



Ex post evaluation of mergers

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A report prepared for the Office of Fair Trading, Department of Trade and Industry and the Competition Commission by PricewaterhouseCoopers LLP.

PREFACE

This report was jointly commissioned by the Office of Fair Trading (OFT), Department of Trade and Industry (DTI) and Competition Commission (CC) from PwC Economics, the PricewaterhouseCoopers LLP economics practice. They were asked to conduct an ex post evaluation of a group of mergers between 1990 and 2002 which had been referred to the CC after consideration by the OFT and had subsequently been cleared by the CC.

Any views expressed are those of the authors and they do not necessarily reflect the views of the OFT, DTI or CC. This report is not and should not be treated as a guideline issued as a consequence of the obligation on the OFT and CC to publish general advice and information under the Competition Act 1998 and Enterprise Act 2002.

This report is part of the OFT's Economic Discussion Paper Series and is intended for discussion within a wide audience of practitioners and interested parties. If you would like to comment on the paper, please write to me, Amelia Fletcher, at the address below. If you would like extra copies of this report please contact our mailing house on 0800 389 3159 or at oft@ecgroup.uk.com. The OFT welcomes suggestions for future research topics on all aspects of UK Competition and Consumer Policy.

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1 EXECUTIVE SUMMARY

- 1.1 Between 1991 and 2002, 120 mergers were referred to the Competition Commission (CC), invariably because it was considered that they gave rise to competition concerns. Of these, 29 were cleared without remedies.
- 1.2 When the CC clears a merger it does so in the **expectation** that the merger will not lead to a substantial lessening of competition, e.g. because there is likely to be sufficient rivalry in the market after the merger, or because buyer power is high, or entry barriers are low. However, there have been few studies about the **actual** effect of the mergers on competition, and, in particular, whether the competitive constraints identified by the CC have been effective.
- 1.3 Studying mergers that were cleared by the CC is interesting in three important respects. Firstly, it allows us to test the CC's belief that the merger would not substantially lessen competition, e.g. by observing whether the merger led to an increase in price. Secondly, if there has not been a substantial lessening of competition, it allows us to test whether this was for the reasons indicated by the CC, or whether other competitive constraints were more important. Thirdly, if there has been a lessening of competition, it allows us to examine how, and how quickly, market participants respond to this. For example, does it prompt new entry, or cause buyers to revise their purchasing strategies?
- 1.4 More generally, studying mergers that were cleared by the CC allows us to learn more about how markets respond to a significant increase in market concentration. Such information can be extremely useful in helping competition authorities improve their assessment of the competitive effects of mergers.
- 1.5 In order to address these questions, PwC Economics (PwC), the PricewaterhouseCoopers LLP economics practice, were commissioned by the Office of Fair Trading (OFT), the CC, and the Department for Trade and Industry (DTI), to conduct an ex post study of mergers that were cleared by the CC between 1991 and 2002.

- 1.6 Our approach was to conduct a detailed study of 10 of the 29 cases cleared without remedies by the CC during the period. For each case we interviewed a number of market participants with the aim of determining what had been the significant changes to the market since the merger (e.g. prices, profits, entry/exit, new products, new technology, and changes in customer tastes and buying strategies) and the reasons for those changes. More specifically, we sought to determine whether there had been any short run loss of competition in the market, and, if so, how the market had responded to this (if at all). We also explored with interviewees what, in their view, were the most important competitive constraints in the market, and compared these with the reasons cited by the CC for clearing the merger.
- 1.7 We chose to focus on the views of the customers of the merging parties, as they were well placed to judge not only whether prices had gone up or down, but also what were the closest substitutes to the products or services provided by the merging parties. We were also interested in buyers' views as to how their bargaining power had been affected by the merger. Other market participants we interviewed included the merged company, their competitors (including new entrants), and industry experts (including regulators).
- 1.8 Our research suggests that there appears to be effective competition in all of the cases in our study. The only possible exception is Cerestar/Cargill (glucose syrups) where the short time-span since the merger, coupled with market flux caused by the failure of grain harvests, means that it is difficult to make a firm judgement as to whether there is sufficient competition in the market.
- 1.9 Only in two of the 10 cases did there appear to have been any short-run competition concerns resulting from the merger. In both of these cases, Klaus J Jacobs/SCIA (industrial chocolate), and CHC/Helicopter (helicopter services), competition concerns appear to have been resolved through new entry.
- 1.10 The competitive constraints on companies we identified as being currently important were, for the most part, very similar to those identified by the CC.

- 1.11 In particular, the CC appears to have a generally good record at predicting where entry is likely to act as a significant competitive constraint. The CC correctly pointed to entry as being capable of resolving competition problems in both the Klaus J Jacobs/SCIA, and CHC/Helicopter cases above, albeit that in the latter case, the CC had considered the **threat** of entry to be a sufficient constraint, whereas actual entry appears to have been necessary. The CC puts considerable emphasis on the views of buyers when assessing whether entry is likely. Given that significant entry tended to arise following close consultation with buyers, this may be one of the reasons for this apparent success.
- 1.12 The CC does however appear to have found it more difficult to predict the circumstances where buyer power is likely to act as a significant competitive constraint. In some of our case studies, buyer power appears to have been strong despite an apparent shortage of suppliers, whereas in others, buyer power appears to have been significantly weakened by the merger even though there appeared to be a number of credible suppliers.
- 1.13 Our research suggests that there are two main reasons for this apparent paradox. The first is that it is not straightforward to determine whether a buyer will have sufficient alternative (and credible) sources of supply after the merger, particularly where buyers experience high switching costs. In two of our cases, Klaus J Jacobs/SCIA, and Cerestar/Cargill, it took a considerable period of time (as well as cost) for buyers to ensure that a new supplier was capable of meeting their individual specifications. Consequently many buyers chose to contract with more than one supplier, enabling them to switch relatively easily to the supplier offering the lowest price. However, both mergers undermined buyers' multiple sourcing strategy, and their buyer power was weakened as a result. Switching costs were also high in the Universal Foods/Pointing (food colourings), and Kodak/ColourCare (wholesale developing and printing) cases. However in both cases there were also substantial benefits to switching, making it much more credible for a buyer to switch to a new supplier. As a result, the merger does not appear to have had any significant impact on buyer power.

- 1.14 The second reason that makes buyer power difficult to assess is that factors other than the number of credible suppliers also appear to be important. In Compass/Rail Gourmet (rail catering logistics), and Cowie/British Bus (buses in London), although there were few credible alternative sources of supply, buyers appeared to be able to exercise buyer power through a number of means including the collection of information, incentive-based contracts, and the level of effort devoted to the bargaining process.
- 1.15 One of the main reasons why the mergers in our study have generally not resulted in a substantial lessening of competition is that the merging parties were not regarded by buyers as being particularly close competitors. Examples include Technicolor/Metrocolor (industrial film processing), NTL/Cable and Wireless (cable TV and telephony), Kodak/ColourCare, and Universal Foods/Pointing. In the latter two cases, the merging parties do not appear to have been imposing a strong competitive constraint on each other despite producing very similar products and services. Both markets were in strong decline, and prices appear to have been set by the newer sources of supply rather than by rivalry between the merging parties. Consequently, in neither case was there an attempt to impose even a short-run increase in price despite there being very significant increases in market concentration.
- 1.16 As might be expected, in a number of cases technical change and other exogenous factors have meant that the merging parties are now exposed to much more substantial competition than they were at the time of the merger. The most obvious example of this is the Kodak/ColourCare (film development and printing) case where the growth of digital cameras has led to substantial structural changes in the market with most retailers now bypassing the wholesale services supplied by Kodak.

2 INTRODUCTION

- 2.1 Assessing whether mergers should be allowed to proceed is intrinsically difficult. It requires predicting whether and how the merging parties are likely to change their behaviour after the merger, and also how their rivals, potential rivals, and customers are likely to react.
- 2.2 In the UK, mergers are assessed in the first instance by the OFT. Mergers where the OFT believes that it is or may be the case that the merger may have resulted, or may be expected to result, in a substantial lessening of competition are then usually referred to the CC for a more detailed examination.
- 2.3 If the CC concludes following such an examination that the merger has not, and is not expected to result in a substantial lessening of competition, then the merger is cleared¹. However, up until now, little has been known about what has actually happened in markets where the CC has cleared a major merger. For example, was competition increased or diminished by the merger? If competition constraints were sufficient to prevent a price rise, were these constraints the same as those predicted by the CC, or were others more important? If the merger diminished competition, how long did it take for the market to self-correct, and what form did this self-correction take?
- 2.4 This study attempts to answer these questions by evaluating how markets have reacted to a significant increase in market concentration. The aim is not to second-guess the CC, but rather to determine whether the reasons for allowing the merger to proceed have been borne out in practice. In doing so we hope to obtain a better understanding of the way certain competitive constraints such as buyer power impact upon competition in the market. Ultimately the purpose of this research is to help the OFT and CC develop the way in which they assess mergers.

¹ All the mergers in our study were examined under the Fair Trading Act (1973). Under this Act, mergers were assessed by the CC according to a public interest test, although, almost invariably, this was interpreted as a competition test.

Our Approach

- 2.5 Mergers that have been cleared by the CC provide an interesting basis for a study for two reasons. Firstly, it allows us to test the CC's view that the merger was unlikely to lead to a short-run loss in competition. Secondly, where there was a short-run loss of competition, it allows us to examine how quickly the market was able to self-correct itself (if at all), and what form that self-correction took, e.g. new entry or buyers devising new strategies to maintain their bargaining power.
- 2.6 We would expect there to have been some short-run loss of competition in at least some of the mergers cleared by the CC, reflecting the fact that predicting the likely impact of a merger on competition is, at best, an imprecise science, and that the CC is only asked to report in situations where the OFT believes there to be some risk that the merger may result in a substantial lessening of competition².
- 2.7 In developing our method we were very conscious that the ultimate aim of this study is to help the OFT and CC improve their merger analysis. We therefore needed to select a method that was not simply aimed at measuring whether the market was more or less competitive than it had been prior to the merger, but was also capable of exploring **why** the market had evolved in the way it did, and whether this evolution was capable of prediction by the OFT or CC.
- 2.8 Our chosen approach was to conduct a detailed examination of 10 of the 29 cases that were cleared by the CC between 1992 and 2002. For each merger we conducted a series of in-depth interviews with different market participants (such as buyers, competitors, the merged parties, new entrants and other relevant third parties). The aim of these interviews was to establish what had happened to the market both immediately after the merger and in the longer-run in terms of prices (and quality), market structure (including new entry), and changes in buyers' behaviour, technology and market definition. The overarching aim of these interviews was to understand whether the market had remained competitive after the merger, and, if so, what had been the most important short- and long-run competitive constraints.

² Indeed, if in every instance that the CC clears a merger there were no loss of competition, this could suggest that the CC is clearing too few mergers.

2.9 Prior to these interviews we studied the corresponding CC reports with the aim of assessing not only the CC’s main reasons for clearing the merger, but also the evidence that had most persuaded the CC to reach these conclusions. We then sought to compare the CC predictions with what we believed to be the market outcome in each case as well as to establish whether any more general conclusions could be drawn.

2.10 The selection of mergers was carried out in conjunction with the DTI, the OFT and the CC. When selecting the mergers, we excluded:

- Cases published after 2002 on the basis that there is unlikely to have been sufficient lapsed time to judge whether there has been a significant reduction in competition
- Cases that were more than 8 years old, due to the difficulties in finding suitable interviewees, and because the approaches used by the CC and OFT in these cases were likely to be very different to those used today
- Cases where the relevant market is subject to an on-going competition inquiry
- Cases where PwC encountered a possible conflict of interest.

2.11 The following 10 cases were selected for in-depth review.

Table 2.1 – Selected cases

Nutricia/Milupa (1996)	CHC/Helicopter (2000)
Klaus J Jacobs/SCIA (1997)	NTL/Cable and Wireless (2000)
Cowie/British Bus (1997)	Kodak/ColourCare (2001)
Technicolor/Metrocolor (1997)	Cargill/Cerestar (2002)
Universal Foods/Pointing (1999)	Compass/Rail Gourmet (2002)

- 2.12 In each case we contacted the merged party to request an interview. Other interviewees were selected mainly on the basis of which market participants had made significant representations to the CC at the time of the inquiries. However, we also approached a number of market participants that had not made any representations, but that we believed could provide us with additional insights e.g. new entrants.
- 2.13 Buyers eventually made up the largest group of interviewees. This was a deliberate decision as we felt that buyers were in a unique position to give an overview of both the market developments, and the reasons for the changes. Buyers are also very well placed to provide views on which products are, and are not substitutes for each other. We also hoped to gain an insight into the way in which buyers seek to obtain and exercise buyer power. This is important as buyer power is one of the most frequently cited reasons for the CC clearing a merger.
- 2.14 For similar reasons we also wanted to explore with new entrants the reasons why, and the process by which, they entered the market.
- 2.15 A request for an interview (usually in e-mail format) was sent out to selected candidates. The response rate was extremely encouraging: we contacted about 120 candidates, and arranged 53 interviews. With the exception of the Cowie/British Bus case (Transport for London, through its subsidiary London Bus Services Limited, is the regulator and can be considered the sole buyer in this market), the number of interviews conducted ranged from 4 to 7 per case.
- 2.16 Interviews were conducted mainly by telephone and usually lasted 20-45 minutes. We also conducted a limited number of face-to-face interviews. The aim of the interview was not to seek answers to a fixed list of questions, but rather to have a structured discussion with the interviewee about the developments in the market that he/she considered to be important.
- 2.17 We also asked the interviewees if we could contact them after the initial interview to ask additional questions. This proved to be extremely useful during the analysis when we identified gaps in our information or areas that needed further clarification.

Confidentiality

- 2.18 We were very encouraged by the response of firms and individuals to our request for interviews and would like to take this opportunity to thank all those who took part. We would particularly like to thank people for their frankness. Much of what parties told us was confidential in nature. To protect firms and individuals, a note of the meeting was taken, and this was agreed with the interviewee. Confidential information and opinions that interviewees did not wish to be published were excluded from this meeting note. We have only used information and opinion expressed by interviewees that formed part of the agreed meeting note.
- 2.19 However, many firms and individuals were only prepared to let us use this information if their views were anonymous. Many of the markets we studied have a small number of participants, and if we were to attribute the views to a named party, it would be easy to identify other participants who preferred to remain anonymous. For this reason we have taken the decision not to attribute the views to any particular buyer. Our study therefore refers to 'a buyer' or 'some buyers.' Where it has not been possible to use information anonymously we have omitted it from the report. The one exception is in the Cowie/British bus case where there is only a single buyer, Transport for London. We are very grateful to them for allowing us to use their data and opinions in this report.

Limitations of study

- 2.20 There are obvious limitations in restricting the investigation to a very small and potentially unrepresentative sample of cases. Although our sample covers 10 of the 29 mergers that were cleared by the CC during the period, it does not include the vast majority of mergers that were cleared by the OFT without a reference to the CC. The sample is also not representative of the CC's approach in general as it does not include cases where there was an adverse public interest finding.

- 2.21 The sample also does not necessarily reflect the current approach of the OFT and the CC. In particular, the replacement of the Fair Trading Act (1973) with the Enterprise Act (2002) has meant that mergers are now appraised against a substantial lessening of competition test rather than a public interest test. All of the mergers in our study were examined under the Fair Trading Act (1973).
- 2.22 The sample in our study is also potentially unrepresentative in that we have been unable to examine mergers in markets where there is an ongoing competition investigation.
- 2.23 A further limitation is that the majority of the information in this report is based on interviewees' personal views and recollections. Where possible we have sought to corroborate these views with publicly available information. In presenting this information we have also attempted to express a consensual view rather than to rely on the views of any one individual. Where views differ we have sought to reflect this in the text.
- 2.24 Finally, due to the commercially sensitive nature of some information, we have either not been able to obtain all the relevant information for our analysis, or have chosen not to present it in this report.
- 2.25 Despite these qualifications we believe that our study is capable of making an important contribution to the understanding of how markets respond to large increases in concentration, and how this information might be used by competition authorities to improve their analysis of mergers.

Structure of the report

- 2.26 The main body of this report begins in Chapter 3 with a very brief introduction to the merger process in the UK as it stood in the period 1991-2002, and the new merger regime that was introduced in 2003.

