practices Act
1977	Restrictive Trade Practices Act
1980	Competition Act
1984	Telecommunications Act
1985	Transport Act
1986	Airports Act, Financial Services Act, Gas Act
1989	Companies Act, Water Act, Electricity Act
1990	Broadcasting Act
1991	Water Industry Act
1993	Railways Act
1994	Deregulation and Contracting Out Act
2000	Transport Act and Financial Services and Market Act and a new Postal Services Act

Source: Wilks [1999].

The Director General of Fair Trading (DGFT) known with his staff collectively as the Office of Fair Trading (OFT) was established by the Fair Trading Act 1973. The Act

governed merger control and inquiries into scale and complex monopolies. The Competition Act 1998 reduced the scope of the Fair Trading Act 1973 by establishing a prohibition-based system of competition law for anti-competitive and abusive practices. The Competition Commission (CC) was established by the Competition Act 1998 to replace the former Monopolies and Mergers Commission (MMC). The Enterprise Act 2002 introduced a new regime for the assessment of mergers and markets in the UK. The 'public interest test' was replaced by tests focused specifically on competition issues.

In Wilks' view UK competition policy developed "*incrementally and piecemeal as a product of consensus building by a powerful civil service, heavily influenced by business lobbying, increasingly responding to developments in economic thought, and operating under a benign and exceptional mantle of political bi-partisanship*". Until the Enterprise Act it could be concluded that competition was not the dominant concern in competition policy, with other objectives taking on degrees of importance depending on the political landscape.

During the Conservative government of Margaret Thatcher new legislation was introduced rapidly to privatise and deregulate various industries and markets. Since the election of the Blair Labour government in 1997 several changes in competition policy and practice have been introduced, mirroring other changes in macroeconomic policy, notably the establishing of an independent Bank of England. The Competition Act 1998 created an independent CC, albeit wholly funded by the Department of Trade and

Industry, with the Secretary of State being responsible for making member appointments, and with the option to declare any industry a 'special' case for more direct intervention. The 2001 Competition White Paper set out the government's vision for the CC as a world class competition authority. This led to the passing of the Enterprise Act 2002.

<u>The anti-trust and merger process</u>

The role of the CC is to conduct in-depth inquiries into mergers, markets and the regulation of the major regulated industries. Its aim is to "*make markets work for consumers*" by allowing them to benefit from lower prices, a wider choice of products, more innovation and higher quality products and services.

Every inquiry is a result of a reference by another authority, usually the Office of Fair Trading (OFT), or a sector regulator. The CC has no power to instigate its own inquiries, there being a voluntary notification mechanism, in contrast to both the US and EU. Under the Enterprise Act, the CC is no longer charged with the task of considering mergers in light of the 'public interest' issue. The criteria for blocking or clearing a merger are based solely on competition issues.

Moreover, the CC now has powers in relation to remedies that supersede previous recommendation-only status. It is at the remedy stage that the former 'public interest' issue effectively comes into play: "*when making its decisions on remedial action, the*

Commission must have regard to the need to achieve as comprehensive a solution as is reasonable and practicable …….(have regard to)…..any relevant customer benefits arising from the merger. If the benefits are significant the Commission may decide to take lesser action, or even no action".

In conducting a market abuse or merger inquiry the type of analysis carried out, and the economic basis for conducting the analysis is similar to that performed in both the US and EU. However, the test of market power is similar to that used in the US, namely, would a merger be expected to result in a '*substantial lessening of competition*' within the relevant market. The tools used to define and measure the relevant market and the use of econometric studies is similar to that used in the US.

In contrast to the US, the UK regulatory bodies, the CC and OFT are administrative only, although their decisions are subject to an appeal procedure through the Competition Appeal Tribunal (CAT). The functions of the CAT include the following:

i. To hear appeals on the merits in respect of decisions made under the Competition Act 1998 by the OFT and the regulators in the telecommunications, electricity, gas, water, railways and air traffic services sectors.

ii. To hear actions for damages and other monetary claims under the Competition Act 1998

iii. To review decisions made by the Secretary of State, OFT and CC in respect of merger and market references or possible references under the Enterprise Act 2002.

iv. To hear appeals in respect of decisions made by the OFT under the EC Competition Law (Articles 84 and 85) Enforcement Regulations 2001 (as amended).

In relation to reviews, the CAT applies the same principles as would be applied by a court on an application for a judicial review. In reviewing the relevant decisions the CAT may dismiss the application, or quash the whole or part of the relevant decision and where it quashes the whole or part of that decision it may refer the matter back to the original decision maker with a direction to reconsider and make a new decision in accordance with the ruling of the CAT. In common with civil law, a CAT decision can be appealed to the Court of Appeal but only on a point of law, or in penalty cases as to the amount of any penalty.

3.2. The economics of anti-trust

As quickly as laws and regulations governing the anti-trust and merger process have been introduced, 'progress' in economic thinking and the use of econometric techniques have called for boundaries to be pushed further. With a rich tradition of anti-trust analysis, and a burgeoning academic community, US economists have led the way in shaping such policy. There is a general and almost unchallenged agreement that US anti-trust and merger policy, with its supporting use of economics is the system that all other jurisdictions should aspire to. The UK through the Enterprise Act, and more recently the European Commission through the new merger regulation have formalised imported US

terminology and methodology for assessing relevant markets and the estimation of market power in anti-trust and merger cases.

Recently, criticisms have emerged from within the ranks of the US regulators themselves, not just with regard to the level of sophistication of the economics used in anti-trust and merger cases but with the increasingly abstract nature of the econometric analysis presented by opposing parties. Muris [2000] prior to his appointment to the helm of the FTC offered a suitably scathing attack on both the legal mechanism and the economic basis of monopolisation cases, pointing to "*the weak empirical foundation of much of modern economic theory*". Pointing to the future, Muris concluded "*given our ignorance about the sources of a firm's success, they (monopolisation cases) must necessarily be wide-ranging in questioning whether the conduct at issue in fact created, enhanced or preserved monopoly, whether efficiency justifications explain such behaviour and all other relevant issues*".

Scheffman and Coleman [2003], Director and Deputy Director respectively of the Bureau of Economics at the FTC, comment that econometrics is only one of many forms of quantitative analysis that are useful in anti-trust cases. The key decision makers at the FTC and DoJ and their associated legal staff are generally not economists or econometricians. If they cannot see a sufficient link between the economic analysis and the facts of the case, they are not likely to give the analysis much weight. Referring specifically to a reliance on scanner (or panel) data – used frequently in consumer product anti-trust and merger analysis – Scheffman and Coleman recognise what many

academic economists have failed to acknowledge in their analysis; it is a poor estimate of achieved price because it does not adjust for retrospective discounts and slotting fees, consequently, "*estimates of elasticities from scanner data were inconclusive on whether two products were close competitors, yet an analysis of manufacturer trade promotions showed that one product targeted another in its trade promotions which provided one basis for a conclusion that the two products were close competitors*".

Perhaps one reason for the need for more detailed and watertight quantitative analysis is to overcome the historic reliance on political interference, or 'public interest' that has gone hand-in-hand with the evolution of competition policy. Fox [2002] sheds light on the impact of 'politics' in the US anti-trust system. In her view, the Chicago School that had been influential in reversing the interventionist approach of the US authorities prior to 1980, made way for a more heavy-handed approach at the FTC, in particular during the Clinton presidency. Until the arrival of Mr Monti, the previous European Commissioner, the EC was seen as open to significant influence from the direct intervention of Member States. Mr Monti was credited by Neven and Röller [2002] for his "*independence and for protecting his staff from political influence*". Indeed when Mr Monti called for comments from interested parties as part of the consultation process ahead of introducing the new merger regulation, political interference was a criticism that was not levelled at the EC. It remains to be seen whether the UK's newly independent CC under the auspices of the Enterprise Act proves to be as genuinely apolitical as expected.

In the following sections, a brief account of the relevant industrial organisation literature and econometric analysis is discussed, with a specific focus on the academic thinking in consumer goods industries within which this thesis is based.

3.2.1. Market definition and market power

It is a requirement in competition analysis that the starting point in the investigation is to define the relevant market that the alleged abuse of market power (monopolisation cases) or the potential for 'significant lessening of competition' or its equivalent formulation (merger cases) takes place in. According to Massey [2000], market definition has long been a thorny issue in competition law analysis, and this continues to be the case. As the authors of the OFT's specially commissioned report on the use of quantitative techniques in competition analysis [1999] explain "*the correct definition of the relevant antitrust market is an important feature of an accurate competition analysis. A too narrowly defined market can lead to unnecessary competition concerns....a too widely defined market may disguise real competition problems.*" However some regulators, for example, the DoJ's Werden [1992] have downplayed the significance of market definition, referring to it as a "*means to an end rather than an end in itself*".

Due to its early adoption of anti-trust regulations, the US has been the testing ground for new and emerging economic theories and econometric analysis to assist in market investigations. In the 1950s, the accepted methodology in defining markets was based

on cross-price elasticity analysis. However, this form of analysis fell into disrepute as a result of what became known as the 'cellophane trap', coined from the finding in the Du Pont section 2 Sherman Act monopolisation case of 1957 that all packaging materials were substitutes for cellophane at prevailing market prices. Of course what the analysis failed to show was that prices of cellophane were already at the monopoly level, at which point other packaging materials and the option to not package at all represent adequate substitution possibilities.

Following the discrediting of cross-price elasticity analysis as the method of choice in defining a market, many other methodologies were presented to fill the vacuum. None has become integrated into a conventional anti-trust framework. Surprising, some 40 years down the road, the adoption of the 1992 merger guidelines in the US has reinstated cross-price elasticity in market definition. To accommodate the pitfalls of the 'cellophane trap', however, the guidelines start at the smallest possible definition of a market – for example, deluxe blended Scotch whisky that is 12 years old – and require that current prices are competitive. It is immediately obvious why Massey claims market definition remains a 'thorny issue'. As Werden [1992] explains, parties to a merger almost invariably argue that the relevant market is so large that post-merger market shares will remain small. On the other hand, regulators are incentivised through the guidelines to start at the other extreme. In reality, Werden suggests that a more fruitful approach for firms in many cases is to argue, with supporting evidence, why the merging firms' products are <u>not</u> in the same market.

The OFT's report [1999] identified a range of situations where quantitative analysis in anti-trust could be valuable: market definition, market structure issues, pricing issues, behavioural issues, vertical issues (including contracting), merger issues, and potential entry and competitive expansion. However, the authors of the report warn that even if it is relatively unproblematic to define the market, in the later analysis, interpreting market share and implying its impact on market power is not a straightforward task, as discussed in more detail in the next section.

Table 3.3 summarises the types of econometric and other quantitative tests that have been applied to anti-trust and merger cases to help in market definition and the identification of abuse of market power, drawn from the report.

3.2.2. The economics of consumer product markets

In his capacity as the Director, Bureau of Economics at the FTC, Baker [1997] made a key speech that discussed the nature of anti-trust issues in highly differentiated product markets. In his view: "*In the differentiated product settings, anti-trust has had trouble isolating anti-competitive harm and devising a pro-competitive remedy within the conventional rule-of-reason, market definition paradigm*". Along the same vein, Rubinfeld [2000] questions the role in general of econometric methods in highly differentiated goods mergers.

Table 3.3. Econometric and quantitative tests applied to merger cases

Technique	Description	Applications
Statistical Tests of Prices		
Cross-sectional price test	Hypothesis testing to establish if two sets of prices are uniform	MMC compared prices of paired samples of CDs and cars across various countries, including US
Hedonic price analysis	Regression-based analysis that purges prices of the effect of quality differences	Comparison of the price of like cars (same features) across the EU
Price correlation	Statistical technique to measure the degree of interdependence between two variables	Stigler and Sherwin [1985] test whether Chicago, Detroit and New Orleans are in the same market for wholesale petrol
Speed of adjustment	Estimation of linear relationship between current and past price differences to establish mean reversion following a 'shock'	Horowitz [1981] used the technique to establish if two geographic markets constitute an anti-trust market
Granger causality test	Similar to speed of adjustment test but seeks to establish causation from one price series to another or mutual determination	Slade [1986] used causality tests to determine that US West Coast and South East petrol markets are distinct from North East
Co-integration analysis	Error Correction Model that tests whether series of prices exhibit stable long-run relationships. Engle and Granger [1987] showed that integrated series whose relationship can be expressed as an ECM are co-integrated	To allow estimation of equilibrium relationships where non-stationary time series present. MMC investigation of soluble coffee in UK retail market regarding adjustment of price of soluble coffee to changes in the price of coffee beans
Demand analysis		
Residual demand analysis	Firm's residual demand is that part of total demand not met by other firms in industry. Its elasticity (derived from Instrumental Variable or reduced form regression equation) infers whether firm could achieve a SSNIP	MMC investigation into National Express and Midland Main Line merger. Extensive use of own and cross-price elasticity analysis of rail and coach use.
Critical loss analysis	Necessary complement to residual demand analysis. Estimate by simulation the 'critical' loss in sales that would render unprofitable a unilateral price increase.	Harris and Simons [1989] developed its use in merger analysis. If actual loss is less than critical loss, price increase is profitable, and potentially anti-competitive.
Import penetration test	Establish the sensitivity of imports to domestic prices through elasticity measures and regression analysis	General anti-trust application but not used due to 'simultaneity bias' that is it is difficult to distinguish between demand and supply of the imported good
Survey techniques	Where raw data is not available or is incomplete seek to obtain information formally/informally from surveys and questionnaires as a basis for statistical analysis	Engelhard/Floridin gel clay merger in the US. DoJ expert witness interviewed customers of both companies to elicit whether they would switch for a 5% or 10% price increase.
Models of competition		
Price-concentration studies	Based on Structure-Conduct-Performance paradigm and Lerner Index of monopoly power that implies higher concentration is associated with higher prices/profits in the relevant market. Degree of concentration is used as the proxy for market structure; k-firm ratio or HHI	Frequently used by MMC. For example, the SCI/Plantsbrook funeral services merger utilised multiple regression analysis to explain differences in prices by differences in six chosen variables. MMC disputed parties findings, but could not present an alternative model from the dataset
Bidding studies	Empirical observation of whether there is systematic bias in bidding prices over time between cartel and non-cartel firms	To detect bid rigging to stop/prevent anticompetitive behaviour of a cartel of bidders.
Differentiated product analysis	Diversion ratio techniques based on Independence of Irrelevant Alternatives Assumption or Estimation of Demand System using econometric model, AIDS	Have been used in several high profile US consumer goods merger cases and are discussed in detail below

Source: "Quantitative Techniques in Competition Analysis", Economic research Paper 17, OFT [1999]

As a starting point Baker acknowledges that differentiation, while benefiting consumers in the context of offering superior choices can facilitate the exercise of market power. What makes analysis of these industries particularly difficult is that a relatively small number of large firms that invest heavily in selling and marketing their products, but which appear to sustain relatively high margins could be interpreted as an industry realizing a return from high risk, high fixed cost investments, or one that has been successful in erecting entry barriers to protect supernormal returns. Where the authorities have the most difficulty is in instances where there are no gaps in the chain of substitutes, in economic terms, where the product-characteristic space is crowded or even overlapping. Rightly, he points out that in these instances the anti-trust concern is more likely to centre on the effect on prices among the merging firms own products, rather than in the wider market *per se*. In this sense the standard anti-trust analysis of defining a relevant market and then computing market shares should be abandoned in favour of asking the question: "*If competition between products of the merged firm declines and one product price rises, where do buyers go*?"

Although the merger guidelines have placed cross-price elasticity at the cornerstone of identifying the relevant market, the technique and its interpretation are not without criticism. For example, Massey [2000] questions how high the cross-price elasticity measure must be for two products to be considered substitutes that are part of the same relevant market. Even assuming this question can be answered, problems occur further down the line in the analysis. Pinkse and Slade [2003] point out that many economists believe that concentration indices such as the HHI are poor indicators of market power

in industries characterised by differentiated products. Recent analysis by Walsh and Whelan [2002] of the carbonated soft drinks market suggests firm size is attributed to the degree to which firms own a portfolio of brands across segments of the market and not as a result of performance within segments.

OFT [1999] identifies two quantitative techniques to assist in merger cases involving differentiated products. Diversion Analysis is a simulation technique that uses the Independence of Irrelevant Alternatives Assumption (IIAA). The fundamental assumption in IIAA is that the cross-price elasticity between one product and all others is identical. Using an econometric model known as a multinomial logit demand model, the demand for the given product can be estimated. In the case of a merger, this model is used to assess the quantity of the product that is lost to a close substitute product if its price is increased. The diversion ratio is calculated numerically as the cross-price elasticity of the two products divided by the own-price elasticity of demand for the first product. The diversion ratio can also be expressed in terms of market shares due to the properties of the logit model. It is then used to estimate the post merger price increase using the assumption that the elasticity of demand is constant pre and post merger:

Post-merger price increase = (mark-up x DR) / (1 – markup – DR)

Diversion Analysis has been criticised frequently in the literature. Hausman, Leonard and Zona [1994] warn against the use of the IIAA assumption that underpins this and related analyses. The assumption that if a single product is eliminated from the choice

set consumers will distribute themselves among the remaining products proportionate to their market shares is a feature that has been "*tested and rejected numerous times in the discrete choice literature*". Moreover, these authors claim that the IIAA assumption that the cross-price elasticity between one product and all others is identical is unlikely to hold very often and is counterintuitive.

Hausman et al describe a set of demand models for consumer goods industries using scanner data. Specifically these authors developed a multi-level demand system that modelled the US beer market. Utilising what is called a 'Gorman's multi-stage budgeting' approach, a three stage demand system is built. Starting at the bottom level, estimates of cross-price 'effects' among brands in a given segment using the Almost Ideal Demand System (AIDS) developed by Deaton and Muellbauer [1980] áre calculated. These are then fed into the second stage model that estimates total demand by segment, which in turn feeds into the top level that estimates overall demand for beer. At this stage the model has been fully estimated and it can be manipulated to turn the brand cross-price 'effects' into unconditional elasticities.

Bottom level demand specification has the advantage of not imposing restrictions on competition among brands within a given segment. The authors suggest that competition among differentiated products is typically highest among brands within a given segment. They use their model to simulate the effect on prices of a merger between what they consider to be competing brands, for example, the two premium beer brands Coors and Labatts under various scenarios, including fixed or falling marginal cost assumptions,

and looking at the constraining influence on price of other brands in the same or related beer segments. The results show that even with no efficiency gains the estimated price increases would be quite small because Coors' price is constrained much more by Budweiser and Miller while Labatts' price is constrained more by Molsons. When modest efficiency gains are included due to hypothetical decreases in marginal costs, predicted post-merger prices decrease. When beers from other segments are included in the model, such as popular beers and light beers, the results also show significant constraining influences on post-merger price increases.

In the same vein Pinkse and Slade [2004] have built even more sophisticated demand models that have applications for anti-trust and merger analysis. Their work looked at the UK brewing industry in the mid-1990s, in the immediate aftermath of the 1995 acquisition of Courage by Scottish & Newcastle, to model the potential impact on beer prices of the proposed, but blocked merger that would have created Bass Carlsberg-Tetley. Their model was an extension of Hausman in that it had a continuous choice specification that allowed the estimation of cross-price elasticities as a function of a number of distance measures between brands in product-characteristic space.

The conclusions of Pinkse and Slade's UK brewing industry study was that the Scottish & Newcastle/Courage merger had little effect on prices, but that the proposed merger of Bass and Carlsberg-Tetley would have resulted in retail price increases of 3%, a figure that they considered significant and a justifiable reason for blocking the proposed merger. This was attributed to the non-overlapping nature of the former two businesses

in terms of both geography and brand portfolio. On a conventional measure of concentration in the regions studied, Scottish Courage accounted for 37% market share compared to a combined Bass/CT market share of 34%; the Scottish Courage merger should be more (not less) anti-competitive – the opposite of what they found. Their conclusions of anti-competitive behaviour rest heavily on the identity and product mix of each merging partner at the local level.

There are 'common sense' non-econometric reasons for apparent spurious answers to anti-trust and merger problems and examples from the alcoholic beverages industry illustrate why. As a starting point, using raw price data from panel or scanner studies is likely to over-estimate systematically the true retail price of consumer goods as discussed previously by Scheffman and Coleman [2003]. These prices fail to account for the 'normal' practice of slotting fees and retrospective discounts, one of a range of complicating factors that governs the relationship between manufacturers and retailers. Moreover, with many long-term and exclusive contacts between brewers and pub retailers that frequently have to be honoured on a change of ownership, it is unclear that what is purported to be modelled is a true reflection of consumer – as opposed to customer – demand and price sensitivity. Dobson [2002], in an analysis of Interbrew's proposed acquisition of Bass Brewers pointed specifically to the failure of 'normal models' to take account of the significant and growing buying power of the PubCos and other retail groups, for example, the supermarket chains. The divergence between wholesale and retail pub prices of beer have been described in detail in Chapter 2 of this thesis.

The use of economic 'games' that simulate the impact of prices in the event of a merger is also a hotly debated topic. Typically the simulated game is a Nash-Bertrand equilibrium model, one of several 'one-shot' games. Werden [2004] explains that critics of these models – used widely in anti-trust analysis – point to the real world fact that competitors in an industry play repeated games. Where repeated games have been introduced, in Werden's view they are "*even more abstract and artificial than one-shot games*" given that they tend to involve infinite repetition of the same one-shot game, without allowing for communication or learning, key factors in normal industrial development.

On the basis of his work as the economics expert witness in the Post/Nabisco Cereal merger, Rubinfeld [2000] confirms the practical issues in dealing with the price and volume evidence. Purchasing (scanner) data tends to estimate household, rather than individual spending patterns, which may consequently be overstated. In addition households often buy cereals, for example, in large volumes to take account of promotional offers, such as 'buy one get one free', generally referred to as 'multi-buy' deals. Further problems occur in the modelling stage, in particular with regard to demand models based on multi-stage budgeting decisions. The decision to include a product or group of products in one segment rather than another can affect substantially the conclusion reached with regard to the relevant market for anti-trust purposes. The restriction tends to make products in the same segment much closer substitutes than is really the case, whereas products categorised as in different segments are mathematically seen as insignificant substitutes. Rubinfeld concludes that the

econometric evidence must be used in conjunction with quantitative and qualitative marketing evidence.

One of the more fundamental criticisms expressed by various economists (Baker, Hausman et al, Pinkse and Slade) is that the guidelines and standard anti-trust analysis is a poor predictor of market power for merging firms that own an array of brands that are relatively close substitutes. However, it is rare to find reference to the impact of the portfolio itself, and its supporting distribution network (in the context of vertical restraint) in the literature.

Recently, in a specially commissioned work by the UK Department of Trade and Industry, the concept of 'portfolio effects' was introduced. The report's author, Nalebuff [2003] sets the scene for a new generation of complex econometric models that are likely to be presented to the regulatory authorities as expert evidence in anti-trust cases. With reference to the analysis of ski resorts he discusses competitive advantage when bundling can be used to increase the value of a firm's offering relative to that of a rival, a topic that he claims has not been addressed in the literature. In his view, "*when rivals cannot duplicate this strategy the result is a sustained competitive advantage and possibly a dominant or leading market position*".

The problem with the standard anti-trust analysis is that it relies on price as a proxy for the exercise of market power, not volume per se, and it generally attributes limited cost savings to the combination of portfolios of highly differentiated products, as explained

by Baker [1997]. Certainly the US authorities appear to be lagging considerably in their knowledge or acceptance of 'portfolio effects'. Nalebuff [2004] attributes this to "*the Chicago School (has) largely succeeded in discrediting the idea of leveraging monopoly power*".

The European Commission, in contrast, has recognised that for example, in the case of the 1997 merger of Grand Metropolitan and Guinness, the supplier of a broad range of spirits to its customers would be stronger than a supplier of a single spirit since it would account for a greater proportion of a customer's business. A broader (across, not necessarily within) portfolio provides economies of scale and scope in sales and marketing activity and strengthens the threat of the refusal to supply.

3.2.3. Discussion of economics and law

Over the period of the literature review the legal frameworks for anti-trust and merger analysis have changed several times within the various jurisdictions. In common with other industries, the major UK alcoholic beverages firms have increasingly been conducting mergers outside their UK base, and have consequently been exposed to the legal networks of either the US, EC or both simultaneously.

Greater co-operation between the US, viewed by itself and others as the founding father of anti-trust analysis, and other jurisdictions was both inevitable and desirable with the growth in cross-border mergers and acquisitions. According to Charles A James [2001],

assistant Attorney General in the anti-trust division of the US DoJ, the Competition Law and Policy Committee of the Organisation for Cooperation and Development (OECD) has worked for the past 30 or more years to build a consensus among its members with regard to policy and its implementation. Although regimes have moved closer together, sharing information and adopting each others policies where possible, there have been differences in approach. The US had remained critical of the EC for what it viewed as placing more emphasis on the welfare of competitors than consumers in competition analysis.

This debate was spurred by the acrimony that followed the EC decision to block General Electric's proposed acquisition of Honeywell, even though the US authorities had cleared the deal. The EC decision was influenced heavily by the possibility of adverse 'portfolio effects' in such conglomerate mergers. As discussed previously, when viewing alcoholic beverages industry mergers the EC has utilised a similar analysis. Indeed the UK-commissioned work by Professor Nalebuff was motivated by the possible existence of 'portfolio effects'. For the US, in Attorney James' words "*so-called 'portfolio effects' or 'range effects' as it has recently been employed is neither soundly grounded in economic theory nor supported by empirical evidence*".

The EC, having relied on 'portfolio effects' theory in several high profile mergers, but without producing a new economics paradigm or econometric tool to identify and quantify them has, it seems, been forced to abandon this analysis, at least in the near term. An appeal by GE to the European Court of First Instance (CFI), whilst being

denied an annulment of the merger prohibition, succeeded in relegating the EC analysis of 'portfolio effects' to the back burner. The CFI considered that the EC analysis was erroneous in that it had not established with high probability that such effects would occur as a result of the merger. This decision followed on from similar findings in another high profile appeal to the European Court of Justice (ECJ), that of Tetra Laval/Sidel earlier in 2005. In the view of some in the legal profession this development has effectively closed the gap in antitrust merger analysis and policy between the US and EC.

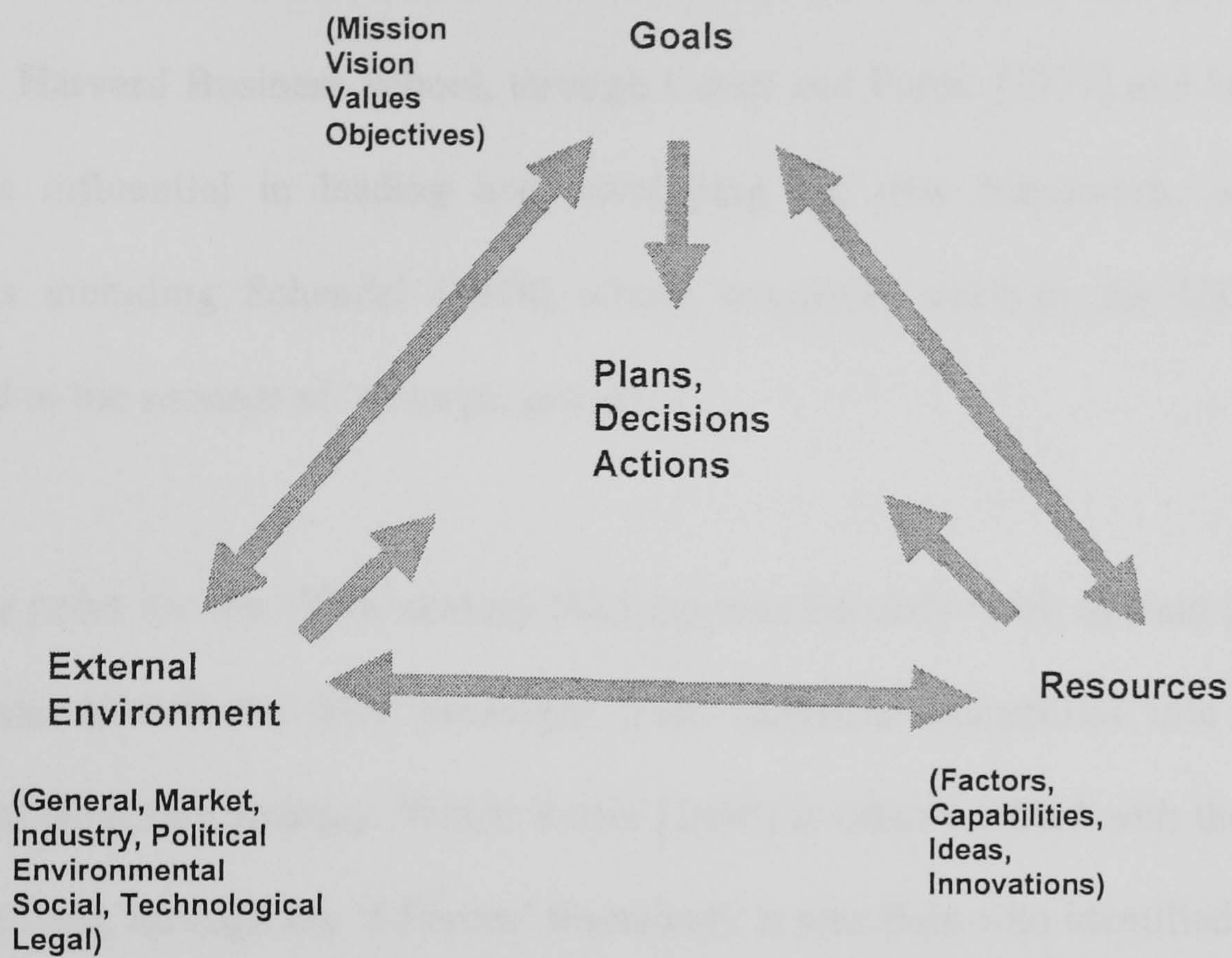
Whilst the EC might be guilty of not establishing a sufficient economic foundation for the identification and quantification of 'portfolio effects', the fact remains that building a leading portfolio of seemingly unrelated brands is the core objective of much merger and acquisition strategy in consumer-related industries, if not in may others. The merger strategies of many leading consumer goods firms such as those in the alcoholic beverages industry are underpinned by the concept of 'portfolio effects'. Moreover, it is not the case that the economic principles that underpin US anti-trust and merger policy is not without high-level criticism, as discussed above. Problems accrue at several stages in the analysis; there is a heavy reliance on scanner data, relevant market definitions can place brands arbitrarily into categories that may not exist in practice, and the models of competition do not account for both the existence of long-term supply contracts, buyer/supplier relative bargaining and the fact that competitors play repeated games from which they learn and adapt their strategies to not just the market place but also the regulatory environment within which they operate.

3.3. The firm and its strategy for growth

The previous sections defined the competition policy framework within which markets and firms are obliged to operate. This section considers the corporate strategy literature and what it says about firms' ability to create and maintain competitive advantage in the markets within which they operate. Mergers and acquisitions are a key feature of growth for firms. Given that a firm's strategy is constrained by anti-trust policy, it would be logical to expect firms to incorporate and adapt to the legal framework and supporting economic analysis to remain successful. As Figure 3.1., from McGee, Thomas and Wilson [2005], illustrates, it is implicit in the strategy literature to recognise the importance of the interaction between corporate strategy and the external environment, including government-related interaction.

In the following sections the two classic paradigms of strategy literature are discussed, the traditional Structure-Conduct-Performance (SCP) paradigm that traces its origins to industrial economics, and the Resource-Based-View (RBV) of the firm, that became a popular area for academic strategy in the 1980s. The academic literature, in so far as it exists that links firm strategy to the external environment, both political and the stock market is reviewed. Finally the implementation of a merger strategy that is 'doing the deal' is considered, drawing on a rich – and controversial – body of Finance literature that assesses the impact of a merger strategy on a firm's long-term returns.

Figure 3.1. Basic dynamics of strategy



3.3.1. The Structure-Conduct-Performance (SCP) paradigm in strategy

The obvious starting point for a review of the academic strategy literature that might be expected to encompass merger and acquisition strategy is the classic SCP paradigm. This was imported from industrial organisation economics, and has been the framework for the industrial analysis that accompanies most anti-trust investigations. It formed the dominant thinking in 1980s strategy research until it was eclipsed by the RBV of the firm as the mainstream strategy thinking of the 1990s.

Rumelt, Schendel and Teece [1991], suggest that prior to the 1970s, academic strategy research consisted largely of case study analysis of actual situations with generalisations

sought through induction. During the 1970s a new deductive style emerged, utilizing econometric statistical methods, such as multivariate techniques, and the principles of economics. Harvard Business School, through Caves and Porter [1977] and later Porter [1980] was influential in leading and developing the new framework, with other contributors including Schendel [1978] whose empirical work in the US brewing industry led to the concept of 'strategic groups'.

The starting point for the 1970s strategy thinking was the early work of Bain [1959]. In essence Bain carried the SCP paradigm from industrial economics into the new discipline of corporate strategy. Whilst Porter [1980] is often credited with the seminal work in the field, through the '5 Forces' framework it was Bain who identified that four primary characteristics of market structure, that is, the degree of differentiation, the condition of entry, and the degree of seller and buyer concentration "*are the aspects of market organization that most clearly and systematically influence market conduct and performance throughout all industries*". The incidence of product differentiation was the key fundamental determinant of structure, and consequently conduct and performance. The closeness of substitutes, demand characteristics of the product and the preferences of consumers and customers linked directly to the condition of entry.

Recognising the importance but also limitations of Bain, Caves and Porter [1977] broadened the SCP framework to accommodate 'barriers to mobility', the forerunner of the strategic group literature. This was seen as an SCP-based explanation to the question of 'persistent profit'. Barriers to mobility, later incorporated into the 'strategic group'

analysis were an attempt to explain why some firms in an industry sustained apparently superior returns and why new entry did not erode their competitive positioning in the manner in which economic theory suggested.

In one of the early empirical studies that established industry subgroups, Schendel and Patton [1978] developed a 'simultaneous equation model of corporate strategy' from studies of the US brewing industry over the period 1952 - 1971. Their aim was to examine the many competing goals that occupy management, in particular, the trade-off between growth and profitability. They outlined three fundamental aspects of any purposive organisation; its goals, the means or resource allocations possible and the environmental constraints within which the firm must operate. Goals are a system of multiple explanatory equations that capture more adequately a firm's behaviour than the one single goal of profit maximization projected by economists. Means can be split into two camps that are under management control: strategic variables, such as resource allocation and operating variables. Finally, environmental constraints are factors that management cannot control directly even though its decisions may influence them, such as the nature of the industry to which the firm belongs, and the political and economic climate that is shared by all firms and industries.

In the analysis, Schendel and Patton divided the brewing firms into hypothesized homogeneous subgroups based on firm size and geographic scope; national, large regional and small regional. Their regression analysis vindicated the separation, with starkly different results to the aggregated industry trends in the market share and

profitability maxim. National firms were shown to be successful in gaining dominance by presenting a quality product that was marketed intensely and supported by strong distribution. Although profitability was affected by the pursuit of market share gains, this was a short-run effect; over time the national players gained competitively from the circularity and positive feedback of marketing supremacy, and the ability to invest in a multiple plant capacity to push down costs and optimise distribution capability. The major losers in the strategic battle were the large regional brewers that were too large to not follow the profit/market share trade-off of the nationals, but which were unable to match their marketing budgets and thus could not sustain a costly market share battle. The small regional brewers suffered from similar adverse effects.

In extending this work and the earlier work of Porter, McGee and Thomas [1986] conclude that 'strategic groups' offer an explanation for persistent intra-industry differences in profit rates, and as such "*contribute to our understanding of oligopolistic interdependence and may enrich the SCP paradigm of industrial organization theory*". The nature of such interdependence and firm rivalry is illuminated by the pattern of group membership and how this changes over time. Interestingly, these authors also see 'strategic groups' as adding to the RBV literature through a link back to the early work of Penrose [1959] and her theories for the growth of the firm, and to Rumelt [1991] who identifies 'isolating mechanisms' as a general term to explain the concept of mobility barriers as a unique characteristic of a firm.

3.3.2. The Resource-Based View (RBV) of the firm

The question of whether performance is industry or firm-specific has taxed the minds of many leading strategy scholars for several decades. As early as the late 1960s, empirical observations questioned whether there was a causal relationship between size and profitability. However, it was not until the 1980s that researchers started to investigate apparent intra-industry heterogeneity in performance. In contrast to the work emanating from Harvard, Rumelt et al [1991] and other 'Chicago School' academics saw industry structure as reflecting efficiency outcomes rather than market power. These authors concluded that there were firm-specific effects that were more significant in explaining performance.

This 'resource-based view' (RBV) forms an alternative paradigm within the strategy literature whose objective is to provide the answer to the 'problem of persistent profit'. Central to the SCP orthodoxy is that supernormal or excess profits are eliminated by other firms in the industry or new entrants, assuming no anti-trust barriers exist. In real world examples, even relaxing some of the constraints of SCP to allow for scale economies, first mover advantages and barriers to mobility residual unexplainable profit can still remain. RBV proponents describe this as supernormal returns derived from unique resource combinations within a firm. The identification and management of these unique resources create sustainable competitive advantage that is difficult to replicate.

Whilst the origins of RBV are credited frequently to the workings of Penrose [1959], it found its place in strategy as the alternative paradigm in the 1990s, under the auspices of Prahalad and Hamel [1990]. However, the theories of authors such and Alchian [1950], Ansoff [1972], Nelson and Winter [1982], and Nelson [1991] have contributed to the intellectual base. These authors, in general, conceive the organisation as a dynamic entity that responds to signals from the external environment and adapting in much the same way as a biological entity in a Darwinian sense.

Alchian [1950] called for "*a modification of economic analysis to incorporate incomplete information and uncertain foresight*". He proffered that there is a distribution of outcomes that are uncertain. The best a firm can do is to opt for an action with a preferred outcome distribution and hope it will be successful. With regard to the living world, Alchian recognises that there are difficulties in distinguishing between 'adaptation' and 'adoption'; survivors may appear to be those that have adapted themselves to the environment, whereas in reality the environment may have adopted them. If the latter is true, success may be a function of luck rather than predicted behaviour.

Ansoff [1972] sees the firm as a "*dynamic open system in constant two-way interaction with the environment*". The art of strategic management is to establish and maintain a set of relationships that enable a firm to pursue its objectives that are consistent with its organisational capabilities. These in turn are determined by the characteristics of the

individuals within it. To survive and succeed all organisations need to adapt to the environment and to operate within it.

Nelson and Winter's book "*An Evolutionary Theory of Economic Change*" [1982] in discussing competition from an evolutionary economics standpoint draws heavily on the work of 1930s Austrian (and later Harvard) economist, Schumpeter. Nelson and Winter describe Schumpeterian competition as producing winners and losers in a process of continuing disequilibrium, in contrast to the equilibrium, profit maximization fundamentals of industrial organisation and SCP. Through a process of 'natural selection' winners emerge, and growth and success tends to breed further growth and success, leading ultimately to a concentrated industry structure. Nelson [1991] sees the world as too complicated for an ex-ante decision of the 'best' strategy (profit maximization). In his view firms in an industry choose from many potential strategies, creating a diversity of outcomes. It is the organisational differences that become institutionalised subsequently as core 'dynamic capabilities', in particular those that lead to differences in the ability to generate and gain from innovation, that are the source of durable competitive advantage.

The quantitative 'evidence' that set out the case for RBV – or certainly against SCP – was presented in a re-working of Schmalensee's 1985 analysis "*Do Markets Differ Much*". Rumelt [1991] credits the "*innovative and technically sophisticated*" findings of that report, but extends the original one-year data analysis to a four-year period. In addition he adds variables that relate to overall business cycle effects and stable and

transient industry and business unit effects. Rumelt's 'variance components estimation' model implies that business units differ from one another within industries significantly more than industries differ from one another. He concludes "*the most important impediments to the equilibration of long term rates of return are not associated with industry but with the unique endowments, positions, and strategies of individual businesses*".

In a break with 1980s thinking on refocusing and restructuring, Prahalad and Hamel [1990] gave credence to a new type of diversification strategy, one that was based on core competencies. For example, in the case of Honda, its core competence in engines and power trains were seen as giving it a distinct advantage in car, motorcycle, lawn mower and generator businesses. Many of the 'best in class' examples were Japanese companies, while US management, including that of GE "*often lacks the vision to build (competencies) and the administrative means for assembling resources spread across multiple businesses*".

These authors predicted that the 1990s' manager would be "*judged on the ability to identify, cultivate and exploit core competencies that make growth possible*", while at the same time recognizing that little would be gained from 'political or macroeconomic relief'. They describe a core competence as one that:

i. Provides potential access to a wide variety of markets;

ii. Makes a significant contribution to the perceived customer benefits of the end product, and

iii. Should be difficult for competitors to imitate.

Identifying these unique resources and combining or exploiting them to create a sustainable competitive advantage is not as simple as it might sound. As Mintzberg [1997] explains, the great challenge for managers is "*knowing the organisation's capabilities well enough to think deeply enough about its strategic direction*". In earlier work, based on extensive case study analysis across several sectors of the economy Mintzberg [1985] identified two broad categories of strategic management styles, deliberate and emergent. A perfectly deliberate strategy would only occur in an environment that was totally predictable, benign or under the control of the firm, whereas a purely emergent strategy would only occur when an environment imposed directly a pattern of actions on a firm.