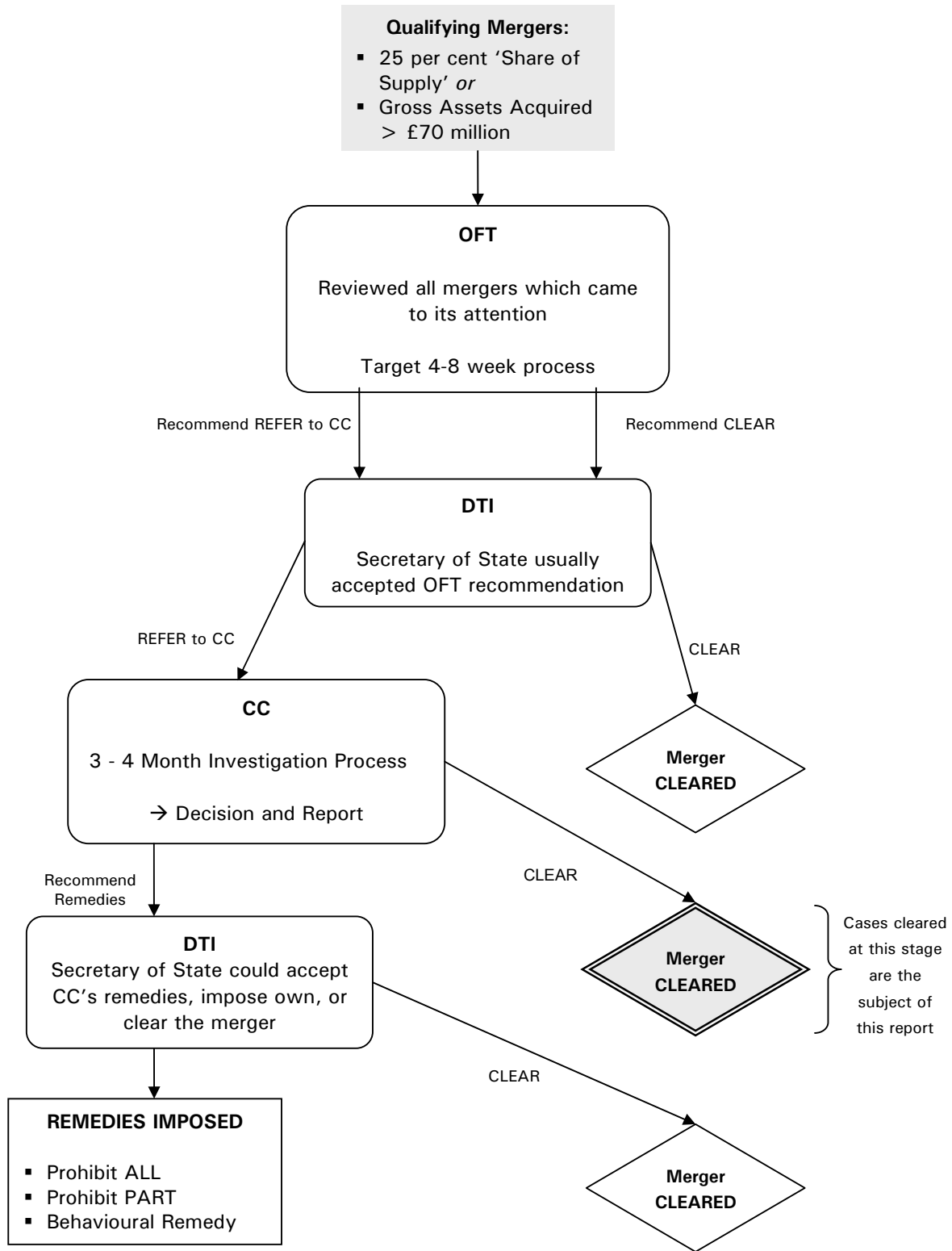
- 2.27 In Chapter 4 we present the results of our post-merger evaluations. Each of the 10 cases studies includes a brief description of the salient features of the market, the key reasons for the CC clearing the merger (as well as the reasons given by the OFT for referring the merger to the CC), a description of the most important changes to the market following the merger, and an assessment of what appear to have been the most important competitive constraints in the market, and how and why they may have differed from those predicted by the CC.
- 2.28 Chapter 5 pulls together some of the themes identified in the individual case studies and asks whether the post-merger experience provides any lessons that could help the CC in their future assessment of cases. The chapter includes discussions on the main competition issues that arise in merger investigations, including the assessment of the counterfactual, market definition, unilateral and co-ordinated effects, buyer power, barriers to entry and expansion and technological change.
- 2.29 Annex A takes a brief look at the remainder of the 29 cases that were cleared by the CC in the period 1991-2002 with the aim of identifying what were the key reasons for clearance, and whether those reasons were different from those in our sample.
- 2.30 Annex B contains a review of the relevant literature.

3 BACKGROUND: THE MERGER REGULATION PROCESS

- 3.1 Prior to 20 June 2003 mergers were regulated under the Fair Trading Act 1973. Mergers qualified for investigation if either of two criteria were satisfied as a result of the merger: (1) the merged entity had a 25 per cent share or more in the supply of goods or services in the UK or a substantial part of it or (2) the gross assets acquired exceeded £70 million. The share of supply test related to any reasonable description of goods or services rather than the share of supply of the relevant economic market (which was typically much broader).
- 3.2 Technically mergers were assessed according to a public interest test. However, during the period of our study this was almost invariably interpreted as a competition focused test.
- 3.3 The OFT examined mergers in the first instance, and, if competition concerns arose, the merger could be referred by the Secretary of State for Trade and Industry to the CC for a more detailed investigation. Mergers that were found by the CC to be not against the public interest were automatically cleared. Where the CC found a merger to be against the public interest they would make recommendations as to how the public interest detriments might be resolved, e.g. through behavioural undertakings, divestment, or the prohibition of the merger. The ultimate decision as to whether a merger was allowed to proceed in this instance rested with the Secretary of State for Trade and Industry. Figure 3.3 attempts to summarise the FTA procedures including the somewhat complex relationship between the OFT, DTI, and CC.
- 3.4 In June 2003, the Enterprise Act 2002 came into force. There were several key changes made under the new system. Firstly the public interest test was formally replaced with a substantial lessening of competition test. Secondly the DTI was taken out of the decision-making process (apart from a small subset of cases). In addition, the OFT and CC decisions are now subject to appeal to the Competition Appeals Tribunal (CAT).

- 3.5 The introduction of the Enterprise Act 2002 was accompanied by the publication of guidelines by both the OFT and the CC as to how they are likely to interpret the substantial lessening of competition test.
- 3.6 This report only concerns mergers that were cleared under the Fair Trading Act 1973, and specifically those that were cleared following an investigation by the CC. In one of the cases in our sample, the NTL/Cable and Wireless merger, the OFT recommended that the merger should be cleared without reference to the CC. However, the Secretary of State for Trade and Industry did not accept this advice, and the merger was referred to the CC. This is rather unusual, and in the vast majority of cases the DTI accepted the OFT recommendation.
- 3.7 Under the FTA the OFT was expected to carry out a shorter, and less detailed assessment of the competition concerns posed by a merger, and to recommend referral to the CC for a more detailed analysis where there appeared that there might be significant public interest concerns. As such, the mergers in our sample do not necessarily constitute those where the OFT has taken a different view of the competitive effects of a merger to the CC. They do however represent the set of cases where the OFT judged that competition concerns might arise, and the CC, after a more thorough investigation, took the view that the merger was not against the public interest.

Figure 3.1 – The Merger Regulation Process under the Fair Trading Act 1973



4 CASE STUDIES

Introduction

- 4.1 The following case studies represent a sample of 10 of the 29 mergers that were cleared by the CC (without remedy) in the period 1991-2002³.
- 4.2 For each case study there is a brief overview of the facts surrounding the case. This includes: who the parties to the merger were; the other key players in the market; market shares prior to the merger; a description of the product in question; an indication of what the relevant market was; and any other important information. The facts are intended to provide a sense of the state of competition in the market before the merger took place. This information has been mainly taken from the CC's report into the merger.
- 4.3 A very brief summary is then provided of the OFT's advice to the Secretary of State for Trade and Industry as to whether the merger should or should not be referred to the CC, together with a summary of the key reasons given by the CC for clearing the merger. These points cover only the main arguments expressed by the OFT and CC, and do not include any detail as to how those conclusions were reached, or any arguments to the contrary that were considered. This is intended to provide, at a glance, an impression of what the main competition issues were in each of these cases, and the positions that the competition authorities took with respect to these. Where necessary, more detail as to the decision process is mentioned later on in the study.

³ These numbers exclude water and newspaper mergers for which there were separate procedures under the FTA.

4.4 The main body of the case studies is made up of a description of what has happened in the period since the merger took place, and an analysis of what light these events shed on the decision to clear the merger. The 'What Happened Next...' section is based on information acquired through interviews with market participants, and in some cases information from market studies published since the merger. The analysis section represents our interpretations of the evidence that we have uncovered, and is an attempt to see if there are any lessons from post-merger performance which could help UK competition authorities in their future assessment of mergers.

Baby meals and baby milk

Nutricia/Milupa (1996)

Facts

- 4.5 In 1996 NV Verenigde Bedrijven Nutricia (Nutricia) acquired certain subsidiaries of Milupa AG (Milupa). The activities of the Nutricia and Milupa subsidiaries overlapped in the supply of a number of baby products, but only the markets for baby food and baby milk were considered to be a cause of concern.
- 4.6 The leading supplier of the market for **baby meals**, at the time of the merger, was Heinz/Farley (H J Heinz Company Limited) with a market share of about 53 per cent in 1995. Cow and Gate (Nutricia) and Milupa were the other two major private brands with market shares of 15 per cent and 13 per cent respectively. Boots The Chemists Ltd (Boots) accounted for 10 per cent of the market, with other own-label suppliers (mainly supermarkets) on 3 per cent.
- 4.7 At the time of the merger, there were two main types of **baby milk**, infant milk formula (IMF), and follow on milk (FoM), which was sometimes, but not always, used as a baby got older. Supply to retailers accounted for about two-thirds of total supply, and the remaining one-third was supplied through the National Health Service (NHS) and the Welfare Food Scheme (WFS). The market for IMF was regulated and direct advertising was not permitted. Brand loyalty was very important and switching costs were high – parents were usually advised by health professionals not to switch brands unless there was a feeding problem. The market leader in the market for baby milk was SMA Nutrition (SMA) with about 44 per cent in 1995 at trade prices. The merging parties were the only two other significant suppliers in the market with estimated market shares of 38 per cent (Nutricia) and 8 per cent (Milupa). Own-label suppliers had struggled to make any significant impact largely because of their lack of experience in the NHS/WFS sector (own-label accounted for less than 2 per cent of supply).

Main reasons for OFT referral

4.8 The main reasons for OFT referral are:

- Merger would lead to further consolidation in two highly oligopolistic markets
- Entry barriers high with brand loyalty as the main hurdle
- No recent branded entry in baby meals, and little to indicate own-brand penetration would improve
- Removal of Milupa as potential source of own-brand supplies in baby milk.

Main reasons for CC clearing

4.9 The main reasons for CC clearing are:

Baby Meals

- Entry was easy, particularly for existing food manufacturers
- Recent entry of several branded and own-brand suppliers
- The major retailers had substantial buyer power
- Parents could switch to home-cooked meals
- Little brand loyalty.

Baby Milk

- Milupa was struggling to control high costs, and may have exited the market in the absence of the merger

- Nutricia would continue to face strong competition from SMA
- Competitive pressure from own-label products
- Buyer power of NHS/WFS and large retailers
- One member of CC dissented, arguing that price rises were likely in both the NHS/WFS and retail sectors

What happened next...

Baby Meals

- 4.10 Competition between retailers appears to have strengthened considerably since the merger. Retail prices have fallen (in both real and absolute terms) and retail margins are also said to have declined. Wholesale prices are also reported to have declined, largely because of the pressure imposed by retailers.
- 4.11 A further market development has been the rapid growth in the organic baby meals sector. Organic meals now account for almost half of baby meals sold. Hipp UK Ltd (Hipp), who entered the market in 1995, is now the leading supplier of organic baby meals. Other baby meals suppliers, including Nutricia, are also active in this part of the market.
- 4.12 Brand loyalty appears to be important, with the major brands strengthening their market share, and smaller brands exiting the market. Notably, the Milupa range of baby meals was withdrawn from the UK shortly after the merger. In addition, most of the own-brand suppliers have also withdrawn, with only the Boots own-brand remaining.

Baby Milk

- 4.13 The trend in prices and margins in baby milk has been much the same as in baby food. Retail prices and margins have both fallen since the merger, and wholesale prices are also reported to have declined in real terms. There has been some increase in wholesale costs, which suggests that wholesale margins have also declined.

- 4.14 It is notable that the NHS Purchasing and Supply Agency (PASA), the organisation that purchases milk for the NHS and WFS, did allow a price increase in 2002 based on evidence of cost increases. For some WFS products this was the first increase granted by PASA, or the former NHS Supplies Authority, since 1993.
- 4.15 There has been a steady decline in the volume of supply to the NHS since the merger. This has been attributed to falling birth rates and fewer mothers becoming eligible for the WFS. It is also likely that the promotion of breast-feeding by hospitals has had an effect. The decline in the NHS sector looks set to continue, and may be accelerated if the proposal to introduce vouchers that are redeemable at retailers is implemented (currently supplies are made available at NHS clinics).
- 4.16 Entry barriers and brand loyalty appear to have remained high. There has been no major entry into the market, although Hipp has introduced a range of organic milk products. Own-label suppliers have been unable to make an impact, and J Sainsbury plc and Boots have both withdrawn their own-branded baby milk products.
- 4.17 In contrast to baby foods, the Milupa brand is still present in the UK baby milk market. There are separate representatives for Nutricia and Milupa for the hospitals, but for the retail sector there is a joint sales force.
- 4.18 The other significant change in the market has been the convenience-led movement away from powdered milk and towards ready-to-drink products. Prior to the merger products were typically sold in powdered form, and only the NHS bought ready-to-drink products.

Analysis

- 4.19 The markets for baby meals and baby milk both appear to have become more competitive in the period since the merger. Prices and margins have fallen, and there has been innovation in the product range, with organic products quickly expanding their share of the meals market, and ready-to-drink products making an impact in the milk sector.

- 4.20 The main force behind falling prices appears to have been a stepping up of competition between retailers. Both baby meals and milk have become known-value items, and a key means by which retailers attract customers to their store and build customer loyalty. Retail prices and margins have declined as a result.
- 4.21 Increasing competition between retailers has in turn put pressure on the suppliers of baby milk and baby food to reduce their prices. Despite this, some buyers noted that they would like to see more competition in the supply of baby milk. SMA was regarded as a 'must stock' product, and, more generally, the market continued to be dominated by a small number of important brands.
- 4.22 Buyer power appears to have been the most important competitive constraint post-merger in both the baby milk and baby meals markets. However, the mechanism by which buyers have been able to exercise their bargaining power is somewhat different from that envisaged by the CC.
- 4.23 The CC expressed the view that retailers would be in a strong bargaining position because of their ability to increase (or threaten to increase) the promotion of their own-label products. However, own-label products have struggled to survive in a market where brand strength is of key importance and where it is difficult for retailers to establish the necessary customer confidence in their products. This is particularly true in baby milk where retailers are unable to advertise and have difficulty in gaining access to the crucial NHS sector. The difficulty of US retailers in developing private label baby milk brands was discussed by Shapiro⁴ (1993).
- 4.24 Buyer power appears to have stemmed from increasing retail competition. With baby milk and meals becoming known-value items, retailers that are able to obtain a more favourable deal are able to offer lower prices and win market share at the expense of their rivals in the wider grocery market. This appears to have increased the incentives for retailers to hold out for a better deal from suppliers.

⁴ 'Price Lure of Private-Label Products Fails to Hook Many Buyers of Baby Food and Beer', Shapiro E., May 13th 1993, The Wall Street Journal, P.b1.

4.25 A contributory reason for the CC clearing the merger was their view that the Milupa baby food brands were in danger of failing. The CC took the view that the investment plans of Nutricia would manage to save the brand. It is not clear however whether such investments were made, and the Milupa baby meal brands were withdrawn shortly after the merger.

Industrial chocolate

Klaus J Jacobs/SCIA (1997)

Facts

- 4.26 Industrial chocolate (couverture) is an intermediate product used in the manufacture of chocolate confectionary, biscuits, cakes and ice cream.
- 4.27 At the time of the merger, producers of couverture could be divided into two categories:
- Producer-users that manufactured couverture for use in their own products. These producers did not usually supply the open market
 - Those that only sold to the open market. These producers accounted for about 21 per cent of total UK supply in 1995.
- 4.28 In 1997 the merger took place between Callebaut AG (Callebaut) (owned by Klaus J Jacobs Holding AG) and Barry SA (Barry) (owned by Société Centrale d'Investissements et Associés, SCIA). These firms accounted for an estimated 47 per cent and 26 per cent share of supply to the open market respectively (although only 15 per cent of the total supply of couverture). The remaining UK suppliers were very small.

Main reasons for OFT referral

- 4.29 The main reasons for OFT referral are:
- The parties would have a very high market share of the open market (which the OFT considered to be the relevant economic market)
 - Customers were concerned that other producers, in particular producer-users, could not meet their requirements

- Buyers were unlikely to exercise significant buyer power since none accounted for a large share of sales, and there was an absence of credible alternative sources of supply
- There were high barriers to large-scale entry, including set up costs, economies of scale, and the importance of reputation. There had been no entry since 1989.