In reality, strategies needed to employ aspects of both to be capable of learning as well as providing a sense of direction for the organisation and its employees. This would seem to be arguing, although not expressed as such, for the simultaneous adoption of SCP and RBV in some form of integrated group strategy. This would offer an advantage in anti-trust analysis of drawing on the SCP literature that has informed the economic analysis of the policy framework but considering the firm's position, expressed through RBV of a core competence that is the ability to interact with external constituencies such as government and the political process.

3.3.3. Linking the two paradigms to the external environment

During the 1990s, a somewhat unsatisfactory compromise has been reached between the two research approaches to strategy: it depends on the industry, the particular performance measure used at a point in time and whether the analysis is considering the market leader, a failed firm or one in the second tier of performers. This is borne out of the fact that each of the two paradigms has pitfalls. SCP, starting with a top-down approach from the external environment within which a firm operates does not appear flexible enough, even allowing for 'mobility barriers' or 'strategic groups' to explain persistent profit. Starting at the other extreme and building up, through an RBV approach is likely to be attributing only transitory success to a firm that could have been achieved by other means; the Japanese industrial 'miracle' of the 1980s, and some high profile specific case studies, such as Enron and Shell illustrate the point.

Two basic problems remain for strategic analysis – and indeed for anti-trust – what is performance (and over what time scale is it measured) and what is an industry? This becomes an even greater challenge when looked at in an international and cross-border setting. Academic work on 'strategic groups' has helped to refine definitions of an industry notwithstanding its failure to capture the dynamic aspects of strategy. But the issue of performance and returns to firms and industries remains thorny. Not only does 'profit' mean different things to different parties, but finding firms that operate consistently as 'profit maximisers' has proved to be a fruitless task, largely because it ignores the agency costs associated with managing corporations. In the view of Rumelt,

Schendel and Teece [1991], whilst economics is important, it is equally important to recognise that most business strategies also contain implicit hypotheses regarding organisational behaviour and political motivation, while relying on judgments about the perceptions, feelings and beliefs of customers, suppliers, employees and competitors.

In an article on 'sustainable advantage', Ghemawat [1986] was one of the first researchers to look in the middle ground between the two paradigms, laying the foundation within a classic strategy framework for a more structured and integrated social science response to business and competitive advantage. Ghemawat argued that since competitors were capable of securing the details of new product introductions within a year of their development, and because processes were even harder to protect that new product information, there were only three ways to sustain a competitive advantage; size and scale, access such as tying up raw materials (by, for example, backward integration) and by freezing out competitors by, for example, exploiting anti-trust and patent laws and other government-sponsored intervention in markets. "*The lesson strategically is that a company that is on the right side of public policy can exploit its position to build sustainability against companies that are not*".

Developing his analysis in an attempt to bridge the gap between the two schools, Porter [1991] redefines strategy as the act of aligning a company and its environment. With both subject to change, the "*task of strategy is to maintain a dynamic not static balance...... need a theory of strategy that links environmental circumstances and firm behaviour to market outcomes*". Having abandoned the cross-sectional econometric

studies of the 1970s that underpinned 'Competitive Strategy' [1980] Porter has taken a longitudinal case study approach to cope with both industry and firm-level effects. In its broadest sense, a firm's success is a function of both the attractiveness of an industry (SCP, and the '5 Forces' framework) and a firm's relative position within that industry (RBV). In Porter's view the firm's relative position is a function of 'initial conditions', such as pre-existing reputations and skills and 'managerial choices' that have led to the assembly or creation of particular skills and resources. Porter's case study analysis seeks to establish why particular firms were able to get into advantaged positions and sustain, or fail to sustain them. Given his acknowledgement that "*The final influence on the environment for competitive advantage is government*" it is within this context that the exploration of growth by mergers and acquisition would sit naturally.

Watkins [2003] considers few businesses are good at integrating government relations and business strategy. Referring specifically to Microsoft, he points to the role of customer and competitor complaints in the DoJ decision to file an anti-trust lawsuit that led to a record settlement. Watkins concludes that efforts to influence government – which clearly can be successful – "*are often a form of business competition in disguise*". With the increasingly tight barriers provided by the regulatory and anti-trust authorities, the mechanism for exogenous change must be a key aspect of firm strategy. Shaffer and Hillman [2000] assert that the responsiveness to public policy issues is of increasing importance to the strategy of firms and their performance. In his earlier work, Shaffer [1995] suggests that given the effect government can have on firm-level profitability, firms with superior capabilities for adapting to "*regulatory dictates*" may attain a

position of competitive advantage over their rivals. However, the process need not be passive, with firms seeking to gain advantage by influencing the legislative and regulatory process instead of going head-to-head in the product market. Shaffer concludes that this proposition needed further conceptual development and empirical support.

Baron [1995, 1997] considers that strategy formulation and implementation must look both inside the firm, with regard to its distinctive competencies, as well as outward to the environment in which the firm operates. In Baron's view, for a business strategy to be effective all internal and external interactions must be tailored and integrated. A firm must recognise that non-market issues, such as government intervention, can have a controlling impact on its opportunities. As such, non-market strategies can be used more broadly to structure the rules of market competition either by the firm, or collectively by the industry. He considers that competitive analysis and strategy formulation often takes the non-market environment as fixed and then conducts a Porter-style analysis from that fixed perspective.

It is unclear whether Baron's insights for successful strategy have ever been put to the test empirically. However, his expectation that where non-market assets and competencies are unique or difficult to replicate they will render a firm a non-market advantage, with the potential for knock-on effects on market positioning should be testable in the context of a successful merger and acquisition strategy.

3.3.4. Merger strategy and implementation

Even assuming that a firm's merger and acquisition strategy has incorporated successfully the key external interaction with the competition policy framework it must also meet with approval from the other key external force, the stockmarket. Many mergers have been thwarted by 'share price effects'; a lengthy enquiry or a hostile bid allows others to benefit directly or indirectly from the bid process at the expense of the bidder. Moreover, if a firm transacts one or more mergers and acquisitions that are deemed to fail or destroy shareholder value after the event this will have a material impact on that firm's ability to cement deals in the future. In this respect the Finance and Financial Analysis literature might offer guidance on successful implementation of mergers and acquisitions.

Finance and Event Studies

The accepted wisdom is that mergers and acquisitions rarely create value for the shareholders of acquiring firms. In as much as there are value-creating merger benefits these accrue almost exclusively to the target firm shareholders. The wealth effects for shareholders is summarised succinctly by Loughran and Vijh [1997]:

i. Target shareholders earn significantly positive abnormal returns from all acquisitions;

ii. Acquiring shareholders earn little or no abnormal returns from tender offers (hostile bids usually paid in cash); and

iii. Acquiring shareholders earn negative abnormal returns from mergers (agreed bids usually paid in stock).

Such conclusions are derived from 'event studies' of abnormal share price returns over the period of the takeover announcement. This analysis was introduced by the eminent academic Eugene Fama in 1969 and underpins the paradigm of stock market efficiency. Since then an extensive academic literature has built on the pros and cons of event study analysis in demonstrating stock market efficiency and establishing the benefits or otherwise of corporate actions including mergers and acquisitions.

In an early appraisal of mergers Jensen and Ruback [1983] surveyed the abnormal returns generated by successful and unsuccessful takeovers. Considering takeovers as part of a corporate control mechanism whereby managerial teams compete for the rights to manage resources, target shareholders gained 8% from proxy contests, 20% from mergers and 30% from tender offers. Bidding shareholders did no worse than to break even. In the case of failed bids, there were small (5%) losses to target and bidder shareholders, except in proxy contests, where target shareholders still gained 8% notwithstanding the failure of the transaction (presumably reflecting the view that a higher bid would emerge now that the target was 'in play'). Jensen and Ruback saw these gains as a signal of increased efficiencies or synergies rather than the creation of

market power. As such they considered that anti-trust opposition to mergers imposed costs by restricting the transfer of corporate control.

Roll [1986] pointed out, however, that there was a fundamental flaw in what became the prevailing view of mergers. Since bidders were usually much larger than targets the effect of the bid could be buried in the noise of the bidder's return volatility. This would be the case, particularly, over short time horizons. He argued that takeover gains may have been overestimated, if they existed at all. He forwarded a cynical view of mergers; that managers make bids even when valuation criteria should have suggested otherwise in what he coined the 'Hubris Hypothesis'. The rationale for bid activity could be explained by a combination of these factors, hubris on the part of individual decision makers in the acquiring firms as well as by tax benefits, corporate synergies or removing inefficient managers in the target firm.

During the 1980s and 1990s there were various 'event studies' that analysed pre and post-merger share prices, often providing contradictory evidence on the pros and cons of mergers and acquisitions. Some authors such as Franks, Harris and Titman [1991] found no evidence from a study of 399 takeovers in the US between 1975 and 1984 of significant abnormal returns three years after the bid announcement. In their opinion the previous findings of poor performance after takeover was likely due to benchmark errors rather than mis-pricing at the time of the takeover.

Agrawal, Jaffe and Mandelker [1992], however, found that shareholders of acquiring firms suffer a statistically significant loss of 10% over the five years following a merger, and that this is robust to various specifications, such as firm size and estimation of risk (beta). Moreover, these authors found that in contrast to the accepted wisdom, the underperformance of acquirers was worse for 'non-conglomerate' mergers that is, between firms in similar lines of business.

Barber and Lyon [1997] outline three specific criticisms of the statistical methods used to calculate long-term abnormal returns that in effect render any analysis that relies purely on stock market evidence as questionable:

i. New Listing bias – sampled acquiring firms generally have a long post-event history of returns while firms that constitute the index or reference portfolio against which abnormal returns are measured include new firms that began trading subsequent to the event month;

ii. Rebalancing bias – the compound returns of a reference portfolio are calculated typically assuming periodic rebalancing (for example at the end of the month or quarter holdings within the portfolio are increased or reduced to maintain their index weighting) while the returns of the sample acquiring firms are compounded without rebalancing; and

iii. Skewness bias – long-run abnormal returns are positively skewed.

The authors suggest that a way to eliminate these statistical biases is to match a sample of firms to 'control' firms of similar size and book-to-market ratios and then calculate the relative abnormal return from a 'buy-and-hold' strategy (known as BHAR). Lyon, Barber and Tsai [1999] identify two additional sources of misspecification in long-run abnormal returns that unlike the three biases outlined above cannot be controlled. They are cross-sectional dependence in the sample observation and a poorly specified asset pricing model.

According to recent analysis by Moeller, Schlingemann and Stulz [2005] managers are getting worse at making acquisitions. With the headline "*Wealth destruction on a massive scale?*" these authors refer to the findings from the period 1991 - 2001 that appear to show that acquiring firm's shareholders lost an aggregate $216bn, 50 times more than the aggregate lost in the 1980s merger boom from a mere six times more money spent. On close inspection, however, the majority of the loss can be attributed to deals struck in the Telecoms, Media and Technology (TMT) sector boom of 1998 - 2001. The 'bad' deals were disproportionately value-destroying. Of the 4,136 acquisitions that were made in the 1998 - 2001 period, 87 had an aggregate loss of $397bn versus an aggregate gain of $157bn for all other transactions. Because the extremely large loss deals could been assigned to firms that had become highly valued by the market for their previous acquisitions, Moeller concluded "*acquiring firms strategy of growing through acquisitions is no longer sustainable and will not create as much value as they previously believed*".

By contrast, Dobbs and colleagues of the strategy consulting firm McKinsey [2006] reported that their analysis of the current 'merger wave' is that, unlike the previous wave referred to in the Moeller study shareholders appear to be faring better this time round. Their analysis looked specifically at abnormal share prices in the two days prior to and after an announcement. The mix of deals is of course different, in terms of both bidder (more private equity-backed mergers) and targeted industries. However these two recent papers serve to retain the lack of a common understanding in Finance regarding the merits of mergers and acquisitions.

Financial Analysis

Financial analysis is concerned with accounting and cash-based analysis of industries and firms that is usually conducted in the financial markets by experienced researchers. There is a body of work as discussed below that seeks to fill the gap in our understanding of the longer-term effects of mergers and acquisitions; used in conjunction with the event-based analysis of the academic Finance literature a more positive empirical understanding of the benefits of mergers begins to surface.

Black [1989] described the case for integrating accounting research and share price data as "*compelling*". Healy, Palepu and Ruback [1992] find that merged firms experience improvements in asset productivity that is manifest in more favourable operating cashflow ratios relative to non-merging peers – even though post-merger cashflow is on average lower that the pre-merger case. The authors examined the post acquisition

performance of the 50 largest US mergers in the period 1979 - 1984. The size of the target firms were on average 42% of the size of the acquirers. Their study used the pro forma operating cash flow of the two merging firms for the period from five years prior to the year prior to the announcement and compared this to the operating cash flow delivered by the merged entity from year one to year five.

The authors suggested a positive relationship between the post merger increase in operating cash flow and abnormal stock returns at the time the merger was announced. In so far as they could consider the details of the 50 mergers, those that were between overlapping businesses showed the greater cash flow improvements, although there were some exceptions. In their view the complexity and heterogeneity of the reasons for merger was an aspect that large scale studies would provide limited insight into and suggested that future research should rely on closer examination of a smaller number of mergers in greater detail.

There have been calls for more use of financial analysis in anti-trust and merger cases. Indeed the CC has more recently been supplementing its workforce with accountants and the EC merger directorate has been recruiting staff with industry-specific knowledge. The OFT [1999] pointed out drawbacks in the use of stock market event studies in anti-trust and merger analysis. Specifically, observing positive abnormal returns in an event study analysis cannot distinguish between a merger that is expected to raise prices and one that is expected to lower costs. By the time of Interbrew's proposed acquisition of Bass Brewers [2001], the CC, having also dismissed

stockmarket-based analysis in previous cases, nevertheless drew on a financial analysis of cross-border brewing mergers to aid in the assessment of the question of market power versus efficiency gains.

Steele [2002] analysed the controversial anti-trust investigation into the supply of banking services to small and medium-sized enterprises. That report saw extensive discussion on the use of accounting measures of profitability to infer monopoly profits, to which Steele had provided expert evidence as an accounting academic. Steele's work rebuts previous comments from the economist, Franklin Fisher that sought to undermine the CC investigation, and Steele's work. In Fisher's view: "*There is a general question of whether one can in fact infer the presence of monopoly profits from accounting data, and in particular from the accounting rate of return.....My firm opinion is in the negative...............The fact that the Banking Review referred the SME banking case to the Competition Commission on the basis of profitability analysis is very disturbing*". Notwithstanding Steele's work, criticism of the CC's use of accounting data to assess profitability remains controversial as discussed by Colley [2004].

3.3.5. Discussion of the Strategy and Finance literature

Despite the extensive and well-established nature of Strategy and Finance research there remains a general perception that the role of mergers and acquisitions in firm and industry growth and development is far from understood. The NBER sought to address what it saw as a significant gap in the literature and the understanding of mergers and

acquisitions by the use of a major case-study based research programme. Its editor, Kaplan [2000] states:

"*Large sample studies – whether accounting-based or stock-based – cannot possibly capture the richness of the economic effects of mergers. And, with some frequency, those large sample measures will not even capture the direction of the economic effect.....In sum, the voluminous economics, finance and strategy literatures on takeovers during the past twenty years offer little insight to practitioners or academics on what managers do to influence whether mergers succeed or fail*"

Kaplan and his colleagues sought to offer "*probing analyses of high-profile mergers in a variety of industries*" based on a series of case studies. Andrade [2001] however concluded that the case studies did not generate substantial insights into exactly how mergers and acquisitions created value, and consequently assessed the Kaplan work as largely failing to deliver against its objectives, commenting: "*The studies revealed richness in economic data surrounding mergers that cannot be captured by large-sample studies. But, these studies did not generate substantial insights into exactly how mergers create value and therefore do not fill the gap as intended. This area of investigation is wide open, spanning fields of Corporate Finance, Industrial Organisation, Organisations and Strategy*"

In the previous section the role of Economics in mergers and acquisitions was discussed and a gap was identified in the literature regarding 'portfolio effects'. In a letter to the

Financial Times, entitled "*Markets serve consumers' interests better than the antitrust lawyers do*" F Smith, Director, Consumer Alert [Financial Times, Monday December 6 2004] offers a thought-provoking consumer perspective on the anti-trust process. He claims "*regulators are not very good at understanding novel practices – creative ways of restructuring traditional activities and distribution systems .... antitrust enforcers assume that the future will be static rather than dynamic*"

With anti-trust and competition policy relying heavily on the SCP tradition that originated in Economics, the comments of Professor Yarrow, Director of the Regulatory Policy Institute at the 'Oxford Competition Policy Conference', 2004, are illustrative. He identified a "*problem in economics*" that could only be filled by what he described as the time-consuming process of looking back through the history of interactions with the authorities that the evolution of an industry can be evaluated. Porter [1991], in repositioning his research away from its pure SCP origins claimed previously: "*(I) concluded that detailed longitudinal case studies, covering long periods of time were necessary to study these phenomena (dynamic aspects of firm strategy) ..... to develop confidence about the appropriate variables and their influence on outcomes. This style of research nudges strategy research and industrial organization into the world of the historian*".

If a firm develops a skill in transacting successfully repeated mergers perhaps the RBV comes closest to bridging the gap between firms and their external interactions. If portfolios of brands are built over time through successive mergers this calls for

repeated interaction with the competition policy framework and it is likely to become a core skill for a firm in building a longer term competitive advantage in its industry. This might also go some way to explain why firms seem to be ignorant of the wide pool of Finance literature that tells them that mergers and acquisitions fail to add value. Event study analysis considers mergers as a snapshot in time but does not consider mergers and acquisitions within the same pool of firms over time. Financial Analysis informs the debate in that the stockmarket's short-term reaction ('abnormal returns') may not give the correct longer term appraisal for the impact of mergers on firm performance.

This thesis attempts to address the gaps in the understanding of the interaction between the competition authorities and firms that shape not only their own structure but that of the industry within which they operate. The following sections outline the key literature in discriminant analysis and case study methodology, the techniques that are employed to develop corporate strategy to incorporate this key interaction.

3.4. Methodology literature

3.4.1. Discriminant analysis literature

Discriminant analysis is one of a set of multivariate statistical techniques that have evolved to capture relationships between qualitative and quantitative variables. Multivariate analysis has become increasingly popular in areas of social science such as

business and politics where researchers seek to capture the dynamics of open systems without compromising statistical rigour and objectivity.

The objective of all discriminant analysis is to classify cases into two or more mutually exclusive groups based on a set of observed characteristics. It has been used extensively in the area of consumer credit, specifically the assessment of individuals as either good or bad credit risks. More recently its application to other economic and financial problems has brought a wider acceptance of what is a powerful and intuitive analytical tool.

According to Myers and Forgy [1963], the first published study that dealt with credit rating systems was conducted under the auspices of the NBER in 1941. Employing discriminant analysis, its analyst, Durand, developed weighting systems for individual loan accounts with commercial banks and other credit providers. The origin of such discrimination between groups in a population was introduced in statistics by Fisher in 1936, using examples from biological science.

Durand's work was followed by similar analysis of department store card accounts and car dealerships. With varying degrees of accuracy in prediction of poor credit risk, the numerical rating systems developed allowed an improvement in purely subjective or judgmental approaches to evaluating credit.

Extending this early work and using a dataset of 300 cases of 'good accounts' and 300 cases of 'repossessions' for the Universal Finance Company, a firm that purchased conditional sales contracts on mobile homes, Myers and Forgy developed a series of discriminant models. The models not only split the dataset on the basis of some 21 predictive variables (such as age, marital status, bank account holder) but allowed the client firm to assess prediction within scoring quartiles; a feature that was particularly useful among the least credit worthy customers.

Since these early examples from the US, the use of computer-aided scoring systems in consumer credit decisions has advanced rapidly, in the US, UK and other countries. In a review of statistical classification methods used in consumer credit industry Hand and Henley [1997] attribute this to the economic pressures resulting from the increased demand for credit allied with greater commercial competition. Developments in computer technology have allowed the introduction of wide scale sophisticated statistical modelling. Underpinning much of the credit scoring industry is discriminant analysis. Datasets typically contain more than 100,000 individual cases, with data on 100 separate variables. However, it is common to find that across individual cases there is an incomplete set of information on all variables that is there are substantial missing values.

A recent appraisal of forecasting consumer defaults and credit scoring by Thomas [2000], discusses the 'next generation' discriminant models that allow banks and finance institutions to not only identify creditworthy consumers, but also those that are

profitable to lend to. Notwithstanding the scale of the datasets available to lending institutions there is an inherent bias in the sample. Data is available on consumers that have been denied credit, but it is not usually possible to discover whether or not these consumers would have been good, that is profitable, clients with the benefit of time. Moreover, other modifications to the simple good risk/bad risk discriminant models include when and by how much additional credit should be granted to existing customers.

A newer popular financial area that has employed discriminant analysis techniques is the prediction of corporate failure and the identification of takeover targets using widely available accounting and financial ratios. The former, in its guise as the stockmarket valuation technique known as 'Z scores', was a popular tool with investors in the early 1990s. However, notwithstanding apparently high (99%) success rates Lin and Piesse [2004] have pointed to the demanding assumptions of such models with regard to the variable and model selection process as well as the distributional characteristics of the sample data. Work by Barnes [2000] on takeover prediction concluded that when comparing the efficacy of logit and discriminant models it was the choice of the form of the data – industry-relative versus raw accounting data by firm – that was more important than the choice of the statistical technique used. He concluded that the ability to predict takeover targets consistently in the UK using historical cost accounting data was poor regardless of the choice of estimating technique.

Whilst finance has been the most common field that has employed discriminant analysis, there are other significant and important social areas for which it can be extremely useful. Klecka [1980] illustrates the use of the technique in what was then a topical social problem, hostage-taking. His example studied the outcome of terrorist activity where there was a positive outcome from hostage taking even though the terrorists' demands had not been met. He hypothesized several variables as good predictors of safe release versus injury and/or execution of hostages, for example, the number of terrorists, the ratio of terrorists to hostages, tone of their rhetoric and whether they were an independent group or part of a larger militant network.

Though clearly building on the well established application of discriminant analysis in financial and banking areas it is believed that this work is the first example of the technique in an application to merger policy and corporate strategy. It could prove a valuable tool in that it would remove the over-reliance on econometric models that are highly dependent on numerical datasets, such as scanner data, that are notoriously unreliable. It would allow a wider set of both qualitative and quantitative data to be used simultaneously in the decision process.

3.4.2. Case study literature

Over the past thirty years the case study has become a commonly used methodology in the social sciences, in particular to address complex business problems. It is often the method of choice to answer questions "how" and "why" in examining contemporary

events, but where the investigator has no direct control over the relevant events and behaviour. The case study methodology relies on many of the same techniques as a historical textual analysis but it adds two sources of evidence; direct observation of the events being studied and interviews with the persons involved in the events. The unique strength of the case study as a method is its ability to deal with a full variety of evidence – documents, artefacts, interviews and observations.

The case study methodology and its applicability to addressing complex business issues is not without major criticism. The study of a small number of cases is frequently questioned as a basis from which to establish reliability or to generalise to other situations and environments. Critics point out that the researcher frequently loses objectivity with the intense exposure to case-specific material and personnel. The proponents of the method, such as Yin [2003] counter:

"*...case studies, like experiments, are generalisable to theoretical propositions and not to populations or universes...in doing a case study your goal will be to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)*"

Case studies, like other research strategies, are ways of investigating an empirical topic by following a set of pre-specified procedures. To build a defence to the more common criticisms of rigour, multiple case studies tend to be preferred: Analytical conclusions arising from two or more studies present a general cross-check on the validity of the

analysis, whether confirmatory or contradictory. The logic underlying the use of multiple-case studies is the same. Each case must be selected carefully so that it either predicts similar results ('literal replication') or contrasting results but for predictable reasons ('theoretical replication').

Yin [2003], argues that a well-trained and experienced investigator is needed to conduct a high-quality case study because of the continuous interaction between the theoretical issues being studies and the data being collected. He recommends the use of a 'Case Study Protocol' to increase the reliability of the research, with separate sections that outline the case study project, case study questions, data sources, analysis and field procedures and the use and presentation of data and documentation. Table 3.4. summarises the six separate sources of evidence most commonly used in case studies.

Table 3.4. Sources of evidence used in case studies

Source of Evidence	Strengths	Weaknesses
Documentation	Stable – can be reviewed repeatedly Unobtrusive – not created as a result of the case study Exact – contains exact names, references and details of an event Broad coverage – long span of time, many events and many settings	Retrievability – can be low Biased selectivity if collection is incomplete Reporting bias – reflects (unknown) bias of author Access – may be deliberately blocked
Archival Records	As above for documentation Precise and quantitative	As above for documentation Accessibility due to privacy reasons
Interviews	Targeted – focuses directly on case study topic Insightful – provides perceived causal inferences	Bias due to poorly constructed questions Response bias Inaccuracies due to poor recall Reflexivity – interviewee gives what interviewer wants to hear
Direct Observations	Reality – covers events in real time Contextual – covers context of event	Time-consuming Selectivity – unless broad coverage Reflexivity – event may proceed differently because it is being observed Cost – hours needed by human observers
Participant-Observation	As above for direct observations Insightful into interpersonal behaviour and motives	As above for direct observations Bias due to investigator's manipulation of events
Physical Artefacts	Insightful into cultural features Insightful into technical operations	Selectivity Availability

Source: Yin [2003]

In the two case studies presented in this thesis the researcher performed the role of Participant-Observation as described in Appendix 1.

Chapter 4. Discriminant analysis

A fundamental premise of a growth strategy based on mergers and acquisitions is that a firm cannot pursue this objective indefinitely without the path being blocked in some way by the interjection of one or more competition authorities. Once firms achieve sufficient scale, all but the smallest of subsequent acquisitions are liable for a full-scale investigation, modification and potential obfuscation by the authorities. With increasingly sophisticated and complex analysis being employed to identify and stop potential anti-competitive practices firms need to recognise and anticipate the outcome of interactions with the competition authorities.

Scottish & Newcastle and Diageo (and its former constituent parties, Grand Metropolitan and Guinness) have been especially active in the merger process, latterly expanding cross-border as they have sought to become leading international alcoholic beverages firms. A central proposition of this thesis is that both Scottish & Newcastle and Diageo turned their ability to manage interactions with competition authorities into a source of long term competitive advantage. By contrast their major UK competitors, partly due to an inability to interact as successfully with the authorities have been forced to downsize or exit from the alcoholic beverages industry.

The merger process may be an especially important aspect of corporate strategy for firms operating in mature consumer product markets where brands, portfolios and distribution capabilities are critical success factors that can only be developed over a long period of time. If it follows that interaction with the competition authorities is crucial to growth it is logical to ask what factors a firm can exploit to maximise its chances of success in those interactions.

The UK alcoholic beverages industry and its firms present an ideal test case from which to explore these factors. The industry has been a 'special interest' sector for the UK (and other) government for many generations because of its importance as an employer and source of tax revenues, both domestically and internationally from Scotch whisky exports. Consequently there is a long and detailed history of reports and enquiries that track the progress of the firms from regional and domestic vertically integrated brewer/retailers to multinational brand marketing firms with global distribution and extensive product portfolios.

A rich database of well documented anti-trust and competition authority investigations into proposed mergers and acquisitions also exists. The longevity of the UK alcoholic beverages sector and its major firms means that it is possible to observe several mergers and acquisitions by the same firm that have been investigated by both the same and different regulatory authorities (and individual regulators) over time. Each inquiry brings together industry, market and firm quantitative data, questionnaire information and the views, mainly qualitative, of suppliers, competitors and customers.

4.1. Discriminant analysis technique and methodology

The richness of the data pertaining to the alcoholic beverages industry presents an opportunity to construct a more complex and dynamic model of anti-trust and merger policy than could be achieved from either purely qualitative (case study) or purely quantitative (econometric) analysis. The remainder of this chapter describes the application of a multivariate statistical analysis technique, discriminant analysis, to a dataset of qualitative and quantitative factors assembled during the collection of material for the case studies presented in the following chapters.

4.1.1. Technique

Discriminant analysis is a multivariate statistical technique that estimates the relationship between a single nonmetric (categorical) dependent variable and a set of metric independent variables. For example the categorical variables in this analysis are '*Referred*' or '*Not Referred*', '*Transacted*' or '*Not Transacted*'. The independent variables are a mixture of qualitative and quantitative variables that are entered in either metric or non-metric (entered as dummy variables in binary form). The process of discriminant analysis modelling is shown schematically in Table 4.1.

Discriminant analysis is particularly useful when the researcher is interested either in understanding group differences (profile analysis) or in classifying correctly a number of objects into separate groups (prediction). It is appropriate in situations where there is

a single categorical dependent variable and several metrically scaled independent variables. Described as an equation it yields a model of the form:

'Z' Score = a*(Variable 1) + b*(Variable 2) + c*(Variable 3)... + u

The terms 'a, b, c ...' are known as the 'discriminant weights' similar to the estimated regression coefficients in multiple regression; u is a constant. The equation known as the 'discriminant function' represents the combination 'variants' (a*Variable 1; b*Variable 2 and so forth) that maximise the among-groups variation relative to the within-groups variation. For prediction purposes once the discriminant model has been constructed, new cases can be classified as belonging to one group or the other based on their 'discriminant score' termed the 'Z' score.

Table 4.1. Discriminant analysis process

Stage	Analysis	Key Issues/Factors
One	Research Problem	Evaluate group differences on a multivariate profile
		Classify observations into groups
		Identify dimensions of discrimination between groups
Two	Research Design Issues	Selection of independent variables
		Sample size considerations
		Creation of analysis and holdout samples
Three	Assumptions	Normality of independent variables
		Linearity of relationships
		Lack of multicollinearity among independent variables
		Equal dispersion matrices
Four	Estimation of Discriminant Function	Simultaneous or stepwise estimation
		Significance of discriminant function
	Assess Predictive Accuracy	Determine optimal cutting score
		Specify criterion for assessing hit ratio
		Statistical significance of predictive accuracy
Five	Evaluation of Discriminant Function	Discriminant weights
		Discriminant loadings
		Partial F values
Six	Validation of Discriminant Results	Split-sample or cross-validation
		Profiling group differences

Source: Adapted from Hair, JA et al 'Multivariate Data Analysis', Sixth Edition [2006]

The objective of the analysis is to maximise the discrimination between groups by setting a discriminant weight for each variable that maximises the between-group variance relative to the within-group variance. Typically the analysis is run in a stepwise fashion which allows variables to enter, exit and re-enter the prediction equation to enhance its efficacy. The statistical test is to reject the null hypothesis that there is no difference in the means of the discriminant scores of the two groups.

Typically a 'classification summary table' is also generated from known group membership that calculates the percentage of correctly classified cases in each group – the 'hit ratio'. In essence the hit ratio describes the efficacy of the discriminant model in the same way that the R^2 statistic gives the 'goodness of fit' in multiple regression analysis. For the model to be meaningful the hit ratio must exceed, in a statistically significant way, the value that would be obtained from a random chance assignment of objects to one of two groups.

4.1.2. Computer software and hardware

In its original use as a credit scoring tool, mainframe computers were used to analyse small groups of cases with few variables. However, with the advent of low cost desk top computing power and specialist statistical software packages, discriminant analysis is now accessible to a far wider range of users and can be readily applied to problems involving large numbers of objects and variables.

The software used to produce all of the analysis presented in this chapter was SPSS 13.0 for Windows, Version 13.01 (12 Dec 2004) running in a Microsoft Windows XP Home Edition 5.1.2600 operating system environment. The software and all of the data was stored and run on a Dell Dimension 8300 desktop computer with an Intel ® Pentium ® 4CPU 3.20 Ghz processor and 2048 MB RAM. Running time for each model was less than 10 seconds which permitted rapid data processing and testing.

The original SPSS model outputs run to some 200 pages in total so summary tables are included in this chapter for ease of reading. The original outputs are available from the author on request.

4.2. Case definition and data capture

4.2.1. The analytical objective

It is assumed that the best possible outcome for any firm wishing to merge with or acquire another firm is for the transaction not to be referred to the competition authorities. Clearly, if a referral can be avoided then there is no regulatory barrier to it succeeding. Firms save the management time and costs of an enquiry. Lengthy enquires can give competitors several opportunities to attack the merging firms' market positions aggressively while its management is otherwise occupied. In addition, and in particular in the case of hostile bids, the target firm has ample time to deploy various tactics to thwart the bid.

The primary objective of this analysis is therefore to identify what factors lead to merger and acquisition cases being either '*Referred*' or '*Not Referred*' to the competition authorities. Not all referrals lead to a bid being blocked by the regulatory authorities, and not all cleared bids then lead to completed mergers. Firms frequently point to lengthy investigations effectively derailing the merger process. Consequently there are bids that lapse even though they have regulatory clearance. Other bids have succeeded following a referral because they are cleared with or without the need for significant structural and/or behavioural remedies.

If a merger or acquisition is referred to the competition authorities then the second best outcome, as opposed to not being referred at all, is for that referral to lead to the transaction being allowed to proceed with few if any remedies or restrictions being applied. The secondary objective of this analysis is therefore to identify what factors lead to a case being '*Transacted*' or '*Not Transacted*' following a referral.

4.2.2. Case definition

A dataset containing detailed numerical and structural information on more than 40 separate alcoholic beverages merger and acquisition cases has been assembled that cover all those proposed and completed by the major UK drinks firms that were in existence at the time of the first anti-trust investigation into brewing and pub retailing in 1969. That is, Allied-Lyons, Bass, Grand Metropolitan, Guinness, Scottish & Newcastle and Whitbread. It includes purely UK brewing transactions, cross-border brewing

transactions, UK spirits transactions and cross-border spirits transactions as well as subsequent transactions between those categories spanning the four decades beginning in 1969. Additional UK cases, Hiram Walker's hostile approach for Highland Distilleries that was referred and Highland Distillers' agreed bid for Macallan-Glenlivet are also included because they were concerned specifically with the change of ownership of key Scotch malt distilleries and brands.

The merger of Grand Metropolitan and Guinness to form Diageo, Diageo's acquisition of the bulk of the spirits assets of Seagram and Pernod Ricard's acquisition of Allied Domecq are each viewed as two separate cases given that both were investigated separately by the FTC and EC, with different evidence presented and slightly different outcomes.

During the process of the separation of brewing and retailing assets that followed the second beer supply anti-trust investigation in 1989 (the 'Beer Orders') divestment of major brewer-owned pub estates created a new group of pub companies that through merger have now become large independent (quoted in the FTSE 100 or FTSE 250) firms in their own right. Their mergers have been omitted from the list, since they do not involve alcoholic beverage production and have often been accompanied by complex mortgage-backed security financing arrangements. The exception is the 1999 acquisition of Allied Domecq's retail operation, first proposed by Whitbread, but transacted by Punch Taverns because of the controversy that surrounded the two approaches.

The acquisitions of Greene King and Wolverhampton and Dudley Breweries, in existence as 'Regional Brewers' at the time of the 1989 MMC investigation have also been omitted. Although both firms had grown aggressively by acquisition of smaller rivals such that they now have operating structures that resemble the pre 'Beer Orders' Whitbread or Scottish & Newcastle, none of their acquisitions have been contested by the authorities.

4.2.3. Defining the dependent variables

To address the primary analytical objective, the 40 cases comprising the full dataset were split into two groups; *Referred* and *Not Referred* regardless of jurisdiction or combination of jurisdictions of the competition authorities to which the cases were referred

In assigning cases to *Referred* and *Not Referred* groups some clarification is necessary. A *Referred* case in the UK results from an OFT decision to refer a merger for full investigation by the CC. In the US it results from the decision by the FTC to carry out a detailed investigation of the 'relevant market'. In Europe it results from the decision to proceed to a Phase 2 investigation. If a UK merger went ahead without a referral to the CC it is in the *Not Referred* group. Similarly if the FTC cleared the bid without any investigation and the EC deemed that it was in keeping with EU Competition law at Phase 1 of an investigation that would also be a *Not Referred* case.

To address the secondary analytical objective, the *Referred* dataset was subdivided into two further subgroups; *Transacted* and *Not Transacted.* Again the jurisdiction of the competition authorities that the cases were referred to was ignored.

The possibility that success factors might vary when dealing with competition authorities in different jurisdictions was also considered by re-running the analysis with cases involving only UK competition authorities. This 'UK Only' analysis therefore excluded any cases that had involved either EU and/or US competition authorities. The cases which did not involve the UK competition authorities were also analysed in the same way as the All Cases and UK Only Cases models except that there are insufficient instances of cases where the case had been referred but then subsequently did not transact to produce a statistically valid result to address the secondary analytical question (one of four referred cases was blocked).

Hair *et al* provide guidelines on the ideal ratio of sample size, that is, number of cases to the number of independent variables that is needed for a discriminant analysis model to be useful statistically. If the sample size is too small, differences in the data may just reflect sampling error. Conversely if the sample size is too large, all differences identified in the data may appear significant even though in practice they are irrelevant to the problem being addressed. Many discriminant analysis studies have suggested a ratio of 20 observations for each predictor variable, albeit this ideal may be difficult to achieve in practice. At a bare minimum Hair suggests five observations per independent variable.

The sample size of each category must also be considered. At a minimum the smallest group size of a category must exceed the number of independent variables, with each category as a 'practical guideline' comprising 20 observations. Moreover, ideally the categories should be of approximately equal sizes to avoid an inherent over-classification of the larger group. Table 4.2 summarises the numbers of cases included in each of the model groups and subgroups in this analysis.

Table 4.2. Discriminant analysis group and subgroup sizes

Model	Number of Cases
All Cases	
Original Cases	40
Referred	16
Not Referred	24
Transacted after Referral	7
Not Transacted after Referral	9
UK Only Cases	
Original Cases	26
Referred	12
Not Referred	14
Transacted after Referral	4
Not Transacted after Referral	8
Non-UK Cases	
Original Cases	14
Referred	4
Not Referred	10
Transacted after Referral	3
Not Transacted after Referral	1

4.2.4. Defining the independent variables

For discriminant analysis to be effective, it is essential that independent variables are chosen that *a priori* are expected to be potentially good predictors of the outcome. For example, when trying to predict corporate bankruptcy it would be rational to start with variables such as profits, sales and costs. However, in many cases, the problem being modelled is more complex and the data less discrete than this. It is therefore common to

find other multivariate techniques such as *factor analysis* or *cluster analysis* employed first to reduce and order the data into a smaller number of intuitive variables before conducting discriminant analysis. This is particularly the case where, for example, raw data has been collected from a questionnaire and where the researcher does not have a detailed understanding of possible relationships between variables.

In the study presented here, the number of potential variables is not large and as the data has been extracted largely from published documents such as CC investigation summaries and annual reports and accounts the dataset has by its nature been subject to prior reduction and sorting. Therefore, the author did not consider it necessary to pre-treat the data further before performing the discriminant analysis.

The independent variables in the analysis presented here were generally observable directly from the raw data and include:

i. Market shares of bidder and target firms;

ii. Market prices of the relevant products at the time of the merger;

iii. Political and structural variables, for example, donations to various political parties, and whether the merger was agreed or hostile; and

iv. Financial performance statistics for bidder and target firms.

The primary source of raw data that was used to assemble the independent variables was original documentation published by the CC, EC and FTC after each merger

investigation. These contain a detailed market analysis with the UK documents also supplying a rudimentary financial analysis of the firms. Substantial quantitative and qualitative commentary from competitors, suppliers, buyers, trade union and other related industry groups is also included in UK reports. In addition, individuals, several of whom have held senior positions in the industry have usually written comments to mergers in their own capacity. The sheer scale of commentary published by the CC after its enquiries has rarely been available in investigations carried out by the US and European authorities. However, the EC has often provided more comprehensive market analysis, in particular for the major cross-border spirits mergers. In aggregate there were a combined 40 official documents from the CC, EC, FTC and DoJ. Whilst nearly all of these documents are now available to download from the various official websites, the early UK documents were read initially in the archive section of the Oxford University Bodleian Library.

Where a merger or acquisition proceeded without the intervention of the competition authorities, financial and market share analysis was captured from contemporaneous documentation, such as annual reports and accounts and industry/trade surveys. Recent (from the mid 1990s to date) annual reports and accounts are available online on each firm's website. Prior to this, back copies of most firms' accounts have been accessed from the archives at the London Business School, the British Library and the University of Strathclyde.

In total more than two hundred annual reports and accounts were accessed (up to 37 years for each of the six major UK firms, plus several years just prior to merger for some 20 target firms). With the exception of a few missing years, report and accounts were available for the six major UK alcoholic beverages firms, Allied Domecq, Bass, Grand Metropolitan, Guinness, Scottish & Newcastle and Whitbread for the period 1969 to the point at which they ceased to exist (Allied Domecq in 2005, Bass in 2003, Guinness and Grand Met separately in 1997). The author downloaded as PDF files annual report and accounts for the major UK firms. They are generally available from 1999 to date, with some earlier reports in some cases (Allied Domecq from 1994, Pernod Ricard from 1987).

The author also utilised more than 20 of her previous industry publications, written in her career as a City investment analyst in the period 1992 - 1999. A further 10 market research reports, including those of industry bodies such as the Scotch Whisky Association, the Gin & Vodka Association of Great Britain, the British Beer and Pub Association were relied on in the analysis. Finally there were an additional 32 firm press documents and press releases accessed, some of which were viewed from their websites. A full list of all of the documents that were read and absorbed into the database is contained at the end of the Bibliography. Table 4.3. summarises the variables that form the dataset for discriminant analysis. A full set of dependent and independent variable values for each case in the dataset is shown in Table 4.4. The independent variables are described in more detail in the next section of this chapter.

Table 4.3. Dependent and Independent variables

Variable	Type	Lower Limit	Upper Limit	Comments
Referred	Nonmetric	0	1	Yes = 1; No = 0
Transacted	Nonmetric	0	1	Yes = 1; No = 0
Bid Type	Nonmetric	0	1	Hostile = 1; Agreed = 0
Investigator	Metric (yrs)	0.1	5.9	UK - Secretary of State; Europe - Competition Commissioner; US - Chairman, Federal Trade Commission
Bidder Margin	Metric (%)	1.9	58.2	Operating profit (before fixed asset sales but after depreciation) in year prior to bid as a % of gross turnover
Target Margin	Metric (%)	5.0	35.3	
Bidder Gearing	Metric (%)	8.8	100.0	Net debt as a % of total capital employed (net debt + net assets + goodwill previously written off)
Bidder Return	Metric (%)	7.1	32.6	Operating profit as a % of total capital employed
Target Return	Metric (%)	5.7	39.2	
Bidder % Market	Metric (%)	0.0	23.0	In 17 cases the bidder was a 'new entrant'. Later deals generally see higher market share. The market is the 'economic market'
Target % Market	Metric (%)	0.0	66.0	
Market Leader %	Metric (%)	4.8	70.0	
PM Dominance	Nonmetric	0	1	Yes = 1; No = 0. Post merger market share of 25% of a defined or recognised 'relevant market'
Real Prices	Metric (%)	-6.6	7.9	Mini trends within the economic cycle
Bidder Donations (UK)	Nonmetric	0	1	Yes = 1; No = 0. Evidence of donations to a UK political party (in practice this is for the Conservative party or one of its affiliates only)
Target Donations (UK)	Nonmetric	0	1	

Table 4.4. Dataset summary

Case	Year	Bidder	Target	Referred	Transact	Bid Type	Inv'gator	Bidder Margin	Target Margin	Bidder Gearing	Bidder Return	Target Return	Bidder % Mkt	Target % Mkt	Mkt Leader %	PM Dom'nce	Real Price
1	1969	Unilever	Allied Breweries	1	0	0	1.4	7.5%	10.7%	16.2%	16.7%	10.3%	0.0%	15.5%	18.1%	0	-3.7%
2	1971	Grand Met	Truman	0	1	1	0.7	8.1%	9.5%	35.4%	11.2%	10.8%	0.0%	0.0%	18.1%	0	1.2%
3	1972	Watney Mann	IDV	0	1	0	1.7	8.7%	8.1%	37.4%	7.1%	14.3%	0.0%	5.0%	11.0%	0	-6.6%
4	1972	Grand Met	Watney Mann	0	1	1	1.7	14.4%	10.0%	36.9%	11.9%	7.1%	0.0%	9.4%	18.1%	0	-1.5%
5	1980	Hiram Walker	Highland Distilleries	1	0	1	0.7	16.0%	9.1%	19.5%	19.0%	17.0%	6.8%	4.3%	38.5%	0	-1.7%
6	1984	Scottish & Newcastle	JW Cameron	1	0	0	0.6	10.7%	6.4%	22.7%	11.9%	11.7%	19.0%	6.0%	19.0%	1	3.8%
7	1985	Guinness	Arthur Bell	0	1	1	1.7	7.0%	13.6%	29.3%	16.5%	21.1%	0.0%	22.0%	22.0%	0	2.0%
8	1985	Scottish & Newcastle	Matthew Brown	1	1	1	1.5	9.3%	15.6%	26.2%	14.1%	9.7%	17.4%	31.7%	31.7%	1	3.0%
9	1985	Elders IXL	Allied Lyons	1	0	1	0.3	1.9%	9.5%	52.4%	18.1%	15.7%	0.0%	13.0%	22.0%	0	3.0%
10	1986	Guinness	Distillers	1	1	0	0.1	7.2%	16.0%	32.5%	12.0%	16.3%	22.0%	18.0%	22.0%	1	3.2%
11	1986	Allied Lyons (Spirits))	Hiram Walker	0	1	0	0.4	6.7%	16.8%	24.7%	9.3%	22.5%	0.0%	10.0%	15.0%	0	3.2%
12	1986	Scottish & Newcastle	Home Brewery	0	1	0	0.7	10.4%	7.9%	26.5%	15.4%	12.5%	0.0%	7.8%	10.3%	0	1.7%
13	1986	Elders IXL	Courage	0	1	0	0.8	1.9%	10.0%	52.4%	18.1%	5.7%	0.0%	9.0%	22.0%	0	1.7%
14	1987	Grand Met (Spirits)	Heublein	0	1	0	0.9	13.7%	15.8%	28.5%	32.6%	11.5%	0.0%	10.0%	15.0%	0	-0.4%
15	1988	Grand Met (Spirits)	Irish Distillers	1	0	1	3.4	12.4%	7.2%	34.8%	24.9%	10.7%	0.0%	50.0%	50.0%	1	0.2%
16	1988	Elders IXL	Scottish & Newcastle	1	0	1	1.4	14.0%	13.4%	69.0%	21.3%	15.0%	10.0%	11.0%	22.0%	0	0.4%
17	1990	Allied Lyons (Spirits)	Whitbread (Spirits)	0	1	0	0.6	17.7%	11.3%	23.6%	23.5%	25.0%	7.5%	5.0%	20.0%	0	7.9%
18	1990	Elders IXL (Courage)	Grand Met (Brewing)	1	1	0	0.8	8.9%	8.6%	69.0%	7.4%	15.0%	9.0%	12.0%	22.0%	0	-1.4%
19	1992	Grand Met (IDV)	Cinzano	0	1	0	3.0	18.3%	8.0%	42.9%	29.4%	21.5%	0.0%	20.0%	70.0%	1	6.2%
20	1992	Allied Lyons (Brewing)	Carlsberg (UK)	1	1	0	1.7	7.0%	18.9%	36.4%	8.9%	36.4%	13.0%	8.0%	24.0%	0	6.9%
21	1993	S & N (Retail)	Grand Met Retail	0	1	0	1.4	19.2%	14.1%	16.4%	9.7%	7.1%	2.7%	2.0%	4.8%	0	3.0%
22	1994	Allied Lyons (Spirits)	Pedro Domecq	0	1	0	5.2	20.1%	16.0%	36.5%	28.3%	24.7%	7.5%	20.0%	20.0%	1	-5.4%
23	1995	Scottish & Newcastle	Courage	0	1	0	3.1	9.9%	13.3%	24.3%	16.1%	39.2%	11.0%	19.0%	23.0%	1	0.6%
24	1996	Highland Distillers	Macallan-Glenlivet	0	1	0	1.0	23.8%	35.3%	8.8%	15.3%	14.3%	3.3%	6.7%	27.0%	0	-3.5%
25	1996	Bass (Brewers)	Carlsberg Tetley	1	0	0	1.4	9.3%	5.9%	15.5%	14.0%	9.2%	23.0%	14.0%	28.0%	1	0.7%
26	1997	Grand Met (US)	Guinness	1	1	0	2.1	13.2%	28.1%	49.2%	27.4%	15.5%	15.0%	10.0%	15.0%	1	-0.6%
27	1997	Grand Met (Europe)	Guinness	1	1	0	2.3	13.2%	16.2%	49.2%	27.4%	15.5%	7.5%	6.0%	14.0%	1	-0.3%
28	1999	Whitbread (Retail)	Allied Retail	1	0	0	0.5	21.3%	14.7%	20.5%	14.1%	11.0%	4.3%	4.3%	4.8%	0	0.5%
29	1999	Punch Taverns	Allied Retail	0	1	1	0.6	58.2%	14.7%	100.0%	10.1%	11.0%	1.7%	4.3%	4.8%	0	0.5%
30	1999	S & N (Retail)	Greenalls Retail	0	1	0	0.8	23.8%	24.3%	23.5%	13.3%	11.0%	3.2%	2.2%	4.8%	0	0.5%
31	2000	Interbrew	Whitbread Beer	0	1	0	1.4	14.1%	5.1%	20.8%	18.1%	16.8%	0.0%	14.0%	28.0%	0	1.6%
32	2000	Scottish & Newcastle	Danone Brewing	0	1	0	0.7	8.7%	10.6%	23.0%	22.2%	35.4%	0.0%	40.0%	40.0%	0	-1.0%
33	2000	Interbrew	Bass Brewers	1	0	0	1.6	14.1%	8.2%	20.8%	18.1%	15.8%	9.5%	23.0%	28.0%	1	1.6%
34	2001	Diageo (US)	Seagram Spirits	1	1	0	5.9	30.3%	14.2%	37.2%	25.9%	16.1%	20.0%	12.0%	20.0%	1	-2.0%
35	2001	Diageo (Europe)	Seagram Spirits	0	1	0	1.5	13.9%	14.2%	37.2%	25.9%	16.1%	12.0%	2.0%	14.0%	0	-3.8%
36	2002	Scottish & Newcastle	Hartwall/BBH	0	1	0	2.6	8.8%	14.1%	39.3%	25.5%	10.3%	0.0%	45.0%	45.0%	0	-1.0%
37	2003	Scottish & Newcastle	Centralcer	0	1	0	3.7	9.4%	18.8%	31.7%	28.4%	7.8%	0.0%	39.0%	55.0%	0	2.6%
38	2003	Scottish & Newcastle	HP Bulmer	0	1	0	1.9	9.4%	5.0%	31.7%	28.4%	16.6%	0.0%	66.0%	66.0%	0	0.6%
39	2005	Pernod Ricard (US)	Allied Domecq	0	1	0	0.8	22.7%	25.4%	23.7%	23.7%	19.4%	7.5%	6.0%	25.0%	0	-0.7%
40	2005	Pernod Ricard (EU)	Allied Domecq	0	1	0	0.5	20.8%	13.0%	23.7%	23.7%	19.4%	14.0%	9.0%	14.0%	0	-6.1%

4.3. Independent variables

4.3.1. Dominance and market price variables

Market shares

There are four separate variables that fall into this category:

i. Bidder % Market: Acquiring firm percentage share of an economic market. This is one that the merging firms and industry both recognise as a discrete market. For example, in the Scottish & Newcastle acquisition of Courage it would be UK beer sales. In the case of Hiram Walker's proposed acquisition of Highland Distilleries it would be control of malt distilleries (whisky fillings).

ii. Target % Market: The same as above for the target's market share prior to the merger.

iii. Market Leader %: The market share of the industry leader (the bidder, target or another firm) at the time of the merger.

iv. PM Dominance: A categorical variable, taking a Yes = 1, or No = 0 value depending on whether post merger the firm has a 25% share or more of what would be defined (or was defined in the case of an official investigation) of an anti-trust 'relevant market'. An example of a 'relevant market' was vermouth in Greece in Grand Met's acquisition of Cinzano.

The method that the regulatory authorities have used for calculating market share has changed several times over the period covered by this study. This reflects the evolution of policy, the quantity and type of data that is available and the increasing ability to handle and manipulate data and information using computers. In the very early UK beer inquiries, total share of beer production and sales tended to be the extent of the market analysis. In the latter part of the 1980s the MMC moved to differentiating between sales to the on-trade and off-trade against the backdrop of the rapid demise of pub beer consumption.

By the mid 1990s the 'relevant market' was divided into share of ale and lager, in recognition of the fact that lager had replaced ale as the drink of choice. By the time of Interbrew's proposed acquisition of Bass Brewers in 2000, in common with the trends in the US HHIs were calculated on a national and television region basis and brand portfolios were analysed in depth, with shares of more narrowly defined categories derived, for example, premium and standard lager, and national and international brands.

In the spirits industry, the increased scale and scope of acquisitions has led to joint and/or simultaneous investigation by both the US and EC authorities. The investigation into the 2001 acquisition by Diageo and Pernod Ricard of Seagram's spirits operation was hailed as a triumph of cross-border co-operation. Yet the coordinated approach had to be sufficiently flexible to accommodate US-style economic analysis that does not

recognise 'portfolio effects' with European analysis that does (at least prior to the recent ECJ and CFI appeal decisions in Tetra Laval and GE/Honeywell, discussed above).

As far as the FTC is concerned spirits categories are pre-set and recognised by consumers, with brands sitting neatly within category definitions as narrow as premium rum or deluxe Scotch. In most cases this defines the market for anti-trust purposes around no more than two or three brands. In the Diageo/Seagram merger, the FTC was concerned specifically with a potential duopoly in rum between Bacardi and Diageo post-merger. Specifically, as it has elucidated recently in *Commentary on the Horizontal Merger Guidelines*, [2006]: "*Although a smaller rival before the merger, Diageo's Malibu imposed a significant competitive constraint on Seagram's and Bacardi*".

Conversely the FTC takes a much looser stance on defining the geographic market as the whole of the US, notwithstanding the fact that there is state-level regulation of wholesaling and retailing of alcohol that acts as a barrier to the flow of products across state boundaries. In the Diageo/Seagram acquisition the EC concluded that where a system akin to the US 'Control States' exists such as that in some Scandinavia countries it creates significant supply and pricing inertia that cannot be eroded by legitimate paralleling. The EC has sought remedies from the parties accordingly.

Following the merger of Grand Met and Guinness in 1997, the subsequent large-scale spirits mergers have come with ready-made remedies, carving up the portfolios to head off criticism of too many brands or too much perceived market share in any part of the

portfolio. In the US this has had to accommodate very narrow and somewhat illogical (to the industry and its consumers) category definitions, whereas in Europe the key has been to concede distribution in certain countries by granting a third party competitor distribution rights over one or more brands. The precedent having been set in Diageo and Pernod Ricard's joint bid for Seagram (with prior learning from the 1997 merger that formed Diageo), this structure has now been copied successfully by Pernod Ricard with partner with Fortune Brands in its cleared bid for Allied Domecq.

Table 4.5 summarises all market share information that was collected from CC, FTC and EC investigation reports for every merger and acquisition. Data was also taken from the two anti-trust investigations into the UK beer industry (in 1969 and 1989). In addition, the author relied on data that had been supplied either directly from the firms or from trade data and sources at the time and that was then reproduced in commercial research documents that are listed in the Bibliography.

Market price

There is one variable in this category:

i. Real Prices: The real (inflation adjusted) percentage change in price of the product in the year prior to the announcement of the acquisition. This therefore adjusted for the level of retail price inflation in the country of the acquisition.

Table 4.5. Relevant market analysis

Case	Bidder	Target	Market	Bidder %	Target %	Leading Competitors (Comments)
1	Unilever	Allied Breweries	UK Beer	0	15.5%	18.1% (Bass)
2	Grand Met	Truman	UK Beer	0	<5%	18.1% (Bass)
3	Watney Mann	IDV	UK Spirits	0	<5%	11% (Bells). Scotch 50% UK market, vodka 10%.
4	Grand Met	Watney Mann IDV	UK Beer	<5%	9.4%	18.1% (Bass)
			UK Pubs	<1%	8.7%	12% (Bass); 11% (Allied)
5	Hiram Walker	Highland Distilleries	Malt Distilleries	6.8%	4.3%	38.5% (DCL)
6	Scottish & Newcastle	JW Cameron	UK Beer	9.0%	<1%	22% (Bass)
			NE Pubs	19.0%	6.0%	Bidder
7	Guinness	Arthur Bell	UK Scotch	0	22.0%	15% Teachers (Allied); 13% Haig (DCL); 7% Grouse (Gloag)
8	Scottish & Newcastle	Matthew Brown	UK Beer	9.0%	<1%	22% (Bass)
			NW & Cumbria Pubs	17.4%	31.7%	Target
9	Elders IXL (UK)	Allied Lyons	UK Beer	0.0%	13.0%	22% (Bass)
			UK Pubs	0.0%	8.4%	9.2% (Bass)
10	Allied Lyons	Hiram Walker	US/Canada Spirits (branded	<5%	~10%	15% (Seagram)
11	Elders IXL (UK)	Courage	UK Beer	0.0%	9.0%	22% (Bass)
12	Guinness	Distillers	UK Scotch	22.0%	18.0%	18% Allied (15% Teachers).
13	Scottish & Newcastle	Home Brewery	UK Beer	10.0%	<1%	22% (Bass)
			East Midlands Pubs	0.0%	7.8%	10.3% (Bass)
14	Grand Met	Heublein	US Spirits (branded)	~5%	~10%	15% (Seagram)
15	Grand Met	Irish Distillers	Irish whiskey/Ireland	0	>50%	40% (Cantrell & Cochrane)
16	Allied Lyons	Whitbread Spirits	UK Spirits	~7.5%	~5%	20% (UD) - 40% of gin plus 25% of Scotch
17	Elders IXL (UK)	Scottish & Newcastle	UK Beer	10.0%	11.0%	22% (Bass). NewCo 39% NE beer, 21% NE pubs
			UK Pubs	6.2%	2.8%	9.1% (Bass)
18	Courage	Grand Met Brewing	UK Beer	9.0%	12.0%	22% (Bass)
			UK Pubs	6.4%	6.1%	NewCo 9.8% following remedies; 9.1% (Bass)
			PSDs >25%	5.6%	6.5%	NewCo 3.5% following remedies
19	Allied Lyons Brewing	Carlsberg (UK)	UK Lager	13.0%	8.0%	NewCo 18% at Courage contract end. 24% (Bass); 22% (Courage)
			UK Pubs	6.4%	0%	9.8% IEL plus GMR
			PSDs >25%	5.4%	0.0%	NewCo 3.6% following remedies
20	Grand Met	Cinzano	EU Vermouth	0%	10 - 20%	70% (Martini). PR owned Cinzano France. IDV ended Martini Greece
21	Scottish & Newcastle	Grand Met Retail	UK Pubs	2.7%	2.0%	4.75% (Bass). S&N freed 748 houses from tie following acquisition
22	Allied Lyons	Pedro Domecq	Spain Spirits	~7.5%	~20%	13%(PR); 13% (IDV). NewCo 47% whisky category (30% total Spain spirits)
			Mexico Spirits	<5%	40.0%	50% Bacardi
			Jerez Sherry	0%	20 - 50%	NewCo 30% (UK), 58% (Ireland); AL previously distributer for PD
23	Scottish & Newcastle	Courage	UK Beer	11.0%	19.0%	28% (Bidder) after remedies
24	Highland Distillers	Macallan-Glenlivet	Branded Scotch	4.1%	0.4%	Assumes 61m cases branded Scotch sales
			Single Malts	3.3%	6.7%	27% Glenfiddich (Grants)
25	Bass	Carlsberg Tetley	UK Beer	23.0%	14.0%	28% (ScotCo)
			On-Trade Lager	25.0%	16.0%	15% NewCo standard lager; 9.1% (ScotCo). 50% NewCo top 20 beers
			UK Pubs	5.2%	4.8%	5.1% (GPC - Nomura)
28a (US)	Grand Met	Guinness	US Branded Spirits	15.0%	10.0%	20% (Bidder) ex Dewars/Bombay. 12% (Seagram); 11% (JBB)
			Premium Scotch	24.0%	68.0%	Divest Dewars 45% market to Bacardi
			Premium Gin	15.0%	58.0%	Divest Bombay 36% to Bacardi
28b (Europe)	Grand Met	Guinness	European Branded Spirits	5-10%	5-10%	12% (Bidder). 14% (PR); 9% (AD)
			Scotch National Markets	10-20%	10-50%	40-50% whiskey Greece, Spain, Belgium. Divest Dewars & Ainslie (10%). Divest in Ireland
29	Whitbread	Allied Retail	UK Pubs	4.3%	4.3%	4.75% (Bass). Grand Pub Company (Nomura) 5%
			PSDs >25%	10.0%	7.3%	7.4% (Bass), 1986 data. Post merger 40.5% (SE) and 29.7% (WM)
30	Scottish & Newcastle	Greenalls Retail	UK Pubs	3.2%	2.2%	4.75% (Bass). Grand Pub Company (Nomura) 5%
			PSDs >25%	6.5%	2.0%	Post merger 20% (NW)
31	Interbrew	Whitbread Beer	UK Beer	0.0%	14.0%	28% ScotCo
32	Interbrew	Bass Brewers	UK Beer	14.0%	23.0%	32.4% (Bidder) ex Heineken licence
			Standard Lager	2.0%	34.5%	21.1% Fosters (ScotCo), 10.5% Carlsberg
			Premium Lager	27.5%	9.7%	12% Budweiser; 9.5% 1664 (ScotCo)
33	Scottish & Newcastle	Danone Brewing	France Beer	0.0%	40.0%	36% (Heineken)
			Belgium Beer	0.0%	14.0%	60% (Interbrew)
35a (US)	Diageo	Seagram Spirits	US Branded Spirits	~20%	~12%	25% (Bidder) ex brands transferred to PR
			Premiun Rum	8.0%	33.0%	54% (Bacardi). Order to divest Malibu 8% . Sold to AD
35b (Europe)	Diageo	Seagram Spirits	European Branded Spirits	12.0%	2.0%	14% PR; 9% AD. 'Significant portfolio effects' in Iceland, Spain , UK
36	Scottish & Newcastle	Hartwall	Finland Beer	0.0%	45.0%	35% Sinebrychoff (Carlsberg)
			Russia and Baltics	0.0%	22-42%	Target no 1 in Baltics, Russia and Ukraine
37	Scottish & Newcastle	Centralcer	Portugal Beer	0.0%	40.0%	54% Unicer (Carlsberg shareholder)
38	Scottish & Newcastle	HP Bulmer	UK Cider Market	0.0%	66.0%	30% (Matthew Clark). Bulmer's Strongbow 42% market share.
39a (US)	Pernod Ricard	Allied Domecq	US Spirits (branded)	10.0%	6.0%	25% Diageo; 11% JBB
39b (Europe)	Pernod Ricard	Allied Domecq	European Spirits (branded)	14.0%	9.0%	Following divestment to Fortune (Larios, Courvoisier)

Gaining accurate and consistent price data is by no means an easy task. Of all of the variables used in this analysis, a researcher would develop reluctantly an argument based solely or primarily on it. Original evidence is almost impossible to verify, not least because of the impact of retrospective discounting that is a routine feature of consumer goods industries. There is secrecy in a firm's pricing policy. It does not account for structural shifts in quality, including differences in alcohol content that have been a feature of the beer industry. This is more the shame because it is such a crucial variable for competition authorities to understand fully and from which to derive decisions about market power

Generally the CC has considered the impact of a brewing merger on retail prices only. In the UK brewing industry prior to the dismantling of the vertical tie there was limited difference between the change in wholesale and retail beer prices. This is clearly no longer the case with the emergence of independent retail pub chains that buy centrally and then supply their own tied tenants. In addition the structural decline of the pub trade relative to off trade sales has seen the increasing importance of the major supermarket groups in forcing down wholesale prices.

It is difficult to access accurate retail and wholesale prices that is consistent over time for both beer and spirits. The many complications that distort prices include the practice of granting retrospective discounts, the tendency to quote 'average' price that reflects a combination of genuine price and changes in mix (that is, it is not a 'like-for-like' comparison), the impact of excise taxes that distorts cross-border figures (some pricing

is net of tax while some is inclusive, depending on the buyer, the type of product and the location). There are organisations (International Wine & Spirits Record, Nielsen) that compile data directly from the firms and markets themselves, and on a brand-by-brand basis, but the cost of acquiring this is prohibitively expensive and often the information is restricted to industry participants.

On the basis of documents that the author could access from the Scotch Whisky Association, the British Beer and Pub Association and market research reports from firms such as Euromonitor that are held by The British Library in London on a read-only basis, various price series were compiled for beer and spirits that have been used as 'estimates' of the pricing environment at the time of each investigation. The volume and value of exports of Scotch is presented in the annual statistics report from the Scotch Whisky Association and summarised in Table 4.6. This is wholesale and net of duty data, and has been used as a proxy for international spirits prices where market-specific data was not available. It is a crude estimate in that value does not distinguish between price and mix.

UK wholesale beer, wines and spirits prices: this data has been used as the price base in UK only mergers and acquisitions. The information is supplied in the annual British Beer and Pub Association statistical handbook and summarised in Table 4.7. and Table 4.8.. US spirits and European beer, wines and spirits: some limited data was available for the late 1990s to date from the various market research reports referred to previously.

Table 4.6. Exports of Scotch by volume and value

Year	Volume (m litres pure alcohol)	Value (£m)	Average Price (£m)	% Price Change	All Items RPI %	Real Price Change %
1964	90.9	92.3	1.02			
1965	102.9	107.6	1.05	2.9	5.0	-2.1
1966	107.9	120.4	1.12	6.7	4.1	2.7
1967	112.0	122.4	1.09	-2.0	2.6	-4.6
1968	153.5	176.6	1.15	5.2	4.4	0.8
1969	136.0	167.5	1.23	7.0	5.5	1.6
1970	160.9	194.1	1.21	-2.0	6.3	-8.4
1971	182.5	226.9	1.24	3.1	9.7	-6.6
1972	178.4	227.9	1.28	2.7	6.9	-4.2
1973	203.6	260.0	1.28	0.0	9.2	-9.2
1974	227.3	326.4	1.44	12.4	16.0	-3.6
1975	234.3	366.6	1.56	9.0	24.4	-15.4
1976	238.3	436.7	1.83	17.1	16.4	0.7
1977	243.6	512.6	2.10	14.8	15.8	-1.0
1978	274.1	661.2	2.41	14.7	8.5	6.2
1979	262.4	707.4	2.70	11.7	13.4	-1.7
1980	249.9	746.6	2.99	10.8	17.8	-7.0
1981	244.2	784.8	3.21	7.6	12.0	-4.4
1982	251.3	871.6	3.47	8.0	8.6	-0.6
1983	227.8	858.1	3.77	8.6	4.7	3.9
1984	231.3	931.4	4.03	6.9	4.9	2.0
1985	225.9	993.9	4.40	9.3	6.1	3.2
1986	236.2	1070.1	4.53	3.0	3.4	-0.4
1987	240.2	1135.5	4.73	4.3	4.2	0.2
1988	246.0	1288.8	5.24	10.8	4.9	5.9
1989	242.5	1469.5	6.06	15.7	7.8	7.9
1990	238.3	1712.5	7.19	18.6	9.5	9.1
1991	227.7	1833.9	8.05	12.1	5.9	6.2
1992	231.3	1958.9	8.47	5.2	3.7	1.4
1993	256.9	2093.9	8.15	-3.8	1.6	-5.4
1994	252.2	2191.3	8.69	6.6	2.4	4.2
1995	262.1	2277.1	8.69	0.0	3.5	-3.5
1996	256.8	2278.1	8.87	2.1	2.4	-0.3
1997	276.9	2394.3	8.65	-2.5	3.1	-5.7
1998	254.0	2030.4	7.99	-7.6	3.4	-11.0
1999	266.6	2093.7	7.85	-1.8	1.5	-3.3
2000	277.1	2156.7	7.78	-0.9	3.0	-3.8
2001	283.6	2295.1	8.09	4.0	1.8	2.2
2002	264.2	2285.0	8.65	6.9	1.7	5.2
2003	274.6	2375.0	8.65	0.0	2.9	-2.9
2004	266.9	2236.7	8.38	-3.1	3.0	-6.1

Source: SWA

Table 4.7. UK beer prices

Year	Beer PPI	% change	Beer RPI	% change	All Items RPI	% change	W/sale Beer %	Retail Beer %
1964			11.6		14.1			
1965			12.6	8.6%	14.8	5.0%		3.7%
1966			13.1	4.0%	15.4	4.1%		-0.1%
1967			13.5	3.1%	15.8	2.6%		0.5%
1968			13.6	0.7%	16.5	4.4%		-3.7%
1969			14.7	8.1%	17.4	5.5%		2.6%
1970			15.8	7.5%	18.5	6.3%		1.2%
1971			17.1	8.2%	20.3	9.7%		-1.5%
1972			18.0	5.3%	21.7	6.9%		-1.6%
1973			18.6	3.3%	23.7	9.2%		-5.9%
1974			20.8	11.8%	27.5	16.0%		-4.2%
1975			25.8	24.0%	34.2	24.4%		-0.3%
1976			30.8	19.4%	39.8	16.4%		3.0%
1977			36.4	18.2%	46.1	15.8%		2.4%
1978			39.5	8.5%	50.0	8.5%		0.1%
1979			44.1	11.6%	56.7	13.4%		-1.8%
1980			54.4	23.4%	66.8	17.8%		5.5%
1981	37.1		64.7	18.9%	74.8	12.0%		7.0%
1982	41.8	12.7%	72.9	12.7%	81.2	8.6%	4.1%	4.1%
1983	44.8	7.2%	79.1	8.5%	85.0	4.7%	2.5%	3.8%
1984	48.5	8.3%	85.4	8.0%	89.2	4.9%	3.3%	3.0%
1985	52.5	8.2%	92.0	7.7%	94.6	6.1%	2.2%	1.7%
1986	55.1	5.0%	97.3	5.8%	97.8	3.4%	1.6%	2.4%
1987	57.0	3.4%	101.8	4.6%	101.9	4.2%	-0.7%	0.4%
1988	59.8	4.9%	108.0	6.1%	106.9	4.9%	0.0%	1.2%
1989	62.8	5.0%	114.9	6.4%	115.2	7.8%	-2.7%	-1.4%
1990	67.8	8.0%	126.4	10.0%	126.1	9.5%	-1.5%	0.5%
1991	74.5	9.9%	142.6	12.8%	133.5	5.9%	4.0%	6.9%
1992	79.3	6.4%	152.2	6.7%	138.5	3.7%	2.7%	3.0%
1993	83.5	5.3%	160.1	5.2%	140.7	1.6%	3.7%	3.6%
1994	88.6	6.1%	165.0	3.1%	144.1	2.4%	3.7%	0.6%
1995	92.7	4.6%	171.9	4.2%	149.1	3.5%	1.2%	0.7%
1996	91.4	-1.4%	177.9	3.5%	152.7	2.4%	-3.8%	1.1%
1997	93.5	2.3%	184.4	3.7%	157.5	3.1%	-0.8%	0.5%
1998	97.0	3.7%	191.7	4.0%	162.9	3.4%	0.3%	0.5%
1999	99.0	2.1%	197.8	3.2%	165.4	1.5%	0.5%	1.6%
2000	100.0	1.0%	201.9	2.1%	170.3	3.0%	-2.0%	-0.9%
2001	101.8	1.8%	206.6	2.3%	173.3	1.8%	0.0%	0.6%
2002	103.6	1.8%	211.3	2.3%	176.2	1.7%	0.1%	0.6%
2003	105.2	1.5%	215.9	2.2%	181.3	2.9%	-1.4%	-0.7%
2004	108.8	3.4%	220.3	2.0%	186.7	3.0%	0.4%	-0.9%

Table 4.8. UK wines and spirits prices

Year	W & S RPI	% change	All Items RPI	% change	W/sale W&S %	Retail W & S %
1964	22.2		14.1			
1965	23.9	7.7%	14.8	5.0%	-2.1%	2.7%
1966	24.9	4.2%	15.4	4.1%	2.7%	0.1%
1967	25.5	2.4%	15.8	2.6%	-4.6%	-0.2%
1968	26.1	2.4%	16.5	4.4%	0.8%	-2.1%
1969	27.8	6.5%	17.4	5.5%	1.6%	1.1%
1970	28.1	1.1%	18.5	6.3%	-8.4%	-5.2%
1971	28.8	2.5%	20.3	9.7%	-6.6%	-7.2%
1972	29.3	1.7%	21.7	6.9%	-4.2%	-5.2%
1973	30.3	3.4%	23.7	9.2%	-9.2%	-5.8%
1974	33.0	8.9%	27.5	16.0%	-3.6%	-7.1%
1975	40.4	22.4%	34.2	24.4%	-15.4%	-1.9%
1976	46.8	15.8%	39.8	16.4%	0.7%	-0.5%
1977	51.8	10.7%	46.1	15.8%	-1.0%	-5.1%
1978	54.0	4.2%	50.0	8.5%	6.2%	-4.2%
1979	59.1	9.4%	56.7	13.4%	-1.7%	-4.0%
1980	68.4	15.7%	66.8	17.8%	-7.0%	-2.1%
1981	78.2	14.3%	74.8	12.0%	-4.4%	2.4%
1982	85.0	8.7%	81.2	8.6%	-0.6%	0.1%
1983	90.0	5.9%	85.0	4.7%	3.9%	1.2%
1984	92.2	2.4%	89.2	4.9%	2.0%	-2.5%
1985	95.7	3.8%	94.6	6.1%	3.2%	-2.3%
1986	98.3	2.7%	97.8	3.4%	-0.4%	-0.7%
1987	101.6	3.4%	101.9	4.2%	0.2%	-0.8%
1988	105.3	3.6%	106.9	4.9%	5.9%	-1.3%
1989	110.0	4.5%	115.2	7.8%	7.9%	-3.3%
1990	120.1	9.2%	126.1	9.5%	9.1%	-0.3%
1991	134.3	11.8%	133.5	5.9%	6.2%	6.0%
1992	142.3	6.0%	138.5	3.7%	1.4%	2.2%
1993	147.2	3.4%	140.7	1.6%	-5.4%	1.9%
1994	149.6	1.6%	144.1	2.4%	4.2%	-0.8%
1995	154.3	3.1%	149.1	3.5%	-3.5%	-0.3%
1996	157.3	1.9%	152.7	2.4%	-0.3%	-0.5%
1997	159.4	1.3%	157.5	3.1%	-5.7%	-1.8%
1998	163.4	2.5%	162.9	3.4%	-11.0%	-0.9%
1999	166.1	1.7%	165.4	1.5%	-3.3%	0.1%
2000	167.6	0.9%	170.3	3.0%	-3.8%	-2.1%
2001	170.6	1.8%	173.3	1.8%	2.2%	0.0%
2002	174.5	2.3%	176.2	1.7%		0.6%
2003	178.0	2.0%	181.3	2.9%		-0.9%
2004	181.3	1.9%	186.7	3.0%		-1.1%

4.3.2. Political and structural variables

There are four variables in this category, three of which are political and one structural.

i. Bidder Donations: this is a categorical variable with Yes = 1, No = 0 if the bidder was making donations to a UK political party.

ii. Target Donations: as above but where the target was making such donations.

iii. Investigator: this is a continuous variable that represents the number of years that the investigating commissioner had been in post at the time he/she either cleared the merger or decided to refer it for further investigation.

iv. Bid Type: this is a categorical variable with Yes = 1, No = 0 if the merger was a hostile approach from the bidder to the target.

Political Donations

The alcoholic beverages industry has always had a political voice as a function of its role as a revenue generator, particularly through exports of Scotch whisky and a major employer. Previous merger cases have emphasised these points in attempting to stave off overseas suitors (Highland Distilleries defence against Hiram Walker, Allied-Lyons and Scottish & Newcastle against Elders IXL). Where regional brewers have been under attack from larger players, for example, in the case of Matthew Brown versus Scottish & Newcastle the operation of breweries and distribution depots in working-class areas –

and the potential threat of unemployment in a post-merger rationalization programme – has frequently been relied on as a blocking mechanism.

It seems logical to include a variable that captures political donations for bidders and targets for UK merger cases. There is no evidence that donations to political parties were given specifically to influence a particular competition enquiry. Indeed donations tended to occur over a long period of time as part of a continuous lobbying campaign that gave the industry an opportunity to influence the political landscape and give it a voice during periods of significant merger and acquisition activity. During the 1990s there was a backlash against UK political donations and many previous Conservative party supporters stopped making them. This occurred before the election of a Labour government in 1997. Historically, 'The Beerage' has been inherently Conservative in its allegiances. There are no examples of donations to Labour-affiliated organisations. Table 4.9 has been compiled from all UK firms that feature as either bidders or targets in the discriminant analysis that donated to UK political parties in the period 1969 - 2005.

Ideally a similar variable would be included that tracked political donations in the US and Europe. However, disclosure requirements remain such that although there is more than a suspicion of the importance of political affiliations, the data and information are not available. Pressure is mounting for disclosure in the US. UK firms are increasingly seeking shareholder approval for still unspecified political donations in Europe and other jurisdictions.

Table 4.9. Political donations by firms

Firm	Year	Party/Organisation	Amount £k
Allied Breweries/Allied Domecq	1968	South West Industrial Council	1.1
	1969	South West Industrial Council	1.1
	1970	South West Industrial Council	1.1
	1971	South West Industrial Council	1.6
	1981	South West Industrial Council	1.5
	1981	British United Industrialists	70.0
	1988	Conservative Party	95.0
	1988	South West Industrial Council	2.0
	1988	British United Industrialists	5.0
	1989	Conservative Party	95.0
	1989	South West Industrial Council	2.0
	1989	British United Industrialists	5.0
	1991	Conservative Party	110.0
	1994	No Donations	
	1995	No Donations	
Watney Mann	1972	British United Industrialists	4.0
		Economic League	0.6
		Halifax Conservative Association	0.1
Highland Distillers	1984	Conservative & Unionist Party	1.3
	1990	Conservative & Unionist Party	4.5
	1992	Conservative & Unionist Party	7.0
Bass	1969	Party not specified	0.1
	1973 -	No Donations	
Guinness	1974	Party not specified	
	1983-91	No Donations	
Scottish & Newcastle	1969	Conservative Party & Associations	8.0
	1981	Conservative Party & Associations	3.0
	1984	Conservative Party & Associations	10.0
	1992	Conservative Party & Associations	70.0
	1994	Conservative Party & Associations	50.0
	1997	Conservative Party & Associations	50.0
Whitbread	1969	Conservative Associations	20.8
	1971	Conservative Associations	0.5
	1971	Economic League	1.5
	1973	Conservative Associations	0.1
	1975	Conservative Associations	1.8
	1983	Economic League	5.4
	1984	Economic League	2.6
	1986	No Donations	
	1987	No Donations	
	1988	Party not specified	76.5
	1989	Conservatives	30.0
	1990	Conservatives	15.2
	1998-	No Donations	
Arthur Bell	1984	No Donations	
Distillers	1984	Conservatives	50.0
Greenalls	1994-99	North West Industrial Council	2.5
Grand Met	1969 -	No Known Donations	
Invergordon Distillers	1991	No Donations	
JW Cameron/Ellerman Lines	1981	No Known Donations	
Home Brewery	1986	No Known Donations	
Courage Group/Imperial Group	1982	No Known Donations	
IDV	1972	Conservative Associations	10.0
Truman Hanbury Buxton	1971	Conservative & Unionist Association	0.2
Bulmers	1998-2002	No Known Donations	
Unilever	1969	No Known Donations	

It has always been the case that UK donations have to be disclosed on the face of the annual report and accounts in line with donations to charities. It is not mandatory for UK firms to disclose payments to overseas political entities, including lobby firms in the US and Europe. However, major UK firms tend to make a general disclosure that they make such payments. Whilst donations to UK political parties are now less common the incidence of donations overseas has been rising.

Investigator

At the date of the announcement of each merger the number of years that the chief decision-maker had been in post might have an impact on whether the bid was referred or otherwise. It would be reasonable to expect that a person new to the job, seeing a complex and large deal would be more inclined to refer. However a countervailing force to clear early exists if a merger looked uncomplicated, more so if there were many other mergers pending in other sectors that might warrant more attention. While data is available that would show the workload of the authorities at every point over the duration of the dataset, collecting and collating the data, in particular for Europe and the US would be onerous. However, hostile bids have tended to be more prevalent during merger booms, and in this sense the bid structure variable should capture the essence of how busy the various regulators were at the time.

The names, political affiliations and dates of office have been compiled from MMC/CC, FTC and EC websites for all key investigators that were responsible for overseeing the

mergers and acquisitions of the major UK alcoholic beverages firms in the 1969 - 2005 period, are shown in Table 4.10. Exact dates and political affiliations are only available for UK and US investigators. The data was used to construct a variable of number of years in the post.