Main reasons for CC clearing

4.30 The main reasons for CC clearing are:

- No barriers to some smaller producer-users supplying the open market
- Potential for continental suppliers to enter the open market
- No substantial barriers to entry by new competitors
- Some buyer power
- Merger would generate cost savings that were likely to be passed on to consumers.

What happened next...

4.31 At around the time that the merger was completed, five former managers of Barry set up their own company OCG Cacao (OCG). These managers recognised that many customers had a strong preference for dual sourcing, and that the merger had created a gap in the market for a second producer of high-quality chocolate couverture.

4.32 OCG's first plant was built in Rouen in France after an initial investment of approximately £20m. Although OCG had received positive soundings from customers before making this investment, buyers do not appear to have underwritten any of these costs or otherwise to have sponsored this entry.

- 4.33 OCG has expanded and now has four plants in Europe, including a UK plant. OCG's market share is now estimated at 20-25 per cent, with Barry Callebaut on 55-60 per cent. Our understanding is that Classic Couverture Ltd, an independent supplier, has also developed to be a small but significant supplier.
- 4.34 The two main producer-users at the time of the merger, United Biscuits (UK) Limited, operating as McVitie's (UB/McVitie's) and Premier Biscuits (part of Hilldown Holdings plc), appear no longer to supply the open market. Buyers told us that they were reluctant to purchase from producer-users as they compete directly with these firms in downstream markets (it appears that buyers did not wish to reveal their recipes, and also did not want to be dependant upon a competitor for supplies in a market where security of supply is important).
- 4.35 Market participants still regard it as difficult to obtain supplies from firms that are based outside the UK. This appears to be mainly due to transport costs, but it is also regarded as easier for UK manufacturers to match local tastes, to respond to changing supply needs, and to meet the requirements for just-in-time delivery. There does not appear to have been any entry or expansion into the UK market from European suppliers.
- 4.36 OCG was recently acquired by Cargill Incorporated, the US multinational that had been its main supplier of cacao products.

Analysis

- 4.37 The market for chocolate couverture has in some sense 'self-corrected', in that the current market structure is almost identical to that which existed pre-merger. This has been almost entirely due to the entry of OCG into the open market.
- 4.38 The entry and subsequent success of OCG in the open market is largely attributable to the fact that many customers regard it as imperative that there are at least two suppliers in the market in order that they can maintain a dual sourcing policy.

- 4.39 The demand for dual sourcing arises primarily from the high costs of switching to an alternative supplier. It can take more than a year of process testing to ensure that a new supplier is capable of matching the recipe and quality specifications of the buyer. Dual sourcing is also important for maintaining security of supply (couverture cannot be stored for more than a few days).
- 4.40 With dual sourcing a buyer is able to switch its demands towards the supplier with the lowest price. However, if a buyer has only one contract the credibility of changing supplier is limited by the high switching costs. Dual sourcing is therefore a very important means by which a buyer is able to attain and exercise a degree of buyer power. Some of the customers to whom we spoke noted that when there had previously been only one supplier of couverture, they had very little bargaining power, and it had been difficult to achieve a fair price. Dual sourcing, as well as providing a buyer with a more credible threat, also forced suppliers to reveal information about their costs, further enhancing buyer power. This suggests that actual, rather than potential competition, is important in this market.
- 4.41 The merger, by all but eliminating the possibility of dual sourcing, would, in the absence of entry, have significantly reduced buyer power for these companies. The CC's report does not mention this possibility. The CC may have relied on the fact that approximately 50 per cent of buyers were content with a single sourcing policy. However, buyers are not a homogeneous group. Single sourcing tends to be used only by lower quality chocolate manufacturers, or for manufacturers for whom chocolate represents a relatively small part of their production costs, e.g. ice-cream makers. For these customers switching costs are often significantly lower.
- 4.42 Whether the reduction in buyer power would have led to a price rise in the absence of OCG's entry is more open to speculation. On the one hand, we were told by buyers that when there had only been one UK supplier of couverture, prices had been higher. On the other, it is possible that expansion by producer-users or European based suppliers may have been sufficient to constrain prices. However, the buyers that we spoke to were all reluctant to use these sources of supply, and we

are not aware of any producer-user that currently supplies the open market.

- 4.43 Of course, entry did occur, and, moreover, was of sufficient speed and scale that customers did not suffer any detriment. There is however a question mark over the extent to which such entry was predictable. Firstly, there were relatively high sunk costs involved in entering the market – OCG’s first plant required an investment of £20 million, and three subsequent plants were built. Secondly, as discussed, there were very significant switching costs involved in buyers taking their supplies from a new entrant. Thirdly, buyers appear to have been reluctant to obtain supplies from firms who already had a presence in neighbouring markets, specifically, producer-users and European suppliers. Whilst the ex-Barry employees were able to overcome these hurdles (they had important advantages of reputation and customer contacts), other potential new entrants may have struggled.
- 4.44 An alternative viewpoint is that the merger itself created a profitable entry opportunity, which, because of customers’ strong requirements for dual-sourcing, was likely to be taken up.
- 4.45 Whether a merger should be cleared on such a basis is to a large extent a question of judgment, the answer to which depends upon how prepared a competition authority is to intervene in markets. On the one hand, the whole point of having a mergers law is to prevent anti-competitive market structures from forming – here the entry opportunity only arises because the merger has denied customers the ability to dual-source. On the other hand, if, as here, entry opportunities are quickly taken up, then consumer detriment associated with the merger is likely to be low.
- 4.46 The main lesson to be learned from this case is the importance that dual sourcing had in the maintenance of buyer power. In such circumstances a merger that denies customers the opportunity of dual sourcing can significantly reduce buyer power making anti-competitive effects more likely.

Bus services

Cowie/British Bus Group (1997)

Facts

- 4.47 In 1996 Cowie Group plc (Cowie) and British Bus Group Limited (British Bus) merged, and the combined company subsequently changed its name to Arriva plc (Arriva). The main competition issues identified by the CC concerned the market for bus services in London, with South London highlighted as a particular concern.
- 4.48 The London bus market is highly regulated. Transport for London (TfL) through its subsidiary London Bus Services Limited (LBSL) is responsible for regulating the market, and amongst other things determines the route network and the frequency of services. Each route is served by one operator, with bus companies competing for the right to serve the route via a competitive tender. TfL provides passenger facilities at bus stations and stops, information services to passengers, and ticket inspectors on board buses. In addition, some depots are leased from LBSL. Fare levels are determined by the Mayor.
- 4.49 In 1989 the bus service that had been operated by London Regional Transport was split into 11 separate subsidiaries, each operating in geographically distinct areas of London (although there was a fair amount of overlap from one area to another). These subsidiaries were privatised in 1993. Subsequently there had been a number of acquisitions and mergers involving these subsidiaries. However, bus operators tended to concentrate on serving routes in a particular part of London. One reason for this was that guidelines drawn up at the time of privatisation, developed in consultation with the competition authorities, stipulated that a single purchaser could not 'buy' adjacent areas. Incumbency advantages, such as investment in infrastructure and detailed knowledge of the route, also played a role. An operator's ability to compete in any area was also constrained by the availability of garage premises. This could make it difficult to stray too far away from 'home' territory.

Main reasons for OFT referral

4.50 The main reasons for OFT referral are:

- Large increase in concentration. The merger would lead to the three largest operators accounting for over half of national bus turnover
- In South London the merger would leave just two main competitors
- Recent fall in bids per tender
- Entry barriers due to difficulty in acquiring depots
- In Surrey and Kent Cowie had been seen as a valuable potential competitor to challenge British Bus's strong market position.

Main reasons for CC clearing

4.51 The main reasons for CC clearing are:

- Low barriers to entry
- Many Arriva routes due to be tendered within two years
- LBSL in a powerful position to encourage competition and could even provide services itself.

What happened next...

4.52 Since the merger there has been further consolidation of the overall London bus market. The market share of the large operators has risen from 70 per cent at the time of the merger to 90 per cent in 2004. There are now six large operators and twelve smaller operators in the London market.

- 4.53 Immediately after the merger Arriva had a market share of 26 per cent. This has now declined to 19 per cent. In South London, where the OFT's and CC's competition concerns were focused, Arriva has experienced an even sharper drop in market share (down from 32 per cent to 21 per cent). Market shares are now distributed more evenly between the four largest companies than they were prior to the merger.
- 4.54 The average number of bids per tender fell through 1995 and 1996, and since 1997 it has settled at 2-3 bids per contract. This contrasts with an average of six bids per contract in 1995. There is a strong suggestion that many bids in the period prior to 1996 were not competitive (many were from very small operators). Thus a fall in the number of bids per tender does not necessarily reflect a reduction in rivalry.
- 4.55 The London bus market has grown considerably since the merger. This partly reflects a general growth in demand for transportation within London, but bus demand has also received a further boost as a result of several policy initiatives, including bus lanes, fare policies, and the introduction of congestion charging. Bus operators have generally found it difficult to expand their operations in line with the demands of the regulator. In particular bus operators have experienced difficulties in recruiting staff and obtaining the necessary garage space. With a general shortage of capacity in the market, bus operators have often been constrained in bidding for additional contracts. In the longer run, as capacity restrictions are overcome, the number of bids per tender is expected to increase.
- 4.56 In general the larger operators have been successful in retaining routes, and the growing scale and quality requirements of bus operations in London may serve to strengthen their role. However LBSL has played an active role in promoting competition from smaller operators and between the major players. This includes the acquisition and refurbishment of new and disused garages to help remove one of the significant barriers to entry to the market. National Express Group plc has recently entered the London market by acquiring Connex Bus UK Limited and has scope for potential further expansion by leasing a recently refurbished garage from TfL.

- 4.57 TfL now operates its own bus company. In 1999 Harris Buses, was placed in administration and TfL re-established a public sector operator London Buses Limited (trading as East Thames) to take on the operation of six routes. However this company currently does not compete for tenders in the open market, and only operates routes that commercial operators do not wish to tender for (or where there are no acceptable bids). The operation of these services has given LBSL further data on the costs of running a bus service. Additionally, LBSL has also developed its own cost model, which it uses to assess whether tenders are priced competitively. LBSL also obtains detailed breakdowns of cost structures from operators as part of the tendering process.
- 4.58 Quality of service has been an important focus for LBSL, and a new contract system was introduced in 2000 to reflect this. Immediately prior to this, an operator was awarded the contract in exchange for either a fee or a subsidy (depending on whether revenues were expected to exceed costs) and was then entitled to keep fare revenue. Under the new system, called Quality Incentive Contracts (QICs), LBSL receives all fare revenues, and operators receive incentive payments based on their performance. The new system, by transferring revenue risk away from operators, may benefit smaller companies and encourage market entry.

Analysis

- 4.59 While LBSL itself had concerns about the merger, subsequent events appear to have confirmed the CC's view that the regulator was powerful enough to solve any competition problems that might arise. Not only has LBSL been able to encourage and support entry successfully, but it has also been able to introduce QICs, which have served to enhance non-price competition. The collection and analysis of information has also played an important role in making LBSL an 'intelligent customer'. All of these factors have effectively increased LBSL's buyer power and ensured that the market delivers not only the price, but also the quality of service, demanded by consumers (as represented by LBSL).

- 4.60 It is difficult to assess whether there was any price effect caused by the merger given the number of exogenous changes that were happening in the market at the time, most notably the introduction of QICs, and the short-run capacity problems that arose from the increase in demand for bus services. The number of bids per tender remains at 2-3, although comparisons are largely meaningless given that the changes to the market have led to a reduction in the number of small to medium sized operators, many of whom were not believed to have been supplying competitive bids. It is however perhaps notable that in South London, where competition concerns were seen to be the greatest, Arriva has lost a number of contracts, with its market share falling from 32 per cent to 21 per cent. At present, there is no conclusive evidence that there are too few bus operators in London. Indeed, even if there were, LBSL has shown itself to be capable of facilitating entry.
- 4.61 Although the CC correctly identified the importance of LBSL in being able to shape competition in the market, there are two areas which they might have explored in more detail. The first of these is that the CC did not carry out a very thorough analysis of how a fall in the number of bidders would impact on the competitive situation. Unilateral effects do appear to have been a realistic prospect here given the relatively few number of bidders pre-merger, and the general unwillingness of bus companies to bid for tenders outside their core area. That said, the post-merger evidence does tend to confirm the CC's assessment that LBSL had the ability to sponsor entry.
- 4.62 The second issue that the CC might have explored in more depth is the role of depot access as an entry barrier. Whilst the CC's conclusion that there were little or no problems in the acquisition of sites (whether for large or small operators) has been confirmed by subsequent events, a key difficulty for larger operators has been in ensuring that planning consent is confirmed before the start of the contract. A delay in planning consent entails operating dead mileage (between a depot and a route) for a period of time, with consequential cost implications. This does appear to have reduced the incentive for bus operators to bid for tenders away from their existing depots.

Industrial film processing for television and film

Technicolor/Metrocolor (1997)

Facts

- 4.63 This was a horizontal merger between Technicolor Limited (Technicolor) and Metrocolor London Limited (Metrocolor), both of whom supplied processing and printing services to the film and television industry.
- 4.64 The major services could be split into two categories:
- **Front-end processing:** Film processing services which transformed the rush print produced at the end of a day's shooting into a final version which was ready for editing. This required close collaboration with filmmakers and the reputation of individual graders was important. Film may be 35mm (used mainly by filmmakers) or 16mm (used mainly in television). Use of 16mm film was declining due to increased use of digital cameras. In the UK demand for front-end services came primarily from independent filmmakers (70 per cent)⁵.
 - **Release printing:** The final version of a print (the 'release print') needed to be reproduced in large quantities so that a film could be shown simultaneously in cinemas across Europe. Release printing was essentially a manufacturing business. Demand was volatile and to win business firms needed to have sufficient capacity to cope with huge peaks in production, together with a reputation for reliability. Buyers were often the large Hollywood studios.
- 4.65 Technicolor was a large international company with laboratories in the US, UK and Italy. Metrocolor operated only in London. Despite its smaller size, Metrocolor had been successful in winning business in the UK, although at the time of the merger revenues were falling and a number of key staff had been lost. Over the whole industry in 1996, the UK market shares for Technicolor and Metrocolor were estimated at

⁵ Independent production companies accounted for over 70 per cent of the 35mm feature front-end processing work commissioned in the UK in 1996.

44 per cent and 19 per cent respectively. Rank Film Laboratories Limited (Rank) accounted for about 20 per cent of the UK industry, and was strong in 35mm release printing. Imports accounted for only about 4 per cent of the UK market.

Main reasons for OFT referral

4.66 The main reasons for OFT referral are:

- Merger would create concentration around two players in several markets
- Risk of collusion was enhanced by the merger
- Risk that prices would be increased to smaller independent producers and distributors who have weak buyer power compared to Hollywood studios.

Main reasons for CC clearing

4.67 The main reasons for CC clearing are:

Release Printing

- Rivalry strong, and likely to remain so
- Buyers sophisticated and could readily switch between providers
- Strong international aspect to the 35mm release printing market.

Front-end processing

- Low barriers to entry
- 'Strong possibility' that the Metrocolor laboratory would close down if the merger did not take place.

What happened next...

Front-end Processing (35mm)

- 4.68 One of the features of this market is that work often followed the individual rather than the firm. Individuals are highly skilled, and the feel of a film can be very different according to who has worked on it. Metrocolor had a very good reputation in this area, but during the course of the CC investigation a number of key members of staff left. As a result, when Technicolor acquired the business, Metrocolor had already lost a large number of customers. After the merger, more Metrocolor staff left, and customers continued to switch. Most customers switched their business to Deluxe (previously known as Rank) and to a smaller processor, Soho Images Ltd. Few customers switched to Technicolor. One of the reasons for this is that Metrocolor's customer base had largely comprised of smaller independents, whilst Technicolor had a reputation for being primarily interested in meeting the needs of larger customers. Some smaller independents saw Technicolor as offering a 'Rolls-Royce' service.

Front-end Processing (16mm)

- 4.69 There have been a number of significant technological advances since the merger which now effectively allow filmmakers to bypass the need for 16mm film. Most 16mm demand came from television, and this has now moved almost entirely to digital. A number of complaints at the time of the merger concerned services that Metrocolor offered but Technicolor did not, for example blowing super 16mm up to 35mm. These services appear to have been largely superseded as the quality of digital cameras continues to improve.

Release Printing

- 4.70 This market has continued to grow substantially. Customers who used second hand prints from the US now have to use new prints as the timing of first runs in the US and Europe has been brought much closer together. In addition European demand has grown, especially from the new EU member states.