Table 4.10. Key investigator's jurisdiction

Year	Appointed	Name	Party
UK (Secretary of State for Trade and Industry)			
1964	October	Douglas Jay	Labour
1967	August	Anthony Crossland	Labour
1969	October	Roy Mason	Labour
1970	June	Michael Noble	Conservative
1970	October	John Davies	Conservative
1972	November	Peter Walker	Conservative
1974	March	Peter Shore	Labour
1976	April	Edmund Dell	Labour
1978	November	John Smith	Labour
1979	May	John Nott	Conservative
1981	January	John Biffen	Conservative
1982	April	Lord Cockfield	Conservative
1983	June	Cecil Parkinson	Conservative
1983	October	Norman Tebbitt	Conservative
1985	September	Leon Brittan	Conservative
1986	January	Paul Channon	Conservative
1987	June	Lord Young	Conservative
1989	July	Nicholas Ridley	Conservative
1990	July	Peter Lilley	Conservative
1992	April	Michael Heseltine	Conservative
1995	July	Ian Lang	Conservative
1997	May	Margaret Beckett	Labour
1998	July	Peter Mandelson	Labour
1998	December	Stephen Byers	Labour
2001	June	Patricia Hewitt	Labour
2005	May	Alan Johnson	Labour
US (Chairman of Federal Trade Commission)			
1961	March	Dixon	Democrat
1970	January	Weinberger	Republican
1970	August	MacIntyre	Democrat
1970	September	Kirkpatrick	Republican
1973	February	Engman	Republican
1976	January	Dixon	Democrat
1976	March	Collier	Republican
1977	April	Pertschuk	Democrat
1981	March	Clanton	Republican
1981	September	Miller	Republican
1985	October	Calvani	Republican
1986	April	Oliver	Republican
1989	August	Steiger	Republican
1995	April	Pitofsky	Democrat
2001	June	Muris	Republican
2004	August	Majoras	Republican
EU (European Competition Commissioner)			
1967	N/A	Maan Sassen	
1971	N/A	Albert Borschette	
1976	N/A	Raymond Vouel	
1981	N/A	Frans Andriessen	
1985	January	Peter Sutherland	
1989	January	Leon Brittan	
1995	January	Karel van Miert	
1999	September	Mario Monti	
2004	November	Neelie Kroes	

Bid structure

It is clear from experience (and from viewing the cases) that hostile bids attract much attention in the media, and might therefore be expected to influence the regulatory process.

Hostile bids would appear to be more prevalent during merger booms, and this would be borne out by the bunching of hostile bids in the UK alcoholic beverages sector in the 1980s. Hostile bids have all but disappeared in this industry. This is due to a combination of scale (the industry having already restructured considerably) and ownership structure. However, there may also be an implicit reaction to previous incidence of referrals of hostile as opposed to agreed bids.

Conceptually, firms might anticipate that an agreed bid will be more likely to clear than a hostile one. If two parties have negotiated a merger then they will have addressed potential regulatory problems as part of the process. Conversely, a hostile bid suggests opportunism, with the bidder expecting to claw back the price premium paid to the target shareholders by way of exploiting the enhanced market power in the form of higher prices to consumers. Regulators need to be wary of jumping to conclusions, however, in particular where 'cosy' agreements have been reached. A case could be made for giving more attention to agreed mergers with pre-formed regulatory arguments in place; this is one of the few occasions where it appears legitimate for competitors to 'co-operate' to produce a market solution.

4.3.3. Financial performance variables

There are five separate variables in this category:

i. Bidder Margin: The operating margin of the bidder (this may be a division if it is part of a larger group) in the last available financial year. It is defined as the operating profit percentage of gross turnover. Net (of duty) turnover is not available consistently across firms over the full period of the study consequently gross turnover is used in the model.

ii. Target Margin: As above for target firm or division.

iii. Bidder Gearing: This variable is the net financial debt of the bidder group as a percentage of its total capital (equity and debt) at the time of the merger

iv. Bidder Return: The operating returns of the bidder (this may be a division if it is part of a larger group) in the last available financial year. It is defined as the operating profit as a percentage of its total capital (equity and debt) at the time of the merger.

v. Target Return: As above for target firm or division.

A full definition of all financial ratios used in the discriminant and case study analysis is contained in Appendix 2.

Financial analysis is starting to feature in merger inquiries, in particular those undertaken by the CC. It can be a useful complement to the complex and often

theoretical approach of econometrics to identifying markets and what actually happens in real life firms and industries. Understanding the current and historic profile of operating returns for bidders, targets and their wider industries completes the picture and is as valid an indicator of the likely direction of prices in the post merger environment.

The use of financial analysis in anti-trust and merger inquiries is not without its critics as highlighted by Steele [2002] in the small business banking enquiry. Financial ratios taken in isolation can lead to unstable predictions. In blocking Interbrew's proposed acquisition of Bass Brewers, the CC relied heavily on comparisons of EBITDA (earnings before interest, tax, depreciation and amortization) in previous pan-European mergers. It concluded that a 'high' EBITDA multiple paid in conjunction with low cost savings projections signalled a likely future abuse of market power; hence the acquisition was blocked. However, to infer overpayment from this ratio alone is dangerous. EBITDA is not finance neutral, and therefore does not signal whether a firm has overpaid relative to its true cost of capital. In addition, firms tend to err on the side of caution in estimating the efficiency gains from a merger, due to sensitivity to the issue of job losses.

Several financial variables have been constructed. These ratios are all easy to compute from available firm data. A measure of operating cash flow would have been desirable and likely significant, however the raw data to compute such a ratio is not widely available. Many of the acquisitions have been between divisions of larger groups and it is impossible to derive a divisional cash flow without access to management accounts.

Again owing to the lack of divisional information the financial gearing of the bidder group only was prepared. It is the bidder's financial health that will determine ultimately whether the firm can proceed with the acquisition as planned. The financial health of the bidder was a feature in several UK investigations that took place during the 1980s merger wave. Moreover, merger guidelines in both the US and Europe require some assessment of the financial status of both bidder and target in considering the wider market implications of mergers.

4.4. Deriving 'The Model'

4.4.1. Estimation of discriminant function and predictive accuracy

The research objective of the discriminant analysis modelling carried out here is to identify only those very significant discriminating independent variables from the larger set of data that correspond to the factors that determine '*Referred*' or '*Not Referred*' in firm interactions with competition authorities. Unlike, for example, a credit scoring exercise, the purpose of the analysis presented in this chapter is **not** to produce a predictive model which would, say, allow us to assess the likely chances of any given firm succeeding in its interaction with the competition authorities before it launches a hostile bid.

With this research objective in mind, a stepwise estimation methodology was chosen, rather than a simultaneous estimation on the dataset. In stepwise estimation the single

best discriminating variable enters the discriminant function first. This is then paired with all the other variables, one at a time, to find the second variable that is best able to improve the discriminating power of the function in combination with the first variable. This is reflected in a reduction in the Wilk's Lambda statistic. SPSS continues the process, adding the third, fourth and so on variable until there is no further significant contribution to the discrimination between the groups.

Hair [2006] considers that the stepwise approach is better when there are a large number of independent variables. However, the solution becomes less stable as the ratio of sample size to starting number of variables falls. In such cases, validation is essential. In addition, running strict criteria for entry and exit of variables into a stepwise estimation is also recommended. SPSS sets automatically a 'conservative' F value for entry and exit of 3.84 (entry) and 2.71 (removal). An F value of 3.84 corresponds to a 'α significance' level of 0.05 (95% confidence interval)). The exit F value of 2.71 corresponds to a 'α significance' level of 0.10 (90% confidence interval).

A variable is entered into the model if its F value is greater than the entry value and removed if it is less than the removal value. Entry must be greater than removal and both values must be positive. Lowering the entry level allows more variables into the model. Conversely, increasing the removal level removes more variables from the model. Given the small sample size in this discriminant analysis model the conservative F values of 3.84 for entry and 2.71 for removal were retained so that a very small number of highly significant variables remained in the final model.

Having chosen the stepwise methodology the statistical significance of the discriminant function must be evaluated with reference to either the Mahalanobis D^2 (or alternatively Rao's V) ratio. The Mahalanobis D^2 procedure, chosen as an option in SPSS, is based on generalised squared distance in Euclidean space that adjusts for unequal variances. Cases with large Mahalanobis D^2 distance have extreme values on one or more of the independent variables and are therefore assigned to different groups, whereas smaller differences identify cases in the same group. In the stepwise estimation the variable that maximises the Mahalanobis D^2 between the two groups is entered, hence the ratio increases at each stage.

There are three ways to determine the relative importance of significant independent variables that define the discriminant function; Discriminant Weights, Discriminant Loadings (also known as Structure Correlations, and listed in SPSS as a Structure Matrix) and Partial F Values. Discriminant weights are the traditional approach to interpreting discriminant functions. They are the weight whose size relates to the discriminating power of that independent variable across the groups of the dependent variable. Independent variables with large discriminating power usually have large weights and those with little discriminatory power usually have small weights. The interpretation of discriminant weights is analogous to the interpretation of beta weights in regression analysis and is therefore subject to the same criticisms; they are influenced by multicollinearity and are subject to considerable instability.

Discriminant loadings are the simple linear correlations between each independent variable and the discriminant Z score for each discriminant function. Discriminant loadings reflect the variance that the independent variables share with the discriminant function. In this regard they can be interpreted like factor loadings in assessing the relative contribution of each independent variable to the discriminant function. They are the preferred evaluation tool in assessing the contribution of each significant variable because they are a standardised measure of importance (ranging from 0 to 1), are calculated for every variable whether or not used in the discriminant function and are unaffected by multicollinearity. As a rule-of-thumb loadings greater than 0.4, or less than -0.4, are considered substantive for interpretative purposes.

Finally, in using a stepwise estimation process, SPSS also lists F values. The larger the F value, the greater the discriminating power of the independent variable. In practice using F values for ranking purposes performs the same task as discriminant loadings, but in addition, F values indicate the associated level of significance of each variable.

Predictive Accuracy

The number of correctly classified cases, known as the Hit Ratio, is a measure of the efficacy of the discriminant model. It should be as close to 100% as possible that is all cases correctly assigned to the groups if the discriminant function contains variables that separate the groups well. At its lower bound, a rule-of-thumb suggests that for the discriminant function to be meaningful and useful for predictive purposes, the hit ratio

must be at least 25% greater than chance. In other words, if there was an equal prior probability of a case being assigned to one of two groups, the hit ratio has to be at least 25% higher than 50% to be significant.

Maximum Chance Criterion is the more conservative measure of predictive accuracy in the classification of cases. It is calculated from the percentage of cases in the largest group on the rationale that the best uninformed choice is to classify every observation into the largest group. It is used when the sole objective is to maximise the percentage correctly classified. It therefore generates the highest standard for comparison with the Hit Ratio. The Proportional Chance Criterion is usually recommended for unequal size groups and where the research objective is to identify correctly members of all groups. It is less conservative a measure than the maximum chance criterion. The average probability of classification is calculated adjusting for group sizes.

In the most conservative case, and to have the greatest degree of confidence that the discriminant function is classifying well, the percentage uplift on the maximum chance criterion for each group should be above 25%. This is on grounds that there is little benefit of a high overall hit ratio, based on the larger group if the smaller group cases are poorly classified.

4.4.2. Background assumptions

The variables must *a priori* satisfy four key statistical conditions in order to provide confidence that the output from discriminant analysis is both meaningful and statistically significant:

i. Normality of the independent variables;

ii. Linearity of the relationships among the independent variables;

iii. Equality of dispersion matrices (covariance) for dependent variable subgroups; and

iv. Lack of multicollinearity among the independent variables.

Each of these criteria can be tested in SPSS, and the summary of the statistical analysis carried out on the sample prior to carrying out the discriminant analysis is shown in Table 4.11.

Normality

Before assessing multivariate normality, the independent variables individually have to be shown to be normal. In the event that the independent variables are not normal, the multivariate normality condition will be broken. However, showing that the independent variables individually are normal does not a priori prove multivariate normality. Currently, it is not possible to test for multivariate normality in SPSS (for example, by

using Mardia's Statistic to assess skewness and kurtosis) although a histogram plot of the multivariate solution can give a graphical illustration.

In addition the common rule-of-thumb tests for normality of the variables – the assessment of skewness and kurtosis – are available. Skewness is the tilt in a distribution whereas kurtosis is the peakedness in a distribution. The degree of skewness should be within the +2 to -2 range when the data is normally distributed (some researchers use the stricter +1 to -1 condition), with positive implying a long right-hand tail and negative implying a long left-hand tail. For kurtosis the +2 to -2 range is held for normal distributions, although some researchers allow the less restrictive +3 to -3 range. Positive kurtosis signals too few cases in the tail of the distribution whereas negative kurtosis signals too many cases in the tail ('fat' tail).

From the background statistical analysis of the independent variables it is clear that several variables break the skewness and kurtosis normality constraints. Looking at the 'All Cases' dataset of 40 original cases, two variables, Bidder Margin and Bidder Gearing are particularly high on both measures. All other variables are either well within the range for both, or sufficiently close to be confident of normal distributions. Looking at the original data there is an obvious outlier in both Bidder Margin and Bidder Gearing that is Punch Taverns, the firm that won the bidding for Allied Domecq's UK retail estate in 1999. Eliminating this case from the analysis brings the skewness and kurtosis measure for both Bidder Margin and Bidder Gearing into the normal distribution range.

Table 4.11. Background statistical checks on variables

All Cases (40)							
Variable	Description	Mean	Variance	Std Deviation	ANOVA (sig)	Skewness	Kurtosis
Referred	Nonmetric (Yes = 1; No = 0)	0.400	0.246	0.496		0.424	-1.919
Transacted	Nonmetric (Yes = 1; No = 0)	0.780	0.179	0.423		-1.369	-0.135
Bid Type	Nonmetric (Hostile = 1; Agreed = 0)	0.230	0.179	0.423	0.291	1.369	-0.135
Investigator	Metric (Years)	1.578	1.611	1.269	0.807	1.777	3.467
Bidder Margin	Metric (%)	0.141	0.009	0.095	0.326	2.750	11.418
	ex Punch Taverns					*0.664*	*0.248*
Target Margin	Metric (%)	0.134	0.004	0.064	0.773	1.440	2.833
Bidder Gearing	Metric (%)	0.337	0.029	0.172	0.442	1.864	4.900
	ex Punch Taverns					*1.047*	*1.195*
Bidder Return	Metric (%)	0.186	0.005	0.071	0.444	0.157	-1.146
Target Return	Metric (%)	0.160	0.006	0.077	0.404	1.512	2.460
Bidder % Market	Metric (%)	0.062	0.005	0.072	0.087	0.929	-0.267
Target % Market	Metric (%)	0.153	0.021	0.146	0.346	1.829	3.273
Market Leader %	Metric (%)	0.243	0.023	0.153	0.819	1.421	2.067
PM Dominance	Nonmetric (Yes = 1; No = 0)	0.300	0.215	0.464	0.002	0.907	-1.242
Real Prices	Metric (%)	0.004	0.001	0.032	0.588	-0.030	0.509

UK Cases (26)							
Variable	Description	Mean	Variance	Std Deviation	ANOVA (sig)	Skewness	Kurtosis
Referred	Nonmetric (Yes = 1; No = 0)	0.460	0.258	0.508		0.164	-2.145
Transacted	Nonmetric (Yes = 1; No = 0)	0.690	0.222	0.471		-0.885	-1.325
Bid Type	Nonmetric (Hostile = 1; Agreed = 0)	0.310	0.222	0.471	0.803	0.885	-1.325
Investigator	Metric (Years)	1.158	0.415	0.644	0.737	0.897	1.755
Bidder Margin	Metric (%)	0.136	0.012	0.108	0.659	2.978	11.685
	ex Punch Taverns					*0.539*	*-0.161*
Target Margin	Metric (%)	0.123	0.004	0.065	0.714	2.037	5.682
	Ex Punch Taverns & Macallan-Glen					*1.037*	*1.455*
Bidder Gearing	Metric (%)	0.334	0.042	0.204	0.714	1.811	3.610
	ex Punch Taverns					*1.290*	*1.303*
Bidder Return	Metric (%)	0.150	0.002	0.049	0.659	0.671	0.878
Target Return	Metric (%)	0.152	0.006	0.079	0.336	1.882	3.866
Bidder % Market	Metric (%)	0.063	0.005	0.074	0.209	1.055	0.019
Target % Market	Metric (%)	0.128	0.017	0.132	0.642	2.859	10.467
	Ex Punch Taverns & HP Bulmer					*0.946*	*0.806*
Market Leader %	Metric (%)	0.215	0.016	0.126	0.635	1.603	5.519
	Ex Punch Taverns & HP Bulmer					*-0.329*	*0.224*
PM Dominance	Nonmetric (Yes = 1; No = 0)	0.230	0.185	0.430	0.038	1.358	-0.177
Real Prices	Metric (%)	0.010	0.001	0.030	0.549	-0.141	1.364
Bidder Donations (UK)	Nonmetric (Yes = 1; No = 0)	0.420	0.254	0.504	0.106	0.331	-2.055
Target Donations (UK)	Nonmetric (Yes = 1; No = 0)	0.420	0.254	0.504	0.954	0.331	-2.055

Similarly in the 'UK Only' dataset of 26 original cases, Punch Taverns causes non-normality in Bidder Margin and Bidder Gearing. This reflects the fact that having recently been formed from the spin-out of Bass's tenanted pub estate that was privately owned and debt-financed, its operating margin and level of gearing (debt as a percentage of total assets) was somewhat distorting. Other acquiring firms have had significant levels of gearing, most notably Elders IXL that bid unsuccessfully for both Allied-Lyons and Scottish & Newcastle in the 1980s (and which did form the basis for referral to the MCC), however, even then gearing did not exceed 70%. With regard to operating margins, carrying none of the normal overheads of a managed estate, tenanted pub companies, in particular those with attractive long-term supply contracts would typically boast margins (though not returns) in the 60 - 70% range.

The elimination of HP Bulmer, the cider producer that was 'rescued' by Scottish & Newcastle in 2003, reduces both skewness and kurtosis in Target % Market (share) and Market Leader % (share) to normal levels. HP Bulmer was an unusual merger partner in that it was the leader in the UK domestic cider market with 66% market share, the second player, Matthew Clark, accounting for the majority of the remaining 34% of the UK cider market. However, the researcher is loathe to eliminate this firm from the analysis because the lack of even an initial investigation by the OFT is in itself interesting, not so much for its huge share of a small and then declining category but the fact that, along with Matthew Clark, it was a major free-trade beer distributor, once viewed by the MMC (and CC) in the aftermath of the 'Beer Orders' as a 'protected species'.

Finally, the removal of Macallan-Glenlivet from the analysis brings skewness and kurtosis of Target Margin to the normal range. This firm was the subject of an agreed bid from Highland Distillers, not a major UK alcoholic beverages firm, but a major Scotch player by virtue of the strength of The Famous Grouse. Macallan was unique among the smaller independent whisky producers in that it had developed its own single malt brand in preference to selling fillings into the trade. Consequently it had very high margins, even by Scotch whisky industry standards. In 1980, when Hiram Walker made an aggressive bid for Highland Distillers, the bid was blocked following an investigation by the MMC primarily because of the importance of Highland in the fillings market. Interestingly Scotch observers might have been more concerned about the ownership of Macallan-Glenlivet. Although small its fillings are well sought after being a key ingredient in the two major blends, The Famous Grouse, and J&B Rare.

Linearity

Another key condition for discriminant analysis is that the independent variables are linear with respect to the dependent variable. An ANOVA table computed from the Linearity Test of Means in SPSS displays the F Value and its associated significance that indicates a deviation from linearity for the relationship between dependent and an independent variable. If the F Value significance is below a critical value – ordinarily taken as < .05 – there is significant nonlinearity.

Testing the independent variables in turn against the dependent variable, Referred/Not Referred suggests that only PM Dominance in both the 'All Cases' and 'UK Only Cases' models displays significant nonlinearity. The reading for Bidder % Market, at 0.087, albeit above the critical level, is low with respect to the level for all other independent variables.

Covariance

The relevant statistical test for the equality of the covariance (dispersion) matrices of the independent variables across the groups of the dependent variable is known as Box's M. When the M is not significant, the researcher accepts the null hypothesis that the groups do not differ. The test is highly sensitive to group size and departures from multivariate normality.

According to Hair et al [2006] mixed evidence exists concerning the sensitivity of discriminant analysis to both the assumptions of multivariate normality and equality of covariance. Others have commented that it is a conservative test and that the null hypothesis is rejected too often. Hair suggests the use of a conservative significance level – 0.01 or less – as an adjustment for the sensitivity of the statistic.

However, a Box's M test was run routinely for each of the discriminant models, and the results recorded. For the 'All Cases' model that had 40 original cases, the Box's M test showed nonsignificance, with all significance levels on runs of the model being above

0.09. With the 'UK Only' model that had 26 original cases, the M was also nonsignificant, with all significance levels on runs of the model being above 0.03 (although this is sufficiently close to 0.01 to suggest there may be a hint of unequal dispersion matrices). For the 'Non-UK Cases' model that comprised 14 original cases the Box's M could not be computed as there were fewer than two non-singular group covariance matrices.

Multicollinearity

This is the result of high levels of correlation among the independent variables that is one variable can be highly explained or predicted by one or more of the other variables. It thus adds little explanatory power to the dataset. Multicollinearity, measured by Tolerance, becomes especially problematic in stepwise discriminant analysis, such as that employed here, in that it can reduce markedly the estimated impact of independent variables in the discriminant function. However, Eisenbeis [1977] in an authoritative early work that addressed the pitfalls in discriminant analysis warned against excluding variables from the analysis on the belief that multicollinearity was harmful. He concluded that multicollinearity is a sample property that is largely an irrelevant concern in discriminant analysis except where the correlations are such that it is no longer possible to invert the dispersion matrices. He pointed to empirical evidence that seemingly unimportant variables on a univariate basis may be important discriminators in a multivariate context.

In the discriminant analysis models, where significant variables (low Wilk's lambda – 0.781, and high F value – 10.640) do not appear in the discriminant function it is usually a sign of multicollinearity. In this instance PM Dominance, the variable that reflects a 'relevant market' dominant position that would be created through the merger is the most significant omission from the discriminant function in both 'All Cases' and 'UK Only Cases'. Multicollinearity is confirmed by the lowest Tolerance statistic of the set of variables at 0.784 (the other variables being close to 1) in the 'All Cases' model and 0.392 in the 'UK Only Cases' model. Its omission is logical on grounds that it would be highly correlated with Bidder % Market; if a pre-merger bidding firm has a high market share in the wider economically defined market it is extremely likely that it will have a 'dominant' position in one or more narrowly defined anti-trust markets both pre- and post-merger.

Less pronounced is the relationship between Bidder % Market and the variable Bidder Margin that also does not appear in the discriminant function. It has a Wilk's lambda of 0.973 and an F value of 1.056, although these ratios are not significant. Tolerance statistics of close to 1 in both models does not imply multicollinearity. However one would expect some multicollinearity with Bidder % Market in that a high market share in an economic market should, ordinarily generate higher operating margins. There are examples where this is not the case, for example, with HP Bulmer, market leader in a small category that was in rapid decline.

Given that multicollinearity is an inherent feature of such a specific database, drawn from one industry where common patterns of market share and financial returns might be anticipated, the discriminant function has to be interpreted with care. It is therefore recommended that discriminant loadings are used in the interpretation of the discriminant function rather than discriminant weights, as discussed previously.

4.5. Results

The dataset described in the previous sections was divided into a series of subsets before starting the modelling process. A baseline set of models called 'All Cases' were run using all of the merger cases and all of the dataset. Some variations of the 'All Cases' models were run excluding what appeared to be outlier cases involving Punch Taverns (a pub operator) and HP Bulmer (a cider producer).

A second set of models, called 'UK Only Cases' were run that included only those cases which were exclusively within the remit of the UK competition authorities. Variations of these were also run excluding the two outlier companies, Punch Taverns and Bulmer. A final set of models were run, called 'Non-UK' that included only those cases which were excluded from the 'UK Only Cases' analysis. The purpose of running the 'UK Only Cases' and 'Non-UK' models separately was to examine whether and to what extent competition authority treatment of the alcoholic beverages industry had varied between jurisdictions. The remainder of this section contains a detailed description and discussion of each modelling exercise.

4.5.1 All Cases

In the first run of the model, all 40 cases in the dataset were included. Of the 40 cases, 16 were deemed to be in the '*Referred*' category and 24 in '*Not Referred*', designated 1 and 0 respectively in the SPSS programme.

Table 4.12 shows the key relevant statistical output for the 'All Cases' run of the model. In addition to this run with all 40 cases, two further runs were made from the same dataset but removing, stepwise, Punch Tavern's acquisition of Allied Retail and Scottish & Newcastle's acquisition of HP Bulmer. Punch Taverns was a tenanted pub company that was entirely debt-financed; consequently operating margin and group gearing ratios for this case were deemed outliers. HP Bulmer was a cider firm with 66% market share of its category, this again representing an out of entry in the target market share variable. Their removal did not improve the overall efficacy of the model or the statistical significance of the variables.

Two variables were shown to be significant; Bidder % Market at the time of the bid, and Bid Type, that is whether the bid was hostile. A higher bidder market share and a hostile bid structure are more likely to lead to a referral.

Table 4.13 shows which cases were classified incorrectly with the reasons for referral or lack of referral.

Table 4.12. All Cases model summary

All Cases (40)								
Models	**Referred**		**Referred (ex Punch)**		**Referred (ex Punch Bulmer)**		**Referred then Transacted**	
Model Summary								
Number of cases	40		39		38		16	
Method	Stepwise		Stepwise		Stepwise		Stepwise	
	Mahalanobis distance		Mahalanobis distance		Mahalanobis distance		Mahalanobis distance	
	Compute from group size		Compute from group size		Compute from group size		Compute from group size	
	Leave-one-out classification		Leave-one-out classification		Leave-one-out classification		Leave-one-out classification	
Efficacy								
Box's M Test (significance)	0.103		0.090		0.114		0.094	
Eigenvalue	0.613		0.670		0.641		0.755	
Canonical Correlation	0.622		0.633		0.625		0.656	
Variance Explained	38.7%		40.1%		39.1%		43.0%	
Probabilities								
Prior	Not Referred (0)	60%	Not Referred (0)	59%	Not Referred (0)	58%	Not Transacted (0)	56%
	Referred (1)	40%	Referred (1)	41%	Referred (1)	42%	Transacted (1)	44%
Cross-Validated	Not Referred (0)	83%	Not Referred (0)	74%	Not Referred (0)	73%	Not Transacted (0)	89%
	Referred (1)	56%	Referred (1)	56%	Referred (1)	56%	Transacted (1)	86%
Uplift (Maximum Chance)	Not Referred (0)	39%	Not Referred (0)	25%	Not Referred (0)	26%	Not Transacted (0)	58%
	Referred (1)	41%	Referred (1)	37%	Referred (1)	34%	Transacted (1)	96%
Hit Rate (Overall)		73%		67%		66%		88%
Significant Variables								
Wilks' Lambda	Bidder % Market	0.685	Bidder % Market	0.692	Bidder % Market	0.701	Target Margin %	0.570
	Bid Type	0.613	Bid Type	0.599	Bid Type	0.609		
Mahalanobis D^2	Bidder % Market	1.819	Bidder % Market	1.749	Bidder % Market	1.656	Target Margin %	2.684
	Bid Type	2.498	Bid Type	2.628	Bid Type	2.492		
Exact F Statistic	Bidder % Market	17.462	Bidder % Market	16.504	Bidder % Market	15.340	Target Margin %	10.567
	Bid Type	11.673	Bid Type	12.063	Bid Type	11.221		
Discriminant Loading	Bidder % Market	0.853	Bidder % Market	0.816	Bidder % Market	0.815	Target Margin %	1.000
	Bid Type	0.219	Bid Type	0.278	Bid Type	0.273		

Table 4.13. All Cases model incorrectly classified cases

Case	Bidder	Target	Actual Group	Predicted Group	Transacted	Comments
1	Unilever	Allied Breweries	1	0	0	Referred for financial/exchange control reasons
9	Elders IXL	Allied Lyons	1	0	0	Referred due to concerns that bidder was highly geared (and foreign)
15	Grand Met (Spirits) (Jv)	Irish Distillers	1	0	0	Heavy lobbying in EC by Irish drinks industry (Irish Commissioner)
18	Elders IXL (Courage)	Grand Met (Brewing)	1	0	1	First restructuring after Beer Orders
27	Grand Met (Europe)	Guinness	1	0	1	First major cross-border spirits industry transaction
28	Whitbread (Retail)	Allied Retail	1	0	0	Threatened referral after Whitbread claimed to have pre-cleared with OFT
33	Interbrew	Bass Brewers	1	0	0	Concerns over 'small' efficiency savings
23	Scottish & Newcastle	Courage	0	1	1	Created new market leader with >25%. Reverse of deal blocked six years earlier
29	Punch Taverns	Allied Retail	0	1	1	Outlier query
35	Diageo (Europe)	Seagram Spirits	0	1	1	Would have been referred had it not been for up-front remedies
40	Pernod Ricard (Europe)	Allied Domecq	0	1	1	Would have been referred had it not been for up-front remedies

The significance of Bidder % Market in the referral process is not surprising given that competition policy is designed to prevent abuses of market power. There is more likelihood of an abuse of market power the larger is the market share of the firm. If it is large pre-merger but there is no evidence of an abuse of market power the authorities have to be sure that in the event of a further lessening of competition by the removal of another competitor the expectation for the abuse of market power is unchanged.

Although Bid Type is a powerful discriminating variable it is less so than Bidder % Market. Whilst its discriminant loading of 0.219 falls below the 'rule-of-thumb' cut off point the fact that the F Value of significance is 11.673 implies it is a variable to include in the discriminant function. The fact that a firm is more likely to be referred if the bid is hostile makes for an interesting discussion, in particular with regard to the tactics employed by the merger parties.

From a regulatory point of view a non-hostile bid should arouse more suspicion than a hostile one because in this instance both target and bidder have an incentive to collude in their representations to the competition authorities that does not occur in a hostile case. If a bid is agreed, possibly with up-front remedies, there is arguably an even stronger case for referral. Given the powers of the regulatory authorities notwithstanding their own time constraints it could be argued that agreed bids by major firms should not be dismissed lightly.

Of the 40 cases in the 'All Cases' dataset only 16 were referred. These 16 cases were analysed further in a '*Transacted*' and '*Not Transacted*' discriminant model. Of the 16, seven were transacted and nine were not transacted, either because they were blocked or were abandoned by the bidder. The latter was more likely to be the case in the UK where most of the hostile bids occurred.

Whilst this discriminant model is developed from a small subset of only 16 cases, there are roughly equal numbers of cases that were transacted and not transacted. The model shows that only Target Margin % is significant with a loading of 1.000 and an F Value of 10.567. However, the variable appears to be positively correlated with 'Transacted'. This could either be a function of an anomalous result from a very small sample size, although the classification accuracy and statistical significance of the independent variable is high. Alternatively it could simply be an artefact of the merger clearance process.

Bidder firms are more likely to compromise during the remedies procedure to ensure that an 'attractive' target (in the sense of higher margins) is absorbed. If there was no such remedy procedure the only other possible explanation is that having undergone an investigation process, the bidder then pursues an 'attractive' target more aggressively than a less attractive one and hence the likelihood of a transaction is positively related to the target's margins.

4.5.2. UK Only Cases

In total there were 26 'UK Only Cases' of which 12 were referred. Of those that were referred, four were transacted and eight were either blocked or abandoned by the bidder. A summary of the analysis for 'UK Only Cases' is presented in Table 4.14..

Where cases were classified incorrectly the reason for referral or lack of referral is summarised in Table 4.15..

As with the 'All Cases' model, Bidder % Market is the most significant discriminating variable in the 'UK Only Cases' models, with a loading of 15.329. The model was also run with Punch Taverns and HP Bulmer removed sequentially. Similarly this had little noticeable effect on the efficacy of the model and significance of the variables.

It is noteworthy that trailing prices of beer and spirits do not show up as significant variables in the UK Only model. One might have expected that mergers proposed during and after the publication of the 'Beer Orders', with its recommendations for better choice and price for consumers in pubs would have tagged product market prices. Clearly there was much discussion in the many merger enquiries about relevant retail and wholesale prices of beer. The industry's increasing calls for a consideration of the difference between these two sets of prices in reaching merger decisions fell on stony ground. The model certainly backs this conclusion.

Table 4.14. UK Only Cases model summary

Models	Referred		Referred (ex Punch)		Referred (ex Punch Bulmer)		Referred then Transacted
Model Summary							
Number of cases	26		25		24		4
Method	Stepwise		Stepwise		Stepwise		Stepwise
	Mahalanobis distance		Mahalanobis distance		Mahalanobis distance		Mahalanobis distance
	Compute from group size		Compute from group size		Compute from group size		Compute from group size
	Leave-one-out classification		Leave-one-out classification		Leave-one-out classification		Leave-one-out classification
Efficacy							
Box's M Test (significance)	0.030		0.050		0.056		Too few cases
Eigenvalue	1.144		1.208		1.124		
Canonical Correlation	0.731		0.740		0.727		
Variance Explained	53.4%		54.8%		52.9%		
Probabilities							
Prior	Not Referred (0)	54%	Not Referred (0)	52%	Not Referred (0)	50%	Too few cases
	Referred (1)	46%	Referred (1)	48%	Referred (1)	50%	
Cross-Validated	Not Referred (0)	100%	Not Referred (0)	100%	Not Referred (0)	100%	
	Referred (1)	75%	Referred (1)	75%	Referred (1)	75%	
Uplift (Maximum Chance)	Not Referred (0)	86%	Not Referred (0)	92%	Not Referred (0)	100%	
	Referred (1)	62%	Referred (1)	56%	Referred (1)	50%	
Hit Rate (Overall)		89%		88%		88%	
Significant Variables							
Wilks' Lambda	Bidder % Market	0.610	Bidder % Market	0.620	Bidder % Market	0.637	Too few cases
	Bidder Donations	0.466	Bidder Donations	0.453	Bidder Donations	0.471	
Mahalanobis D^2	Bidder % Market	2.372	Bidder % Market	2.257	Bidder % Market	2.087	
	Bidder Donations	4.251	Bidder Donations	4.451	Bidder Donations	4.121	
Exact F Statistic	Bidder % Market	15.329	Bidder % Market	14.083	Bidder % Market	12.523	
	Bidder Donations	13.161	Bidder Donations	13.284	Bidder Donations	11.800	
Discriminant Loading	Bidder % Market	0.747	Bidder % Market	0.712	Bidder % Market	0.712	
	Bidder Donations	-0.321	Bidder Donations	-0.360	Bidder Donations	-0.339	

Table 4.15. UK Only Cases model incorrectly classified cases

Case	Bidder	Target	Actual Group	Predicted Group	Transacted	Comments
1	Unilever	Allied Breweries	1	0	0	Referred for financial/exchange control reasons
9	Elders IXL	Allied Lyons	1	0	0	Referred due to concerns that bidder was highly geared (and foreign)
16	Allied Lyons (Brewing)	Carlsberg (UK)	1	0	1	Second (less significant) post-Beer Orders merger. Prof. Beasley questioned referral

Looking at 'UK Only Cases' it is clear why the Enterprise Act 2002 with its objectives of removing politics from the merger process was enacted. Bidder Donations, in this case, exclusively, monies paid to the Conservative Party and its affiliated enterprises, is a significant variable that is negatively correlated with referral. Interestingly no major 'UK Only' deals in the drinks industry have been announced in the new regime. Moreover, following the experiences of Bass and its thwarted attempt to merge with Carlsberg-Tetley in 1996/7, UK merger activity by the majors in the UK has all but dried up. This may be because historically having been aligned to the Conservative Party as an industry few have been prepared to 'gamble' with a new government, more so given the experiences of Bass/CT and Whitbread's failure to gain early approval for Allied Domecq's retail chain.

Of the three cases that were incorrectly classified, all three were referred when the model would have predicted early clearance. Somewhat surprisingly all three involved Allied-Lyons (later re-named Allied Domecq). This Conservative supporter was thwarted in its agreed merger with Unilever in 1969, during a Labour government, albeit the bid was cleared. But the ability to stave off the hostile bid from Elders IXL in 1986 when there was a Conservative government may be significant. In 1992, and against the dissenting view of the highly respected Professor Beesley, Allied had to endure a lengthy enquiry into its merger with Carlsberg UK, when the model predicted early clearance. Not long after political donations to the Conservative party ceased.

This raises two important business questions. Is the importance of Bidder Donations industry specific and is it replicable across national boundaries? Other UK sectors and firms might, historically, have different political affiliations, and it would be interesting to discover how such firms and sectors have faired in the referral and/or anti-trust process. It has become somewhat unfashionable to make political donations at the firm level in the UK and in this sense many of the UK drinks firms that were ardent Conservative Party supporters stopped doing so in the 1990s. However, the lack of disclosure of affiliations and monies paid to European and US political institutions and lobby groups is of concern, more so because shareholders in UK listed firms are increasingly asked to approve such spending routinely at annual general meetings. It is therefore not possible to link donations to the regulatory process in the same way as it was possible in the UK over the period of this study.

4.5.3. Non-UK Cases

There are a relatively small number of 'Non-UK Cases', consisting of a mix of cases investigated by the EC and/or FTC. Of the 14 cases, four were referred and ten proceeded without referral. Of the referred cases, only the Grand Met hostile approach for Irish Distillers in 1988 was blocked. At the time this bid was controversial and the source of much political debate. The initial bid had involved an approach for Irish Distillers by a joint venture group controlled by Grand Met, but with Allied-Lyons and Guinness as partners. Irish Distillers made what was described as a 'decisive tactical move' by making a formal complaint to the EC. A lengthy and heated debate took place

in the Irish parliament on 13 July 1988. On 29 July 1988, the EC blocked the joint bid on grounds that it infringed Article 85 and ordered the three parties to bid separately. Grand Met presented a revised bid, but by that time Pernod Ricard had made a white knight offer for the Irish firm that was accepted by its shareholders.

Of the other three referred cases, two pertained, unsurprisingly, to the merger of Grand Met and Guinness in Europe and the US respectively. Whilst the FTC referred the subsequent acquisition of Seagram by Diageo for further analysis, the EC cleared it at Phase 1 on the basis of the structural remedies agreed by Diageo and its acquisition partner, Pernod Ricard. The Pernod Ricard acquisition of Allied Domecq, structured similarly with partner Fortune Brands was cleared by both the US and Europe at the first stage.

Table 4.16 describes the 'Non-UK Cases' model. It shows that the likelihood of being referred is positively correlated to only one significant variable, 'PM Dominance'. This is a Yes/No variable based on whether the investigating authorities had identified one or more highly concentrated 'relevant market' as a result of the merger. PM Dominance can be explained largely in terms of the scale of the pre-merger market share in the wider economically defined market, and it is consequently not significant in the 'All Cases' model. However, in the 'Non-UK Cases' model it illustrates the more narrowly defined anti-trust markets that have been used consistently by overseas regulators. Given that 11 of the 'Non-UK Cases' involve spirits mergers and acquisitions, where there has

been emphasis on category and subcategory spirits brands and market shares in the US and Europe, the significance and direction of this variable is not surprising.

The model shows, however that two cases were strictly speaking misclassified, as described in Table 4.17. Both were relatively small agreed acquisitions by one of the major spirits firms that involved brands and distribution infrastructure in a specific country where the parties had worked together on a joint-venture basis prior to the acquisition. The brands in themselves were not, perhaps, as important as the distribution opportunity. In the case of Allied Domecq's acquisition of Pedro Domecq, the infrastructure in Spain and number of brands and categories covered were significantly larger.

In common with the 'UK Only Cases', the 'Non-UK Cases' model shows fewer incorrectly classified cases than in the 'All Cases' models. There is overlap in two of the three cases with the 'All Cases' model and the UK dataset, but no overlap at all with the Non-UK dataset. This reflects different significant variables in the discriminant function. Interestingly in the UK all three cases were referred when the model would have predicted non-referral whereas the two non-UK cases, both European, saw no referral when the significance test would have predicted otherwise. This could relate to the former 'public interest' test that was part of UK inquiries prior to the Enterprise Act. Alternatively it might just reflect a sense of proportionality in the EC when considering a merger with essentially a principal effect in one-member state, for example Italy and Spain in these two cases.

Table 4.16. Non-UK Cases model summary

Non-UK Cases (14)			
Models	Referred		Referred then Transacted
Model Summary			
Number of cases	4		3
Method	Stepwise		Stepwise
	Mahalanobis distance		Mahalanobis distance
	Compute from group size		Compute from group size
	Leave-one-out classification		Leave-one-out classification
Efficacy			
Box's M Test (significance)	-		Insufficient cases
Eigenvalue	1.143		
Canonical Correlation	0.730		
Variance Explained	53.3%		
Probabilities			
Prior	Not Referred (0)	71%	Insufficient cases
	Referred (1)	29%	
Cross-Validated	Not Referred (0)	80%	
	Referred (1)	100%	
Uplift (Maximum Chance)	Not Referred (0)	12%	
	Referred (1)	250%	
Hit Rate (Overall)	86%		
Significant Variables			
Wilks' Lambda	PM Dominance	0.467	Insufficient cases
Mahalanobis D^2	PM Dominance	4.800	
Exact F Statistic	PM Dominance	13.714	
Discriminant Loading	PM Dominance	1.000	

Table 4.17. Non-UK Cases model incorrectly classified cases

Case	Bidder	Target	Actual Group	Predicted Group	Transacted	Comments
4	Grand Met (IDV)	Cinzano	0	1	1	High post-merger share of a declining market with limited impact on distribution
5	Allied Lyons (Spirits)	Pedro Domecq	0	1	1	High post-merger share of small categories in Spain but with high impact on distribution

4.6. Interpretation and validation

4.6.1. Preliminary findings

For all versions of the discriminant analysis models described above the dominance variables, namely Bidder % Market or the identification of post-merger category dominance ('PM Dominance') were the key factors in determining whether a case is referred to the competition authorities or not. This confirms the *a priori* conjecture that, regardless of jurisdiction, those alcoholic beverages firms that grew and intend to grow in future by use of a merger and acquisition strategy cannot assume their strategy will proceed without factoring in the interaction with the competition authorities.