- 4.71 Much of the business that had previously been conducted in the UK has now shifted to the continent. Technicolor previously produced 70 per cent of release prints for US distributors bound for the European market in London, but this has now fallen to around 20 per cent. Much of the printing now takes place in Rome. Release printing is essentially a manufacturing business, and economies of scale have grown with advances in technology. Due to the more international nature of the market, movements in exchange rates have become important in determining where production takes place.
- 4.72 There is little doubt that the overall market for release printing is now European wide. The major Hollywood studios source their European supply needs primarily from Technicolor and Deluxe (previously Rank), both of whom have a global presence.
- 4.73 The market shares for all productions are 45 per cent for Technicolor and 35 per cent for Deluxe, with the remaining 20 per cent accounted for by local European suppliers.
- 4.74 Prior to the merger, Metrocolor accounted for approximately 10 per cent of the 35mm release print market in the UK, whilst Technicolor and Deluxe held about 39 per cent and 51 per cent respectively. However competition appears to have remained strong. Buyers we spoke to considered there to be a high degree of rivalry between Technicolor and Deluxe, and indicated that buyer power was strong. As demand is so volatile and time sensitive, there is often considerable spare capacity in the market, and buyers found it relatively easy to negotiate discounts. Overall, prices appear to have declined (in real terms) since the merger.
- 4.75 Many interviewees felt that Metrocolor would have been unlikely to survive the move towards a European market. Customers are increasingly seeking to obtain all their European release print needs from a single source, and many interviewees thought that it was unlikely that Metrocolor would have had the financial strength to increase its capacity to meet these demands.

Analysis

- 4.76 Rather than seeking to define the relevant market using the SSNIP⁶ test, the CC divided the industry into six broad sectors. This pragmatic approach helped give the CC a good understanding as to what were the key competitive constraints in the market.
- 4.77 For front-end services, the CC's judgement that Rank and smaller competitors would be readily able to expand appears to have been entirely confirmed by subsequent events. In release printing, although barriers to entry appear to be substantial (and may have actually increased), the CC correctly pointed out that buyers have considerable strength and that rivalry between Technicolor and Deluxe would be strong. However, a more formal analysis of the geographical market might have been appropriate given that the market for major studio releases now appears to be European wide.
- 4.78 Technological change has been a defining influence in the market post-merger and has negated some potential competition concerns. Digital technology now allows filmmakers to bypass 16mm front-end processing, preventing the absence of Metrocolor from causing any substantial loss to customers in this field, although this is not something that the CC could have readily predicted at the time.
- 4.79 Although the merger led to a substantial increase in market concentration in all sectors, the evidence that we have obtained from buyer interviews and switching behaviour suggests that Technicolor and Metrocolor largely offered differentiated services to different types of clients and that direct competition between them was limited. Whilst there was, and remains, considerable unhappiness about the merger amongst some buyers, this appears to have been much more to do with the loss of Metrocolor as an independent competitor rather than any loss of competition between Technicolor and Metrocolor. Indeed, the lack of direct competition between the parties appears to have been one

⁶ The test relates to whether it is profitable for a hypothetical monopoly supplier to impose a small, but significant, non-transitory increase in price (see *US Horizontal Merger Guidelines*, 1992).

of the key reasons why there was no price rise after the merger. The CC did not appear to conduct an analysis into whether Technicolor and Metrocolor were close or more distant competitors, and this is perhaps an area where more information could usefully have been sought.

- 4.80 The CC report also did not contain an analysis of the possibility that the merger might increase the risk of tacit or implicit collusion (co-ordinated effects). This is a little puzzling given that this was identified by the OFT as a possible competition concern. However, we have found no suggestion of collusion in the post-merger market.

Food colourings

Universal Foods/Pointing (1999)

Facts

- 4.81 Universal Foods Corporation (Universal Foods), now known as Sensient Technologies Corporation (Sensient), acquired Pointing Holdings Limited (Pointing) in April 1999. Sensient and Pointing overlapped in the manufacture of food flavours and colours. The market for food colourings can be sub-divided into 'natural colourings' and 'synthetic colourings'.
- 4.82 Competition concerns arose in the area of synthetic food colourings, where Sensient had a market share in 1998 of approximately 50 per cent, and Pointing had about 24 per cent. Imports (mainly from Asia) accounted for the remaining 26 per cent of supply. The price of imports was around 20-30 per cent lower than UK produced synthetic colours.
- 4.83 At the time of the merger, there were only 16 synthetic food colours that were permitted in the EU. Universal Foods produced 15 of these colours and Pointing 11. However, these basic colours could then be blended to create a very wide range of different colours.

Main reasons for OFT referral

- 4.84 The main reasons for the OFT referral are:
- Buyers expressed concern that the increase in concentration would weaken their bargaining power, leading to higher prices
 - Uncertainty over market definition
 - The OFT had insufficient time to conduct a detailed analysis.

Main reasons for CC clearing

4.85 The main reasons for CC clearing are:

- Prices constrained by long-term decline in demand for synthetic colours
- Prices constrained by low cost producers in Asia
- Switching costs were not substantial
- Large customers had buyer power
- Merger would lead to unit cost savings
- One member of the CC dissented, concluding that the merger would lead to a public interest detriment, largely because of a belief that other firms in the market were unlikely to compete aggressively for market share.

What happened next...

4.86 In 2001/2002 Sensient shifted the production of synthetic colours to its plant in Kings Lynn and the Pointing plant was closed. Investment was undertaken to allow the plant to operate at higher volume and lower cost. Product range was reduced so as to concentrate production into longer batch runs with lower costs. Despite this it was unable to remain competitive and at the end of 2003 the decision was made to cease a significant proportion of UK-based production. Dr Marcus GmbH, a German manufacturer of natural colourings, was acquired by Sensient in 2000, and some elements of the management and control of the European business have moved to Germany from Kings Lynn. Sensient now manufactures synthetic colours in Mexico and the USA, and natural colours in continental Europe.

4.87 After the merger Sensient began a rationalisation process that involved a reduction in its range from around 9,500 to around 5,000 colours. This process is ongoing, and was partly motivated by the need to

eliminate duplication between the Pointing and Sensient ranges. Sensient now focus on supplying larger customers (they have a minimum order requirement), and on the production of value added products such as bespoke blends.

- 4.88 Reputation, technical expertise, and knowledge of customer requirements are seen as major barriers to entry in the market for food colourings. These factors may have partly insulated the UK market from competitors in countries such as India in the period prior to the merger. However, these low cost products are now more widely accepted in the UK market, and there is an acceptance that their quality has increased. In some cases reputation and expertise barriers have been overcome by using UK-based distributors to market Asian products. In a number of cases ex-Sensient staff took on this role, and were able to provide an assurance of product quality. New entrants have been particularly important in meeting the needs of smaller customers, who experienced a reduction in choice immediately after the merger.
- 4.89 Sensient's market share is currently around 50 per cent (down from 74 per cent at the time of the merger).
- 4.90 There is a general consensus amongst market participants that natural and synthetic colours remain separate markets. However there has been a significant shift in demand within the food manufacturing industry away from synthetic, and towards natural colours. This is largely due to consumer perceptions concerning food safety.
- 4.91 Prices have continued to fall for both synthetic and natural colours. The main reason for this appears to have been increased competition from low-cost suppliers in Asia and elsewhere, although increased pressure from major food retailers has also been a significant contributory factor. Price reductions have been greatest in the natural colourings market. One possible reason for this is that immediately prior to the merger there had been a very rapid decline in the price of synthetic colourings, and that these price reductions have now 'bottomed out'.

Analysis

- 4.92 There have been huge changes to the synthetic food colourings industry that have ultimately resulted in the disappearance of all production plants from the UK. The main factor has been the intensifying competition from imports from Asia, very much as foreseen by the CC. Low cost importers have been able to overcome the reputational entry barriers both by improving the quality of their product, and through using UK blenders and distributors, some of whom were ex-Sensient staff (they were able to assure the quality of Asian imports).
- 4.93 The long-term decline in demand for synthetic colourings has placed a further, but perhaps less important, constraint on prices. Changing tastes ensured that buyers who switched to natural colours were very unlikely to switch back. The decision to make this switch is invariably made on the basis of perceived marketing advantages of using natural colourings rather than on the relative costs of natural and synthetic colourings. Natural colours remain significantly more expensive, and can cost 100 times the price of the synthetic equivalent. However, the cost of colourings represents a very small proportion of the overall cost of food production.
- 4.94 The merger was cleared by the CC largely on the basis that there were likely to be powerful long-term constraints on Sensient's pricing. However, the CC also argued that Sensient would not have an incentive to raise prices even in the short-run because buyers had come to expect price reductions.
- 4.95 On the face of it this is a somewhat surprising conclusion given that the CC had also argued that Universal Foods and Pointing were closest competitors to each other, that the merger would give the parties a 74 per cent market share, that there were significant (although not insurmountable) switching costs, that buyers were not price sensitive, and that there were reputational barriers to entry which might take time to overcome. All of these factors pointed to the risk of a short-run increase in price following the merger.

- 4.96 In our interviews we found no evidence that Sensient had attempted to impose a price increase after the merger, so the CC's conclusion again appears to have been correct.
- 4.97 However, the views of market participants suggest that the main reason why there was no short-run increase in price was that imports were acting as the primary competitive constraint at the time of the merger. This is also consistent with Sensient's post-merger strategy which, from the outset, was aimed at reducing costs and keeping prices competitive in order to ward off the threat of competition from low-cost Asian suppliers.
- 4.98 This suggests that Universal Foods and Pointing may not have been closest competitors to each other prior to the merger and that instead prices were set by the threat of imports.
- 4.99 The CC somewhat presumed that Universal Foods and Pointing were close competitors based on the fact that they both produced high price and (perceived) high quality products. Whilst there is some evidence to support this – some buyers noted that Universal Foods and Pointing had been engaged in a 'price war' prior to the merger – most of the evidence points the other way. For example, it seems equally plausible that the perceived 'price war' was a reaction to a common enemy, namely low-cost imports. Buyers also appear to have cited the lower price of imports when seeking additional discounts from their existing supplier. Finally, there is also a question mark over the extent of rivalry between Universal Foods and Pointing in circumstances where Pointing bought a substantial quantity of food colouring from Universal Foods (as well as being a rival, Pointing was also Universal Food's largest customer).
- 4.100 More generally, whilst the CC correctly judged the longer-term competitive constraints in this market, the report could perhaps have benefited from a more detailed investigation of whether there was likely to have been any short-run increase in price following the merger, through, in particular, examining the extent of rivalry between the merging parties.

Helicopter services

CHC/Helicopter (2000)

Facts

- 4.101 At the time of the merger, Brintel Helicopters Limited (Brintel) (owned by CHC Helicopter Corporation, Canada (CHC)) and Bond Helicopters Limited (Bond) (owned by Helicopter Services Group ASA, Norway (HSG)) were two suppliers of helicopter transport services to oil and gas installations on the UK continental shelf. The merger, which took place in 2000, concerned the acquisition of Bond's offshore services by Brintel. Bond continued to operate onshore services.
- 4.102 This was essentially a bidding market, with the customers typically being large multinational energy companies. Bristow Helicopters Limited (Bristow) was the only other operator which competed with the parties for contracts in the Northern Zone UK offshore market (the Northern and Southern Zone UK offshore markets were regarded as distinct as they were served from different bases using different types of helicopters). In 1998, Bristow had a market share of about 55 per cent in the Northern Zone, with Brintel and Bond accounting for 22 per cent and 23 per cent respectively.
- 4.103 A similar merger, between Bond and British International Helicopters Ltd., was prohibited in 1992. At the time the CC was concerned that barriers to entry were high, and that there were risks that the merger might lead to tacit or explicit collusion.

Main Reasons for OFT Referral

- 4.104 The main reasons for OFT referral are:
- Merger would create a duopoly with a risk of unilateral or co-ordinated effects
 - Competition did not appear to be particularly strong (market shares had been static)

- Merger would reduce buyer power
- Liberalisation of air transport regulations had not led to entry, and some evidence that entry barriers had actually increased (capital costs, access to Aberdeen Airport, reputation for safety and reliability)
- Overall, little had changed since a similar merger had been prohibited in 1992.

Main reasons for CC clearing

4.105 The main reasons for CC clearing are:

- Entry barriers had declined significantly since 1992 (air transport regulations had been liberalised allowing non-UK controlled companies to operate in the UK and there was greater availability of onshore facilities)
- The market was regarded as being contestable in that the threat of entry was likely to be sufficient to constrain prices (bids were made far enough in advance to allow new companies to be set up for specific contracts)
- Buyer power had increased since 1992 (buyers were 'more determined to bear down on costs')
- Collusion was unlikely on account of low entry barriers, buyer power, lack of price transparency, spare capacity, symmetry of market shares and costs, and the homogeneous nature of the product.

What happened next...

4.106 There was a general consensus amongst market participants that prices had risen since the merger. One interviewee told us that the rise in prices was due to underlying cost increases and an unexpected short-term increase in demand. However, other market participants expressed concerns that rivalry between Brintel and Bristow was less intense than

it had been prior to the merger, and that prices were less competitive as a result. We were also told of a perception of a reduction in quality after the merger in the form of reduced punctuality. However, rather than as a result of reduced competition, this could be a result of a short term increase in demand.

- 4.107 From 2001 Bond started receiving offers from oil companies to re-enter the offshore market. After some negotiations, one oil company offered Bond a contract that was large enough to enable them to commit to re-entry in 2004. Although Bond are not yet fully operational there is anecdotal evidence that prices have since eased and that the quality of services provided by the incumbents has improved.
- 4.108 Despite the re-entry of Bond, there is evidence that there are significant barriers to entry and expansion in this market. A new helicopter can cost £10 million (compared to an overall market value of around £150 million at the time of the merger), and it is often difficult to obtain second-hand helicopters (they are normally owned by competitors). The reputation of the firm (in terms of safety, experience, and performance), and not just individuals, also appears to be an important barrier to market entry.
- 4.109 However, access to facilities no longer appears to be a significant entry barrier. The demand for helicopter services is declining partly because oil and gas fields are now maturing, but also because with technological developments less people are needed on platforms (although there was an increase in demand for helicopter services in 2000, this proved to be short-lived). Capacity at airports has been freed up as demand for helicopter services has fallen. Bond recently obtained some facilities at Aberdeen airport (which helped them to re-enter the market), and it is also possible to build new capacity at the airport. Access to hanger space also no longer appears to be a significant barrier to entry.
- 4.110 The nature of contracts is changing back towards 'sole use' contracts (standing charge, plus an hourly fee). The duration of contracts varies. Larger buyers appear to favour longer contracts, while smaller buyers appear to favour shorter durations.

Analysis

- 4.111 The re-entry into the market of Bond appears to have ensured that there is effective competition in the market for helicopter services. However, the behaviour of the market in the interim period of duopoly casts serious doubt on the CC's view that the market was contestable in the sense that the mere threat of entry would be sufficient to constrain prices. Whilst the observed increases in prices may in part be explained by factors other than the increase in market concentration, the reported concerns over price and service levels, suggest that there may have been some reduction in rivalry.
- 4.112 Perhaps the strongest evidence that the threat of entry may not have been sufficient is that one buyer went to substantial lengths, and costs, to facilitate the re-entry of Bond into the market. This suggests that at least one buyer was dissatisfied with the level of existing competition in the market. In many respects the post-merger situation appears to closely resemble the predictions of the 1992 CC report, which suggested that at least three firms were required for competition to be effective.
- 4.113 It appears that prices have fallen and services levels have improved since Bond won the contract. If true this presents a bit of a puzzle. If, as it appears, it was credible for buyers to sponsor entry, why was this threat not sufficient to constrain prices, i.e. why did the threat have to be imposed?
- 4.114 The most plausible explanation is that Bristow and Brintel did not believe that such entry was credible, or at least not sufficiently credible to constrain short-run pricing behaviour.
- 4.115 However, this only provides an explanation if the incumbents also believed that other potential new entrants did not impose a significant competitive threat. In either event it does appear that the incumbents believed that there were significant barriers to entry to the market. In our interviews with market participants, respondents stressed the importance of reputation, including a reputation for reliability and safety, in their choice of helicopter services operator. Whilst it may be easy for a new entrant to offer a lower price, it is difficult to determine what

quality of service will ultimately be delivered unless the entrant has a track record (which they can only really achieve through being in the market).

4.116 Looking at the CC analysis more generally, it is notable that the CC only considers the possibility of co-ordinated effects resulting from the merger. This approach may stem from the bidding nature of the market, although the theoretical literature on auction markets suggests that unilateral effects cannot be ruled out in such cases⁷.

4.117 The CC's analysis of the possibility of co-ordinated effects began with an examination of whether the characteristics of the market were likely to facilitate tacit collusion. The CC put most emphasis on low entry barriers and buyer power as factors that would hinder collusion. More surprisingly, the CC also pointed to product homogeneity and symmetrical market shares and costs as factors that make collusion unlikely. This is at variance with standard economic theory. The CC also examined evidence from the Norwegian market where there were only two competitors. The Norwegian study suggested that prices were higher with only two players, although the CC appears to have been convinced that the price differences could be explained by higher costs.

⁷ See, for example, *'The effects of mergers in open-auction markets'*, Waerhrer, K. and Perry, P.K. The RAND Journal of Economics, vol.34, No.2.

Pay-TV

NTL/Cable and Wireless (2000)

Facts

- 4.118 This case concerns the merger between cable operators NTL Incorporated (NTL) and (the cable business of) Cable and Wireless Communications plc (Cable and Wireless). In 1999 these were the second and third largest cable operators with about 15 per cent and 12 per cent of pay-TV subscriptions respectively. The largest cable operator was Telewest Communications plc (Telewest), with a market share of about 16 per cent. Cable operators compete with other platforms for pay-TV services, namely satellite, and digital terrestrial television. The largest and most important competitor was the satellite operator British Sky Broadcasting Group plc (BSkyB), accounting for about 50 per cent of the market at the time of the merger. ONdigital plc (ONdigital), a newly formed digital terrestrial transmission operator, had a market share of approximately 6 per cent at the time of the merger.
- 4.119 The parties also overlapped in the provision of digital interactive television services and telephony, but in these areas they had very low market shares, and there were other significant sources of competition. British Telecommunications plc (BT) was a particularly powerful presence in the provision of telephone services.
- 4.120 At the time of the merger, cable services were run on a local basis, and operators had long-term exclusive contracts, i.e. customers were only able to contract with their local cable operator. Thus although both NTL and Cable and Wireless had a considerable UK market share, there was no direct competition between them either for customers or in the purchase of content (it was important to content providers to be included in cable packages provided by every company).
- 4.121 This case was unusual in that the Director General of Fair Trading recommended that this case be cleared without reference to the CC. This advice was however overruled by the Secretary of State for Trade and Industry.

Main reasons for OFT recommending clearance

4.122 The main reasons for OFT clearance are:

- NTL and Cable and Wireless operated in different franchise areas so no loss of direct competition in pay-TV, telephony, or digital interactive services
- Market shares in pay-TV and telephony low compared to market leaders, BSkyB and BT
- Digital interactive services were a nascent market and market shares were low
- Parties had no market power in the purchase of content
- Merger was likely to be pro-competitive in that it would allow the merged entity to compete more effectively with major incumbents in pay-TV and telephony.

Main reasons for CC clearing

4.123 The main reasons for CC clearing are:

- Lack of horizontal overlap between the merging parties
- Buyer power of cable companies was constrained by the need to obtain good quality content, and by the countervailing selling power of content providers
- Even if cable operators secured lower prices from content providers, this may result in lower prices for consumers
- Merger likely to increase, rather than reduce, competition between platforms

What happened next...

- 4.124 Both the OFT and CC argued that the merger might allow the newly merged company to compete more effectively with BSkyB. Some observers believe that the enlarged NTL was now better run, and had put itself on a sounder financial footing. However, neither NTL nor Telewest have been able to mount a significant challenge to BSkyB, whose share of subscriptions has increased from 50 per cent to 68 per cent. NTL has suffered particularly badly, with its market share declining from 27 per cent to 19 per cent (Telewest's share has fallen from 16 per cent to 13 per cent). NTL has also been unable to increase its subscriber base, whilst BSkyB's has nearly doubled since the merger.
- 4.125 One important reason why BSkyB has been more successful has been its ability to offer attractive premium content. Since the merger NTL has generally not sought to challenge BSkyB in bidding for premium content, preferring instead to buy channels wholesale and then sell them on to their retail customers. Another reason for BSkyB's success is that it has been much faster at transferring to digital technology. Whilst all of BSkyB's customers have received a digital service for more than 12 months, about a third of cable customers still had analogue services in 2004.
- 4.126 ONdigital, the DTT provider, went into receivership shortly after the merger. This service was re-launched as ITV Digital, but in 2001 ITV Digital itself was closed down. In 2002 Freeview was launched. Like ONdigital this provides free-to-air channels to viewers that purchase a set-top box (initially retailed at around £100, now from about £40). This platform provides BBC, ITV and other free-to-air digital channels, along with digital radio and other free-to-air services. Although this channel is not strictly part of the pay-TV market (there is no subscription and the service does not contain premium content), some observers believe it provides a limited competitive constraint.
- 4.127 We have been told that prices of pay-TV packages have increased since the merger, although given that the number and quality of services is generally increasing, it is difficult to make meaningful comparisons.

NTL's basic package now costs £19.50 per month⁸, whilst Telewest offers a £14.50 per month service⁹. However, Telewest's average revenue per customer is 8 per cent higher. The cost of a basic satellite package is £13.50 per month¹⁰.

- 4.128 Some content providers told us that after the merger NTL had negotiated lower purchase prices for the supply of content. NTL sought a decrease in fees on the basis that their subscriber base, and thus the value of the platform to a content provider, would increase. NTL's subscriber base has however remained relatively static. We have been unable to ascertain whether there was a general reduction in the payments made to content providers by NTL.
- 4.129 In 2001, both cable companies launched broadband Internet services, and have been relatively successful in this area.

Analysis

- 4.130 There is little to report in this case, and the conclusions of the OFT and CC, that there were no horizontal or vertical issues, appear to have been confirmed by the future developments of the market. Whilst there is no evidence that the merger has actually been pro-competitive, there is no evidence of any adverse effects either.
- 4.131 That said this is one of the few cases where we were told that prices increased (or rather the purchase prices paid to content providers decreased) following the merger. There is however no evidence that NTL was able to obtain those lower prices either through reducing, or threatening to reduce, their demands for programming. Indeed, NTL's demand for programming has increased, very much as the CC predicted. This suggests that any reduction in payments to content providers

⁸ Based on a 'base pack' priced at £10.00, and '3-2-1 Standard' telephone package of £9.50 (<http://www.home.ntl.com/icat> as at 15 October 2004).

⁹ Based on a 'Starter package' of £14.50, which includes a phone line (<http://www.telewest.co.uk/html/television/digitaltv.htm> as at 15 October 2004).

¹⁰ Based on a 'Value Pack' of £13.50 (<http://www.ordersky.com/channelpackages/> as at 15 October 2004).

represents a transfer of monies from content providers to NTL with no adverse effects for consumers or economic welfare more generally. Indeed, customers may benefit from lower purchase prices to the extent that cable companies pass them on. There is however no evidence that customers have benefited in this way.

- 4.132 Some content providers believed that the merger had increased NTL's bargaining power. However, it is not immediately obvious what the source of this bargaining power might be. For example, NTL does not appear to be in any stronger a position to threaten to de-list a content provider. One possible explanation suggested to us by a content provider is that prior to the merger NTL and Cable and Wireless were often paying different prices to the same supplier. The merger would have revealed this information, putting NTL in a better position to insist that they were given the lower price of the two contracts. This suggests that access to information can play a key role in buyer power, a theme familiar from the extensive literature on utility regulation.
- 4.133 There are two points on the CC's approach to market definition that may be worth reflecting on. The first is that it is perhaps surprising that so much of the CC report is devoted to the issue of whether the pay-TV market is local or national in dimension. As the CC later concede, irrespective of whether the pay-TV market is local or national it is clear that there was only the most limited competition between NTL and Cable and Wireless prior to the merger. Whilst we acknowledge that there is substantial pressure to define the relevant economic market formally, this is perhaps a case where a more pragmatic approach to market definition could have been safely adopted.
- 4.134 The other point is that the CC used the same market definition to address the three separate competition issues, namely, was there any immediate loss of horizontal competition, was there likely to be any loss of horizontal competition in the future (e.g. if cable became the dominant platform), and were there any vertical issues arising from NTL's increased importance as a buyer of content? Whilst a pay-TV market definition is suitable for analysing the first issue, the second issue can only really be addressed by considering whether there might be a separate market for cable services, whilst an assessment of the vertical issues demands that a market be defined both for the sale and the purchase of content.

4.135 That said, the CC was able to assess all the competition issues in this case almost without reference to market definition. However, this may not always be the case, and the CC may wish to consider how the market definition could be better targeted at addressing the specific competition issues posed by the merger.

Photograph development

Kodak/ColourCare (2001)

Facts

4.136 At the time of the merger, amateur photographers could have their film developed and printed in three main ways. The quickest option was to go to a retailer with on-site processing and developing facilities (known as a mini-lab). These retailers typically offered a 1-2 hour, and same day/next day service. The slowest, but cheapest option, was to use a mail-order supplier. However, the most common option at the time of the merger was to go to retailers who used a specialist wholesaler to develop and print pictures on their behalf. These wholesalers collected film from the retailer, processed and developed it in their own laboratories, before returning it to the retailer (usually the next day) for customer collection.

4.137 Kodak Processing Companies Limited (Kodak) and ColourCare Limited (ColourCare) were, at the time of the merger, the two leading providers of specialist wholesale processing and development services. Out of all the amateurs' films that were the subject of wholesale supply in the UK in 2000, 43 per cent were processed by Kodak and 35 per cent by ColourCare. Their demand came mainly from retailers who did not have their own wholesale laboratories. However, retailers with mini-lab facilities sometimes used wholesalers to provide a next-day service.

Main reasons for OFT referral

4.138 The main reasons for OFT referral are:

- The merger would leave only one nationwide provider of specialist wholesale processing services
- Limited switching of ultimate consumers between same-day, next-day, and mail order
- Significant barriers to entry in wholesaling

- Merger would reduce buyer power.

Main reasons for CC clearing

4.139 The main reasons for CC clearing are:

- Most supply is controlled by large retail chains with significant buyer power
- Retailers are able to switch some of their photo processing to mini-labs or regional wholesalers if Kodak were to raise prices
- If the price charged by wholesalers were to rise, and this was passed on by retailers, customers would switch to same day and mail-order service.

What happened next...

4.140 There have been a number of significant changes to the photo development and printing market since the merger took place in 2001. The main development has been the growth in the use of digital cameras, which has been much more rapid than anyone had expected at the time of the merger.

4.141 The longer-term impact of the move towards digital cameras has yet to be fully revealed. Some retailers believe that there will be a gradual decline in the printing business as consumers choose to display their pictures in other forms or print at home. They also pointed to the increased opportunities to e-mail photographs to low-cost printers in Central and Eastern Europe.

4.142 Other retailers remain much more optimistic. They note that the use of digital cameras has provided a boost to the popularity of photography, and that more pictures are being taken, albeit that a smaller proportion is being printed. They also note that whilst early adopters of digital cameras tended to be highly IT literate, with a preference for storing photographs on computer, as digital cameras have become a mass-market product, they are increasingly being used like a conventional

camera, with people taking their memory card to a retailer to print off their photographs.

- 4.143 The growth in use of digital cameras has increased the viability of retailers investing in their own (and larger capacity) mini-labs. Since digital camera memory cards are much more valuable than film, customers are much less willing to send them to a laboratory by mail order, or even to a retailer offering an overnight service. Many newer mini-labs allow customers to print photographs themselves, allowing more freedom to control the image, and this has proved to be very popular with customers.
- 4.144 There was widespread agreement that Kodak face very tough competitive constraints despite the absence of any direct competition from wholesalers. The strongest constraint appears to come from retailers with mini-labs, who, because their capacity has increased, are not as dependent on wholesalers to meet their overnight demands. The increase in mini-lab capacity has strengthened buyer power considerably. Retailers by and large do not however believe that the ability of customers to switch from an overnight to a same day service provides much of a competitive constraint.
- 4.145 Retailers said that there had been no attempt to increase prices following the merger. However, some interviewees told us that there had been some temporary problems in service quality in the summer of 2002. This was judged to have resulted from a miscalculation on Kodak's part, in closing too much capacity at a time when demand was temporarily high (this was the year of the Golden Jubilee celebrations) together with the challenge of assimilating the two businesses.
- 4.146 There has been no longer-term increase in prices either, whilst the quality of the product provided by Kodak to customers, and the support offered to retailers, was said to have improved.
- 4.147 In retrospect, buyers were generally satisfied with the CC's analysis and decision, despite some fears expressed at the time of the merger. Many felt that ColourCare would have exited the market anyway, and indeed some buyers had switched from ColourCare to Kodak shortly before the

merger took place on the basis that Kodak was the more likely of the two to survive.

Analysis

- 4.148 The three competitive constraints identified by the CC, namely buyer power, switching by ultimate consumers, and the potential of retailers to use mini-labs to meet their next-day developing and printing needs, appear to have strengthened since the merger, and there is widespread agreement that Kodak operates in a highly competitive market.
- 4.149 The reason that these competitive constraints have strengthened is almost entirely due to the transformation in the market caused by the rapid growth in the use of digital cameras. Customers are now much more inclined to use same day services both because they do not wish to be parted from their valuable memory cards, and because they are attracted to the digital interactive services offered by the new generation of mini-labs. They are therefore prepared to pay a greater premium for a same-day service, and this has increased the incentives for retailers to invest in new mini-labs. Mini-lab capacity has grown rapidly as a result, and as a consequence, retailers are now much less reliant on wholesalers to provide next-day services. Buyer power has strengthened considerably as a result.
- 4.150 Substitution between same-day and next-day services does not however appear to have increased, with most market participants we spoke to believing that they still constituted separate economic markets.
- 4.151 Although the CC and other industry analysts had expected the use of digital cameras to grow, actual demand growth has been much more rapid than that predicted by even the most optimistic forecasts. It was also difficult for the CC to foresee the impact that digital cameras would have on the incentives to invest in mini-labs. So whilst the CC correctly identified the key competitive constraints, these constraints are currently more powerful than the CC could have reasonably anticipated. As such it is difficult to gauge whether these competitive constraints would have been sufficient to discipline Kodak's pricing had this technological change occurred more slowly and in line with the CC (and industry) predictions.

- 4.152 That said, there is no evidence that Kodak made any attempt to increase prices or reduce the quality of their service following the merger. This suggests that they did face sufficient short-run competitive constraints before digital cameras began to make an impact on the market (the use of digital cameras grew broadly in line with expectations until the summer of 2003, when there was a rapid acceleration in demand).
- 4.153 We asked retailers why, in their view, Kodak had been unable to raise prices given that they were effectively a monopoly wholesaler¹¹. The main reason given was that wholesalers faced a high degree of competition from mini-labs. There appear to be two aspects to this. The first is that whilst it remains true that a retailer with no mini-lab facility has no choice but to use a wholesaler, these retailers compete head-to-head with mini-labs in the market for next-day services. As the number of mini-labs grows so the share of the next-day market accounted for by wholesalers declines, and this puts pressure on wholesalers to keep prices competitive.
- 4.154 The second reason is that retailers were able to resist such price increases, because, for many, investing in mini-lab capacity provided a credible threat. Both the OFT and CC had argued that there were significant switching costs in bypassing wholesalers by building mini-lab capacity. Whilst it is true that the sunk costs of making such an investment are significant, the focus on switching costs only considers one side of the potential investment decision. Retailers noted that there were also substantial benefits to investing in mini-labs not only in terms of avoiding wholesale costs, but also in providing a value added product to consumers. It does appear that, at the time of the merger, for many retailers the choice between building a mini-lab or remaining with a wholesaler was finely balanced. Higher prices by Kodak could therefore have tipped this balance. It is also possible that that Kodak was constrained in its pricing by the recognition that once retailers had invested in a mini-lab they were unlikely to switch back to using a wholesaler, so that Kodak would lose the sale permanently.

¹¹ The CC market definition also included mini-labs that were used to provide a next-day service.

Glucose syrups

Cargill/Cerestar (2002)

Facts

- 4.155 Cargill Incorporated (Cargill) is a US company that operates internationally. At the time of the merger, it had two European plants producing glucose syrup, one in the Netherlands, and one in the UK. Cerestar SA (Cerestar), the other merging party, had seven plants in Europe including one in the UK. The other major UK producers were Amylum Europe NV (Amylum), a subsidiary of Tate and Lyle plc, and Roquette UK Limited, a subsidiary of the French firm Roquette Frères (Roquette).
- 4.156 The combined market share of the merging parties was, at the time of the merger, approximately 48 per cent in the UK (Cargill 20 per cent, Cerestar 28 per cent), and 38 per cent in the EC. The merger would result in three main suppliers accounting for more than 93 per cent of UK production and sales of glucose syrups.
- 4.157 The merger was originally notified to the European Commission in 2001, and cleared in all member countries except for the part of the deal that related to the supply of glucose syrups and blends in the UK. The merger was also cleared in the US in April 2002.
- 4.158 Glucose syrups are starch-based sweeteners used in the production of food and drinks such as confectionary, beer, cider, preserves, dairy and bakery. At the time of the merger, they were normally supplied in bulk by road. Storage was costly. Purchasers of the product were mainly large firms in the food, drink and pharmaceuticals industries. There were a number of different types of glucose syrups, and manufacturers were often required to produce blends that matched a customer's individual requirements.

Main reasons for OFT referral

4.159 The main reasons for OFT referral are:

- Glucose not generally substitutable with other sweeteners e.g. sugar
- Lack of supply side substitution possibilities
- Possibility that the market did not extend beyond the UK, in which case the merger would result in a very high increase in concentration
- Sunk costs of entry appear to be high
- Buyer concern.

Main reasons for CC clearing

4.160 The main reasons for CC clearing are:

- Geographic market extended at least to northern France and Benelux countries
- High degree of inter-firm rivalry (evidence of customer switching, falling prices, and increasing imports)
- Market characteristics not conducive to collusion (prices not transparent, competitive fringe provides an effective competitive constraint, spare capacity)
- Buyer power is strong.