The second finding, drawn from the 'UK Only Cases' models, is that political factors have had some impact on the likelihood of a bid being referred to the competition authorities. This confirms that the decision to make the CC independent of government ministers was based on the correct premise. As no data was available to test the importance of political factors in jurisdictions outside the UK it is impossible to say whether political factors have and continue to have an influence on competition authority referrals outside the UK jurisdiction.

The third conclusion that can be drawn from the 'All Cases' models is that adopting a strategy of pursuing 'agreed' merger and acquisition transactions is more likely to result in clearance without further investigation by the competition authorities. This is an

important result and suggests that a 'co-operative' merger and acquisitions strategy is more likely to succeed with regulators than where a firm launches 'hostile' bids without the agreement of the target management. Given that referrals often result in mergers being abandoned this must be factored into merger strategy.

It is therefore tempting to conclude that co-operation between management teams, not only in agreeing the bid terms but also in identifying subsequent potential disposals of parts of the joint business that may be required to satisfy the competition authorities is a crucial success factor in adopting a strategy of growth by merger and acquisition. Indeed, it is striking that following 'failed' attempts in the mid 1980s merger boom, both Scottish & Newcastle and Grand Met (on its own and as part of Diageo) have pursued 'agreed' bids as part of their growth path. Both have also been active in presenting upfront merger remedies before the competition authorities imposed them, or at least showed the willingness to compromise.

However, this cannot be the whole story; Allied Domecq's acquisitions were agreed, as were those of Bass (Carlberg-Tetley) and Whitbread (acquisition of Allied Domecq Retailing). Bass and Whitbread both appeared only once each as bidders in the period of study. However failure by both to proceed without a referral to the CC (Whitbread) and subsequent lengthy enquiry that led ultimately to the proposed deal being blocked (Bass) was directly responsible for both firms' exit from UK brewing and retailing.

The Allied Domecq experiences are somewhat more puzzling, in that it does not seem to have been deterred by investigations by the UK CC (although at the time of the Carlsberg-Tetley merger its complained bitterly about the impact of the lengthy investigation and remedies on the efficacy of the business), and was brave enough to strike deals in both North America and Europe. What seems to have caused the final capitulation in spirits, following the merger of Grand Met and Guinness, was its inability to find a merger partner with which to pursue the subsequent deals in the industry.

4.6.2. Internal and external validity

The analysis presented here is produced from a sample of '*Referred*' and '*Not Referred*' transactions involving the major UK alcoholic beverage firms. Although the models only contain independent variables that exceed significantly the threshold of significance defined by a range of test statistics further validation is necessary to ensure that what is observed really has genuine significance and that the result could be replicated using a completely new sample of data.

Unfortunately, there is only a small sample of available cases in the alcoholic beverages industry and there remains a significant risk from such a small sample that there is so much sampling error that identification of all but the most significant independent variables is impossible and/or that the results are not generalisable or lack external validity. It cannot therefore be ruled out that if a new sample of alcoholic beverages

mergers and acquisitions were to subsequently become available a new set of independent variables might be identified if the discriminant analysis modelling procedure was repeated.

In addition, it has to be borne in mind that as with any longitudinal study the political, legal and structural environment changes over the time period used. There are obvious 'merger waves' that are identifiable throughout history. In these waves the preponderance of hostile bids is greater. Counter to this is the scale and ownership structure of firms in any particular industry at any give time; if large mergers have already taken place, future target firms may be either large in themselves or remain in the private sector. Finally, when considering only one industry, there is likely to be an increased likelihood of referral over time reflecting increasingly larger deals and amalgamations of existing large firms.

Holdout sampling

Ordinarily, validation of discriminant analysis models is carried out by splitting the initial sample into two roughly equal size groups, using one of the groups – the analysis sample – to build the discriminant model, and the second group – the validation or holdout sample - to test the robustness of the predictions from the first model. However, given that the original sample size amounts to only 40 cases, splitting the sample into a model and a test group in this way is impractical. For such small sample sizes, systematic use of the 'leave-one-out' method is the only viable approach to validation.

Cross-validation

Applying the 'leave-one-out' validation process to a sample of 40 has the effect of producing 39 separate test samples each with a slightly different composition of cases. The principal effect is to reduce the hit rate classification and if the cases that are used in calculating the discriminant function are also those that are being classified, there should be an inherent upward bias in the prediction accuracy of the 'leave-one-out' models as compared to the original model.

A 'leave-one-out' validation test was conducted on the 'All Cases', 'UK Only Cases' and 'Non-UK Cases'. The hit rate following 'leave-one-out' cross-validation was still significantly higher than chance classification. We can therefore conclude that all of the models presented here are 'internally valid'. That is we can be confident that the significant independent variables that were observed would also appear to be significant variables if a new sample of cases from the alcoholic beverages industry were available.

It cannot be concluded with confidence that the models presented here are 'externally valid' although there is no reason to believe that they are not. Confirmation of 'external validity' could only be achieved if a different sample of mergers and acquisitions from a different industrial sector, a completely different time period, or involving a different set of competition authorities was modelled. If these were available further significant independent variables may have been found. Unfortunately, given the nature of mergers and acquisitions data, capturing the necessary data to permit external validation across a

number of industrial sectors, time periods and competition authority jurisdictions would have required more time and analytical resource than was available in this study. Clearly this remains a fertile topic for further work.

4.6.3. Discriminant analysis versus logistic regression

As a final validation test, consideration was given as to whether the choice of discriminant analysis as an analytical technique may have influenced the results, for example because it is known that unequal covariance matrices can have an adverse impact on both the estimation and classification process in discriminant analysis. Logistic Regression has been cited as a possible alternative technique by Hair et al, in particular for problems involving a binary dependent variable. Logistic regression does not face the strict assumptions for multivariate normality and equal covariance matrices and is viewed as more robust when these assumptions are not met. Researchers point to its straightforward statistical tests, similar approaches to incorporating metric and non-metric variables and non-linear effects and a wide range of diagnostics that make it preferable to discriminant analysis even when the multivariate conditions are met.

A stepwise logistic regression was performed on the 'All Cases' dataset. Bidder market share was the most significant variable, with a score of 12.594 (0.000 significance). Bid type entered as a second significant variable at step 2 with a score of 4.226 (0.040 significance). The overall prediction accuracy of the model was 75%. The model gave exactly the same overall percentage classification success as the 'All Cases'

discriminant analysis model, and with the same group membership. Given that the logistic regression approach produced exactly the same results it can be concluded that the prediction efficacy of the discriminant analysis modelling is not an artefact of the technique itself.

4.6.4. Conclusions

Whilst the discriminant analysis models yield significant explanatory variables and respond satisfactorily to classification under strict statistical criteria there are several aspects of the dataset and variables, and consequently the results that require qualification. The dataset is small at 40 original cases, although each case has its full complement of independent variables. Given the small sample size the researcher, mindful of the Hair et al bare minimum requirements (five observations per independent variable) restricted the choice of independent variables to those that *a priori* were anticipated to be significant. Some of the variables are of higher quality than others, for example, the market share data collected and available to the competition authorities at the time of each merger tends to be undisputed (although there tends to be a differential view between the two parties regarding the definition of the market) and whether the bid was hostile or agreed is a statement of fact. However, the market prices variable, as described above, is a wide guesstimate of the reality of the price profile in the product market, given that it tends to reflect at best a list wholesale price (often derived from retail prices) that ignores discounts.

Chapter 5. Case study of Scottish & Newcastle

Scottish & Newcastle is the UK's largest brewer and the only UK-owned firm that remains from the 1989 pre-'Beer Orders' 'Big 6' brewer-retailers. This chapter presents an in depth analysis of the dismantling of its pub and leisure portfolio during the 1990s, culminating in the complete exit from pub retailing in 2003, and subsequent merger and acquisition activity it is now a pure brewer, with leading positions in the brewing markets of the UK, France, Portugal, Finland and Russia. Table 5.1 charts the development of Scottish & Newcastle from its origins in the Edinburgh and Newcastle family brewing firms of William Younger and John Barras through successive rounds of acquisition and divestment.

5.1. Background

At the time of the first anti-trust investigation into the UK brewing market in 1969, Scottish & Newcastle was by far the smallest of the "Big 6" brewers with a limited tied pub estate. From its base in Scotland and the North, it had pursued, and with some success, market share in the free trade in the South. However, the other brewers

responded aggressively and from the mid-1970s, its beer sales declined by 20%. It was at this stage that the ambitious firm moved to an acquisition-led strategy to pursue growth.

Table 5.1. Major events in Scottish & Newcastle corporate history

Year	Event
2003	Sold managed pub estate, effecting complete exit. Acquired HP Bulmer (Strongbow cider; wholesale distribution network) and 51% of Centralcer
2002	Acquired Hartwall (Finland; included 50% stake in Baltic Beverage Holdings). Strategic partnerships with share stakes implemented in India (United Breweries) and Greece (Boutari Group)
2000	Acquired Kronenbourg (France and Belgium beer subsidiaries of Groupe Danone). Bought 49% share stake in Centralcer (Portugal). Started divestment of leased estate to Royal Bank of Scotland, initially to comply with Beer Orders, and various parcels of pubs from managed estate. Disposed of leisure interests, Center Parcs and Pontin's.
1999	Acquired Greenall's pubs, restaurants and lodges.
1995	Acquired Courage for £430m (owned John Smith, Foster's European and Kronenbourg UK distribution rights)
1993	Acquired Chef & Brewer managed pub estate for £628.5m
1991	Bought remaining minority 25.2% in Center Parcs
1989	Defended successfully hostile bid from Elders IXL Disposed of Thistle Hotels for £645m Purchased controlling stakes in Center Parcs and Pontin's
1988	Hostile bid announced by Elders IXL, owner of Courage.
1987	Acquired Matthew Brown for £118m.
1986	Acquired Home Brewery for £123m
1985	Launched hostile bid for Matthew Brown. Acquired Moray Firth Maltings for £23m. Sold Scotch whisky interests, Charles Mackinlay to Invergordon Distillers.
1984	Abandoned acquisition of JW Cameron following referral to MMC Disposed of Gough Brothers.
1979	Acquired Royal Brewery (Manchester), and Gough Brothers (off licences)
1965	Formed Thistle Hotels from existing hotel assets
1960	Scottish Brewers merged with The Newcastle Breweries to form Scottish & Newcastle Breweries Ltd
1931	William Younger and William McEwan merged to form Scottish Brewers Ltd.
1913	William McEwan died. William Younger, his nephew, took on the running of the Edinburgh brewery
1890	Newcastle Breweries launched at Tyne brewery
1884	John Barras took over Tyne brewery
1856	William McEwan established Fountain brewery in Edinburgh
1803	William Younger II acquired Abbey brewery at Holyrood
1770	John Barras established in Gateshead by John Barras Snr and William Johnston
1749	William Younger brewery established in Leith

Source: Scottish & Newcastle website

During the 1980s and 1990s, Scottish & Newcastle was a frequent party to discussions with the UK competition authorities. It abandoned an agreed bid for a neighbouring

brewing firm when the acquisition was referred to the CC, embarked on one hostile bid that was cleared following a lengthy CC enquiry, and was on the receiving end of a bitterly contested hostile bid from an overseas conglomerate. Further opportunities for discussions with the competition authorities came with acquisitions in the 1990s, notably the 1995 acquisition of Courage that was waved through without referral.

5.1.1. Early acquisition activity

In 1984, Scottish & Newcastle proposed the acquisition of its Hartlepool-based neighbour, JW Cameron, an ailing firm that was a subsidiary of the conglomerate Ellerman Group. The acquisition was referred to the MMC and shortly afterwards the bid was abandoned. Instead, the two firms reached an agreement in July 1985 to swap Tyneside pubs for Cleveland and North Yorkshire pubs. Cameron's limped into the 1990s and was acquired by Wolverhampton & Dudley Breweries in 1993.

Undeterred by the failure to gain rapid approval for the acquisition of Cameron, Scottish & Newcastle announced a hostile bid for Matthew Brown on 18 March 1985, having started buying shares in the firm in January 1985. The acquisition was referred to the MMC on 24 April 1985. Although the bid was cleared it took an additional two years of negotiations between the parties before the deal was consummated in 1987. Matthew Brown was one of the larger and more successful of the regional brewers that had, itself grown by acquisition in the North West, latterly extending into Yorkshire with the acquisition of Theakston. At the time it comprised four breweries and 527 tied houses.

Unusually for a regional brewer, it had developed successfully its own lager brand, Slalom.

Scottish & Newcastle's argument to the MMC investigation was that Matthew Brown presented a means of strengthening its ability to compete more effectively with the other "Big 6" and the regional brewers. It was well placed to offer greater competition to the national brewing groups because of its size and had a proven ability to compete successfully in the free trade "*even without the security and advantages of a large tied estate*". However, it needed to establish a larger platform and have access to Matthew Brown's English 'heritage' ale brands to ensure maximum effective competition.

Scottish & Newcastle's argument in favour of allowing strengthening of its competitive position within the 'Big 6' through this merger, supported by the views of the Industry Department of Scotland and one other smaller brewer, was not shared by the MMC. Nor indeed did it agree that Matthew Brown was doomed to disappear. Nevertheless the bid was cleared as the MMC did not see any adverse impact on consumer choice resulting from the elimination of Matthew Brown.

5.1.2. Fending off an unwarranted approach

A turning point in the fortunes of Scottish & Newcastle was in its ability to persuade the UK competition authorities that an unwelcome approach from the aggressive Australian conglomerate, Elders IXL should be blocked.

Elders IXL controlled the largest brewer in Australia, Carlton United Breweries, and owned the Foster's lager brand. Its ambitious management believed that the UK beer market was inefficient, poorly managed and consequently ripe for rationalisation. It saw the beer market becoming increasingly international and sought to use the UK as the platform for international growth into Europe as part of a larger plan to 'Fosterise' the world. Having failed to acquire Allied-Lyons in early 1986, in a test-case hostile approach, Elders IXL was the successful bidder in the auction for Courage in November 1986, sold by Hanson Trust following its acquisition of its previous owner, Imperial Tobacco. Significantly, in the auction process Hanson Trust had held discussions with Scottish & Newcastle but the two parties could not agree a price for Courage and Hanson Trust believed there would be problems in gaining regulatory clearance.

Initially, Elders IXL tried to forge a national distribution agreement with Scottish & Newcastle. As discussions continued, the debate centred on an agreed merger of the two beer businesses under Scottish & Newcastle control. However, Elders IXL, in an attempt to move the process forward quickly, started to buy shares in Scottish & Newcastle. The two companies had several further meetings during which time Elders increased its shareholding in Scottish & Newcastle further. When no agreement was reached between the parties, Elders launched a £1.6bn hostile bid on 17 October 1988. The bid was referred to the MMC on 9 November 1988.

Whilst Scottish & Newcastle mustered support from all (Scottish) quarters to stave off the bid, the actions of Elders IXL that were somewhat aggressive by UK standards at the

time undoubtedly played a part in the final decision of the MMC to block the bid. On the morning of the referral, Elders bought more shares in the stock market, taking its holding in Scottish & Newcastle to 23.6%, and prompting the Secretary of State to make an order to freeze the shareholding and limit the voting rights to 15% of the equity. Elders justified its actions on the basis they were designed to stop Scottish & Newcastle instigating a 'poison pill' during the course of the MMC investigation. Moreover it claimed its actions did not breach the Substantial Acquisition Rules or the Fair Trading Act.

It is difficult to conclude that the decision to block was anything but a political one, given the position of Scottish & Newcastle as a leading firm in the Scottish business establishment. Leading beer buyers such as Tesco, and J Sainsbury gave evidence that they saw no adverse impact from this merger. In its deliberations to the merger enquiry in addition to offering general criticisms of the structure and operation of the UK brewing industry, Elders suggested that the industry attracted an unusual amount of sentimental interest. In its opinion this was confused with genuine public interest issues in what was a highly regulated and very "political" industry.

5.1.3. Courage acquisition

Following the ratification of the 1989 'Beer Orders' there was a period of unprecedented and immense upheaval as the UK brewing industry was forced to cope with the sale of substantial parts of the major brewer/retailers tied estates. The firms were given until

November 1992 to comply with the orders; in the intervening period the UK economy entered a deep recession that impacted both beer consumption and pub visits.

Having escaped the clutches of Elders IXL, Scottish & Newcastle was in the fortunate and unique position among the 'Big 6' in not having an estate large enough to require divestment to comply with the 'Beer Orders': in 1989 its pub estate was just under the limit of 2000 outlets. It had the luxury of being able to watch from the sidelines as its competitors were forced to consider their strategies content – at least initially – to build a leisure business, using the proceeds from the sale of the home-built Thistle hotel chain to acquire Center Parcs and Pontin's.

Scottish & Newcastle's ambitions to be a leader in the domestic brewing and retailing scene came as a result of the actions of its two southern competitors, Grand Met and Courage, the subsidiary of old adversary Elders IXL. Both these firms had longer-term objectives outside the UK, and outside brewing. Their common vision for the structure of UK brewing – an argument that Elders IXL had presented on two occasions to the MMC in merger cases – being manifest in the 1990 agreement, referred to as the 'breweries-for-pubs swap'. The enlarged Courage brewing presented a serious challenge to Bass's decades of supremacy, and allowed considerable cost to be extracted from the production base at the same time. It also made a more attractive merger partner for the ambitious Scottish & Newcastle.

With the Conservative party's term in office coming to an end, a Scottish firm that had thus far faired well under a Conservative-controlled MMC, was, perhaps, the only one of the big brewers that had enough confidence to attempt to breach the 25% market share 'rule' through merger. It had learnt at first hand about the Courage business as a buyer of its beer in the newly acquired Chef & Brewer estate that Scottish bought from Grand Met in 1993.

On 18 May 1995, Scottish & Newcastle announced that it had reached an agreement with Foster's, formerly called Elders IXL, to acquire its UK subsidiary, Courage, for £425m, paid for with the aid of a £354m rights issue. In essence the deal gave Scottish & Newcastle the rights to brew, package and market the Foster's brands in the UK, Republic of Ireland and Continental Europe.

The rationale for the timing and relative merits of the Courage deal were stated:

i. UK brewers are becoming increasingly dependent on free trade sales, where success relies on the strength of their brands and the quality and price competitiveness of their products and services.

ii. S&N, with its traditional strengths as a free trade brewer is well placed to respond to these challenges. However.... it is important to develop the Group's presence in geographic areas where it is currently under-represented and to continue to develop its brand portfolio.

iii. The acquisition of Courage will complement this (Chef & Brewer's) geographic expansion and will enable the Group to create a brewing business with a distribution network, brand portfolio and cost profile which will provide a strong base for growth in the UK and Continental Europe.

iv. The combined product ranges will provide the merged business with an enhanced portfolio of strong brands with which to compete in the free on and off trade sectors.

v. The merged business will provide opportunities for significant cost savings through purchasing efficiencies, reductions in overheads and the integration of operating resources.

The Courage deal catapulted Scottish & Newcastle into the number one spot in UK brewing, displacing long-term leader Bass. The acquisition brought two leading beer brands, Foster's and John Smith's that collectively accounted for nearly 30% of Courage's 17.6mhl volume. The deal also brought the Foster's licence for Europe, in addition to modern and relatively more efficient plant at Reading (5mhl lager capacity) and Tadcaster (2.5mhl ale capacity). Scottish's existing brewery in Edinburgh that had been responsible for most of the group's lager and ale production, had capacity of 3.25mhl, with a then state-of-the-art canning line that met demand in the off trade. Collectively these were three of the largest sites in the UK, rendering the rest of the combined firms' brewing capacity more or less redundant and provided opportunities to expand and distribute nationally from these three locations. Forecast cost savings in the third year after the acquisition were at least £40m per annum – the figure came in at

closer to £75m, and arguably, could and should have been pushed harder, as Scottish & Newcastle has admitted more recently.

Through the Courage acquisition Scottish & Newcastle had become a truly geographically balanced national brewer with a market share close to 30%, some seven percentage points higher than long-term market leader Bass. Having been the market leader for so long Bass was less than delighted at the demotion to second place; in a matter of little over a year Bass challenged the number one position through its own proposed but unsuccessful merger with Carlberg Tetley as discussed below.

5.1.4. Cementing domestic leadership

Scottish & Newcastle set out to become a national brewer with a managed pub portfolio of leading branded concepts that also had a national reach. To this end the 1995 Courage deal was only part of the story. Having entered the South on a large scale through the 1993 acquisition of the Chef & Brewer pub estate from Grand Met, the 1999 acquisition of Greenalls' managed estate expanded the presence in the North West. At this stage Scottish & Newcastle could more or less claim to own a national managed pub operation to sit alongside its national brewing assets, albeit one that required considerable capital investment and some in-fill expansion into key areas in the Midlands.

The author argued in 1998, prior to the acquisition of the Greenalls estate, that Scottish & Newcastle should remain in pub retailing. The traditional vertically integrated

structure provided a platform for pricing power, reduced marketing spend and gave control over distribution. In its 2001 Annual Review the Chairman of Scottish & Newcastle claimed:

"*Our commitment to UK pub retailing reflects both confidence in the growth prospects of the retained business and a strong belief that such an estate provides an invaluable shop window for our beer brands. It is in this on trade environment, not only here in the UK but in other markets around the world that much of beer brand building occurs*."

However, by April 2003, after several international brewers had indicated their interest in being acquired, as discussed below, and under mounting pressure from some leading institutional investors Scottish & Newcastle was forced to concede that it was not possible to be both a domestic retailer and international brewer:

"*The Board believes that the best route for sustained value creation for Scottish & Newcastle is to focus on and develop its international beer business, driving value and improving returns on capital from its existing European platform*".

On 6 October 2003, the firm announced the sale of S&N Retail to a private equity consortium, Spirit, for £2.5bn in cash. A long-term supply and distribution agreement was signed between Scottish Courage and Spirit for the provision of beer, wine, cider and other beverages. However, with the continued decline in wholesale beer prices the

new contract was significantly below the implied transfer price that Scottish Courage had historically booked on sales to its retail sister firm.

5.2. Response of Scottish & Newcastle's competitors

5.2.1. Bass

At the start of the 1990s, Bass was a brewing and leisure conglomerate that comprised the UK's largest brewer/retailer, the Holiday Inn hotels franchise (bought in parts between 1988 and 1990), diversified leisure operation spanning gaming (Coral Racing), bingo (Gala) and amusement with prize (AWP) machine manufacture, and a controlling interest in the Britvic soft drinks business. Under pressure from shareholders to simplify the group structure and create cohesive strategies within each of the 'core' businesses of brewing, pub retailing and hotels, Bass embarked on the acquisition trail. Initially, it made piecemeal investments in brewing in the Czech Republic and China, and reached an agreement to brew and distribute Grolsch in the UK. However, once it was overtaken as the leading UK brewer by Scottish & Newcastle, the acquisition focus was on regaining pole position at home.

On 25 August 1996 Bass Plc acquired Allied Domecq's 50% stake in Carlsberg Tetley (CTL). Subject to regulatory approval Bass agreed to merge its brewing operations with those of CTL and acquire an additional 30% shareholding in the enlarged enterprise, Bass Carlsberg-Tetley (BCT). On 9 December 1996 the proposed merger was referred

to the MMC. The merger would have created the UK's largest brewer with 37% market share of beer production (Bass 23%; CTL 14%) and with a tied estate of 4,400 pubs. Scottish Courage had a market share of 28% with 2,700 tied outlets. Whitbread had a market share of 13% and a tied estate of 4,400 outlets.

The merger was given clearance on a majority decision subject to Bass reducing the size of its pub estate to 2,500 outlets. However, the publication of the findings corresponded with a change in Government. The new Secretary of State, Margaret Beckett, did not accept the advice of the MMC, agreeing with the dissenter of the MMC panel, Professor David Newbery, and blocked the merger. In any event, Bass had concluded that the remedy to sell down to 2,500 outlets and in the manner suggested by the MMC was onerous and the fallback arrangements of the merger were enacted.

At the end of 1997, and prompted partly by the failure to buy CTL, Bass sold its tenanted pub estate to the firm now known as Punch Taverns. It also sold the gaming and bingo operations. At that stage it was operating at some 2000 pubs below its 'Beer Orders' licence limit. It eventually expanded its managed pub portfolio to exploit the licence limit through a side agreement to buy 550 of the largest Allied Retail pubs following Punch Taverns' successful bid for Allied Retail in 1999. Bass also acquired the Inter-Continental Hotel operation in March 1998 for £1.78bn, giving it a step change in scale as an international hotel operator.

Following the failure to acquire CTL to reassert its leadership in UK brewing Bass opted to exit the industry to expand its presence in international hotels and domestic pub retailing. In 2000 it sold its brewing operation to Interbrew for £2.3bn, the proceeds helping to eliminate the debt taken on to fund the February 1998 acquisition and future development of Inter Continental and the £1bn spent on the former Allied Retail managed pubs.

In February 2003, Bass now renamed Six Continents, demerged, creating InterContinental Hotels Group (hotels and the Britvic investment) and Mitchells & Butlers (managed pubs, bars and restaurants). This was described at the time by group chairman, Sir Ian Prosser, as the "*final significant move*" in the five year focus plan.

5.2.2. Whitbread

In the post 'Beer Orders' environment, in common with the other major brewer/retailers, Whitbread had sought a new strategy for its brewing and pub operations. Notwithstanding the success of the Whitbread Beer Company (WBC) in marketing its portfolio, the reliance on Heineken and Stella Artois was problematic, with the barrelage licence fee creating an operational cost disadvantage. Whilst not going the whole way to divesting WBC, it was de-emphasised in the portfolio at a time when the group's success as a retailer became increasingly evident. The cross-shareholding relationship with the Whitbread Investment Company (WIC) was unwound; WIC simultaneously sold its equity stakes in various regional brewers. The brewing operation was placed on

an 'arms length' relationship with the retailing business. In essence the foundation was laid for an independent WBC.

On 25 May 1999, Whitbread announced that it had reached an agreement with Allied Domecq, subject to shareholder and regulatory approval, to buy Allied Domecq Retailing UK for £2.36bn. This was the division of Allied Domecq that comprised 3,500 leased and managed pubs, a 50% share in the off-licence chain First Quench (the other 50% owned already by Whitbread as a result of the merger of Thresher and Victoria Wine) and 25% stake in Britannia Soft Drinks (the parent company of Britvic that was controlled by Bass, and in which Whitbread also had a 25% stake). In order to comply with established regulatory requirements Whitbread announced that it would separate WBC following completion of the acquisition.

Following the surprise (to the parties, their advisers and The City) intervention of the new Secretary of State, Stephen Byers and the prospect of a CC investigation, Whitbread withdrew from the acquisition, clearing the way for the Punch Taverns/Bass bid that many believed raised more significant competition concerns. Whitbread carried through its objective to exit brewing, however, and in May 2000, sold WBC to Interbrew for £400m.

The disposal prompted a complete strategic review of the group that concluded that its future did not lie in the pub market either, but in hotels, restaurants and fitness concepts. All pub and pub-related assets were sold. Since the 2000 strategic review the group has

narrowed its portfolio further to encompass primarily budget hotels (Travel Inn), coffee shops (Costa Coffee) and fitness clubs (David Lloyd) with surplus cash returned to shareholders.

5.3. Scottish & Newcastle's international acquisitions

Scottish & Newcastle was transformed through the Courage deal into not only the UK number one, but a firm with an option to expand an internationally recognised beer brand, Fosters into the European market. Whether there was ever a great likelihood of significant volume potential given national beer style and brand preferences it nevertheless signalled an interest in being an international player.

On 20 March 2000 Scottish & Newcastle announced that it had reached an agreement with French food group, Danone, to acquire Kronenbourg and Alken Maes, its French and Belgian brewing operations for £1.8bn. At the time Danone also had equity investments in Italy and Spain, both of which were sold prior to the full transfer of ownership of Kronenbourg to Scottish & Newcastle.

There had been rumours for some time that Scottish & Newcastle was poised to make a move internationally. Indeed, a feature article in *The Sunday Times* on 22 November 1998 suggested that Scottish & Newcastle was in talks to buy Kronenbourg for £2bn. The author wrote on 10 December 1998 that such a deal, if it could be agreed, would be beneficial to Scottish & Newcastle shareholders in that it would give the firm number

one position in the consolidating European brewing industry, with the ownership of a brand (Kronenbourg 1664) that could provide the basis for growth in the lucrative US imported beer market. Over time, the significant valuation gap with Heineken, the then European market leader would be closed. Danone had made little secret of its interest in exiting brewing to concentrate on its food and mineral water operations. In the listing particulars for the Danone acquisition, Scottish & Newcastle justified its purchase:

"*For some time we have made clear our objective to deliver shareholder value through creating a major international beer business able to deliver genuinely international brands, exploit the spread of best practice and capitalise on the anticipated growth in global beer consumption, This transaction represents a major step towards our objective........ In both the short and the long term, this base will provide the platform for three further development routes: investment in similar businesses (such as those in Spain and Italy), exporting premium brands and further complementary acquisitions.*"

Kronenbourg was the French market leader with a share of 40% and owned one of the largest breweries at its headquarters near Strasbourg. Alken Maes was the number two player in the much smaller Belgian market with a share of 14%, the market being dominated by Interbrew (now called InBev) the rival firm that also had a significant export business to France. Scottish & Newcastle had developed a relationship with Danone over the five years of ownership of Courage, which was responsible for licensed production and sales of the premium Kronenbourg 1664 in the UK. In aggregate the Kronenbourg standard and 1664 premium brands had annual sales of 8mhl – a minnow

by comparison to Budweiser global sales volume of 50mhl and Heineken's 18mhl – but enough to underpin Danone as the third largest brewer in Europe in 1996 with a 6% share of the very fragmented market.

The Kronenbourg acquisition was followed quickly by the purchase of Finland's leading brewer, Hartwall in February 2002 for £1.3bn, and control of the Portuguese brewer Centralcer in 2003. There have also been minority investments in the emerging markets of India and China, in Greece and in the UK with the acquisition of the leading cider producer, HP Bulmer. Hartwall was the most significant acquisition, not for its leading position in Finland (a duopoly beer market) but because it came with a 50% stake in a joint-venture with Carlsberg, Baltic Beverage Holdings (BBH) that owned and managed the Baltika brewery, the largest brewery in St Petersburg. Baltika accounted for 33% of the growing Russian market.

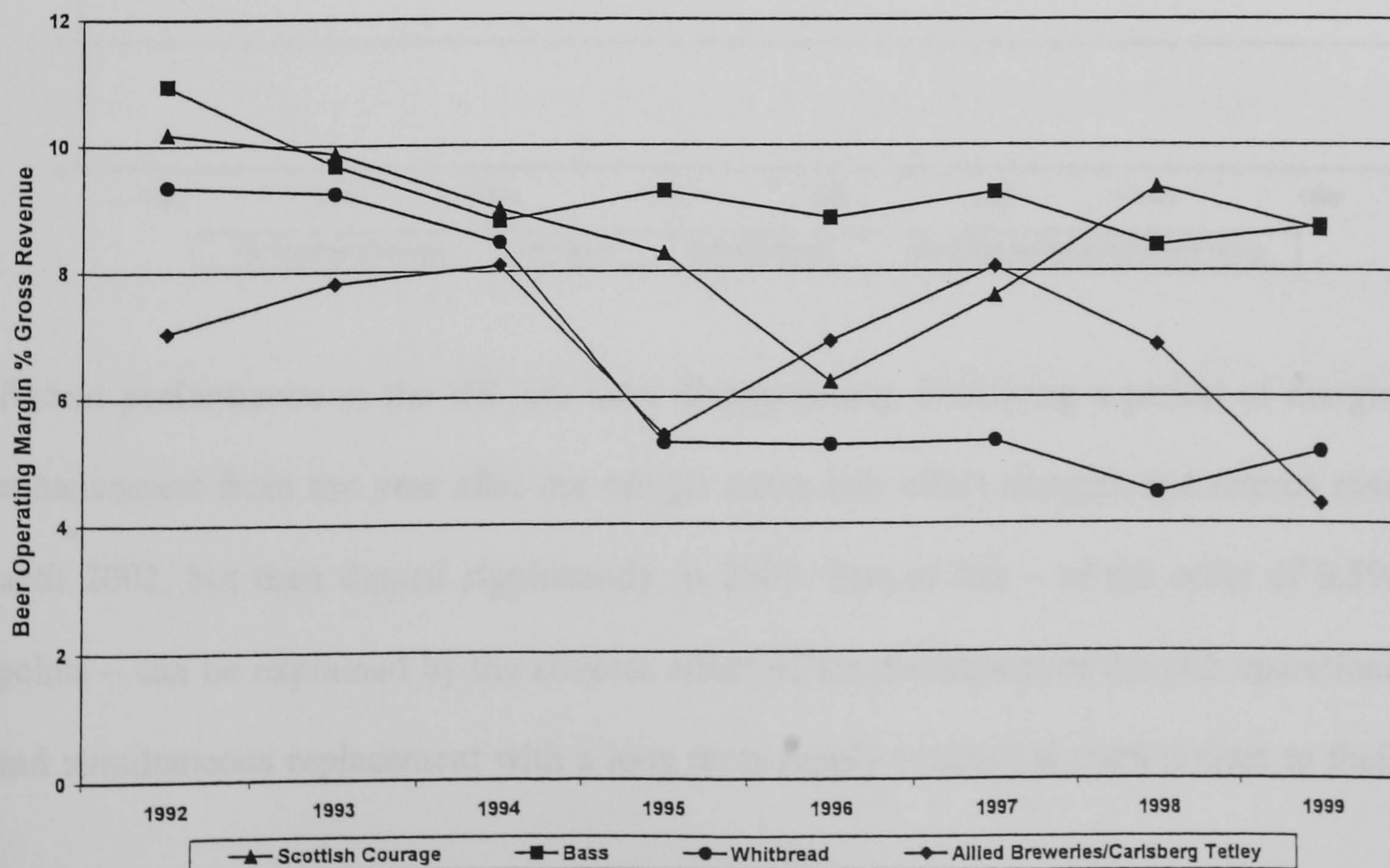
5.4. Post-acquisition operating performance

Figure 5.1. and Figure 5.2 track the performance of the UK's major brewers from 1992, the first year of full implementation of the 'Beer Orders' to 1999, the last year that both Bass and Whitbread were involved in UK brewing. It is clear that the Courage deal transformed Scottish and Newcastle's UK brewing margins and returns from what appeared to be terminal decline in the aftermath of the 'Beer Orders'. Certainly its experience post Courage demonstrated that it had something of a future compared to Whitbread and Carlsberg-Tetley. The chart also illustrates however, that Bass's position

provided a firmer base from which to develop a larger (international) beer portfolio, if indeed that could be a value-added strategy.

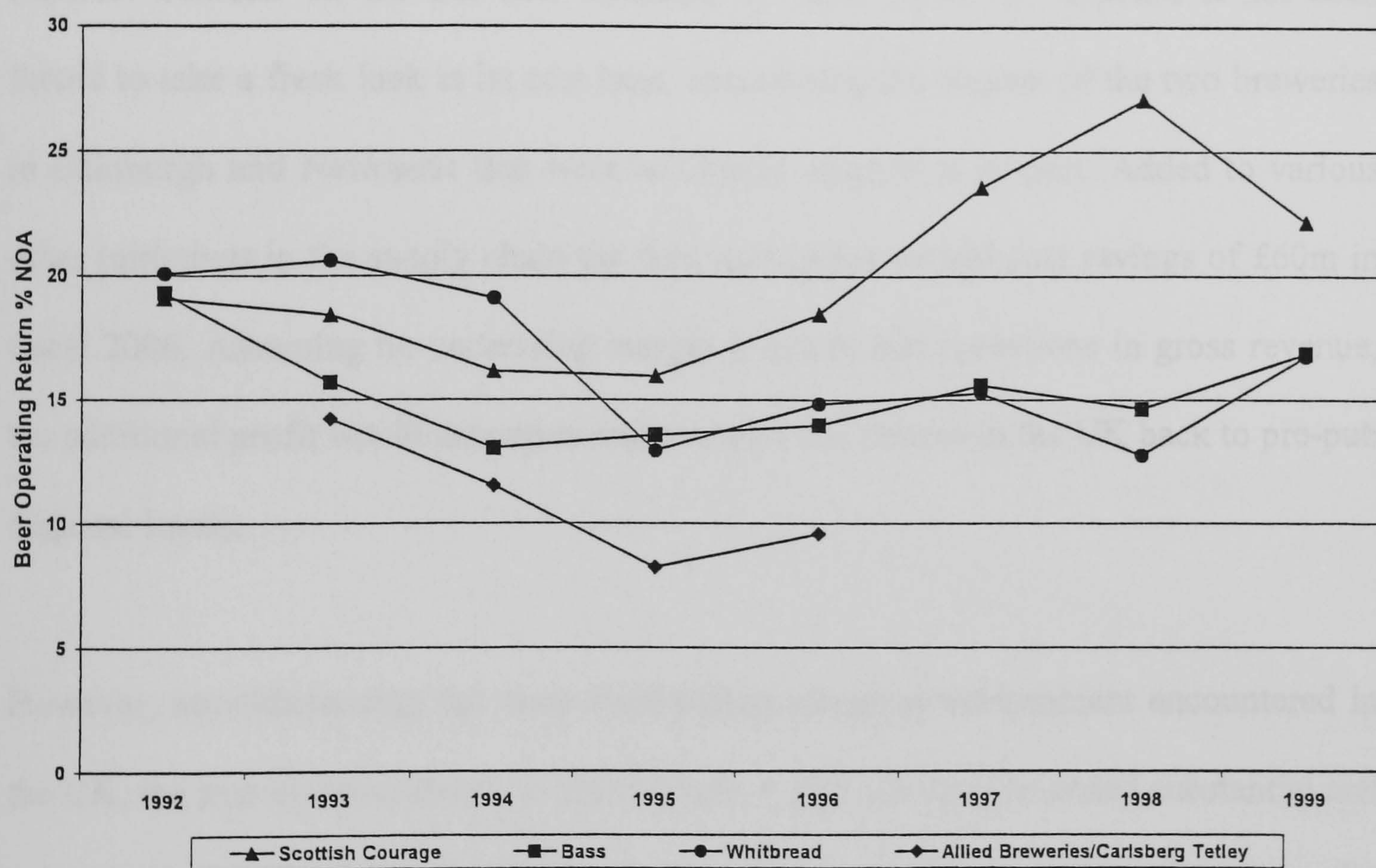
Although wholesale beer prices remained under pressure, not least within the Courage business following the expiration of the lucrative supply contract to the Inntrepreneur estate that ended in 1997 (and which transferred to Scottish & Newcastle on the change of ownership), Scottish & Newcastle had the benefit of significant efficiency measures that shielded margins from the price discounting pressure in the free trade. Breweries were closed and distribution was rationalised in addition to an increased emphasis on the leading brands in the portfolio with successful campaigns for the former Courage brand, John Smith's in particular. The improvement in operating returns reflects the efficiency gains.

Figure 5.1. Operating margins of major brewers



The true test of whether the Courage deal has been a transformational one for Scottish rests in two attributes. Has it given Scottish a sustainable margin advantage in UK brewing, and one that allows a 'superior' return to shareholders? Has it created a powerful platform from which to expand and create a leading position internationally, a key argument in both the Courage acquisition and the 1989 failed bid by Courage's parent Elders IXL for Scottish & Newcastle?

Figure 5.2. Operating returns of major brewers



Recent performance in the UK has been disappointing. Following a period of margin enhancement from the year after the merger came into effect margins and returns rose until 2002, but then dipped significantly in 2003. Part of this – of the order of 0.5% points – can be explained by the adverse effect of the divestment of the pub operations and simultaneous replacement with a long term supply contract at market rates to their

new owner that cost an estimated £14m per annum. In addition, the acquisition of the low margin and high capital intensive Bulmer's cider business also clouds the current picture, adding a further 0.5% points reduction in the smoothed operating margin.

Market conditions deteriorated generally in 2003 with aggressive pricing in the off-trade. According to Scottish & Newcastle since 2000 the UK beer market overall has declined 5.4%. With indirect costs increasing 10%, overall brewing profits fell by 16% (Source: Seminar on the UK beer business, 23 June 2004). In response it has been forced to take a fresh look at its cost base, announcing the closure of the two breweries in Edinburgh and Newcastle that were so closely aligned to its past. Added to various other initiatives in the supply chain the firm anticipates annual cost savings of £60m in fiscal 2006. Assuming no underlying margin pressure and reductions in gross revenue, the additional profit would take operating margins and returns in the UK back to pre-pub disposal levels.

However, notwithstanding the more challenging operating environment encountered in the UK, the true disappointment in the business – and one that has posed substantial and unresolved questions for the firm's mergers and acquisitions strategy has been the failure of the overseas brewing deals to launch Scottish & Newcastle as a formidable international competitor.