What happened next...

4.161 In the two years following the CC report little has changed in terms of the structure of the market. There has been no entry or exit, and market shares have remained relatively stable. Roquette has continued to develop the UK plant it purchased in 2001.

- 4.162 A major development in this market has been the failure of the European maize and wheat harvests in 2003. These are the primary ingredients in the production of glucose syrup. Although there was a good harvest that year in the US, import restrictions and transport costs mean that it is generally not economic to import from this source. These supply shortages led to a large increase in the price of raw materials, which in turn fed through into higher glucose prices. The prices of raw materials are now returning to more normal levels, and the accession of several Central and Eastern European countries to the EU may provide additional sources of raw material.
- 4.163 There is however a perception amongst some buyers that prices charged by Cargill-Cerestar have risen since the merger, independently of raw material cost increases.
- 4.164 There is also a feeling that the geographic market is limited to the UK, and that, more generally, there is too limited a choice of suppliers. Most larger customers multiple source, often using as many as three suppliers (prior to the merger some firms had used as many as four suppliers). Some customers felt that the merger had made the threat to de-list the newly merged company less credible as there were now only three main suppliers in the market, and rival suppliers did not have the capacity to supply a large contract. They argued that bargaining power had been reduced as a result.
- 4.165 One customer told us that it has recently sought to reduce its dependence on individual companies by purchasing a standard product which it then plans to blend in-house. It also said that it was considering widening the number of approved suppliers. Another customer noted that suppliers seemed reluctant to act as sole supplier, suggesting that firms seemed unwilling to upset rival suppliers. However, exclusive contracts are common where suppliers work with a customer to develop a bespoke blend.
- 4.166 Prices and contracts are generally determined by a tender/negotiation process. However, buyers noted that it is reasonably easy for suppliers to gain intelligence about the prices their rivals are charging. For example, buyers often negotiate on the basis of prices that have been offered by competitors.

Analysis

- 4.167 The short period of time since the merger, together with the unusual circumstances of the 2003 crop failure, make it very difficult to assess whether the merger had any short-run effect on prices, and what, if any, will be the longer run market response.
- 4.168 However there are indications that some of the short-run competitive constraints that the CC identified in clearing the merger are not particularly effective. In particular, there is a general concern that the merger has reduced buyers' bargaining power by undermining the ability of buyers to multiple source. Whilst the CC acknowledged that buyers multiple sourced in response to the high costs of switching to a new supplier – many customers require glucose bespoke blends that can take up to a year to develop – they do not appear to have fully appreciated that the merger could reduce buyer power through reducing the ability of customers to multiple source.
- 4.169 That said, it is clear that customers do retain considerable buyer power, and that they are willing and able to take action to introduce more competition into the market if their concerns persist. This is very much along the lines that the CC had suggested.
- 4.170 The CC's view that the market was not conducive to collusion does not appear to be entirely consistent with the opinions expressed by some customers. In particular some customers felt that although prices were individually negotiated, the negotiation process facilitated the dissemination of price information, so that prices were in fact quite transparent.
- 4.171 Questions have also been raised about the CC's geographic market definition, which included Northern France and Benelux. Roquette, the main importer, seems to be moving towards more UK-based supply, which is consistent with the views we received from customers that sourcing from outside the UK is unattractive. Although there are both imports and exports, it appears that these are often of different types of glucose and glucose blends. Although the CC acknowledged the heterogeneity of the product in many parts of the report, it is missing from the analysis of import and export data.

Train catering

Compass/Rail Gourmet (2002)

Facts

- 4.172 This merger concerns the supply of on-train catering services. The merging parties were Rail Gourmet Holding AG (Rail Gourmet), Restorama AG and part of Gourmet Nova AG, which were part of the Swissair group, and Compass Group plc (Compass).
- 4.173 The quality and availability of on-train catering can impact on the overall demand for rail travel, and is regarded by train operating companies (TOCs) as an important aspect of their brand. For this reason TOCs retain a high degree of control over all aspects of on-train catering. The retail part of this service is invariably conducted in-house, and whilst the logistics function is usually contracted out to third parties, TOCs generally specify the menus and sometimes the brands to be sold. Logistics contracts are usually awarded following a competitive tender. The merger only concerns the supply of logistics services.
- 4.174 At the time of privatisation a single company, European Rail Catering (ERC), provided all logistics services across the network. ERC was later acquired by Rail Gourmet, and was one of the parties to the merger. At the time of the merger it had an 80 per cent market share of on-train food logistics contracts. The other company, Compass, had entered the logistics market through the merger with Granada Group Plc (Granada)¹² which held the ScotRail contract, giving them a 3 per cent market share. Compass also had a significant presence in retail outlets at railway stations, with about 62 per cent of the concessions let by Railtrack (since superseded by Network Rail) and TOCs, under a number of brand names.
- 4.175 At the time of the merger, logistics services required a network of facilities at stations and regional supply centres. Station facilities were usually owned by Network Rail and subcontracted to logistics

¹² In July 2000, Compass merged with Granada Group plc, and demerged from it in February 2001 retaining Granada's food service interests.

companies for the duration of the contract. Regional supply centres were usually owned by the logistics operator. Food had to be kept cold, and might need to be delivered to a train at several points in its journey, often at very short notice.

Main reasons for OFT referral

4.176 The main reasons for OFT referral are:

- Train operators had difficulty in finding bidders for logistics contracts. The OFT speculated that this might be because Rail Gourmet held some cost or information advantages, or that entry barriers might be significant, e.g. economies of scale or scope
- Compass was a credible future bidder for logistics contracts (its importance as a competitor was understated by its market share)
- Compass had a high share of food retailing at rail stations.

Main reasons for CC clearing

4.177 The main reasons for CC clearing are:

- The acquisition would not increase barriers to market entry
- There were sufficient credible bidders to constrain prices post-merger
- Barriers to entry were low, particularly for general food logistics companies
- TOCs had considerable buyer power and the possibility of self-supply.

What happened next...

- 4.178 After the merger Rail Gourmet was retained by Compass as a self-standing company with its existing brand. This was popular with customers, who felt that there were advantages to dealing with a company whose accounts related entirely to the rail logistics business.
- 4.179 Since the merger Rail Gourmet has won every contract that has come up for renewal. Only one contract (First Great Western) appears to have changed hands, with Rail Gourmet winning back the contract they had lost to Sodexo UK at the previous bidding round. The TOCs were universally happy with Rail Gourmet's performance. We were told that there had been no attempt to raise price following the merger, and that the quality of their service was continually improving.
- 4.180 Most train operators we spoke with reported that they were still experiencing difficulties in obtaining competitive bids from alternative suppliers. Bids had been sought from a variety of sources, although most expressions of interest were from firms that supplied (rail) logistics services in other countries. A number of reasons were given for the lack of enthusiasm amongst potential bidders. Contracts were of low value, there was limited prospect of growing market share, set-up costs were high relative to the size of the contract, and rail logistics were more complex than similar logistics operations in other transport industries.
- 4.181 The main difficulty however appears to be that many potential bidders are unwilling or unable to offer train operators the transparency and flexibility that they require. Contracts are run on an open book basis, and train operators are heavily involved in selecting the products and brands to be supplied (which limits the ability of larger logistics companies to exploit economies of scale in procurement). Train operators also need to work in close partnership with the logistics company and trust is regarded as being very important.
- 4.182 There were mixed views as to whether there are any other significant barriers to entry. Some buyers suggested that there are economies of scale/scope in owning a large number of contracts, and that critical mass is important, whilst other interviewees felt that there are only limited synergies across contracts.

- 4.183 Those buyers we spoke with who had initiated a new round of tenders had all considered taking contracts in-house. Buyers felt that this was a much more likely prospect than switching to an alternative supplier (Anglia Railways Train Services Ltd, a smaller operator, took their logistics contract in-house in 1999). Although this was seen as a non-core activity for them, train operators felt that in-house supply would allow them to retain control of the quality of on-train catering services, whereas switching to a new supplier would carry the risk that the new company would fail to deliver.
- 4.184 Train operators appear to be investing more time and effort in monitoring logistics contracts than they did at the time of the merger. Some operators have now introduced incentive schemes which relate the payments made to logistics companies to the quality of service they achieve and to the overall level of retail sales.
- 4.185 Buyers were asked whether they would have expected Compass to submit a credible bid had the merger not taken place. Responses were mixed, but most buyers expressed doubts as to whether Compass would have been able to deliver the requisite flexibility. Compass was regarded as a company that was able to use its scale to obtain excellent deals in procurement. However it was felt that Compass would be likely to dictate the brands that train operators should take.
- 4.186 Since the merger there has been an increase in the intensity of competition between retail food outlets within stations and Compass' share in this market has fallen markedly.

Analysis

- 4.187 Although Rail Gourmet continues to enjoy a high market share, and it remains difficult for train operators to obtain credible alternative bids, there does appear to be effective competition in the market, with train operators reporting a very high level of satisfaction with the services provided by Rail Gourmet. There are a number of constraints on Rail Gourmet which prevent it from exploiting its apparent incumbency advantage.

- 4.188 Buyer power, and in particular the threat of self-supply, appears to be the most important competitive constraint. This contrasts a little with the CC analysis, which suggested that, whilst buyer power was strong, competition from alternative bidders provided the most immediate competitive constraint. It does however need to be recognised that at the time of the merger very few contracts had been put out to tender.
- 4.189 The CC suggested that one of the main reasons why train operators were unable to obtain many credible bids was that they imposed heavy demands on potential bidders in terms of open-book accounting and on what products and menus should be selected. The CC noted that if rail operators continued to experience difficulties in obtaining bids, these restrictions could be eased.
- 4.190 TOCs appear to have chosen to adopt a very different approach to this apparent problem. Rather than easing restrictions to encourage entry, train operators have put more effort into designing contracts which regulate Rail Gourmet's behaviour and which provide them with incentives to continue to improve the quality of their service.
- 4.191 One of the reasons for this is that whilst competition to secure a contract is good at driving down prices, it is not sufficient in itself to ensure that a high quality of service is delivered after the contract has been won (particularly where the threat of losing a contract at the next round is not particularly strong). As train operators are much more concerned with the quality rather than the price of the service, it is perhaps not surprising that they have concentrated their efforts in designing contracts and monitoring contract compliance, rather than seeking more bids at the tender stage.
- 4.192 Buyer power does appear to have been extremely strong in this case. The threat of self-supply does appear to have been credible, whilst buyers have shown themselves to be adept at designing contracts to ensure that they obtain the type and quality of services that they demand. A recurring theme in our interviews with buyers was that they were only able to exert buyer power because they had very good access to information about Rail Gourmet's costs. Even if buyers have a

credible threat to switch suppliers (or self-supply), access to information is crucial in order to know when to impose this threat. It does however need to be recognised that the collection of information and the monitoring of behaviour is itself costly.

- 4.193 Although the CC's conclusions in this case were entirely reasonable, too much emphasis was perhaps placed upon whether the merger was likely to raise entry barriers, and not enough on the relatively more straightforward issue as to whether the loss in rivalry between Compass and Rail Gourmet was likely to be significant.

5 WHAT LESSONS CAN BE LEARNED?

- 5.1 In this chapter we pull together some of the themes identified in the individual case studies and ask whether the post-merger experience provides any lessons that could help the competition authorities in their future assessment of cases.

Comparison of CC Predictions and Market Outcomes

- 5.2 We begin by looking briefly at the CC's predictions of the way each market was likely to behave post-merger, and contrast this with what we believe to have been the market outcome. These findings are summarised in tables 5.2a and 5.2b below.
- 5.3 A merger may be cleared either because there is not thought to be an immediate reduction in competition, or, if there is, that the market will quickly self-correct e.g. through the emergence of new entrants. We have thus attempted to separate out what the CC believed to be the most important short-run and long-run competitive constraints in the market.
- 5.4 There are a number of difficulties in making such judgements. One is that the CC does not always draw a sharp distinction between short- and long-run competitive pressures. Another is that in clearing a merger the CC invariably lists a number of competitive constraints. For the purposes of this comparison we have set out what we believe were the most important reasons behind the CC's decision to clear the merger based on the views expressed by the CC in the whole report.
- 5.5 The CC predictions are contrasted with what we believe to have been the short- and long-run market outcomes. In making these judgements, we have looked first at whether there were any changes in prices or reductions in service quality following the merger, and, if so, whether this was due to the merger itself, or to exogenous events. We have also sought in our interviews to determine the main competitive constraints currently operating in each market and contrast these with those identified by the CC.

- 5.6 The CC record of predicting the way that the market was likely to develop post-merger is in general very good. In five of the 10 cases the CC's analysis of the impact of the merger on competition and their identification of competitive constraints has been entirely confirmed by subsequent events. These cases were Technicolor/Metrocolor, Kodak/ColourCare, Cowie/British Bus Group, NTL/Cable and Wireless, and Universal Foods/Pointing.
- 5.7 In two other cases, Compass/Rail Gourmet, and Nutricia/Milupa, the CC correctly judged that there was likely to be sufficient competition in the market post-merger, but the competitive constraints appear to have been a little different to those that they highlighted.
- 5.8 In the Compass/Rail Gourmet case, the primary reason given for clearing the merger was that there was likely to be sufficient competition between rival suppliers for the logistics contracts. Train operating companies have however continued to experience difficulties in obtaining bids. However, buyer power appears to be very strong, and the threat of buyers to self-supply appears to be a credible one.
- 5.9 In the Nutricia/Milupa baby food and milk merger, the CC took the view that buyer power was strong largely because of the recent entry of own-label products. However, most retailers experienced difficulties in competing with established brands and have since exited the market. Buyer power does however appear to be the primary competitive constraint and seems to have strengthened since the merger due to increasing retail competition. These events would have been difficult for the CC to predict.
- 5.10 In one case, Cargill/Cerestar, the short time that has elapsed since the merger and the flux created in the market by the failure of the grain crop in 2003, makes it difficult to determine whether there are any short- or long-run competitive concerns in the market. However, some concerns have been expressed that the merger may have reduced buyer power.

5.11 Only in two cases do there appear to be significant differences between the CC's analysis and the post-merger outcome. The first of these is the CHC/Helicopter case where there appears to have been some loss of competition immediately following the merger. However, effective competition now appears to have been restored with the re-entry of Bond. The other case is Klaus J Jacobs/SCIA, where the immediate effect of the merger was a reduction in the number of major suppliers of chocolate couverture in the UK from 2 to 1. The CC took the view that the threat of entry from European and vertically integrated suppliers (producer-users) would be sufficient to constrain prices. However, because of the importance of dual-sourcing, actual entry appears to have been necessary to ensure effective competition. Recognising this, some ex-employees of the merging companies broke away and set up their own company, effectively re-creating the pre-merger market structure. Supplies from the sources identified by the CC have declined since the merger (although they may have increased had new entry not occurred).

TABLE 5.2a – Summary of Competition Commission predictions

	Main competitive constraints		
	Short-run	Long-run	
Baby milk and baby meals (Nutricia/Milupa)	Rivalry	Buyer Power	
Industrial chocolate (Klaus J Jacobs/SCIA)	Threat of entry	Entry/buyer power	
Bus services (Cowie/British Bus Group)	Rivalry	Regulator	
Industrial film processing for TV and film (Technicolor/Metrocolor)	35mm release printing	Rivalry/failing firm	Buyer power
	35/16mm front- end	Failing firm	Entry
Food colourings (Universal Foods/Pointing)	Entry (imports)/ declining demand	Entry (imports)/ declining demand	
Helicopter services (CHC/Helicopter)	Threat of entry	Entry	
Pay-TV (NTL/Cable and Wireless)	Rivalry (no overlap)	Rivalry (no overlap)	
Photographic development (Kodak/ColourCare)	Buyer power/ downstream competition	Buyer power	
Glucose syrup (Cargill/Cerestar)	Rivalry	Entry	
Train catering (Compass/Rail Gourmet)	Rivalry	Buyer power	

TABLE 5.2b – Summary of Ex post findings

		Unilateral/ multilateral effects	Competitive constraints	
			Short-run	Long-run
Baby milk and baby meals (Nutricia/Milupa)		-	Rivalry	Buyer power (increased downstream competition)
Industrial chocolate (Klaus J Jacobs/SCIA)		- *	Entry (managed by staff of acquired firm)	Entry
Bus services (Cowie/British Bus Group)		-	Rivalry	Regulator
Industrial film processing for TV and film (Technicolor/Metrocolor)	35mm release printing	-	Rivalry/ failing firm	Buyer power
	35/16mm front-end	-	Limited overlap	Technological change
Food colourings (Universal Foods/Pointing)		Reduction in product range	Entry (imports)/declinir demand	Entry (imports)/ declining demand
Helicopter services (CHC/Helicopter)		Price ↑ Service Levels ↓	-	Entry (by previous competitor)
Pay-TV (NTL/Cable and Wireless)		-	Rivalry (no overlap)	Rivalry (no overlap)
Photographic development (Kodak/ColourCare)		-	Buyer power/ downstream Competition	Buyer power/ technology change
Glucose syrup (Cargill/Cerestar)		**	**	**
Train catering (Compass/Rail Gourmet)		-	Buyer power (threat of self- supply)	Buyer power (threat of self- supply)

* Could have been anti-competitive effects if entry had not occurred so fast – need to dual source important.

** Crop failure and short time elapsed since the merger, make it difficult to draw conclusions.

Identification of the appropriate counterfactual

- 5.12 Mergers are assessed with respect to whether they might be expected to lead to a substantial lessening of competition. This is a relative assessment. That is, the predicted level of competition in the market after a merger needs to be compared with that which might be expected to exist if the merger were not allowed to proceed. The latter is known as the counterfactual.
- 5.13 Establishing the appropriate counterfactual is often straightforward. In most instances it is reasonable to assume that in the absence of the merger the merging parties would remain as independent competitors. In this case the current market structure and price level provides the basis of comparison.
- 5.14 However, if it is likely that one of the merging parties would have exited the market in the absence of the merger, this prospective change in market structure needs to be taken into account. This task involves answering two difficult questions. First, how likely is it that the firm would have exited the market? Second, if exit is inevitable, what would the new market structure look like? For example, are the assets likely to be bought up by an existing competitor, by a new entrant, or are they likely to leave the market altogether?
- 5.15 The counterfactual has been an issue of some contention in the majority of cases in our study. In two of these cases, Technicolor/Metrocolor, and Nutricia/Milupa, the target firm was in some financial difficulties, and the CC concluded that they were likely to exit the market if the merger did not go ahead. In the Kodak/ColourCare, our interviews with buyers also suggest that the target was unlikely to survive, although it is unclear as to whether this played any part in the CC's decision (most of the financial details are excised from the report).
- 5.16 In the Universal Foods/Pointing case, although the target was not in any immediate financial distress, the CC concluded that cost savings resulting from the merger would provide the best chance of retaining a manufacturing presence in the UK.

TABLE 5.3 – Summary of Ex post Findings

Merger	Issue	Important in clearing merger?
Baby Milk and baby meals (Nutricia/Milupa)	Target in financial difficulty	Possibly – other reasons were more important
Industrial chocolate (Klaus J Jacobs/SCIA)	-	-
Bus services (Cowie/British Bus Group)	-	-
Industrial film processing for TV and film (Technicolor/Metrocolor)	Target in financial difficulty	Yes
Food colourings (Universal Foods/Pointing)	UK industry in decline - unlikely both firms would survive	Possibly - CC believed that the merger would increase the likelihood that one firm would survive
Helicopter services (CHC/Helicopter)	-	-
Pay-TV (NTL/Cable and Wireless)	Merger might help compete more effectively with BSkyB and BT	No
Photographic development (Kodak/ColourCare)	Target in financial difficulty	No
Glucose syrup (Cargill/Cerestar)	-	-
Train catering (Compass/Rail Gourmet)	Compass may not be a strong bidder for future contracts	No

5.17 Although it is clearly not possible to observe the counterfactual, we can look at whether the merger had any success in turning around the financial difficulties of the target firm. Here the experience is very mixed. In the Kodak/ColourCare case, the capacity of ColourCare was closed almost immediately, whilst in the Technicolor/Metrocolor case,

the business was maintained for four years before finally closing. In the Nutricia/Milupa case, the Milupa brand was withdrawn from the baby foods market shortly after the merger, whilst in the Universal Foods/Pointing case, both UK plants were forced to close, and manufacture moved overseas.

- 5.18 One interesting finding from our interviews is that, in some instances, market exit may have been hastened by the behaviour of buyers. For example, in the Kodak/ColourCare case, buyers told us that they believed that market concentration was inevitable even before the merger had been announced. Most had judged that, of the two, Kodak was the more likely to survive, and some had begun to switch their business to Kodak. In the Technicolor/Metrocolor case, the merger announcement itself had led to market uncertainty about whether Metrocolor had a long-term future. Key staff left Metrocolor, and customers began to shift their demand to other suppliers.
- 5.19 In both of the above examples, and also in the Cowie/British Bus merger, the market share of the target company appears to have fallen quite dramatically in the 12-month period prior to the merger. As the OFT and CC are typically working with published market shares which are usually at least a year old, the importance of the target firm at the time of the merger can be overstated. In such circumstances more recent market share data or evidence on switching behaviour in (say) the six months prior to the announcement of the merger may provide additional clues as to whether a company is about to fail.
- 5.20 There was no explicit assessment of the counterfactual by the CC in any of the cases that we studied. Whilst judgements were made as to whether a firm was likely to survive, there does not appear to have been any assessment as to whether exit was imminent, or whether the financial difficulties of the target company could have been turned around by measures other than merger. For example, there is no reported discussion as to whether there were likely to be any other buyers for the firm.
- 5.21 More importantly, in each of the cases where the CC cited financial difficulties as a reason for clearing the merger, there was an implicit acceptance by the CC that it was better for the firm to survive. This

assumption does need to be challenged for in many instances competition might be better served by allowing the firm to fail. Failure can, for example, allow the assets to be picked up cheaply by smaller firms or by new entrants. Even if the likeliest scenario is that the assets would leave the market altogether, in certain instances this may be better for competition and consumers than if those assets are transferred to the market leader.

- 5.22 The determination of the appropriate counterfactual does however extend beyond the more narrow question as to whether the target is a failing firm. For example, in the Compass/Rail Gourmet merger, although there was no sense in which Compass was failing, there was a suggestion that they may have had limited interested in bidding for future contracts (Compass had only entered the market through the wider merger with Granada). This suggests that there was only likely to be limited competition between the merging parties were they to remain independent.
- 5.23 A similar issue arose in the Technicolor/Metrocolor case. Metrocolor had been earning a return on average capital employed of over 40 per cent in the previous two years, and appeared to be a vibrant competitor (they had a reputation for aggressive pricing). However, one of the main reasons for Metrocolor's high reported profits was that they had not been investing in RandD in a market that was undergoing an important period of technological change. Several market participants questioned whether Metrocolor was a large enough company to make the investments that were becoming necessary for market survival. This appears to have weighed heavily in the CC's judgement that Metrocolor, if not technically a failing firm, was likely to diminish in importance as a competitor over time.
- 5.24 Perhaps the most interesting counterfactual issue not involving a firm in financial distress arose in the NTL/Cable and Wireless merger. Here there were no immediate competition issues, but some concerns were raised that longer run competition might be reduced were cable to become the dominant platform for the provision of pay-TV in the future. To address longer term competition issues a longer term counterfactual needs to be developed. Here, for example, the CC sought to address

this issue by attempting to contrast whether RandD would be greater with or without the merger.

- 5.25 Although this case is perhaps unusual, it is by no means unique. Longer term competition issues are quite common in dynamic markets characterised by product innovation, and do seem to demand a longer term counterfactual.
- 5.26 The new CC guidelines have made it clear that the assessment of the appropriate counterfactual should be the first step in any merger investigation. At present these guidelines focus solely on the issue as to whether a firm is failing. However, what matters in the assessment of the counterfactual is the extent to which the merging parties would compete with each other in the future were they to remain independent competitors. As the above cases illustrate, this assessment includes, but very much goes beyond the issue as to whether the target is technically a failing firm.

Market Definition

- 5.27 All of the mergers in the sample gave rise to high market shares and market share increments. Surprisingly none of these mergers was cleared on the basis that the market definition was wider than that suggested by the OFT – in every case the CC broadly concurred with the OFT's market definition¹³.
- 5.28 One possible reason for this is that in many of the mergers we studied, the CC did not define the economic market formally (i.e. by using the SSNIP test), but instead analysed the various competitive issues within the context of the market definition that had been suggested by the OFT.

¹³ The one possible exception is the Cargill/Cerestar merger where the OFT defined the market as the UK, whereas the CC included in production plants in Northern France and Benelux in their market definition.

- 5.29 However, a perhaps more notable reason is that a number of mergers were cleared on the grounds that there was significant competition from competitors who lay outside the market definition adopted by the CC. For example, in both the Technicolor/Metrocolor and Klaus J Jacobs/SCIA cases, whilst the CC worked on a UK market definition, it was argued that there was sufficient potential competition from European suppliers to prevent a rise in prices. The CHC/Helicopter merger was also cleared largely on the basis that there was effective competition from rivals who lay outside the geographic market defined by the CC. In the Kodak/ColourCare case, although the CC largely excluded mini-lab capacity from their market definition, it was seen as providing a major competitive constraint.
- 5.30 In each of these cases the CC appears to have taken a relatively cautious view on market definition by excluding firms that they could not be certain were imposing a significant short-run competitive constraint. This was often the case where competition from European competitors was growing, and expected to continue to grow e.g. Technicolor/Metrocolor. However, if firms are imposing a sufficiently strong competitive constraint that the CC believes it is unlikely that the merger will lead to a short-run increase in prices, then it seems more natural to include these firms in the relevant economic market.
- 5.31 In a number of cases in our study firms that produced somewhat different products to those provided by the merging parties (and which lay outside the CC's market definition) appear to have provided a stronger competitive constraint than firms that produced similar products to the merging parties (and which were included in the CC's market definition). For example, in the Compass/Rail Gourmet case, other logistics companies were seen as less of a competitive constraint than self-supply. In the Universal Foods/Pointing case, the threat of expansion by low-cost Asian suppliers appears to have been a stronger constraint on price than rivalry from UK suppliers, whilst in Kodak/ColourCare, Kodak's prices appear to have been constrained more by the threat of mini-lab expansion than by rival wholesalers.

- 5.32 This perhaps illustrates that it is important to test whether firms that appear to provide substitute products do actually provide a constraint on each other's prices.
- 5.33 One final comment we would make in this section concerns whether it is strictly necessary for the CC to define the relevant market in every case. Whilst there are clear advantages in terms of a disciplined approach to the analysis of competitive constraints, there are clearly situations where a pragmatic approach is called for e.g. where there are a large number of different products affected by the merger such as in the Cargill/Cerestar and Technicolor/Metrocolor cases. The approach in the Technicolor/Metrocolor case, where the CC examined the extent of competition in six separate product sectors, was very successful in identifying the key competitive constraints. A pragmatic approach, where appropriate, could also save resources. For example, in the NTL/Cable and Wireless case, the CC spent a considerable time and effort in defining the geographic market, before concluding that competition issues were unlikely under any feasible market definition. The NTL/Cable and Wireless case also illustrates that where a more formal approach to market definition is adopted, different market definitions may be needed to assess the different competition issues that are raised by the merger.

Unilateral effects

- 5.34 A merger is more likely to lead to a unilateral price increase where the merging parties are the closest competitors to each other, and where there are few competitors who provide similar products.
- 5.35 The CC tends to focus its attention on market definition, and there are few examples in the cases we studied of the CC attempting to assess whether unilateral effects are more or less likely because the merging parties are close or more distant competitors. In part this reflects the fact that in many of the cases we examined products were relatively homogeneous. However, the absence of a discussion of unilateral effects to a large extent reflected the prevailing trends amongst

competition authorities in Europe at the time, where the focus was more commonly on the risks that a merger might increase the risks of collusion (tacit or explicit). The OFT and CC guidelines now emphasise that an assessment should be made of unilateral effects in most merger cases.

- 5.36 Our post-merger evaluations suggest that several of the cases could have been more convincingly cleared by the CC if it had been recognised that the merging parties were relatively distant competitors. For example, Metrocolor and Technicolor appeared to have a quite distinct customer base, Milupa and Nutricia, by and large, concentrated on different sectors of the baby foods market, and there had been limited rivalry between Compass and Rail Gourmet.
- 5.37 Our research has also highlighted that it cannot simply be assumed that because firms produce very similar products or services that they are the closest competitors to each other. In both the Kodak/ColourCare, and the Universal Foods/Pointing mergers, prices appear to have been set by competition from firms outside the CC's market definition rather than by rivalry between the merging parties. Both markets were declining rapidly, and customers appeared to be switching primarily to the new sources of supply rather than between existing competitors in the market.
- 5.38 In terms of measuring unilateral effects the key statistic is the cross-price elasticity of demand between firms in the market. These can be measured using time-series data, or through survey techniques, which use more current data e.g. conjoint analysis. In two of the cases we studied, Technicolor/Metrocolor, and Kodak/ColourCare, the effectiveness of the target as a competitor, and their market share, had declined considerably in the 12 months prior to the merger. The use of time-series data in these instances could have overstated the rivalry between the merging parties and consequently overstated the unilateral effects.

5.39 One particular concern we have is that the CC does not appear to have considered the possibility of unilateral effects in bidding markets. We looked at three bidding markets: bus services, helicopter services, and train catering services. In each of these, the CC made the point that in bidding markets 2-3 suppliers are often sufficient to ensure competitive prices (in the absence of collusion). Whilst this is indeed true, the assertion has more relevance in markets where firms produce a relatively homogeneous product. What is striking about each of the bidding markets we examined was the importance of service quality and reputation in winning contracts. Firms were viewed by customers as being very differentiated in this respect. Whilst the risk of collusion is perhaps a more important general concern in bidding markets, when firms and products are differentiated, unilateral effects may be a concern. We note that in the US, both unilateral and co-ordinated effects are routinely considered in bidding markets in line with modern auction theory¹⁴.

Co-ordinated Effects

- 5.40 This is a difficult issue for us to report on as, for obvious reasons, buyers were unwilling to disclose any concerns that they might have had over possible tacit or explicit collusion.
- 5.41 One observation we would make is that the CC did not consider the possibility of co-ordinated effects in every merger, including some in which the OFT had indicated possible concerns. As with unilateral effects, we expect that this has been resolved with the publication of the OFT and CC merger guidelines.
- 5.42 The approach of the OFT and CC to co-ordinated effects has been to consider whether market characteristics are likely to hinder or facilitate collusion. The CC appears to put most weight on entry barriers and buyer power. We think that this is sensible as the theoretical basis for this is stronger than for many other market characteristics routinely considered.

¹⁴ See, for example, *'Unilateral Competitive Effects Theories in Merger Analysis'*, Jonathon B. Baker, Spring 1997 Antitrust, vol. 11, pp 21-26.

- 5.43 One limited concern we have is in the discussion of price transparency. In the Cargill/Cerestar case the CC argued that because contracts are individually negotiated, prices are not transparent, and that collusion is therefore less likely. Our study however revealed that buyers often solicited quotations from each firm in the industry, and that this information was passed on to suppliers (who were asked to submit a better price). Prices do therefore appear to have been transparent. We also found evidence of buyers revealing price information to suppliers in the Universal Foods/Pointing case.

Buyer Power

- 5.44 One of the most interesting aspects of our research is that it has enabled us to gain some insight into the behaviour of buyers and the very different ways in which buyer power can manifest itself. Our main finding is that buyer power is a much richer and more complex notion than that which is often reflected in competition assessments. It is also, unfortunately, a concept that is hard to pin down. In this section we try to capture some of these complexities, and work towards a more general framework for the assessment of buyer power. This is an area in which we believe further research is required.

What is buyer power?

- 5.45 Both the OFT and CC merger guidelines portray buyer power as being a manifestation of a negotiation or a bargaining game between buyer and supplier. The price that the buyer is able to obtain depends upon the relative bargaining strengths of the two parties. This in turn depends upon what is known in the economic literature as the 'threat points' of the two parties. These threats represent the next best option for both buyer and seller should an agreement fail to be reached. Threats must be credible in the sense that they will be imposed should agreement fail to be reached. For the buyer, the threat may be to switch to an alternative supplier or to sponsor new entry. For the supplier, the threat is the costs saved by not supplying the buyer. Often the supplier's threat point is simply taken to be the marginal cost of supply. In this circumstance, the more powerful is the buyer's threat point, the closer the price will be to marginal cost.

- 5.46 This bargaining theory approach underpins many of the OFT's and CC's conclusions on buyer power. Many mergers were referred by the OFT to the CC on the basis either that the buyer currently had few credible alternative sources of supply, or that the merger would reduce the ability of the buyer to credibly threaten to go to an alternative supplier. Examples include the Kodak/ColourCare and Klaus J Jacobs/SCIA cases where the number of suppliers (on the narrowest definition of the market) would reduce from 2 to 1.
- 5.47 Most of the CC cases in our study examined buyer power primarily on the basis of whether the buyer had credible alternative sources of supply, including the possibility of self-supply or of supporting new entry into the market. The latter is cited in a number of cases including CHC/Helicopter, Klaus J Jacobs/SCIA, and Cargill/Cerestar. However, in many of the reports, particularly the earlier ones, there is no separate analysis of buyer power. Instead buyer power is often asserted where buyers are large, and relatively sophisticated.

Are threat points a good indicator of buyer power?