At the time of the Danone acquisition in 2000, Scottish and Newcastle said:

"For some time we have made clear our objective to deliver shareholder value through creating a major international beer business able to develop genuinely international brands, exploit the spread of best practice and capitalise on the anticipated growth in global beer consumption. This transaction represents a major step towards our objective"

As an array of international brewing businesses were added to the French purchase (Finland, Portugal, Greece, China and India) operating and cash returns have fallen sharply. Free cash flow benefited temporarily from the sale of the capital intensive pub estate, but there has not been an upwards shift in returns to shareholders.

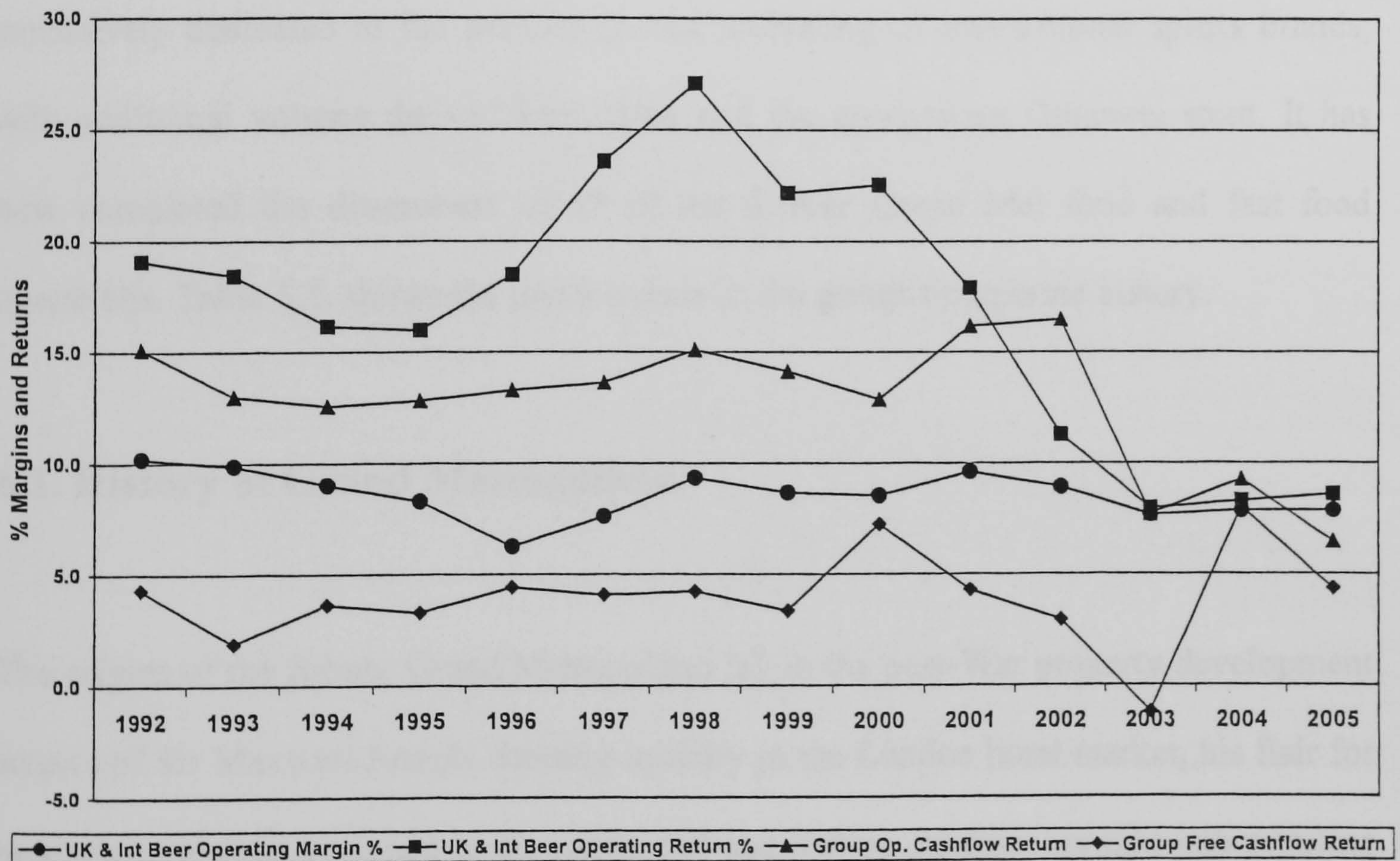
5.5. Conclusion

It is evident from the profile of the financial ratios, shown in Figure 5.3, that chart the firm's development since the Danone acquisition in 2000, that Scottish & Newcastle has been less successful in its international merger and acquisition strategy. While it is not possible to apportion blame between poor strategy and poor implementation, undoubtedly both have played their part.

This performance is in stark contrast to that of Diageo, discussed in the following chapter that also engaged in high profile international acquisitions in the 1990s. Scottish

& Newcastle has adopted a strategy of international mergers and acquisition aimed at broadening its geographic exposure. It is clear that the firm has been successful in managing its interactions with the competition authorities during the execution of those strategies, always favouring an agreed bid structure. However, it is also clear that while developing the core skill of gaining merger clearance as an essential element of the firm's growth strategy good work can be undone by choosing the wrong targets or by poor implementation.

Figure 5.3. Scottish & Newcastle financial ratios



Chapter 6. Case study of Diageo

Diageo is the group that was formed from the 1997 merger of the two major UK alcoholic beverages firms Grand Metropolitan and Guinness. The group is almost exclusively dedicated to the production and marketing of international spirits brands, with additional volume derived from wine and the eponymous Guinness stout. It has now completed the divestment of all of the former Grand Met food and fast food operations. Table 6.1. shows the major events in the group's corporate history.

6.1. History of Grand Metropolitan

The origins of the former Grand Metropolitan lay in the post-War property development empire of Sir Maxwell Joseph. Starting initially in the London hotel market, his flair for property investment aligned to an aggressive acquisition strategy brought pub retailing and several food and drink firms into the Grand Met portfolio. Having established a deal-making culture successive management teams expanded the group into – and out of – Inter-Continental hotels, William Hill, Express Dairies, and the Liggett Corporation (tobacco, eye and healthcare). Perhaps the best known, and at the time controversial

acquisition was the 1989 purchase of Pillsbury that included the Burger King fast food empire.

Table 6.1. Major events in Diageo corporate history

Year	Event
2005	Acquired Bushmills Irish whiskey from Pernod Ricard post acquisition of Allied Domecq
2004	Restructured the US joint venture with Moet Hennessy
2002	Announced sale of Burger King. Disposal of Malibu and Mumm Cuvee Napa brands to Allied Domecq
2001	Acquired Seagram spirits assets jointly with Pernod Ricard. Sold Pillsbury to General Mills
2000	Retirement of George Bull, John McGrath and Anthony Greener Paul Walsh became group chief executive
1999	Sale of Cruzcampo to Heineken Disposal of Metaxa, Asbach Uralt, Cinzano and Vecchia Romagna
1998	Disposal of Dewar's and Bombay to Bacardi
1997	Grand Met and Guinness announced merger to form Diageo
1996	Grand Met sold Pearle Vision
1995	Grand Met acquired Pet (Old El Paso Mexican food, Progresso soups and animal food)
1994	Guinness restructured cross-shareholding with LVMH to take 34% direct stake in Moet Hennessy. LVMH retained stake in Guinness
1993	Grand Met sold Chef & Brewer pub estate. Guinness acquired Desnoes & Geddes (Jamaican brewer of Red Stripe)
1992	Grand Met sold Express Dairy and Eden Vale; acquired Cinzano
1991	Guinness acquired Cruzcampo (Spain's largest brewer)
1990	Grand Met transacted 'breweries-for-pubs' swap with Elders IXL/Courage. Guinness/LVMH cross-shareholding increased to 24%.
1989	Grand Met acquired Pillsbury (included Burger King, Green Giant and Haagen-Dazs)
1988	Grand Met sold Inter-Continental hotels. Unsuccessful bids for Martell and Irish Distillers. Guinness and LVMH established a 12% cross-shareholding structure to 'protect' underlying distribution joint ventures
1987	Grand Met acquired Heublein (owner of Smirnoff)
1986	Guinness acquired Distillers Company Limited (Johnnie Walker Scotch). Grand Met sold Mecca Leisure.
1985	Guinness acquired Arthur Bell. Grand Met sold Liggett.
1983	Grand Met acquired Pearle (eye care), Children's World (nurseries) and Quality Care (healthcare)
1981	Grand Met acquired Inter-Continental Hotels from Pan Am
1980	Grand Met acquired Liggett Group (cigarettes, Alpo pet foods and J&B Rare US distributor). IDV launched Malibu
1974	IDV launched Bailey's Irish Cream
1972	Grand Met acquired Watney Mann, which owned IDV
1971	Grand Met acquired Truman Hanbury Buxton
1970	Grand Met acquired Berni Inns and Mecca (bingo)
1969	Grand Met acquired Express Dairy (Eden Vale, Express and Ski)
1966	Grand Met acquired Levy & Franks (Chef & Brewer)
1963	Guinness opened its first brewery in Africa (Nigeria)
1962	IDV formed from merger of United Wine Traders and W&A Gilbey
1947	Grand Met bought first London hotel (The Mandeville)
1934	Grand Met founded by Maxwell Joseph
1909	Johnnie Walker Red and Black Label launched
1877	Distillers Company Limited formed from six lowland grain whisky distilleries
1851	Gilbey's gin distillery established in Camden Town; Justerini & Brooks merged with Twiss Brownings to form United Wine Traders
1769	Gordon's gin distillery established in London
1759	Guinness brewery established in Dublin
1749	Johnson and Justerini formed partnership, predecessor of Justerini and Brooks (J&B)

Source: Diageo website, Soldana website, London Business School case study (1988)

Grand Met's involvement in international drinks started in the 1970s, when it inherited reluctantly International Distillers and Vintners (IDV) as a result of the hostile approach for the brewing firm Watney Mann. In an attempt to thwart the hostile approach from its Southern rival (Grand Met had acquired Truman Hanbury Buxton in the previous year), Watney Mann, owner of Red Barrel beer and the Chef & Brewer pub estate, bought the minorities in its associate IDV. Grand Met had struck a side deal with Rank Group to offload IDV following the integration of Watney Mann. This agreement fell through, leaving a heavily indebted Grand Met having just completed the largest industrial deal in the UK, on the verge of bankruptcy in the 1973/4 recession.

When Max Joseph retired in 1980 he was replaced by his chosen successor, (Sir) Stanley Grinstead. The acquisition strategy continued unabated, with the purchase of the US tobacco conglomerate, Liggett Group (owner of Alpo pet food and Paddington Corporation, the US distributor of IDV's J&B Rare), Inter-Continental hotels from Pan American Airlines, Pearle eye care and Children's World nurseries. An outside management team was brought in to rationalise the domestic portfolio of brands and retail concepts, notably, (Lord) Allan Sheppard, who went on to replace Grinstead at the helm of Grand Met in 1986. Sheppard recruited a team of younger managers that had similar operational experience from industrial sectors such as the motor industry. Like Sheppard, many of these managers, such as Ian Martin and John McGrath went on to senior positions in Grand Met, and subsequently to leading non-executive positions in other groups.

Shortly after his appointment as group chief executive, Sheppard announced the acquisition of the US wine and spirits producer, Heublein for $1.2bn. This brought ownership and control of Smirnoff, a brand that IDV had distributed in several countries for more than 30 years, a strategic alliance with the owner of the leading tequila, José Cuervo, and gave Grand Met a 15% market share of the US spirits and 11.5% of the US wine markets. The acquired brands added critical mass to the IDV operation of long-standing Scotch brand J&B and recently developed brands Bailey's and Malibu.

This marked a crucial turning point for Grand Met. A leading position in the key US spirits market and a growing portfolio of acquired and home-grown brands presented a growth platform that could not be replicated through acquisition of any of the competitor UK brewing and pub firms. Presiding over what insiders described as very lively and wide ranging strategy meetings with a management style that he likened to 'strangulation' Sheppard was usually firmly at the heart of acquisition rumours in the spirits industry. During 1988 two significant hostile deals were proposed but ultimately rejected, Martell Cognac and Irish Distillers, in the later case blocked by the EC following an intensive lobbying campaign by both the firm and the Irish authorities.

During this period Grand Met was also believed to have contemplated hostile bids for LVMH, Guinness and a raft of smaller producers with leading brands, such as Highland Distillers. However, the cost and complexity of such deals, with additional (family) blocking stakes in most cases made such aspirations futile. Consequently Sheppard turned his attention to the US food industry and in 1989 acquired Pillsbury, an

underperforming food firm with vertically integrated assets in flour and dough products and processed vegetables, in addition to a sizeable restaurant operation that included the number two fast food chain, Burger King.

In addition to integrating and rationalizing Pillsbury to bring efficiency and margins up to industry standards, the early 1990s were spent planning and executing an exit from the low-growth UK brewing and pub retailing sectors. Commentators suggested at the time that Grand Met was instrumental behind the scenes in providing many of the ideas and much of the analysis of the case for the ending of the vertical tie that was partially effected through the 'Beer Orders'. Therefore it was of little surprise to find the firm making the first strategic move in the immediate aftermath of the 'Beer Orders'.

On 12 March 1990, Elders IXL and Grand Met announced their agreement to swap brewing and pub assets through a complex three-stage process. The merger was referred to the MMC on 27 April 1990. Owing to the fact that the parties had expressed their willingness to put forward possible remedies if necessary, provided their fundamental aims could be accommodated, the investigation was completed by October 1990. The transaction was complex. In summary, Elders IXL, through its Courage subsidiary acquired the brewing assets of Grand Met, Watney Mann Truman, holder of the exclusive licence to brew Foster's in the UK. Grand Met took a 50% shareholding in the Courage tenanted pub operation, renamed Inntrepreneur Estates Ltd (IEL) and injected its 3,565 tenanted pubs to create an enlarged IEL. IEL was administered under a service agreement by Grand Met's property subsidiary, Grand Met Estates Ltd. Both the wholly

owned Grand Met managed pubs, Grand Met Retailing (GMR) and IEL signed ten year exclusive supply contracts to Courage, altered to five years to comply with EU law.

This was the first significant development in Grand Met's exit from brewing and pub retailing. The firm sold Grand Met Retailing, which included the Chef & Brewer chain to the ambitious Scottish & Newcastle in 1993. By 1996, the year after Scottish & Newcastle's subsequent decision to acquire Courage, all that remained from Grand Met's brewing past was IEL. IEL paid back the loans to its parents, and was a fully independent operation. With Pillsbury and Burger King in significantly better shape there was now scope for a landmark deal in spirits.

6.2. History of Guinness

Arthur Guinness established a brewery at St James' Gate, Dublin in 1759. With a relatively small home market and mass emigration from Ireland in the 19th century, Guinness became an internationally recognised name. A brewery was established at Park Royal in London, to meet UK demand, largely from the growing Irish immigrant community. However, Guinness did not adopt the UK vertically integrated brewer/retailer structure, opting to sell its beer brand into both the free and tied trade alike. Without the distraction and capital intensity of pub retailing, it was able to exploit opportunities overseas, and by the 1980s had a portfolio of majority and minority stakes in brewers in Nigeria, the Caribbean and Malaysia. This supplemented the export

business from St James' Gate that was largely in the form of concentrate that was sold to partner brewers for local bottling and distribution.

During the 1960s, as lager emerged as the beer of choice in the UK and Ireland, Guinness was viewed increasingly as an 'old man's' drink. To address the business decline it established in conjunction with several brewers (including Courage and Scottish & Newcastle), Harp lager. As lager's share of UK beer consumption grew, other major UK brewers in addition to the consortium members developed their own brands and sought to brew internationally recognised lagers under licence. Harp lager inevitably lost market share to these heritage brands. By the 1980s, Guinness was effectively 'back to square one'.

The still family-controlled business brought in an outsider, marketing professional Ernest Saunders as chief executive. The Guinness brand was repositioned with a younger image employing a groundbreaking marketing campaign featuring the actor Rudger Heuer. The decline in the UK was arrested and Saunders and his team turned its attention to acquisitions, in particular those with more significant international scope. In 1985 Guinness acquired Arthur Bell, owner of the UK and South Africa's leading Scotch brand. In 1986 came the controversial acquisition of the leading whisky producer and brand owner, the Distillers Company (DCL). It was this acquisition with brands Johnnie Walker and Gordon's and a self-sufficient Scotch production profile that created the platform for a global branded spirits operation; this underpins the successor firm, Diageo even today.

Unfortunately the Saunders team had entered into an illegal share-support scheme to guarantee the success of Guinness' bid for Distillers. Saunders' subsequent arrest, trial and imprisonment made way for a new management team under (Sir) Anthony Tennant, a drinks industry veteran from IDV. He turned his attention to building a distribution infrastructure to support the growth of the brands bought by Saunders. One of the first strategic moves was to form a distribution alliance with the French luxury goods firm, Louis Vuitton Moët Hennessy (LVMH) that covered the major markets of the US, Japan and other parts of the Far East. There had been a pre-existing relationship for partner distribution in France and the UK. In 1988 the alliance was cemented by a complex cross-shareholding relationship between Guinness and LVMH group holding companies.

Following the retirement of Anthony Tennant in the mid 1990s, and the succession of Tony Greener, a 'cooling' in the relationship between the Guinness management and Bernard Arnault at LVMH occurred. The cross-shareholding structure was reorganised with Guinness trading its stake in LVMH for a larger minority holding (34%) in the Moët Hennessy subsidiary, and LVMH reducing and finally selling in entirety its holding in Guinness.

Tony Greener's tenure at the top of Guinness was a somewhat unhappy one. He inherited excellent distribution to support an array of leading Scotch brands but his predecessor had not addressed sufficiently marketing and brand positioning. Greener also had to deal with a weak Spanish brewing operation, Cruzcampo that undermined

the good work in the Guinness brewing subsidiary, GBW. Shortly after the merger with Grand Met, Cruzcampo was sold to Heineken in June 1999 for £425m, some £50m less than the original price paid in 1992 by the Tennant team.

6.3. Diageo merger

By 1996 Grand Met had divested its traditional domestic brewing and retailing operations, in addition to a range of other peripheral assets and in so doing had freed up both capital and management time. It had spent several years working hard to improve the efficiency of Pillsbury and Burger King was making headway against market leader McDonalds in the core US market. However, notwithstanding the operating benefits from the restructuring programme, the US food operation was subscale relative to other US and multinational food conglomerates and the US market was showing early signs of an explosion in demand for private label, fuelled by a power shift downstream to food retailers in much the same way as in the UK and parts of Western Europe.

The performance of the international spirits market, in terms of both mood and trading, was near to the lows last seen in the 1970s at the time of the so-called 'whisky loch'. A revival in fortunes in the mid 1980s, when consumers were keen to trade up to premium and deluxe brands and where overseas markets had started to open up was a distant memory. The 1990 recession, tax increases in the US and a lower inflation environment had undermined brand pricing. The growth in private label and value brands in developed markets supported by previously overoptimistic volume growth projections

had created a new 'whisky loch'. At the same time brand owners were compelled to spend more to support their leading names by way of marketing campaigns and maintaining international distribution networks. In many of the major spirits markets unless a brand was in the top two or three in its category it was in danger of being de-listed (and this did happen to some previously well-known brands).

As a result of the merger and acquisition activity in the mid-1980s, four major quoted firms emerged as global, full-service spirits marketers and distributors, Grand Met, Guinness, Seagram and Allied Domecq. In addition there was a smattering of private operators, including Bacardi, Pernod Ricard and Brown Forman, each with one or two leading brands and supra-national distribution. The annual running cost of a fully-owned and controlled distribution network was estimated at close to £300m. This was an enormous fixed cost for a firm that did not have leading brands and full category coverage. The rational response was to amalgamate one or more portfolios, eliminate an entire distribution network, and sell of the 'tail' of non-performing brands from both portfolios to release capital to support the leading brands.

However, most observers questioned whether rationalisation on this scale was possible. Given the size of the majors, hostile bids seemed unlikely. Moreover, tie-ups within the premier division would lead inevitably to a lengthy regulatory investigation in one or more jurisdictions that would scupper any deal.

In so far as there had been rumours of merger and acquisition activity they had centred on a tie-up between Seagram and Allied Domecq. These two firms were thought to have spoken purposefully about a merger in 1986, but on failing to agree terms (possibly due to the family ownership structure of Seagram) other deals had been sought by the parties. Allied-Lyons, as it was then known, was embroiled in a bitter defence against a hostile bid from Elders IXL, and derailed the bid with the 'white knight' acquisition of Hiram Walker. Seagram occupied itself elsewhere in unrelated industries.

Whilst Grand Met's spirits operation, IDV, was performing relatively well, with well-regarded and supported brands, its more innovative portfolio was narrow and non-traditional. The lack of a leading international Scotch and/or Cognac brands was a serious barrier to growth in the emerging markets of Asia. The management had tried several times, unsuccessfully to resolve the shortfall through acquisition in the 1980s. Aside from strong and lucrative positions in the US (Smirnoff and Baileys) and Spain (J&B Rare) it had a necessarily restricted geographic focus; without international brown spirits brands building and maintaining a global network was an unachievable goal.

By contrast, Guinness had a wide ranging international portfolio because of its dominance of Scotch. Through the joint venture relationship with Moët Hennessy it could also play the competitive position of Scotch and Cognac in its distribution network. However, there were group-level distractions brought about by the increasingly frosty relationship with Moët Hennessy's parent, LVMH, and a GBW operation that was struggling to revive the ill-fated 1991/2 Spanish brewing acquisitions.

The possibility of discussions between Grand Met and Guinness surfaced in autumn 1996 with a bizarre 'leak' to The Sunday Telegraph of a confidential report from within Lazards, investment banking adviser to Guinness. It pointed to the prospect of a mega deal between Guinness and Grand Met, with Guinness taking the initiative as bidder. Deepening the intrigue was that Lazard's sister company, Lazard Frère in Paris acted in a similar capacity for LVMH. Indeed, one of Lazard Frère's senior partners, was on the board of LVMH, and a close confident of M Arnault.

On 12 May 1997, after an apparent senior-level courtship of a matter of weeks following a dinner at a secluded London hotel on 10 April 1997, the chairmen of Grand Met and Guinness announced their intention to join via a 'no-premium merger'. Technically, Guinness acquired Grand Met, the marginally larger firm, to avoid triggering a 'Control Event' clause in the joint venture agreement between United Distillers and Moët-Hennessy.

According to the Listing Particulars ("Proposed merger of Guinness plc and Grand Metropolitan Plc") the stated rationale was to establish:

i. Complementary and broad product and brand range: combined spirits and wines business offer consumers some of the most attractive brands across most major spirits categories.

ii. Greater geographic breadth: necessary critical mass and local market capabilities to exploit the opportunities for growth (in emerging markets)

iii. Enhanced marketing capability

iv. Greater cost efficiency: generate operating cost savings of some £175m per annum in the third year of trading following the merger

v. Financial capability to develop the business: both organically and by acquisition

The rationale for the merger between the two was clear. Guinness was heavily dependent on Scotch, creating significant geographic breadth but little depth in most markets. Grand Met's spirits subsidiary, IDV had a broader spread of spirits categories but a relatively insignificant exposure to Scotch (and Cognac) that limited expansion opportunities in Asia/Pacific and Latin America.

In addition to these stated objectives there were other less public, but equally important potential positives for either party to the merger. The relationship between Guinness and LVMH had gone sour some years earlier following the departure of Anthony Tennant. The 1994 restructuring of the relationship that left Guinness with a direct 34% stake in Moët-Hennessy, and LVMH with a smaller shareholding in Guinness was a temporary compromise; Guinness' bargaining position with LVMH was weak, even if LVMH was keen to divest its spirits operation. As part of an enlarged spirits multinational the significance of the Moët-Hennessy shareholding would be diluted as there would be other brands with which to share distribution overheads.

For Grand Met a major spirits deal provided a useful diversion from a US food operation that had completed the rationalisation programme but now faced the challenge of private label and from a resurgent McDonald's in the US fast food market.

Demerging the three separate and unrelated parts of Grand Met had been considered but there were significant tax disadvantages in doing so. The general upheaval in the wake of a merger could provide opportunities to simplify and resolve outstanding tax and financial issues.

However, in addition to having to deal with the deeply disgruntled LVMH (as discussed below) there were two significant hurdles to clear, the FTC and EC investigations into the merger.

6.3.1. The EC judgment

On 20 June 1997 the European Commission declared its decision to initiate proceedings. Following the submission of remedies by the parties, the deal was cleared on 15 October 1997.

The EC recognised the importance of both distribution and the structure of the portfolio in creating or strengthening a 'dominant' position. It had experience of several cross-border spirits acquisitions albeit of a lesser size and had conducted a lengthy investigation into a merger in the branded bottled mineral water industry some years earlier (Nestlé/Perrier) that raised similar distribution and brand portfolio issues.

Unsurprisingly the merging parties argued for the widest possible 'relevant market' for both products and geography, namely, all spirits (market research showed consumers

willing to substitute one type of spirit for another according to occasion, availability and price) and all geography (a single European market; differential taxation between countries was not an issue given that product was shipped 'under-bond' and could therefore be parallel imported legitimately).

On the basis of its own questioning of Diageo's competitors and customers, the EC concluded that just because several different types of spirits were consumed by the same consumers at different times did not place them in the same market. Moreover, they pointed to significant supply side differences that created a natural distinction between brown and white spirits. Firm brand marketing strategies supported individual spirit types and specific brands within the category, implying that the relevant product market had to be no wider than each spirits type. Scotch constituted a separate market given its heritage and price positioning. However, further subdivision to the level of price points such as standard, premium and deluxe was not necessary given a continuum of prices within most categories. Regarding geography, the EC concluded that the relevant geographic market for spirits sales, with the exception of duty-free, was national. This reflected different consumption patterns and the manner in which distribution channels were organised.

On the supply side, no adverse findings were identified. IDV added an incremental 15% to UD's 40 - 50% market share of grain whisky production through its joint venture agreement for the North British distillery. There were few barriers to entry to grain production given that the process and ingredients were the same as for other grain-based

spirits. There were other major suppliers of grain whisky, such as Allied Domecq and William Grant. Moreover, the Scotch industry had always been characterised by significant concentration in the supply of grain. The situation with regard to malt distilleries was less significant given the combined group's 25 - 35% share. The leading single malt brands were owned by independent Scotch producers.

The EC pointed to the importance of distribution and 'portfolio effects' in the spirits industry, drawing on its findings in earlier EC cases. The major spirits companies were vertically integrated into distribution which provided an effective barrier to entry to smaller players and one-brand firms. Where new entry had occurred it had generally been from US-based spirits groups with established brands, such as Jim Beam Brands and Brown-Forman, but their market position had remained almost negligible. The EC stance was that "*the market power deriving from a portfolio of brands exceeds the sum of its parts*". A firm owning a portfolio of leading brands was in a strong position relative to customers by virtue of its relative importance as a supplier, creating a platform for tying or bundling, and the threat to withdraw supplies. When ten competitors and customers were asked by the EC '*does possession of a leading brand in all or most spirits categories help sales of spirits in general*?' eight replied that it would help "*a lot*". The EC concluded that in some markets buyer power was unlikely to be sufficient to prevent the creation or reinforcement of a dominant position as a result of the merger.

At the country level, the main area of focus was Greece, Europe's seventh largest market overall, and fifth largest Scotch market. Greece accounted for 3% of global Scotch volumes compared to France (11%), UK (10%), Spain (9%) and Germany (4%). As shown in Table 6.2., collectively the merger parties would have had almost full control of Greece, and in particular would have accounted for 60% of the Greek Scotch market, that itself represented over 40% of total spirits consumption. The EC was especially concerned about the portfolio coverage in a market that had a very fragmented retail base.

Table 6.2. Greek spirits market in 1995

Category	Volume %	Guinness % Category	Grand Met % Category
Scotch whisky	42.8	45-55	<10
Other (mainly ouzo)	24.3	-	30
Brandy/Cognac	9.6	-	70-80
Liqueurs	8.5	-	30
Vodka	7.8	<10	10-20
Rum	4.2	75-85	-
Gin	2.8	80-90	<2

Source: Official Journal of the European Communities: Industry estimates

Other markets that were scrutinised heavily were Spain, Ireland and Belgium/Luxembourg, the latter two being very small spirits markets. In Spain, the EC considered that a dominant position would be created in Scotch (largely as a result of the combination of market leader, J&B Rare with Johnnie Walker Red Label and Dewar's). In Ireland, the issue was more of consolidation of spirits distributors, with the new firm consolidating effectively three distributors into one, leaving only one other significant independent player in the market. This in turn would strengthen existing dominant positions in Scotch and brandy/Cognac.

Having argued hard at the outset that the merger did not break EC competition requirements, the merging parties wasted little time in addressing the EC's concerns with remedies. They agreed to the divestment of all rights in Europe and the 'Succession States' to the two Scotch brands, Dewar's and Ainslie's, to end the distribution agreements for Wyborowa vodka and Gilbey's gin in Belgium/Luxembourg and Bacardi in Greece. In addition they agreed to resolve the concentration of distribution in Ireland by one of two unspecified methods (in the event, equity shareholdings were sold to private equity and minority shareholders).

6.3.2. The FTC judgment

Due to the international scope of the merger, the US regulatory authorities investigated it simultaneously with the EC. On 17 April 1998, more than three months after the merger took effect, the FTC announced clearance with conditions. A proposed consent made on 15 December 1997 required the total divestment of Dewar's Scotch and Bombay gin. The two brands plus associated assets were sold to Bacardi for $1.9bn in June 1998. The FTC investigation and decision was noted as one that had resulted from significant international co-operation between the US, EC, Canadian, Mexican and Australian authorities. The sale of assets to Bacardi was a record sum for a government-mandated divestment.

The detail of the FTC's analysis are somewhat sparse, however, it focused on premium Scotch and premium gin as two 'relevant markets' that were highly concentrated, and

where concentration would increase as a result of the merger. Its geographic market definition was the US in total even though there are state-level distribution regulations that prevent firms selling their products nationally. In premium Scotch, Guinness was the largest firm in the US with a market share of 68% (Dewar's and Johnnie Walker Red Label) and Grand Met the second largest with 24% share (J&B Rare). HHI would increase by 3000 points to 8000 as a result of the merger. In premium gin, Guinness was market leader with 58% share (Tanqueray) and Grand Met was the number three with 15% share (Bombay). HHI would increase by 1700 points to 6000 as a result of the merger. The merger would create a substantial lessening of competition in these two relevant markets, resulting in higher prices.

6.4. Response of Diageo's competitors

As part of their strategic reviews firms started to prepare their submissions to the regulatory authorities to attempt to stall the merger, or at least scupper Diageo's plans to keep the proposed portfolio of brands intact. In this respect Seagram was keen to protect its leading position in the US and Allied Domecq was minded to minimise the threat in its key market, Spain. There were in addition some specific flashpoints to resolve, ranging from the small – agency agreements that IDV had with other brand owners such as Brown-Forman – to the very large and complex – the joint venture between Guinness and LVMH, and likely response of M Arnault.

6.4.1. LVMH

M Arnault was less than pleased at the prospect of being a minority shareholder in Diageo, more so because as a board member of Guinness he was only made aware of the merger at the board meeting that took place on 9 May 1997, three days before the announcement. Adding to the insult was the fact that LVMH had sold a 7% stake in Guinness a little more than six months earlier for 170p per share less (£230m) than the share price on the day of the announcement.

As Grand Met and Guinness went through the summer of 1997 the greater threat to the merger came from LVMH rather than the possibility of regulatory intervention. LVMH started to buy shares in Grand Met with a view to blocking the bid; a holding of 10% allowed a shareholder to convene an EGM under section 368 of the Companies Act. At 25% the merger could have been blocked entirely. By 3 July 1997, LVMH owned 6.3% of Grand Met, in addition to the existing shareholding of 14.2% in Guinness.

LVMH urged the parties to accept its proposal for a three-way merger of the spirits operations of IDV (Grand Met), UD (Guinness) and Moët Hennessy (LVMH), with the simultaneous divestment of Burger King, Pillsbury and GBW. This proposal was ruled out largely for tax reasons (in the event, this is exactly what has happened to Diageo with the passage of time).

LVMH additionally threatened legal action on Guinness with regard to the 'Control Event' clauses in the joint venture agreement with Moët Hennessy that if successful would have forced Guinness to sell its half of the various distribution joint ventures at net asset value, and the 34% stake in Moët Hennessy for a maximum 15% discount to fair value. Worse still was the additional part of the 'Control Event' clause that stated that LVMH would retain exclusive distribution control over UD's brands in the joint venture markets (US, Japan and most of Europe) for the following ten years. Whilst the legal challenge seemed unlikely to be successful – the merger was structured technically as Guinness acquiring Grand Met for the very reason to avoid triggering the 'Control Event' clause, there was likely to be a long-drawn out legal process heading ultimately for arbitration at the International Chamber of Commerce in Paris.

On 11 October 1997, by which time LVMH owned 11% of the shares of Grand Met and 11.46% of the shares of Guinness, Guinness announced that it had reached an agreement with LVMH to extend the distribution joint venture with Moët Hennessy in return for a payment of £250m (in effect the opportunity loss from selling shares in Guinness six months before the merger announcement). The extended distribution agreement to cover named IDV brands meant that Diageo would gain additional merger cost savings of £20m by year three.

With the extended distribution agreement it seemed that eventually the majority holding in Moët Hennessy would be sold to Diageo. However, whether motivated by the success of the Millennium celebrations for Champagne sales, or the high profile failure to

capture Gucci, LVMH had a change of heart with respect to its ongoing involvement in the international drinks industry. Following Diageo's acquisition and subsequent integration of the Seagram spirits assets, Diageo took in-house all US brands that had previously been distributed in North America by the joint venture Schieffelin & Somerset, leaving Moët Hennessy with a limited sub-scale portfolio in that key market. In November 2004 Moët Hennessy acquired the Scotch producer, Glenmorangie. It remains unclear whether there is an eventual exit route for Moët Hennessy.

6.4.2. Allied Domecq

At the time of the proposed merger with Unilever in 1969, Allied Breweries, the forerunner of Allied-Lyons and Allied Domecq was the UK's second largest producer of beer, the second largest owner of retail outlets with 8,300 public houses and 1,700 off licences, and by virtue of the 1968 acquisition of Showerings, it was also the UK's largest wines and spirits company. It had a fledgling African brewing business with breweries in Kenya, Uganda and Tanzania but a much larger and more important operation in the Netherlands. Allied Breweries was ambitious to create a major international alcoholic beverages business, mindful of the limited extent to which it could expand in the home market. Its first attempt to become a major international force was via the proposed merger with Unilever. When that failed, it diversified into food through the 1978 purchase of J Lyons, the cakes and tea business.

It was not until forced into drastic action to thwart a hostile approach from the aggressive Australian conglomerate Elders IXL in October 1985 that Allied-Lyons emerged on the international spirits scene. In March 1986, during the course of the MMC investigation, Allied-Lyons announced that it had reached an agreement to buy the spirits division of the Canadian group Hiram Walker Resources for £1.2bn, acting as a 'white knight' against Gulf Canada, part of Olympia & York Enterprises (Canary Wharf).

Having escaped the clutches of Elders IXL even though the bid was cleared, the Hiram Walker deal transformed Allied-Lyons into a major international spirits brand owner and distributor, with critical mass in the UK and North America and a portfolio that had significant brand positions in other leading spirits markets, such as Spain. Hiram Walker's brands included Ballantine's, Canadian Club, Courvoisier and Kahlua. In addition there were extensive grain and malt whisky assets.

Shortly after Hiram Walker, Allied-Lyons cemented further alliances and mergers in the spirits industry. In 1988 it concluded a joint venture distribution agreement with the private Japanese group, Suntory. In 1989 it acquired Whitbread's spirits operation, J Burrough, owner of Beefeater gin. The final move in the attempt to build a global spirits empire came in 1994 with the consolidation of a long-standing relationship with the Mora Figueroa families of Pedro Domecq, owner of Sauza tequila and various Spanish whiskies, brandies and sherries. This firm had a dual power base in Spain and Mexico.

In common with Grand Met, during this process of international spirits development Allied-Lyons was also forced to address the impact of the 'Beer Orders' position for its historic base in UK brewing and retailing. In common with Grand Met, it also concluded that its brewing operation was sub-scale. On 22 October 1991 it announced an agreement to merge its UK brewing operations with those of Carlsberg AS, in what was, in effect, a copy-cat deal of the earlier Grand Met/Courage tie-up. The merger was referred to the MMC on 9 March 1992, and was cleared with remedies in July 1992. However, by then the market had deteriorated significantly. Having waited more than two years after the 'Beer Orders' report to complete the deal, the newly merged firm, Carlsberg-Tetley Limited, under Allied management struggled to rationalise. Two years before the termination of a five year supply agreement to Allied Retail, Allied Domecq, as it was now called under new chairman Sir Christopher Hogg, announced its intention to quit brewing. In 1996, it concluded a deal whereby Bass would be the majority shareholder in an enlarged Bass Brewers/CTL with Carlsberg retaining a minority interest. In 1999, the pub portfolio was sold to Punch Taverns. With a refocused group structure and new outside management many anticipated a spirits merger to rival that of Diageo. However, no spirits deal was forthcoming, despite intermittent rumours of a global alliance (although not a full-scale merger) with Seagram. In the 1998 results announcement the chairman commented:

"*We remain keenly aware of the potential benefits of consolidation in the industry but have so far been frustrated by the unwillingness of the other major players to dilute the controlling holdings in their equity*".

This situation continued, and in the meantime the operation drifted somewhat aimlessly, with a long tail of underperforming brands, and no obvious way to counter the strategic threat from Diageo. It was finally on the receiving end of a bid approach in 2005 from the smaller Pernod Ricard and Fortune Brands acting as partners. In the press release that accompanied the Allied Board's recommendation to shareholders new chairman, Sir Gerry Robinson stated the reasons for accepting the deal:

"*The two most significant developments in the past decade have been the formation of Diageo itself in 1997 and the sale of Seagram's wines and spirits business to Diageo and Pernod Ricard in 2001……In these increasingly challenging market conditions, the need for further consolidation in the distilled spirits industry has become increasingly apparent. Given the shareholder structures of the majority of Allied Domecq's significant competitors, there was always the possibility that Allied Domecq's participation in such consolidation would be as the subject of an acquisition rather than as the acquirer*".

6.4.3. Seagram

There were rumours for many years about a tie-up between Seagram and Allied Domecq. The two firms were believed to have discussed a merger in 1986, around the time of Allied's acquisition of Hiram Walker, but could not agree terms. There was considerable strategic rationale in their combination given the mix of brands and their

geographic strengths and weaknesses. The author laid out the logic in October 1995 '*Allied Domecq – A Radical Restructuring Proposal*'.

At the time of the Diageo merger Seagram was enjoying relatively greater success largely due to its then 'dominance' of the US spirits market and strong presence in Asia/Pacific – it was the only one of the top four international spirits firms to own a leading Scotch (Chivas Regal) and Cognac (Martell). It had been quick to restructure its US portfolio following the 1991 tax increase and had reallocated resources behind a smaller number of core brands, in particular Captain Morgan and Crown Royal. However, it was still weak in Europe, the one area where Allied Domecq had the elements of a sustainable market position as a result of Ballantine's. The question was whether Seagram, having recently sold its shareholding in Du Pont, was more taken by the new media investment in the portfolio, MCA/Time Warner. Whilst the firm was managed by Edgar Bronfman Jr, his uncle, Charles, and father, Edgar Sr, were still very much involved behind the scenes. They were spirits industry die-hards.

Whilst Allied Domecq remained openly silent about the Diageo merger, the Seagram management team was more vocal and direct. The first plan of attack was to have the merger blocked. Robert Matschullat, Seagram's chief financial officer pointed to "*serious anti-trust issues, in the US, Europe and elsewhere. The industry is suffering from over-capacity but it is hard for us to imagine a more anti-competitive way of dealing with it than with this deal. I don't know if they (Diageo) think the regulatory*

authorities are snoozing but if this deal goes through I believe it will only be after a huge amount of scrutiny and only with major divestitures".

Seagram was said to have employed an entire team of lawyers that landed on mass at the EC. However, it did not succeed in blocking the deal and the divestment ordered by the EC investigation was modest on any reckoning. In June 2000 Seagram, now pursuing aggressively a future in Media backed into Vivendi, with the additional merger of Canal Plus, forming Vivendi Universal, a US$52bn media conglomerate. As part of the agreement the wines and spirits operation was put up for sale and sold to a joint venture of Diageo and Pernod Ricard in 2001.

6.4.4. Bacardi

As part of the process of gaining approval from the US FTC for the merger, Diageo was forced to divest Dewar's Scotch and Bombay gin. The FTC had concluded that the combined US presence in premium Scotch and premium gin was 92% and 58% respectively prior to the forced divestment. Dewar's, a Guinness brand was the leading US Scotch with a 15% share of the total category, with J&B Rare (Grand Met) and Johnnie Walker Red Label (Guinness) each representing 8% of the total Scotch category. Bombay (Grand Met) accounted for a mere 2% share of the US gin category, albeit the super premium Bombay Sapphire was growing rapidly, driven by an aggressive marketing campaign. Tanqueray (Guinness) accounted for 10% of the total

gin category, with a virtual duopoly with Beefeater (Allied Domecq) in the premium import segment.

The forced divestment of a leading Scotch and a quality well-supported premium gin assured significant trade interest. Bacardi emerged as the successful bidder, paying $1.9bn, several $100m more than market expectations. Because of its focus principally on one category, and specifically one brand, Bacardi had been keen to forge links with other leading private firms with non-competing brands. It shared distribution for the bulk of its US sales with Brown-Forman, owner of Jack Daniel's and Southern Comfort, as a result of a merchandising accord signed in 1991 shortly prior to the acquisition of Martini in 1992. With new (outside) blood at the top of the firm as the author commented at the time:

"*It is difficult to imagine that Bacardi will remain on the sidelines during the next phase of the industry's reconstruction*"

Having completed the acquisition of Dewar's and Bombay in June 1998, funded by debt, the Bacardi top team looked closely at a public offering mindful that any future rationalisation opportunities would almost certainly require an issue of equity. However, it was not until 2004, and another management team later that the first tentative steps on the IPO track took place with the agreement of the family shareholders to create a new class of shares. In the intervening period Seagram's spirits assets became available. Unable to strike a partnership agreement Bacardi was unable to muscle in on the

Seagram's sale. With little further progress towards an IPO and another change of management, Bacardi also missed out on the 2005 acquisition of Allied Domecq.

6.4.5. Pernod Ricard

A relative newcomer to international spirits Pernod Ricard grew rapidly from its core product base of anis (an aniseed flavoured spirit that is popular in southern France and northern Spain), and is now the second largest spirits firm internationally as a result of two major transactions, the 2001 joint purchase of Seagram as the junior partner to Diageo, and the 2005 acquisition of Allied Domecq in conjunction with junior partner, Fortune Brands. Unlike Allied Domecq it was able to raise the finance to do deals and capable of acting in partnership with others to get the brands it wanted.

6.5. Diageo subsequent merger and acquisition strategy

The merger of Grand Met and Guinness generated significant cost savings in downstream functions through the effective removal of one of the two pre-existing distribution networks. Moreover it established a portfolio of leading brands that spanned almost every market and product category. However, the portfolio was still not optimal; the 'perfect' portfolio would have included Bacardi. In addition in the core US market, third party distributors had perceptively too much sway over product portfolios. Diageo aspired to the same arrangement of exclusivity with distributors enjoyed by the largest beer producer in the US, Anheuser-Busch. To force exclusivity a wider portfolio and a

market share closer to 25% would be required. The merger, post the divestment of Dewar's and Bombay gave a share closer to 20%.

Having captured most of the cost cutting benefits from the merger and sold off the peripheral or 'tail' brands to increase efficiency further (country brands such as Metaxa, Asbach Uralt, Cinzano and Vecchia Romagna), Diageo turned its attention to its wider portfolio of assets. In 1999 the ill-fated Cruzcampo Spanish beer operation was sold to Heineken opening the way for a restructuring of the brewing business, Guinness Brewing Worldwide that started in 2000 with its incorporation into the wider spirits portfolio. This gave additional projected cost savings of £130m per annum by year three. In 2004 the restructuring went further with the transfer of all brewing to St James's Gate, with the closure of London's Park Royal brewery and redevelopment of the extensive site.

Pillsbury and Burger King were also earmarked for sale. In July 2000 Diageo announced an agreement with fellow Minneapolis food firm General Mills to combine their two dough-based food operations with Diageo retaining a 33% minority shareholding in the enlarged General Mills. The shareholding was sold eventually in several tranches between 2004 and 2005. In December 2002 the Burger King business was sold to a consortium of private equity firms.

While the group restructuring was taking place the opportunity for perhaps a final large-scale spirits acquisition presented itself as a result of Seagram's decision to merge with

the French media conglomerate, Vivendi. Acting in conjunction with the French spirits firm Pernod Ricard, Diageo announced on 11 December 2000 that it would buy Seagram's spirits operations from Vivendi. Diageo retained US flagship brands Captain Morgan rum and Crown Royal Canadian whiskey, in addition to other North American whiskeys and peripheral rum and wine brands. Paul Walsh, Diageo's new chief executive officer commented: "*This transaction is the next step in transforming Diageo from a food and drinks group with four operating businesses, into a focused leader in the global beverage alcohol industry*".

Ahead of notifying the EC and FTC the two acquiring parties had put in place a 'Framework and Implementation Agreement' that specified which of the Seagram assets Diageo and Pernod Ricard would acquire respectively. Certain other assets were to be held jointly pending divestment to third parties.

6.5.1. The EC judgment

The EC was notified formally on 20 March 2001 and cleared the acquisition with proposed remedies on 8 May 2001. The 'Framework and Implementation Agreement' had been structured by the parties to avoid competition concerns such that the EC could not identify any situations where overlaps between the parties would create or strengthen a dominant position in any national market. Similarly there were no examples of the creation or strengthening of collective dominance.

However, post-merger 'portfolio effects' that could give rise to competition concerns were identified in France, Italy, Portugal and Spain for post-merger Pernod Ricard, and in Iceland (where the government was the monopoly retailer for all off-trade liquor, similar to in US 'Control States'), Spain and the UK for post-merger Diageo. The concerns in Spain and the UK, by far the most significant markets for Diageo were not deemed sufficiently large to attract additional remedies. However, in Iceland Diageo was forced to entrust permanently the distribution of Captain Morgan to an independent third party, thus removing the opportunity for portfolio leverage through this brand position. This was hardly onerous.

6.5.2. The FTC judgment

In October 2001, the FTC issued a draft complaint against the joint acquisition of the Seagram portfolio on grounds that in five relevant product markets, the result of the elimination of substantial competition between Diageo and Seagram would be higher prices for US consumers. The five relevant markets were premium rum, popular gin, deluxe Scotch, single malt Scotch and Cognac as set out in Table 6.3..

Following remedies proposed by the parties, the FTC approved the acquisition on 19 December 2001. In premium rum, as defined by the FTC, Diageo agreed to divest the Malibu brand worldwide to an approved acquirer, and to put in place various procedures to ensure that it did not gain commercially sensitive information about Seagram's gin, a competitor of Gordon's in the popular gin category, Chivas Regal, the main competitor

to Johnnie Walker Black Label in deluxe Scotch, The Glenlivet, a major single malt and Martell, a major competitor to Diageo partner brand Hennessy Cognac. Diageo also agreed to implement a series of firewalls to protect information about Pernod Ricard brands that were the subject of a co-packing agreement in the US. Again, although more extensive remedies, requiring the divestment of a brand, not a deal-stopper.

Table 6.3. FTC relevant market analysis

Relevant market	Retail sales $m	% US spirits volume	Brands	Market share
Premium rum	1000	9%	Bacardi Captain Morgan Malibu	54% 33% 8%
Popular gin	650	6%	Seagram's Gin/Burnett's Gordon's/Gilbey's	66% 34%
Deluxe Scotch	450	1%	Johnnie Walker Black Chivas Regal	51% 49%
Single malt Scotch	250	<1%	Glenlivet Classic Malts	26% 6%
Cognac	. 1000	5%	Hennessy Martell	54% 9%

Source: Industry estimates, FTC

6.6. Post-acquisition operating performance

The Seagram deal reinforced Diageo's position as the world leader in branded spirits, but importantly gave greater strength and depth in the US, the world's largest market for premium spirits brands. The acquisition brought some key brands, such as Captain Morgan and Crown Royal that had benefited from extensive marketing commitment under Seagram's ownership. Having achieved the 'magic' market share of 25% of US spirits sales with the array of heavyweight brands in one portfolio as a result of the original Diageo merger, there was the possibility of streamlining distributor agreements

to establish portfolio exclusivity in the 'Open States' network. By early 2003 Diageo announced that it had negotiated relationships with new distribution partners giving it a dedicated sales force in 24 states that accounted for 70% of total US volumes. This has been extended further and now takes in 39 states that account for 85% of total volume.

The combination of many large number one category brands – 8 of the top 20 premium spirits brands in the *Impact* top 100 premium distilled spirits brands worldwide – aligned to the extensive distribution capability established a positive feedback whereby peripheral brands and assets could be sold and the surplus reinvested in marketing and additional cost cutting measures in the network. Table 6.4. shows the relative position of leading brand volume sales prior to and over the course of the transition of Diageo to the world's leading spirits brand owner. Tracked against its closest competitor, Allied Domecq it serves to illustrate the step change in the business, the mountain that competitors have to climb in their marketing and distribution commitment, and why smaller players such as Glenmorangie had already given up the chase. Allied Domecq succumbed eventually to the ambitious Pernod Ricard in 2005. Other mid-scale players are likely to follow suit in the years ahead.

The amount of money available to spend on brand marketing initiatives serves to illustrate the ongoing difficulties faced by Allied Domecq's new owners. Currently Diageo spends in excess of £1bn per annum on marketing and advertising. The former Allied Domecq spent approximately £420m. In both cases this represented around 15% of net revenues. But spread among fewer brands that are already market leaders in their

categories, Diageo's 15% goes a lot further, as evident from the relative margin profile of the firms in Figure 6.1..

Table 6.4. Top 5 brand performance of Diageo and Allied Domecq (million cases)

Diageo	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Smirnoff	15.0	15.0	15.3	15.9	16.3	16.5	18.4	21.8	23.0	24.2	25.2	26.9
Johnnie Walker	11.0	11.4	11.4	10.4	10.0	10.3	10.6	10.6	10.8	11.7	12.3	13.7
Baileys	3.9	4.0	4.1	4.2	4.7	4.7	5.1	5.7	6.2	6.6	6.7	7.0
J&B	6.0	6.0	6.2	6.1	6.0	6.0	6.2	6.3	6.0	6.0	5.9	5.9
Jose Cuervo	4.5	4.6	4.7	5.0	4.6	4.3	4.3	4.2	4.2	4.2	4.5	4.5
Subtotal	**40.4**	**41.0**	**41.7**	**41.6**	**41.6**	**41.8**	**44.6**	**48.6**	**50.2**	**52.7**	**54.6**	**58.0**
Total Wines & Spirits	**109.0**	**107.0**	**106.2**	**104.1**	**96.8**	**98.4**	**97.6**	**102.6**	**107.7**	**110.5**	**114.0**	**122.7**
% Top 5	**37.1**	**38.3**	**39.3**	**40.0**	**42.0**	**42.5**	**45.7**	**47.4**	**46.6**	**47.7**	**47.9**	**47.3**

Allied Domecq	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ballantine's	5.0	4.9	5.0	5.0	5.2	5.5	5.6	5.7	5.5	5.9	NA	NA
Kahlua	2.4	2.4	2.6	2.9	3.4	3.5	3.4	3.1	3.1	3.0	NA	NA
Sauza	1.8	2.1	2.4	2.3	2.9	2.1	1.6	1.9	2.4	2.9	NA	NA
Canadian Club	2.5	2.5	2.5	2.4	2.4	2.3	2.2	2.2	2.4	2.6	NA	NA
Beefeater	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.4	NA	NA
Subtotal	**13.8**	**14.0**	**14.6**	**14.8**	**16.1**	**15.6**	**15.1**	**15.2**	**15.6**	**16.8**	NA	NA
Total Wines & Spirits	**46.9**	**47.4**	**48.2**	**49.3**	**49.5**	**50.8**	**50.5**	**63.5**	**68.6**	**70.1**	NA	NA
% Top 5	**29.4**	**29.5**	**30.3**	**30.0**	**32.5**	**30.7**	**29.9**	**23.9**	**22.7**	**24.0**	NA	NA

Source: Impact Databank

Figure 6.2. shows that in group cash terms the trend has been positive for Diageo following the anticipated dip immediately after the merger when the firm had to adjust the cost base downwards. A similar dip occurred following the integration of Seagram in fiscal 2002, before continuing the upwards trajectory.

Figure 6.1. Wines and spirits operating margin of Diageo and its major competitors

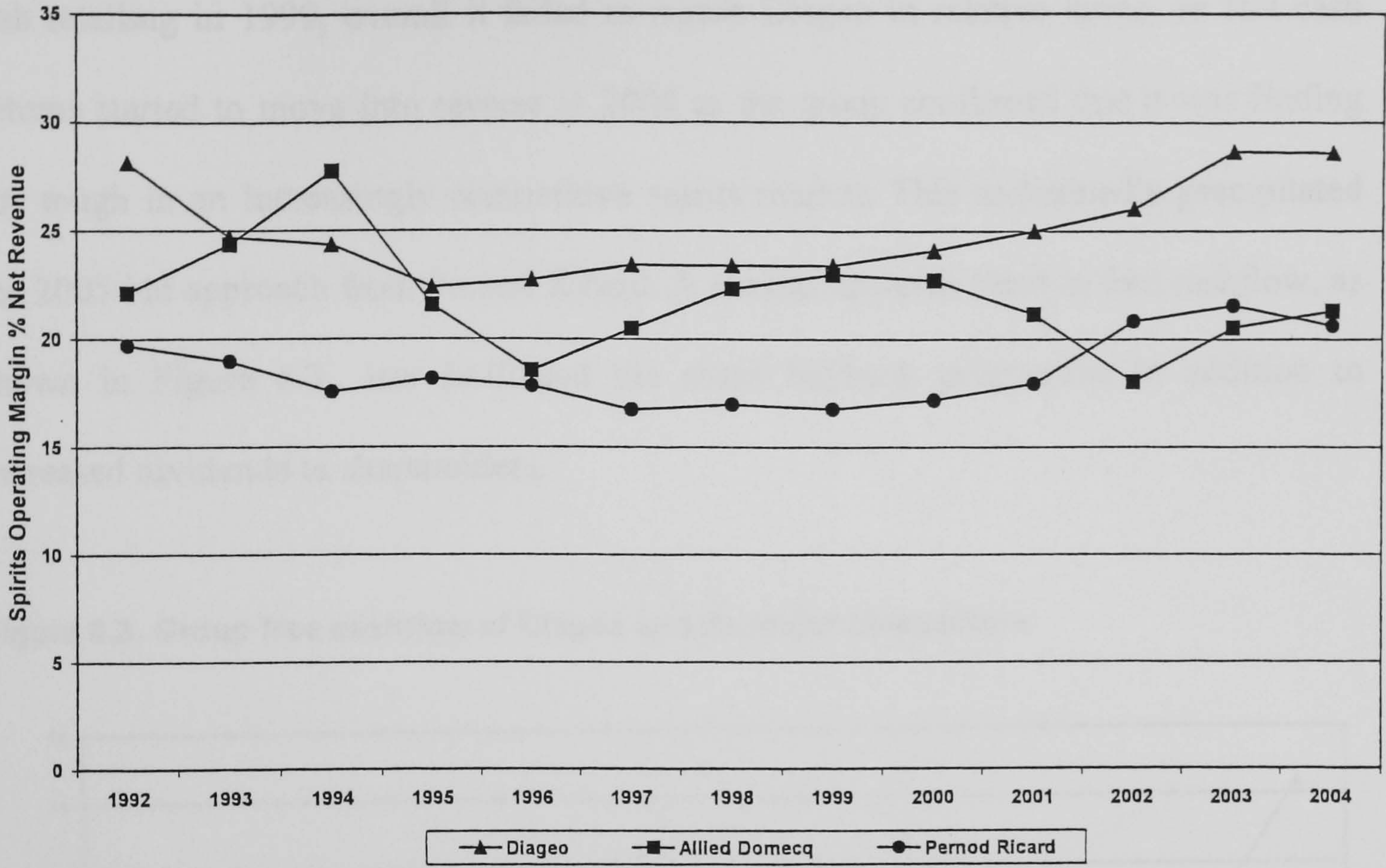
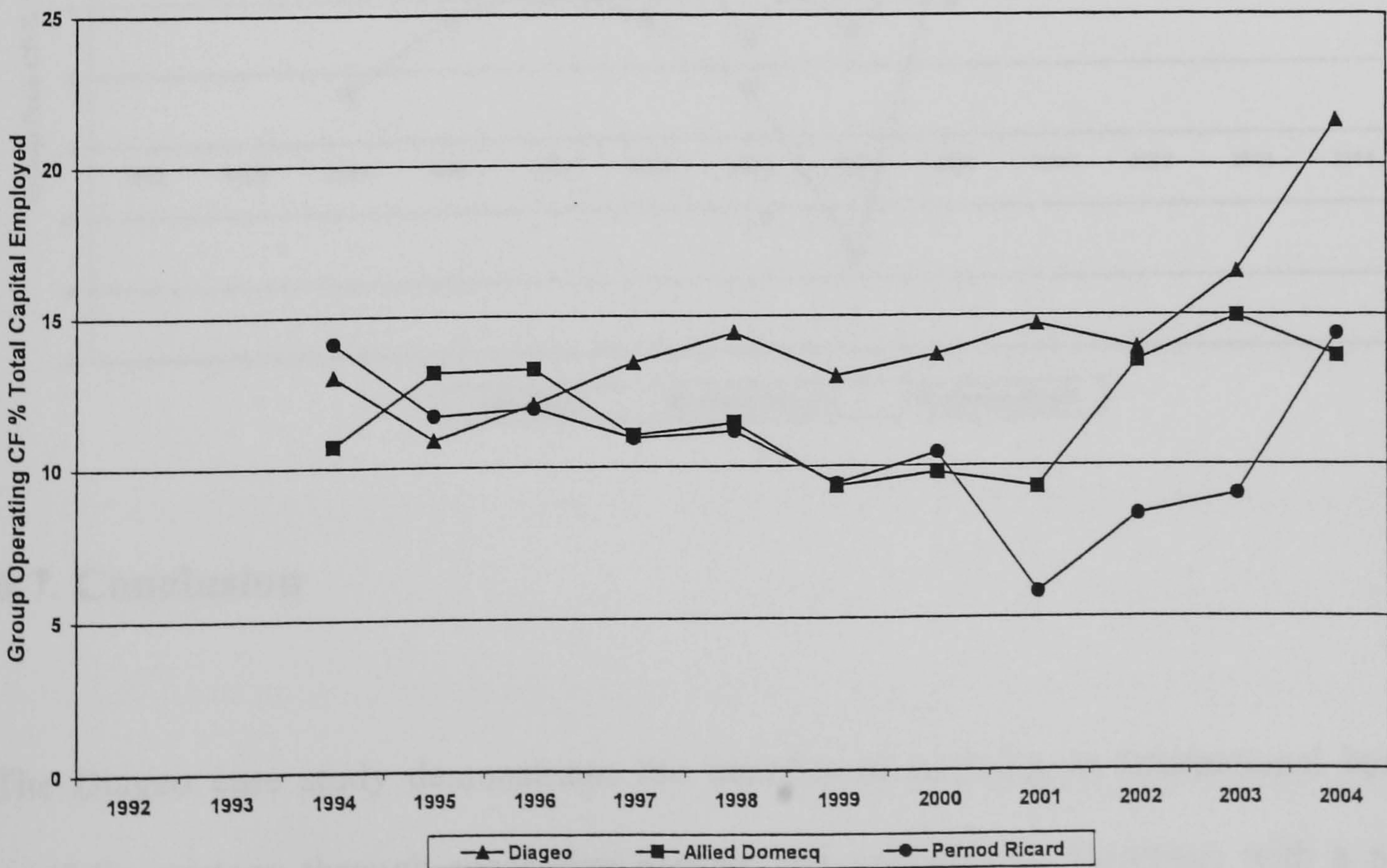
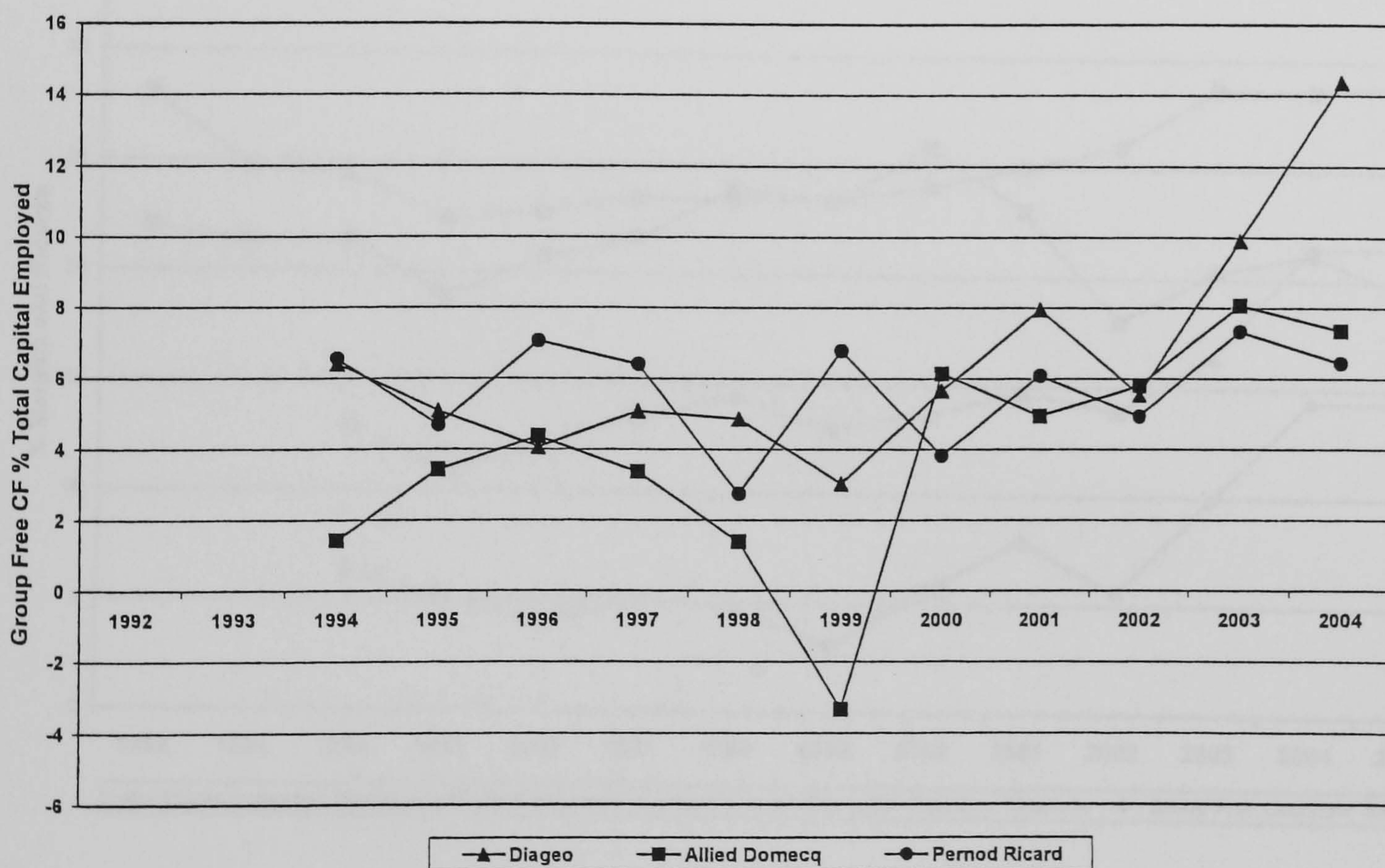


Figure 6.2. Group operating cashflow of Diageo and its major competitors



Whilst Allied Domecq improved considerably following the exit from capital intensive pub retailing in 1999, overall it failed to match Diageo in relative terms. In fact cash returns started to move into reverse in 2004 as the group confirmed that it was finding life tough in an increasingly competitive spirits market. This undoubtedly precipitated the 2005 bid approach from Pernod Ricard. A similar upwards trend in free cashflow, as shown in Figure 6.3., has facilitated the share buyback programme in addition to increased dividends to shareholders.

Figure 6.3. Group free cashflow of Diageo and its major competitors

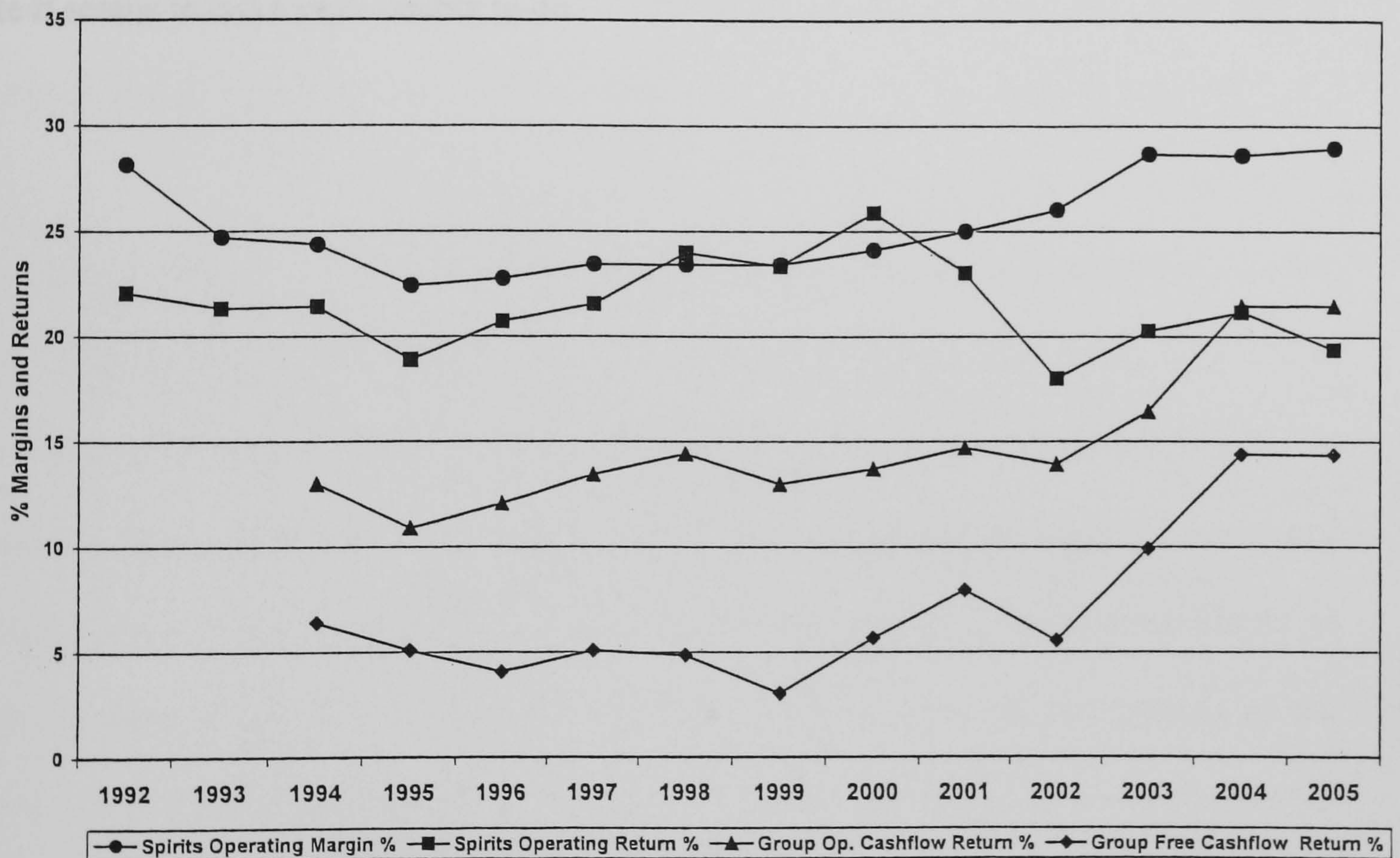


6.7. Conclusion

The Diageo case study demonstrates the benefits of pursuing an international brand portfolio strategy through successive merger and acquisitions. However, with a new

number two competitor in the expanded Pernod Ricard the question remains whether it will continue to add value at the same or greater pace, as measured by divisional and group operating and cash measures. Certainly, looking only at the financial ratios for Diageo in Figure 6.4 it would appear that there is scope for a greater operating return from the same asset base, or an additional round of divestment of more marginal – perhaps wine – assets.

Figure 6.4. Diageo financial ratios



There is the intriguing prospect of further rationalisation in the spirits industry this time centring on the second tier, family controlled businesses. There is speculation that Rémy Cointreau, with its unresolved succession issues, having announced its intention to buy itself out of Maxxium, the distribution joint venture with Fortune Brands and Robertson

& Baxter, is considering a sale. There would be no doubt that if the regulators could be accommodated in the same manner as they were in the original Diageo merger and subsequent joint acquisition of Seagram, Diageo might be the only potential buyer of the leading Cognac, Rémy Martin. In this respect there is now a much slimmed down relationship with Moët Hennessy, with that firm having made its own independent moves into the Scotch segment. Pernod Ricard owns Martell as a result of its share of the Seagram assets. The only other potential buyer of Rémy Martin would be Bacardi, but it would have to resolve its own internal family squabbles first, something which to date it seems to have been unable to do.

Chapter 7. Conclusions

This thesis set out to examine how firms in a mature industry can pursue a growth strategy through merger and acquisition activity by influencing the outcome of competition authority enquiries to their benefit.

The study is unique in that it has assessed the impact of sequential acquisitions within one industry, the UK alcoholic beverages industry in which two firms, Scottish & Newcastle and Diageo, came to dominate it over a 35 year period almost wholly by acquiring their competitors and thereby establishing portfolios of leading brands and geographies in their respective categories of beer and spirits. Two separate pieces of analysis were conducted; discriminant analysis of all mergers and acquisitions of the major UK alcoholic beverages firms over the period 1969 - 2006, followed by two in-depth case studies of Scottish & Newcastle and Diageo.

Crucial to the merger and acquisition strategy both of these firms employed was their respective ability to manage ongoing and repeated interactions with competition authorities. Their success in managing the competition process has resulted in all their major UK competitors either exiting the industry or being subsumed into these two or

other international firms. Both have since gone on to apply their experience, albeit with varied degrees of success, outside the UK.

7.1. Summary of findings

Three research questions were examined in this thesis:

i. What economic, political, and social factors should merging firms exploit to minimise the probability of a referral to, and minimise the impact of any remedies imposed by, the competition authorities;

ii. How should bidder and target firms in a merger organise themselves in presenting their case to the competition authorities; and

iii. How should competition authorities respond to growing evidence of competitor firms co-operating with each other before and during a merger enquiry in the process of gaining clearance

The answers to each of these questions are discussed under three separate headings in the remainder of this section.

7.1.1. What economic, political, and social factors should firms exploit?

Over the period of the study there were 40 separate mergers and acquisitions involving the major UK alcoholic beverages firms. This spanned UK domestic and cross-borders

deals in both the brewing/retailing and spirits industries. An array of quantitative and qualitative data and information accompanied each merger. From this a set of variables was extracted that was *a priori* expected to be significant in determining whether a merger or acquisition was '*Referred*' or '*Not Referred*' and then subsequently '*Transacted*' or '*Not Transacted*'. Discriminant analysis was then applied to this dataset to identify the most statistically significant variables.

The results show that three variables had a significant impact on the probability of a merger or acquisition being referred to the competition authorities:

Market Share

Considering the 'All Cases' dataset of 40 mergers and acquisitions over the 35 year period of study the market share of the bidding firm at the time of the merger was unsurprisingly the most significant variable in determining referral. The larger the market shares of the bidding firm the greater the likelihood of an abuse of market power.

Both the 'All Cases' model and 'UK Only Cases' model show that it is the Bidder % Market variable that is most significant. For the 'Non-UK Cases' sample of 14 mergers in Europe and the US the most significant variable in determining referral was whether there was evidence of dominance of a specific category, or 'relevant market' post-merger rather then the bidder's share of a more widely defined market.

Bid Type

The nature of the bid was also a significant variable in the 'All Cases' model although it had a small discriminant loading suggesting that it was only significant at the margin in determining an outcome. If a bid was hostile it was more likely to be referred. In this model seven mergers were referred when the model would have predicted early clearance. Of the seven, two were hostile bids – Elders IXL's 1986 bid for Allied-Lyons and Grand Met's 1988 hostile bid for Irish Distillers – that were both subject to heavy lobbying by the target firm.

In addition, there were four cases where the model would have predicted a referral but where the bid was cleared early; two of these were high profile European spirits deals where two firms were bidding jointly for the target and had pre-agreed the split of assets in order to pre-empt a regulatory intervention. The other high-profile case was Scottish & Newcastle's 1995 agreed acquisition of Courage that created a new market leader in UK brewing with an approximate 30% market share, and which was the starting point for the eventual exit of Bass and Whitbread from brewing.

Political Donations

The 'UK Only Cases' model of 26 mainly brewing/retailing mergers yielded a very interesting finding in that the likelihood of a referral was reduced if the bidder made political donations. This factor may be a proxy for the positive pro-business political

climate that endured during the period in which the Conservative party was in office that corresponded to significant merger and acquisition activity in the UK. The Beerage had always been seen as pro-Conservative. Shortly after the change of government to the Labour party in 1997, two significant bids were blocked (Bass/Carlsberg-Tetley and Interbrew/Bass) and a third was abandoned on threat of referral (Whitbread/Allied Domecq Retail). No further significant mergers and acquisitions have been proposed by the alcoholic beverages firms in the UK since.

There appears to be another underlying pattern in the impact of political donations, particularly in the 1980s, that hostile bids for politically well connected targets were more likely to lead to referral. Scottish & Newcastle escaped the clutches of Elders IXL in 1989. This correlates with the finding that hostile bids are more likely to be referred.

Based on the significant variables identified above we can conclude that a firm will maximise its probability of success in completing a proposed merger or acquisition by:

i. ensuring that its pre-merger share of a widely-defined market (its own definition) is as low as possible;

ii. that it does not have plans to retain more than a 25% market share of a very narrowly defined market post-merger (the competition authority's definition);

iii. that its bids are agreed with the target and not hostile; and

iv. that its major deals occur during a political regime of which it was supportive.

7.1.2. How should bidder and target firms organise themselves?

The case studies of Scottish & Newcastle and Diageo not only show how these firms worked to achieve their own strategic objectives but how their actions influenced and shaped the growth strategies of their major UK alcoholic beverages industry competitors. What these two firms shared was a strategy for gaining regulatory approval; Scottish & Newcastle working in tandem with the political climate and Diageo relying on its ability to develop innovative merger structures and always showing willingness to compromise with competition authorities by proposing and accepting remedies.

What is also evident from the case studies is that these two firms were successful in implementing their merger and acquisition strategies in an environment of enforced upheaval in the domestic brewing market brought about by a key anti-trust investigation, the 'Beer Orders', that ended the centuries old vertically integrated structure of UK brewing. In addition, their history and formation was also influenced profoundly by the interjection of the aggressively acquisitive Australian brewing conglomerate Elders IXL, a new entrant into the UK brewing industry in the mid 1980s, a time that corresponded with the government-enforced 'Beer Orders'.

The first anti-trust inquiry into the UK brewing industry in 1969 was prompted by a rash of complaints about anti-competitive behaviour in UK brewing due to the increasing dominance of the six large brewers that accounted for 68% of beer production and that

controlled through ownership a major share of the retail - pub and off licence - trade. As a result of this concentration of ownership, it was argued that consumer choice was limited and that there were pricing distortions in the market, with tied tenants paying more for their beer supplies than large free trade customers.

The MMC contemplated a wide overhaul of the domestic brewing industry to remedy the public interest issues, including a full scale disaggregation of brewing and retailing assets and the abolition of the vertical tie. However, it concluded that the disruption and disadvantages of such a radical move was not a practicable catalyst for change given the prevailing restrictive licensing laws. Thus the vertically integrated structure remained intact. Over the next two decades the six large brewer/retailers grew their market share of beer production to over 75%.

It was as this point that the Australian conglomerate, Elders IXL, spotted an opportunity to apply its aggressive management style in developing and marketing of brands to the traditional UK brewing industry. Whether the competition authorities had, at this stage, been contemplating another investigation into the supply of beer in the UK is unclear. However, the referral that led to the 1989 'Beer Orders' came a matter of months after Elders IXL's hostile bid for the UK's second largest brewer, Allied-Lyons. Whilst Elders IXL was ultimately thwarted in its attempt to acquire Allied-Lyons, its actions, directly and indirectly were instrumental in transforming the UK alcoholic beverages industry from a group of sleepy regional brewers and distillers into multinational brand marketing organisations.

Elders IXL provided the catalyst for change; many of the strategic ideas for the restructuring of the UK brewing industry that occurred after the 'Beer Orders' were first mooted in the 1985 and 1989 approaches for Allied-Lyons and Scottish & Newcastle by Elders IXL's UK brewing subsidiary, Courage, and its brand, Foster's. The Elders IXL's partnership with Grand Met in the innovative 'breweries-for-pubs swap' was the forerunner of the 'PubCos', copied from its business development in Australia. Grand Met's ability to find a partner in Elders IXL eased its own transition from domestic brewer/retailer to international alcoholic beverages brand manager. The partnership structure that was formed with Elders IXL to clear regulatory barriers in the UK has been replicated in subsequent acquisitions internationally by the once hostile-only Grand Met. However, despite bringing strategic innovation to the UK, it is evident that Elders IXL did not succeed in its ambitions because Scottish & Newcastle eventually emerged as the UK's only domestically controlled international brewer. The differentiating factor that determined the success of Scottish & Newcastle in implementing its strategic goal, and where Elders IXL failed, was the degree to which these two firms were able to manage their interaction with the competition authorities.

The importance of Elders IXL

At the time of the ill-fated bid for Allied-Lyons Elders IXL was one of the largest firms in Australia, having been built by a series of acquisitions under the management team of John Elliott. Elders entered the Australian brewing industry in 1983 through the

acquisition of Carlton and United Breweries (CUB), the larger of Australia's duopoly brewers with a market share of 47%.

Having absorbed the CUB acquisition and sold peripheral businesses to pay down debt, the ambitious Elders team turned its attention to international expansion. In UK brewing, it saw the potential to reap rewards from shaking up an antiquated structure – both operationally and managerially – to develop a platform for international growth through brand marketing initiatives. The UK brewers had attempted international growth in the 1960s, perhaps fearing the eventual end of the cosy vertically integrated structure but had been slow to promote their brands and develop overseas. Instead they had largely followed a conglomerate strategy into related (and sometimes unrelated) businesses such as food and leisure but within the UK. By contrast Elders had established an international franchise for its leading brand, Fosters, that was sold in 80 countries. Almost 12% of its domestic production was exported, primarily to other countries in Asia/Pacific. It had been building a presence in North America, and with the granting of an exclusive brewing licence to Watney's in 1981 (the brewing subsidiary of Grand Met) UK sales of Foster's represented 5% of the draught lager market at the time of the Allied-Lyons bid.

Aside from a more international focus for its brewing brands, supported by new product development and the adoption of modern brewing technology, the group was also a structural innovator back home. The decision to reshape the recently acquired CUB pub estate of 353 outlets was significant not least for the impact it would have on the UK

beer market. In 1984 Elders started to roll out a programme that allowed the lessees of 304 pubs the opportunity to share in the capital growth as well as income of their pubs through a 50:50 joint venture that was established as a separate property owning firm, with its own non-recourse debt. This structure would be replicated in the UK pub market through Elders' UK subsidiary Courage, and can be traced through the 'Beer Orders' in the Inntrepreneur lease arrangements (the controversial 20-year 'assignable' leases) that were put in place as a result of the 'breweries-for-pubs' swap deal between Grand Met and Courage. Inntrepreneur was the model structure for the independent pub chain sector (PubCos) that has come to dominate the UK retail pub scene.

Elders IXL was unsuccessful in its approach for Allied-Lyons. The reference to the MMC (the Secretary of State considered that the financing of the proposed acquisition deserved investigation), was rejected. However, the lengthy enquiry coupled with a very active political defence from one of the Beerage's core firms served to undermine the deal. Nevertheless, the Elders IXL management style and strategy for the UK brewing industry met with some notable praise from the MMC investigation team, and encouraged it to turn its attention to another of the UK's leading brewers. Courage, was an orphan asset of the 1986 acquisition of its parent, Imperial Tobacco, by Hanson Trust. In a twist of fate, Courage had made an unsuccessful attempt to challenge CUB's dominance of the Australian brewing industry in its Victoria heartland during the mid 1960s.

In much the same way that CUB had acquired aggressively in Australia several decades earlier and come to control almost 50% of the domestic beer markets with a handful of brands, Elders IXL sought a rapid rationalisation of the UK brewing industry to create a national champion that would provide a platform for growth in mainland Europe as part of the grand plan to 'Fosterise' the world. It tried unsuccessfully to persuade Scottish & Newcastle to merge before making a hostile move on its northern competitor at the end of 1988. The timing was crucial; the MMC was poised to deliver its second anti-trust investigation into the UK brewing industry that would go some way towards calling time on vertical integration in UK brewing, a structure that had both supported the incumbent firms and dis-incentivised them from developing internationally.

Perhaps Elders IXL believed that the combination of Scottish & Newcastle's relatively limited vertical structure (it was immune to the 'Beer Orders' as it controlled less that 2000 outlets) and the soundings from the MMC, backed up by the views of politically astute Grand Met, that had been lobbying behind the scenes for an end to vertical integration in favour of greater horizontal integration, would ensure a clear passage for the proposed acquisition. However, following on from the U-turn on 'jobs for Scotland' that had followed in the Guinness/Distillers merger, no amount of assurances and guarantees about combined global headquarters for the enlarged Elders IXL in Edinburgh could derail the political power of the Scottish & Newcastle defence. The obvious strategic rationale for the merger of the southern-based Courage and the northern-based Scottish & Newcastle was lost in the discussion, only to return in 1995

when Scottish & Newcastle picked it up to use in its favour during its acquisition of Courage.

Elders IXL envisaged two efficient UK brewers with brands that could be developed and marketed in mainland Europe, in much the same way as the Australian model. That is exactly the structure that has emerged some 20 years later – albeit with a lot of pain and several perhaps costly and unnecessary investigations later.

The impact of the 'Beer Orders'

On 4 August 1986, the OFT referred to the MMC the possibility of the existence of a complex monopoly in the supply of beer within the UK for retail sale in pubs. Since the last enquiry in 1969 there had been a further concentration of power in the hand of the large 'national' brewers, which although they had reduced in total numbers the sizes of their pub estates, through the combination of churning to retain the largest outlets as managed houses, and owing to the ongoing shift away from ale to lager that mitigated against the smaller and regional independents, their share of total beer sales had continued to grow. Collectively in 1985 the largest six brewers accounted for 75% of beer production compared to 68% in 1967.

The UK brewing industry constituted a small cosy group of brewers that supplied their own pubs, many of them managed houses with expensive beer that was then sold to the pub-going public at excessive prices. Moreover, the pub goer once in a managed or

controlled outlet had little choice in the beer he bought and often in underinvested 'tired' outlets. The high retail price was a function of cross-subsidisation (and tax); managed houses, the flagship of the estate, set on-trade prices. Tied tenants paid above market prices for beer supplies compared to free-trade tenants and off-trade customers, but received subsidised rent in return. As long as tied tenants could sustain retail prices comparable to managed houses, they were likely to be content. Given the operating opacity in so far as it was possible for an outsider to glean, the brewery operation looked reasonably profitable (more so given fully-depreciated plant and equipment) and the managed house return looked reasonable too. What cross-subsidisation did not reveal, however, was the impact of the growth in off-trade consumption on brewing margins. Underlying beer consumption was in decline, tracking the economic shift from manufacturing to the service sector. There was significant overcapacity, particularly in ale brewing, trapped mainly in the smaller regional brewing segment, whose demand profile was under structural attack from lager consumption. It was against this backdrop that the 'Beer Orders', that envisaged greater choice and better prices of beer for consumers, came into effect.

The transition period to the 'Beer Orders' allowed the brewers until November 1992 to complete disposals and divestments to half of the excess over 2000 pubs and corresponded with a severe recession in the UK economy. With declining house prices and a glut of pubs on the open market, the brewing industry was not in its best position to weather regulation-induced changes. Inevitably, firms that acted quickly, by either complying with pub divestment, such as Bass, or by altering fundamentally their

strategies for UK brewing and/or pub retail divisions, such as Grand Met faired better, at least temporarily.

The 'Beer Orders' forced the integrated brewer/retailers to look closely at the two parts of the combined brewing and pub operation. Although the thought of complete separation of assets may not have been discussed with total conviction, clearly some groups considered it seriously. As a first step, decisions were taken to induce a more 'arms length' relationship between the two parts of the business, perhaps to generate a sharper focus in brewing, where the retention of volume would be dependent on retaining and even growing volume in the expanding free trade to the newly formed PubCos. However, the imputed 'transfer price' at its first attempt (in the immediate aftermath of the November 1992 'Beer Orders' compliance deadline) quickly seemed overly generous to brewing with the severe discounting to the free trade that ensued. Profitability declined rapidly, closely followed by calls from institutional shareholders for strategic action. Somewhat unsurprisingly to industry insiders, consumers got more choice from their pubs, but retail beer prices continued to rise; the PubCos kept the discounts.

During 1993 and 1994, a consensus view was emerging that more horizontal integration in the UK brewing industry had to occur, especially after the Grand Met/Courage and Allied/Carlsberg mergers. Bass, the obvious candidate for early strategic moves, laid its claim to be the 'Anheuser Busch of UK brewing'. The only realistic way to achieve an Anheuser Busch-type share of 45% was by acquisition because institutional

shareholders were not minded to wait twenty or more years for organic growth that would inevitably require periods of aggressive discounting and margin hits to deliver. But Bass demonstrated little strategic confidence even from the position of its long-standing market leadership of UK brewing so the task of breaching the 25% market share 'rule' from a horizontal merger fell to the braver and politically connected Scottish & Newcastle. Whilst Bass tried to go one step further in 1996 with its proposal for 40% market share through a merger with Carlsberg-Tetley, it left it too late both operationally, strategically (for shareholders) and politically (the change to a Labour government in the middle of the merger enquiry). Bass never recovered from this failed attempt at its first large UK merger and subsequently exited the industry.

While the MMC and the 'Beerage' were still discussing regional taste variations and the relative merits of supporting the regional brewing industry with its excess capacity, outsiders such as Elders IXL had always forwarded the prognosis of a European brewing industry following EU harmonisation in 1992. Having sanctioned – albeit with remedies that loosened vertical ties – the merger of Elders IXL's UK brewing operations with those of Grand Met shortly after the 'Beer Orders' enquiry was published, the MMC seemed to be leaving the door open for the emergence of a national beer champion equivalent of Danone (France), Heineken (the Netherlands) or Interbrew (Belgium) in the new vertically disintegrated industry structure with the sanctioning of Carlsberg-Tetley and Scottish & Newcastle/Courage. Although Bass/Carlsberg Tetley was blocked and Interbrew completed only part of its plans to own a combined Whitbread and Bass brewing operation, the Elders IXL vision has almost come to pass,

with Scottish & Newcastle and Interbrew now controlling the majority of the volume and brands of five of the six pre-'Beer Orders' brewers as part of wider pan-European operations.

How Diageo and Scottish & Newcastle emerged as winners

Scottish & Newcastle, the smallest of the 'Big 6' UK brewer/retailers at the time of the 1969 investigation into the UK brewing industry has grown from a Scotland and North East regional to become, in its own words, "*one of the world's leading beer-led beverages companies*". Having completed the Courage acquisition in 1995 that created a leadership position in the UK, the firm embarked on series of country-specific acquisitions in Europe.

During the 1980s Scottish & Newcastle interacted frequently with the UK competition authorities. Undeterred by a failed attempt to acquire its neighbour, J Cameron, it then made a successful case for clearance post referral of its hostile bid for Matthew Brown. Perhaps the success in this approval (albeit a protracted bid) and the opportunity to present its case to the MMC was an ideal test run for how to thwart Elders IXL's hostile approach. Certainly the experience it developed over the course of the Matthew Brown bid played its part in escaping from Elders IXL.

Whether weary from the process or mindful of the changing political scene, Scottish & Newcastle's merger strategy subsequently seems to have been focussed on avoiding

referrals. The timing of the Courage acquisition in 1995 was close to the end of the Conservative Party's time in office but it was after the impact of the 'Beer Orders' rationalisation had become evident. Firms that attempted to transact deals during the period that corresponded to the MMC report and the necessary compliance period with the 'Beer Orders' were referred automatically (Elders IXL/Scottish & Newcastle in 1989, Courage/Grand Met in 1990 and Allied-Lyons/Carlsberg UK in 1992). Moreover, by 1995 Courage's Australian parent Fosters (previously known as Elders IXL) had more or less abandoned its international beer ambitions in favour of wine.

Outside the UK Scottish & Newcastle has avoided competition authority referrals by targeting acquisitions in jurisdictions in which it did not already have a presence. As a result it has had a clear run to completion without referral for most of its key acquisitions. It has acted alone as bidder although the acquisition of Hartwall in Finland brought a share of a joint venture in the former Eastern Bloc with Danish brewer Carlsberg.

Diageo, formed from the 1997 merger of Grand Metropolitan and Guinness is the global leader in international branded spirits by a margin of more than 20% above its nearest competitor, Pernod Ricard/Allied Domecq. At the time of the 1969 beer investigation, Grand Metropolitan was a hotel and property conglomerate and Guinness an international brewer without a UK pub retail operation. Grand Met entered the brewing industry in 1971 and spirits industry in 1972. Guinness entered the spirits industry in 1985.

Having emerged from an aggressively acquisitive past in the property industry, the culture of Grand Met, the senior partner in the merger that formed Diageo, was set. During the 1970s and 1980s the acquisitive firm had entered and exited various industries on both sides of the Atlantic through a series of mergers and proposed deals, many of which were hostile to the target party. At the same time there had been an element of aggression – and referral – in the growth by acquisition of the former Guinness that had taken it from its roots in brewing into the international spirits industry.

However, by the 1990s, and in the aftermath of the 'Beer Orders' Grand Met abandoned the hostile approach and entered into a series of joint venture bids, often with a 'first in class' structure in order to get its increasingly large deals transacted. The innovative 'breweries-for-pubs' swap with Courage was the first step that effected the withdrawal for the UK brewing-retailing sector. Directly, through the experience of structuring the deal and accommodating the concerns of the UK competition authorities, and indirectly, because it was the restructuring exercise needed before embarking on the next stage of the plan for international expansion, the Courage deal seems to have presented a framework from which Diageo developed skills that it used in future encounters with the competition authorities in the US and Europe.

The formation of Diageo gave the wider spirits industry its first opportunity to test 'relevant market' definitions across jurisdictions; virtually every category was represented in the merger and owing to the partners' former market positions, there were

clear potentially dominant (or almost monopoly) positions in many territories. The investigations conducted in the US and EC served to highlight the differences in the analysis presented by the jurisdictions opening a fundamental difference of opinion on the ability to derive an enhanced competitive position from ownership of a portfolio of brands.

The Guinness/Grand Met merger deal transacted with the concession of selling two brands that the firm might have decided to sell post-merger in any event and a precedent was set for the subsequent approach that the merged firm (Diageo) would adopt in managing competition authority interactions. By agreeing bids with potential merger parties and seeking to allay competition authority objections early in the process by presenting 'up front' remedies that were in keeping with the US and EC 'relevant market' definitions, it has completed transactions without the imposition of any significant remedies. It has worked closely, not only with its merger partner firms but also with other firms in the industry that might potentially be willing and interested in acquiring components of the merged firm to address issues of market dominance before competition authorities have begun their investigation. The joint approach for Seagram with Pernod Ricard was struck notwithstanding an acrimonious history between Pernod Ricard and the former Grand Met.

The deliberate and repeated nature of the growth process adopted by Diageo and Scottish & Newcastle and their apparent success in managing the competition process has had a direct and powerful influence on the UK alcoholic beverages industry.

Gaining clearance for key mergers and acquisitions in the 1990s forced the exit of their major UK competitors, Allied Domecq, Bass and Whitbread from brewing and spirits.

Their strategies for dealing with competition authorities have been different. Scottish & Newcastle had adopted a strategy of dealing with the competition framework by doing its major mergers and acquisitions during a period where the political climate in the UK was relatively benign. By the time the political climate had changed with the incoming Labour government in 1997, Scottish & Newcastle turned its attention to acquisitive growth overseas, buying existing market leaders in several countries where it had no exposure of its own. Consequently its overseas mergers and acquisitions were all cleared without investigation. In all cases the deals were agreed with Scottish & Newcastle acting as lone bidder.

By contrast, while both the former Grand Met and Guinness made hostile and controversial merger approaches in the 1970s and 1980s, latterly both firms and their successor Diageo, have adopted an agreed strategy with clear signals to competition authorities of their willingness to compromise through remedies. Such a 'co-operative strategy' has now also been extended to working with third parties in order to structure deals that pass obtrusive regulatory scrutiny. Just as Grand Met's innovative 'breweries-for-pubs' swap structure to gain clearance in the UK was copied by competitors, notably Allied Domecq, its arrangement with Pernod Ricard to gain clearance for the Seagram spirits assets in the EU and US has now been taken forward in later spirits industry mergers such as Pernod Ricard/Allied Domecq. Moreover, Diageo, like Grand Met

before it, does not appear to have been deterred by referral, almost relishing the opportunity to present its case and learn from or even shape the process.

The performance of these two firms in the aftermath of their recent large deals that have made them both leading international firms provides an interesting contrast, and in the case of Scottish & Newcastle one is left wondering whether there was any real merit to the international merger strategy it pursued. The two firms that exited UK brewing shortly after the Courage acquisition – Bass and Whitbread – were forced to make deeper and earlier changes to their group structures. Although now difficult to compare the firms directly because they operate in different parts of the leisure retailing and hospitality area, their respective shareholders certainly benefited from the divestment of brewing and 'de-merger and return of excess cash' strategies that both Bass and Whitbread employed. In contrast, Scottish & Newcastle has produced relatively poor operating returns.

Diageo, on the other hand, has seemed to go from strength to strength in international spirits. It is difficult to imagine how others can compete in the long-term notwithstanding the attempt by Pernod Ricard to build its own global position through merger. The operating return profile of Diageo shows continued upward progression from the Diageo merger through to divestment of peripheral brands and assets and the additional benefits of the Seagram brands on the powerful distribution base. Shareholders continue to be rewarded from the firm's strong cash generation.

It is tempting to conclude that Diageo's success is in some part attributable to its 'co-operative strategy' to transacting mergers that ensured it got exactly which brands it most wanted in its portfolio at the expense of forfeiting less attractive brands and/or market positions. In contrast, Scottish & Newcastle's 'avoidance strategy' that has tended to promote acquisitions of non-overlapping geographies has led to the creation of a fragmented portfolio of market positions that have presented few opportunities to add value by exploiting economies of scale and scope.

7.1.3. How should competition authorities respond?

The results of the discriminant analysis and the findings of the detailed case studies of the merger and acquisition strategies of Diageo and Scottish & Newcastle reveal that politics and structural variables play a role in the merger process, in addition to the anticipated impact of product or geographical market share.

In the 'UK Only' discriminant analysis model, a significant variable was the influence of political donations in the likelihood of a merger being referred. In the All Cases' model the likelihood of a referral increased where bids were hostile. The two active and largely successful acquiring firms, Diageo and Scottish & Newcastle attempted hostile bids in the past but quickly adopted a less confrontational approach; in the case of Diageo, increasingly through the use of joint venture structures with competitors to gain regulatory clearance and in the case of Scottish & Newcastle relying on its previous

political connections to get deals done that perhaps others were unlikely to achieve so smoothly.

<u>Political influence</u>

The UK alcoholic beverages industry has always been the subject of significant political interest, not least because of its importance in generating tax receipts through the collection of excise duties and value added tax, and its importance as an employer. The position of Scotch whisky as the leading international spirit provides valuable export revenue to the UK. In addition the social and healthcare issues that surround alcohol consumption ensure that the industry is at the sharp end of the regulatory interface. It is therefore of little surprise that there have been two lengthy high profile anti-trust investigations into the domestic brewing industry in addition to a raft of merger referrals many of which were arguably not warranted.

Looking further afield it would be premature to conclude that politics plays no role in the anti-trust and merger process in the US and EU, notwithstanding the structurally independent nature of the investigating agencies throughout the period of study. Whilst it has always been possible to observe directly monies forwarded to UK political parties there are no such disclosure requirements for overseas donations. Nor indeed is it possible to identify where and how expenses for lobbying firm services are deployed. In the author's own experience there is substantial funding from the drinks industry in general to lobby groups in Washington that have specific links to the political

infrastructure in the US. Others have reported the closeness of certain firms to particular states. Whilst much of the lobbying is to promote a more favourable attitude towards alcohol consumption in what remains a somewhat hostile market still aligned to Prohibition, it would be naive to assume that influence did not accrue, albeit subliminally in the merger and anti-trust process.

In the UK the brewing establishment (The Beerage) was known for its close links to the Conservative party and this was evident in political funding for the party from major firms such as Allied-Lyons and Whitbread. Scottish & Newcastle and Highland Distillers were also notable Conservative supporters, enhancing their naturally derived political clout as key members of the Scottish business establishment.

Whilst friends in high places cannot overcome the fundamental governance of the economic market – mergers involving high market shares will likely be referred – they might assist at the margin. This might explain the partial climb-down from the original proposal for the breaking of the vertical tie in the 'Beer Orders', and the decisions to refer the proposed mergers of Elders IXL for Allied-Lyons and Scottish & Newcastle (which was blocked).

Rationally, in the UK such opportunities for political intervention have now ended with the passing of the Enterprise Act by the Labour government. Firms are under closer scrutiny from shareholders and political donations have all but stopped. The UK merger regime is independent, bringing it into line with the US. Yet in other areas of business

and its interaction with government many commentators have identified 'special interest' aspects that seem to help some firms at either the expense of others or at the expense of ultimate consumers. Moreover public appointments to key positions, including regulatory agencies are within the hands of the political masters.

A body of Economics-based research known as 'Regulatory Capture' provides some interesting insights into the interplay between government and its agencies and private firms. While much of the work has focused on regulated utilities, many of which are natural monopolies, there are some pointers for merger policy in so far as some firms engage in repeated interactions with the same regulatory authorities. Dal Bó (2006) describes a narrow definition of 'regulatory capture' as the process through which regulated monopolies end up 'manipulating' the state agencies that are supposed to control them. Rather worryingly for the proponents of clean and independent governance he suggests that some of the work in the field of capture overlaps with the literature on corruption.

Early theories of regulatory capture were forwarded in the field of Economics, notably Stigler (1971), and in Law, by Posner (1974). According to Dal Bó, Stigler presented a view of public policy that emphasised the idea that regulators could be swayed by 'special interests'.

Tirole and Laffont (1993) suggested that the scope for capture of the regulator by the firm depends on the amount of information that the regulator may obtain and how easy

the environment makes it to bribe the regulator. The key issue for government is to make sure that the regulator is not financially or politically (in a broad sense) dependent on the firm by paying him well and ensuring he is accountable for his actions. The fact that many regulators come from industry or jump ship to the firms that they once regulated (the 'Revolving Door' phenomenon) does little to dispel the concept of political dependency.

With regulators acting as independent agencies of the state, the link to politics and political donations would appear to be broken. However, Dal Bó suggests that there is some evidence from the US that as far as Telecoms pricing in states is concerned, there is a positive relationship between campaign contributions by incumbent firms and incumbent firms pricing.

There has been very little investigation of the impact of politics and political donations on merger outcomes, arguably because repeated interaction between firms and the same investigating authority has not been considered; a fundamental aspect of the capture literature. Cross-sectional studies as a snapshot in time covering many types of firms are unlikely to reveal deep-seated political effects. Recent work by Bougette and Turolla (2007) looked at 229 merger cases accepted at Phase I or Phase II of the European merger process between 1990 and 2005. Whilst in common with the work presented here these authors found that variables related to high market power (share) lead more frequently to a remedy outcome, whatever the phase, there was a difference in the type of remedy (behavioural or structural) depending on the firm's industry and who was the

decision maker for the investigation that is who was the European Commissioner at the time. Moreover, there was some evidence of a country-specific outcome in their work, with US and French acquirers leading to a merger decision with commitments.

It is impossible to be sure that any regulatory process, whether anti-trust or merger policy is truly independent but the 'smarter' firms will identify the opportunities to exploit whatever is within their means to get their own way, and in this sense there is likely to have been and continue to be 'capture' of the competition authorities. As discussed below this might also be related to the growing interest in agreed as opposed to hostile bids. What is clear is that both Diageo and Scottish & Newcastle moved ahead with their merger and acquisitions strategies in full knowledge of the potential for influence in the process and through successive and quick action have completed their plans before the heavier scrutiny that is now apparent from both academics and the markets at large.

The role of hostile bids

The strengthening of anti-cartel legislation and the general attitude to collusion seems to sit at odds with a merger regime that seems to incentivise co-operation between previous, current and possibly future competitors as a result of the pre-notification and remedies process. The complexity and scope for data and information transfer increases the greater the number of parties to the merger. In the event that two pre and post-merger competitors come together to carve up a third party, as was the case in

Diageo/Seagram (with Pernod Ricard) and Pernod Ricard/Allied Domecq (with Fortune Brands), a case could be made for paying more attention to the agreed deals presented as a *fait accompli*. Consequently, although the analysis presented here suggests that hostile bids are more likely to be referred, perhaps it is the agreed ones that warrant closer scrutiny by competition authorities.

Aspects of the 'capture' literature, leads one to consider whether the scope for capture depends on the amount of information that the regulator may obtain or already know and how easy it is to establish the structure of costs in the industry under investigation. Several brewing industry insiders have suggested that the 'Beer Orders' enquiry was hampered not so much for the ability to collect sufficient information from the industry but the failure in its interpretation, specifically to assess capacity and capacity utilisation data in the same way that a brewery operations director would use it. Information and data insofar as it exists on brand positioning and deciphering the final achieved market price for a range of products that takes account of discounts and special offers (and strips out the impact of differential taxes) is very complex; with the limited time and resources for an investigation, particularly for a merger case, by generalists as opposed to industry specialists, the quality of decision making has to be questionable. Seizing the marketing director's e-mail box would be a simpler and quicker way to assess the objectives and likely outcomes of the merger for consumer prices and competitive strategy.

In a recent article, Bloomberg (2007) commented on the failure at the FTC to stop mergers it had blocked but which were challenged subsequently in court by the firms involved. The chairwoman of the FTC was quoted as saying that Federal judges were not 'buying' the FTC's approach to why it considers some combinations anti-competitive. In her opinion this would encourage more firms to litigate against FTC decisions. This has already been a feature of some of the more recent high-profile EC decisions.

In the US observers have claimed that judges are increasingly sceptical with regard to the way the government defines product markets. This chimes with earlier citing in this thesis from the academic literature as well as the author's own observations in the definition of categories and sub-categories of spirits markets, a feature in both the merger of Grand Met and Guinness and Diageo's subsequent acquisition of Seagram.
It remains puzzling why the competition authorities seem to be more likely to challenge a hostile rather than an agreed bid. It may be a function of politics: where firms were on the receiving end of a hostile bid they were often from 'outsiders' (Elders IXL for Allied-Domecq, Scottish & Newcastle; Grand Met for Irish Distillers). Alternatively the limited disclosure that would necessarily accompanies hostile bids compared to an agreed one may in some sense make the competition authority wary – or overly busy.

The research findings presented here suggests that where firms engage in discussions prior to a merger that leads to a cooperative outcome, in the form of an agreed bid or subdivision of assets between competitors, the competition authorities appear to be far

more relaxed than where firms refuse to cooperate with each other. This is at odds with the way that competition authorities normally react when investigating potentially collusive pricing agreements between firms. Where such agreements are proved to have occurred they appear increasingly willing to wield enormous powers to levy fines and bring criminal prosecutions against individual managers involved.

Regulators need to be aware that a carefully thought-out and structured merger that has been struck with the agreement of one or more bidders with the full co-operation of the target might be the one to spend more time investigating than a one where a target management in fear of losing its job (and reputation) has mustered every available line of defence to get the merger referred in full knowledge that the referral process itself is likely to delay and ultimately derail a hostile approach.

7.2. Thesis contribution

The thesis has pursued a research agenda which has sought to make contributions in three areas:

i. Methodology and dataset

ii. Corporate strategy

iii. Competition policy

Each area is discussed in turn in the remainder of this section.

7.2.1. Methodology and dataset

The combination of in-depth case studies of two firms in the same industry and discriminant analysis on a dataset of qualitative and quantitative variables drawn from the rich history of mergers and acquisitions by the UK's major alcoholic beverages firms in a 35 year time period, is itself, a major contribution to the existing merger and acquisition literature that spans strategy, finance and economics.

In the late 1990s the US NBER identified what it saw as a significant gap in the understanding of mergers and acquisitions. It commissioned a series of case studies by leading research academics, headed by Professor Kaplan at the University of Chicago. Kaplan was especially critical of accounting and stock-based cross-sectional studies that

he believed had failed to capture the true economic effects of mergers. Consequently, he concluded that "*the voluminous economics, finance and strategy literatures on takeovers during the past twenty years offer little insight to practitioners or academics on what managers do to influence whether mergers succeed or fail*". Having presented a series of case studies of restructuring within some key industries such as medical care services, tyre manufacturing and the banking industry Andrade [2001] concluded that these case studies " *did not generate substantial insights into exactly how mergers create value and therefore do not fill the gap as intended*".

Part of the problem with the Kaplan case studies was that there was only a passing reference to the impact of regulation in general, and no specific discussion of the impact of merger policy. Moreover the case-studies were US-centric. Professor Yarrow, Director of the Regulatory Policy Institute and a leading Economic practitioner has warned that it is only through the 'time-consuming' process of looking back through the history of interactions with the authorities that the evolution of an industry can be evaluated. Some ten years earlier Professor Porter concluded "*detailed longitudinal case studies, covering long periods of time were necessary to study these phenomena (dynamic aspects of firm strategy) ..... to develop confidence about the appropriate variables and their influence on outcomes*".

This thesis addresses those criticisms by applying discriminant analysis and case study to a dataset of both qualitative and quantitative variables extracted from a 35 year history in the same industry. The case studies consider the history of firm development

and the impact of sequential mergers and acquisitions modelled through financial and operating returns analysis. They rely on not only contemporaneous and publicly available data but draw on the authors direct experience of interaction with the most senior managers in the two firms and their competitors before, during and after the key mergers that transformed the two firms into leading international businesses. It is rare for case studies conducted in an academic environment to be framed against the backdrop of such contemporaneous access.

7.2.2. Corporate strategy

Traditionally, anti-trust and competition policy, dominated by economists and the tools of Economics has relied heavily on the principles of Structure-Conduct-Performance (SCP) in informing the analysis of the impact of mergers on industry competition and consumer prices. Yet this framework or paradigm for corporate strategy could not explain what was known as the 'problem of persistent profit'. During the 1980s and 1990s the Resource Base View (RBV) of the firm gained popularity as a better descriptive framework of what firms do in order to develop and sustain competitive advantage. While SCP was outward-looking RBV came from within the firm and its 'core skills'.

Porter had identified that the "*task of strategy is to maintain a dynamic not static balance…… need a theory of strategy that links environmental circumstances and firm behaviour to market outcomes*". Through case study he sought to establish why

particular firms were able to get into advantaged positions and sustain, or fail to sustain them. McGee, Thomas and Wilson describe an implementation framework where SCP and RBV come together through the external environment. Mergers and acquisitions are at this frontier, bridging the gap between a corporate strategy and the interaction with anti-trust and competition policy on the one hand and the stockmarket on the other. The findings of this thesis are in keeping with RBV principles. If a firm implements successive mergers and acquisitions then it is likely to internalise the core skill of successful interaction with the competition policy framework, precisely what the RBV framework would identify as a distinct competitive advantage.

7.2.3. Competition policy

The thesis describes how firms develop and adapt to the competition policy framework in order to avoid the referral process in entirety or at least gain clearance quickly and with the need for less onerous remedies. Evidence presented here points to a greater likelihood of referral if a hostile bid is made, whereas an agreed bid, and latterly one with a partner to facilitate the remedy process seem to either gain regulatory clearance early, or with limited recourse to further remedies.

Hostile bids can occur at any time during the course of a firm and industry's development. However there are patterns, or 'merger waves' apparent through history across all sectors of industry. Generally there have been fewer hostile bids in the alcoholic beverages industry as time has moved on from the aggressive 1980s. This

reflects partly the ownership structure of the firms, the scale of the remaining incumbents and a change in the political landscape. However, with hostile bids seen as more likely to be referred, and with referral in itself often prompting firms to abandon proposed mergers it is of little surprise that firms have opted increasingly for agreed bids. In addition what appears to have emerged in recent years is the pattern of a three-way merger discussion between existing firms in the industry, with two firms joining forces to structure a deal that they believe will gain early clearance. So far this seems to have paid off, even with additional (but insignificant) remedies imposed.

This leads to a natural question as to whether competition authorities should consider whether any agreement that appears to fulfil existing policy requirements, primarily as a result of former 'relevant market' analysis should be investigated further. There does not appear any sound market or economic logic for referring hostile bids more than agreed ones, rather the opposite. Hostile bids have usually been prepared by firms acting solely on available and published information. By contrast, agreed bids require firms to get together to hold open-ended discussions. This seems somewhat problematic for anti-trust and cartel policy when joint-bidder firms are competitors before, during and after the merger in question.

The 'UK Only' case analysis suggested that there was a link between political donations and the likelihood of referral. UK firms have to make public any donations they make to UK political parties, but are not obliged to do so in Europe or the US. Perhaps this situation should change. It is clear that even despite the enacting of the Enterprise Act

business and politics are 'close' in the UK. It seems likely that this is also the case in Europe and the US. More disclosure on political payments is therefore needed, although with such high-level and State-related interests at stake (contract bidding on defence contracts on both sides of the Atlantic illustrate the point) this may not be achievable.

7.3. Extensions and further applications

7.3.1. Limitations of the thesis

By its very nature the discriminant analysis, conducted on a relatively small sized sample in a single industry mainly in the UK may be unrepresentative of interactions that take place between firms and competition authorities in other industries and other jurisdictions. Whilst a thorough and conservative validation was conducted, it is by no means certain that a new set of either alcoholic beverages mergers in the future, or indeed those of another industry would support the conclusions drawn from this work.

The choice of the alcoholic beverages industry itself may have had an influence on the findings because it has a special status in the regulatory process not least because governments are always attempting to balance the optimal level of tax revenues from alcohol on the one hand – in the case of the UK, this is a major factor in export revenues and consequently the country's balance of payments – with the fact that the addictive nature of its products has a direct impact on health and civil order budgets on the other. This raises complex ethical issues about pricing. Anti-trust and competition policy is

aimed at ensuring that consumers are not overcharged for products yet few parties in the health and law and order debate would argue for lower prices of alcohol.

The public interest provision of the UK competition policy regime has been eliminated under the Enterprise Act 2002, consequently UK mergers and acquisitions are considered only on pure competition grounds. There has only been one UK acquisition since the Enterprise Act was passed, that of Scottish & Newcastle's successful acquisition of the small firm HP Bulmer. Immediately prior to it, Interbrew by virtue of notifying the EC first of its intention to acquire Bass Brewers succeeded in having the public interest provision set aside when the investigation was repatriated to the CC for investigation. The impact of public interest issues other than the impact of competition may well have had a different impact and influence at different times throughout the period of analysis.

There are several other aspects of the discriminant analysis that need to be considered with a critical eye. Competition policy changes over time and there is inherently more likelihood of an interaction with the competition authorities the further down the consolidation process a firm and industry progresses. The results show that a referral is more likely for bidding firms with higher market shares, but it by no means indicates a 'trigger' market share. Anecdotally evidence suggests that firms in the UK alcoholic beverages industry believed that 25% market share of UK brewing would have triggered automatically referral, but Scottish & Newcastle's acquisition of Courage showed that this was not the case. The results of the discriminant analysis may have been influenced

by the progressively larger and more complex nature of the mergers and acquisitions through time.

The case study analysis of Scottish & Newcastle and Diageo does not answer fully the question of why, given the apparent success in the competition authority process one firm (Scottish & Newcastle) appears to have been less successful in its post-merger operating performance than the other (Diageo). It is possible to speculate that there were failings at the implementation stage. An alternative explanation might be that an easy ride through the competition process, in particular with extra-territorial cross-border acquisitions is somehow not a good thing. Having to present all aspects of the case for merger to an 'inquisitive' competition enquiry might make a firm consider in greater depth the merits of the deal than would otherwise be the case. Moreover, if a merger is cleared without the faintest question of a potential impact on (abuse of) market power then there may be no true value-added in the merger.

Following on from this proposition, this thesis may have uncovered an additional factor to consider in building a leading international operation; success is more likely from brand-based mergers and acquisitions than geography-based ones. This ties in directly with the 'portfolio effects' identified by the EC investigation of the merger of Diageo and followed up in economic analysis by others such as Professor Nalebuff. Whilst the EC might be guilty of not establishing a sufficient economic foundation for the identification and quantification of 'portfolio effects', the fact remains that building a leading portfolio of seemingly unrelated brands is the core objective of much merger

and acquisition strategy in consumer-related industries, if not in may others. The merger strategies of many leading consumer goods firms such as those in the alcoholic beverages industry are underpinned by the concept of 'portfolio effects'.

This thesis cannot provide a definitive answer to the conundrum for Finance theory that while mergers and acquisitions appear to fail to add value, firms continue to pursue them at a pace. Event study analysis considers mergers as a snapshot in time but does not consider sequential mergers and acquisitions within the same pool of firms. This thesis has conducted such an investigation through detailed case study supported by financial analysis to provide a longer term appraisal of the impact of mergers on firm performance.

What is apparent from this analysis is that Diageo has been very successful not only in pursuing its merger and acquisition strategy but in increasing margins and operating returns throughout the period of study. Scottish & Newcastle has been successful in building a large international brewing business with a major presence in a number of countries but, in contrast, has demonstrated a weak operating performance profile. This contrasting outcome from what are the two dominant UK alcoholic beverages firms, both built through repeated mergers and acquisitions seems to support and contradict the general conclusion of finance theory that mergers and acquisition do not create value. In Diageo's case they have whereas in Scottish & Newcastle's case they probably have not.

The key to success in mergers and acquisitions is therefore to find a way to choose and manage targets to create value. Diageo appears to have done this by careful selection of brands that it wants to own in its international portfolio and working with partners that are often competitors and the competition authorities to ensure that it keeps exactly which brands it wants. In contrast pursuing a strategy of buying existing dominant shares of national markets that is unlikely to trigger a merger enquiry does not appear to have created value for Scottish & Newcastle.

7.3.2. Options for future research

It is unlikely that a large new sample of mergers and acquisitions between alcoholic beverages firms will become available for several decades therefore a natural progression for this thesis, in particular for the discriminant analysis is to consider the restructuring process of another industry outside consumer products and in another jurisdiction outside the UK but preferably one that has involved firms in significant growth through cross-border mergers and acquisitions.

Testing the proposition that political donations may influence merger outcomes in the US and Europe also presents itself as an interesting and important project for a cross-sectional study of all mergers in all industries that took place over a short time frame. This would need to look at all mergers within only one jurisdiction. The hypothesis that hostile bids are more likely to be investigated could also be tested in the same way.

Appendices

Appendix 1: The Researcher as Participant-Observer

The author was a 'participant observer' in the two case studies presented in the thesis by virtue of the fact that she was an investment analyst at several leading City investment banks, providing research-based share recommendations to leading institutional investors during the period 1992-1999, when most of the major corporate actions by the firms and the UK alcoholic beverages industry occurred.

According to Yin [2003], 'participant-observation' is a special mode of observation in which the analyst is not merely a passive observer, assuming a variety of roles within a case study situation, including participation in the events being studied. The major advantage of this role is that it allows access to events or key personnel that are otherwise inaccessible to scientific investigation, with opportunities to manipulate events for example by convening meetings with case study personnel. However, the major criticism of 'participant-observation' is that the analyst is likely to trade objectivity for subjectivity. Investment analysts are likely to retain more objectivity because they have no contractual relationship with the firm they are analysing and they have their own reputation for impartial advice to protect in their dealings with the stockmarket.

The principal role of an investment analyst in a City investment bank is to make stock recommendations that both the analyst team and the firm's salespeople communicate to institutional investors such as pension funds, insurance funds and (increasingly) hedge

funds. Analyst's recommendations are based on the valuation of a firm's shares and knowledge of the underlying fundamental or economic conditions that affect both the firm and its industry. Forecasts of profitability and cash generation are updated regularly following the publication of interim and final year financial results or if there are material factors that affect the firm's prospects.

Analysts attend results meetings convened by the firm with competitor analysts from other investment banks and often major institutional shareholders of that firm. The standard format is a presentation followed by a question and answer session. In addition, analysts will have regular one-on-one telephone conversations and meetings with senior personnel of the firm to discuss forecasts and other aspects of the business, including opportunities for mergers and acquisitions. Typically this will be the finance director and/or investor relations director in the larger firms with chief executive officers being the more likely point of contact in small and medium-sized firms. Firms also host specific analyst site visits that usually provide opportunities to meet divisional managers both in the UK and overseas.

On the basis of these and similar meetings and numerous conversations with the firms and their international and smaller domestic competitors the author produced a series of research reports, as listed in the Bibliography. On several occasions, firms requested multiple copies of these reports for their own purposes, and requested the author to make specific presentations to key personnel within the firms. For example, during the merger process that created Diageo in 1997, the group's spirits subsidiary, IDV, invited

the author to present her work on the merger to its Spanish directorate. Following the publication of the author's work on the European beer industry in 1998, the strategy director of Groupe Danone requested her to make a presentation at their headquarters in Paris. The group decided to sell its brewing operation, Kronenbourg to Scottish & Newcastle in 2000.

Analysts in integrated investment banks with corporate finance (advisory and investment banking), capital markets (placings) and stockbroking (sales, trading and market making) activities fulfil the additional role of supporting the activities of their colleagues in corporate finance and capital markets. In this role the analyst is 'over the wall', that is, the information is confidential and not for dissemination in the secondary market (the stockbroking division). This support can be no more than providing regular updates and direct advice to corporate finance colleagues or it can involve direct support and attendance at meetings where specific corporate actions are being discussed with a corporate client firm, such as a merger or acquisition proposal or an initial public offering proposal.

The table below shows the meetings the author attended in the first eight months of 1999 in the last year of her employment at Schroder Securities (SSL).

Date	Firm	Details
22 January	Carlsberg	One-on-one with FD, CEO in Copenhagen
26 January	Scottish & Newcastle	FD private presentation to SSL sales desk
26 January	Whitbread	Guest at 'Book of the Year' dinner
28 January	Rémy Cointreau	One-on-one with FD in Paris
29-31 January	Allied Domecq	Presentation and trade visit for small group of analysts in Spanish Pyrenees from AD Europe directorate
9 February	LVMH	Analysts trade visit to retail outlets in Paris
12 February	Vaux Group	One-on-one with CEO in London
23 February	Canandaigua	Dinner with CEO in London (with Corporate Finance)
2 March	Impact International	Spirits industry annual meeting (all firms) in Paris
3 March	Heineken	Analysts meeting for Final results in Amsterdam
11 March	Diageo	Analysts meeting for Interim results in London
18 March	LVMH	Analysts meeting for Final results in London
19 March	Pernod Ricard	Analysts meeting for Final results in London
8 April	Glenmorangie	One-on-one with Chairman in London
9 April	Pernod Ricard	One-on-one with Chairman in Paris
13 April	Matthew Clark	Drinks with Board in London (with Corporate Finance)
15 April	Rémy Cointreau	One-on-one with FD in Paris
15 April	LVMH	One-on-one with FD, Investor Relations in Paris
28 April	Vaux Group	One-on-one with CEO in London
29 April	Allied Domecq	Analysts meeting for Interim results in London
1-2 May	US Wholesalers	Annual conference, guest of senior adviser to Allied Domecq
6 May	Heineken	Analysts presentation in London
19 May	Glenmorangie	Analysts meeting for Final results in London
20 May	Bass	Analysts meeting for Interim results in London
24 May	Lion Nathan	Analysts presentation in London
25 May	Compass Group	One-on-one with FD in Surrey
3 June	Pernod Ricard	One-on-one (plus investor) with Chairman in Paris
9 June	Whitbread	Analysts presentation in London
10 June	Diageo	Summer Exhibition, guest of Investor Relations
11 June	Whitbread	Analysts visit to Stella Artois with Board
15-18 June	LVMH	Presentations and trade visits for analysts to Hong Kong and Tokyo
29 June	Rémy Cointreau	Analysts meeting for Final results in London
8 July	Scottish & Newcastle	Analysts meeting for Final results in London
13 July	Holsten	One-on-one with CEO in Hamburg (with Corporate Finance)
2 August	Fortune Brands	One-on-one with Investor Relations in Old Greenwich, Con
5 August	Bacardi	Presentation to Board in Bermuda (with Corporate Finance)
26 August	Interbrew	Presentation to CEO in Leuven (with Corporate Finance)

Appendix 2: Financial Analysis Definitions

Gross revenue

Annual turnover inclusive of excise duties but exclusive of value-added tax. Includes intra-group sales (only relevant for vertically integrated UK brewers) but excludes sales to joint ventures and associates.

Net revenue

As above but excludes excise duty. Most European firms only provide this figure. Not all UK firms have consistently declared excise duty paid in their annual accounts (Whitbread). In addition, some firms that had brewing and spirits operations (Allied Domecq and Grand Met) did not disclose excise duty separately for each subsidiary. On the basis of her previous knowledge the author has estimated missing data for UK firms and subsidiaries.

Operating profit

Profit before interest and tax but after depreciation, amortisation and other ordinary operating charges attributable to the division, excluding that derived from associates and joint ventures where disclosed.

Net operating assets

Assets before interest, tax and amortisation for the division (can be understated significantly for a firm with previously high goodwill write offs or with fully written down plant and equipment, and overstated for a firm that depends on maturing stock holdings)

Total capital

Group capital invested in all operating divisions, representing the sum of group net assets (including minorities), net debt (gross debt minus cash and short-term deposits) and goodwill previously written off reserves.

Operating cash flow

Group operating profit with depreciation, amortisation and exceptional items added back and adjusting for changes in working capital and provision utilisation.

Free cash flow

Group operating cashflow plus associate payments, minus interest, corporate tax, minority payments and net capital expenditure (not acquisitions of new businesses or

investments, and divestments of the same). Free cash flow is therefore the cash that is available to either pay dividends (or buy back shares) and/or make acquisitions.

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