- 5.48 In a number of cases the CC argued that buyers had powerful threat points and were therefore in a strong bargaining position. In two of these, Technicolor/Metrocolor and Nutricia/Milupa, subsequent events appear to confirm the CC's judgement. In the Technicolor/Metrocolor case buyer power appears to have been strong both because of the excess capacity in the market and because of the ease with which buyers could switch between the two leading suppliers. In Nutricia/Milupa, although buyers could not lightly de-list a brand, it was even more important for suppliers to have their brands on the shelves of major retailers.
- 5.49 However, in the CHC/Helicopter, Cerestar/Cargill, and Klaus J Jacobs/SCIA cases, there appears to have been a significant weakening of buyer power following the merger despite the availability of a number of major competitors in the market. In contrast, in Kodak/ColourCare, and Compass/Rail Gourmet, buyer power appears to have been strong, even though buyers appear to have had only limited threats.

- 5.50 There appear to be two reasons for this apparent discrepancy. Firstly, it is difficult to measure whether threat points are strong or weak. The evidence that we have obtained suggests that the measurement of threat points is particularly difficult where switching costs are high.
- 5.51 Secondly, the economic theory of bargaining suggests that factors other than buyer and seller threat points can be important in determining whether a buyer is able to negotiate a competitive price. In particular, buyers may be able to obtain a better price if:
- They have good sources of *information* about a supplier's costs
 - They devote substantial *effort* into the negotiations
 - They are able to improve the efficiency of a market, and the *incentives* for suppliers, by removing information asymmetries or internalising externalities e.g. through contract design.

Switching Costs

- 5.52 In two of the cases in our study, Cerestar/Cargill and Klaus J Jacobs/SCIA, many buyers took supplies from a number of sources, and, in some instances, from every major firm in the industry. When we explored the reasons for this we discovered that in both cases many buyers required products to be made to bespoke recipes, and that it could take 1-2 years of testing before they could be sure that a supplier was capable of meeting their needs. Security of supply was also important in both instances, and holding stocks of supplies was not feasible. As switching costs were so high, the threat of switching to a new supplier was not a particularly credible one.
- 5.53 Here, multiple sourcing can be thought of as a strategy (or investment) undertaken by buyers to increase their buyer power. By having contracts with a number of suppliers, the buyer was able to rapidly switch supplies (or a higher proportion of their supplies) to the producer offering the lower price. In other words, multiple-sourcing changes the buyers' threat point, making it more credible for them to switch supplier, and thus allowing them to negotiate a more competitive price.

- 5.54 Mergers in both industries led to some buyer concern, but particularly in the Klaus J Jacobs/SCIA case, where the merger would have led to only one major supplier. Although there were a number of potential suppliers, the merger made it infeasible for buyers to dual-source (at least in the short-run), and therefore considerably weakened their buyer power. Problems were exacerbated in this case because, for many customers, chocolate represented a high proportion of their manufacturing costs. The demand for dual sourcing was instrumental in the decision of some of the staff in the newly merged firm to break away and form their own company. The subsequent success of that company appears to underline the importance of dual sourcing as an instrument of buyer power.
- 5.55 In both these cases, although the CC noted that some suppliers dual-sourced, they do not appear to have recognised the significance of this. This stresses the importance of seeking to understand *why* customers dual-source (clearly the leveraging of market power is only one of a number of possible reasons).
- 5.56 Of course, even if the ability to dual-source is taken away, buyers may have a 'next-best' strategy for exercising buyer power, such as sponsoring entry into the market. Whether this represents a sufficient constraint very much depends upon the costs, and the credibility, of such a strategy.
- 5.57 In contrast, in two of our cases buyer power appears to have been high despite the existence of significant switching costs. In the Universal Foods/Pointing food colours case, switching costs were high due to the time taken in trials to ensure that the new supplier could match the previous colour. In the Kodak/ColourCare case the costs of a retailer bypassing wholesalers through investing in a mini-lab were significant. However, a buyer's threat point depends not just upon the *costs* of switching, but also the *benefits*. In the food colourings case there were marketing benefits of switching to natural colours, and cost benefits (in terms of lower prices) in switching to Asian suppliers. In Kodak/ColourCare, investing in a mini-lab increased the quality of the service that retailers could offer their customers (allowing them to

charge a higher price) as well as saving wholesale costs. Moreover, both markets were in long-term decline, and buyers who made a switch were unlikely to switch back. This increased both the potency and the credibility of the buyer's threat.

- 5.58 These contrasting cases emphasise that the presence of significant switching costs on their own are not a particularly good indicator of the existence or the absence of buyer power. Understanding the wider context is crucial in both instances.

Information

- 5.59 Information is important when bargaining for a number of reasons. If a buyer has poor information about the costs of supply in an industry, they may choose to accept what turns out to be a high price. Further, a buyer's threat is only credible if they know when to impose it. If a supplier is delivering a poor quality service, buyers need to be able to monitor this so they can determine when it is better to switch to a rival supplier. Finally, buyers also need to have information on which firms in the market are able and willing to offer the best price.
- 5.60 Access to good quality information appears to have given rise to significant buyer power in two of our cases. The first is the Compass/Rail Gourmet case, where train operators demanded 'open-book' contracts that gave them detailed information about the supplier's costs. A substantial amount of time and energy was also expended in monitoring performance. Most operators had also conducted feasibility studies about supplying the logistics service themselves, which, as well as increasing the credibility of the threat to self-supply, also provided buyers with good information about the costs of running a logistics business. Information was important in increasing the buyer's bargaining power in the Cowie/British Bus Group case. Here the regulator had access to substantial amounts of information as they were responsible for contracting with all bus companies across London. TfL also owned their own bus company which was a further source of information.

- 5.61 In both cases buyers had reasonable threat points (train operators could self-supply, whilst TfL could encourage entry). However buyers told us that access to good quality information was the primary source of their buyer power. One of the reasons for this appears to be that whilst having a powerful threat point may allow a buyer to obtain a good price, it does not necessarily ensure that they will receive a good quality of service. Having won a tender, the winning firm may have an incentive to save costs by supplying a lower than promised level of service, particularly where the supplier is unable to detect service quality. In both of these cases quality of service was important to buyers, and access to information appears to have been important in monitoring the post-tender performance of the winning firm.

Effort

- 5.62 Economic theory also suggests that how much effort buyers put into the bargaining process (and how patient they are) is an important determinant of price. Two contrasting cases illustrate this point. In the Universal Foods/Pointing case, although buyers were large and sophisticated, colourings represented a very small part of their cost of manufacturing, and it does not appear to have been important, or indeed economic, to spend substantial effort in these negotiations (effort incurs an economic cost). Indeed, the evidence at the time of the report was that smaller firms often had more nous than larger firms and consequently often received better prices.
- 5.63 In contrast, in the Nutricia/Milupa case, it appears to have been vitally important that retailers obtained competitive prices in the bargaining process. After the merger, retail price competition increased dramatically, and baby foods and milk became 'known value items'. Retailers who obtained lower purchase prices were thus at a considerable competitive advantage. This appears to have increased the incentives to 'invest' in effort in the bargaining process, and buyer power appears to have strengthened considerably as a result.

- 5.64 Effort could possibly be observed, by a) looking at which firms get good deals, and b) examining the incentives to obtain a good deal e.g. by examining how important purchase costs are in obtaining a competitive advantage in the downstream market, and how intense is downstream competition.

Incentives

- 5.65 Buyers can seek to exert buyer power through providing suppliers with incentives to deliver low prices and a high quality service. This can be done in a number of ways, including designing contracts that force suppliers to reveal information about their costs, rewarding good, and penalising poor performance, and designing auctions that minimise the risks of collusion and maximise the prospects of obtaining a competitive price.
- 5.66 In the Cowie/British Bus Group and Compass/Rail Gourmet cases, buyers appear to have been particularly adept at designing contracts to ensure that the winning supplier delivered a high quality service. In the bus case, TfL had redesigned contracts so that bus companies no longer had to take any revenue risk, but were instead rewarded for meeting a number of quality standards. Bids were also as much distinguished on the basis of quality and reliability of the service as on price. Similarly, in the rail catering case, a series of incentives were built into the contracts to reward the provision of good service. This was backed with open-book accounting and rail passenger surveys, to monitor compliance.
- 5.67 It is notable that in both cases, buyer power appears to have remained strong, despite a shortage of credible bidders. In the train catering case, this was because rival logistics companies had been unable to meet the quality and flexibility standards demanded by the rail operators, whereas in buses, the rapid increase in demand meant that there were strong capacity constraints, and therefore a limited number of potential bidders for each contract.

- 5.68 In the Cowie/British Bus Group case, the CC correctly judged that the power of the regulator was the primary competitive constraint. However, in the Compass/Rail Gourmet case, the CC suggested that the lack of credible bidders was, at least in part, the fault of the train operators for insisting on contract terms that were too onerous for many logistics companies to meet. They also suggested that these restrictions could, if necessary, be weakened to encourage more bidders. However, the strategy of the train operators in designing incentive based contracts appears to have worked well. Whilst easing the contract terms might well have encouraged more bidders, and possibly led to lower prices, it is far from clear that this would have delivered the quality standards that train operators desire.
- 5.69 Similarly in Cowie/British Bus Group, whilst there are fewer bus companies that are capable of bidding for the new quality incentive contracts, effective competition (in terms of delivering the benefits that TfL and customers demand) appears to have increased.
- 5.70 What these two cases emphasise is that increasing the number of bidders is not the only way, and certainly not always the best way, of ensuring that competition works well for consumers. Whether buyers genuinely have buyer power in such instances has as much to do with whether they are able to design and monitor contract compliance, as whether there are a sufficient number of credible bidders.

Barriers to Entry and Expansion

- 5.71 New entry, together with expansion by existing firms, provided an important competitive constraint in a number of our case studies. Significant entry occurred in the CHC/Helicopter , Klaus J Jacobs, and Cowie/British Bus Group cases, whilst smaller firms were able to expand to become significant competitors in the Universal Foods/Pointing and Technicolor/Metrocolor mergers.
- 5.72 In the CHC/Helicopter and Klaus J Jacobs/SCIA cases, entry appears to have arisen, at least in part, because of customer concerns in the market. In the former case there is some evidence that actual prices rose as a consequence of the merger, whilst in the latter, entry to some

extent pre-empted customer concerns (the new entrant was aware that because many customers dual-sourced, there was likely to be a strong demand for a second UK supplier of couverture).

- 5.73 In the Cowie/British Bus Group case entry was a response to a shortage of bidders in the London market, although this appears to have been mainly if not entirely due to the rapid growth in bus demand (there is no suggestion that the shortage of bidders was caused by the merger).
- 5.74 In the Technicolor/Metrocolor, and Universal Foods/Pointing cases, expansion by an incumbent quickly filled the gaps in the market caused by the merger.
- 5.75 In all of the above cases, the CC had taken the view that low barriers to entry and expansion were likely to provide an important competitive constraint. The only case where the CC took the view that entry was likely, and where entry did not occur, was in the Compass/Rail Gourmet merger. However, there is no suggestion of any exploitation by the incumbent, so there does not appear to have been a profitable entry opportunity.
- 5.76 One of the reasons that the CC's record on entry is so healthy may be that they have tended to put more emphasis on whether buyers think entry is likely, and less on structural factors such as the level of sunk costs. In each of the three major instances of entry (Klaus J Jacobs/SCIA, the CHC/Helicopter, and the Cowie/British Bus Group) entry occurred following discussions with buyers. Whilst this is often characterised as buyer sponsored entry, the term is perhaps misleading in that the new entrants often undertook substantial investment risk on their own. This appears to have been the case in chocolate, where the sunk costs of entry were considerable.

- 5.77 The reputation of new entrants amongst buyers also appears to have been important in their ability to quickly win market share. In CHC/Helicopter, a previous competitor, Bond, re-entered the market, whilst in Klaus J Jacobs/SCIA, Technicolor/Metrocolor, and Universal Foods/Pointing, ex-employees of the merged firm played a vital role in either setting up new companies, or in boosting the reputation of existing firms in the market. This perhaps underlines the importance of taking the views of buyers when assessing the prospects for market entry.
- 5.78 In two cases, Klaus J Jacobs/SCIA and CHC/Helicopters, the CC argued that the mere threat of entry was likely to be sufficient to constrain prices. However, in both cases, significant actual entry arose as a response to the merger, suggesting that the threat of entry was not sufficient on its own. In the CHC/Helicopter case, this appears to have been the case because there were few potential competitors that had the necessary reputation for safety and reliability, whereas in Klaus J Jacobs/SCIA, potential competitors were unable to provide a significant competitive constraint due to the high level of switching costs that led many customers to dual-source.
- 5.79 Potential competition does however appear to have been an important competitive constraint in the two declining market cases, Kodak/ColourCare, and Universal Foods/Pointing. The reason for this appears to have been that if buyers were to switch, those sales were likely to be lost forever, which increased the credibility of a threat to switch suppliers.

Technological Change

- 5.80 Technological change was an important factor in both the Kodak/ColourCare and Technicolor/Metrocolor cases.
- 5.81 The CC approach appears to have been to take a wide range of industry views and to examine independent market forecasts and projections. In both instances, whilst the CC could see that technological change was imminent, they did not rely upon it in clearing the merger.

5.82 We think this is a sensible approach because even if technological change can be foreseen, its effects on competition are much more difficult to predict. For example, in the Kodak/ColourCare case, whilst the growth of digital cameras was predicted, its extent and impact on boosting the demand for mini-labs was not.

ANNEXES

A BRIEF DISCUSSION OF WIDER SAMPLE

Introduction

A.1 The case studies cover in detail 10 of the 29 cases which were referred to the CC and subsequently cleared between 1991 and 2002. Here we take a brief look at the wider sample and, for each case, consider the main reasons cited by the CC for clearing the merger.

Examination of 29 cases

A.2 The 29 cases that were cleared by the Competition Commission between 1991 and 2002 cover a wide range of industries (from guided missiles to baby food), and include mergers at all levels of the production chain (manufacturing, wholesaling, retailing). A brief overview of these cases is contained in table A3 at the end of this appendix.

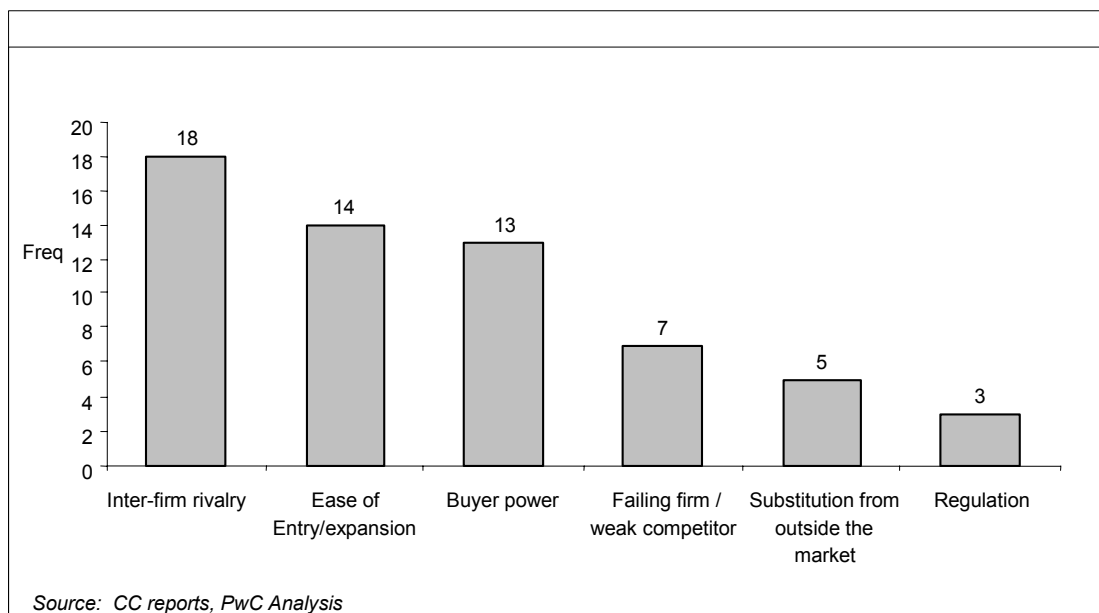
A.3 Six of the cleared cases between 1994 and 1997 affected the market for bus services. The relatively large number of investigations at the time coincided with a period of considerable consolidation in this market. There is no obvious evidence that mergers are more likely to be cleared in any particular industry.

A.4 For each of the 29 mergers we have attempted to identify what the CC regarded as the key competitive constraints that were expected to prevail in the market. We have grouped these into six categories: inter-firm rivalry, buyer power, entry/expansion, failing firm/weak competitor, regulation and substitution from outside the market¹⁵.

¹⁵ The 'substitution from outside the market' category has been chosen to reflect the significant number of cases where the CC has cited competition from a source outside their adopted market as providing an important competitive constraint e.g. the ability of importers to expand production.

- A.5 The CC usually cites a number of reasons for clearing a merger. Whilst the CC’s reasoning is usually very explicit, it is often difficult to map these reasons to a particular competitive constraint. The main difficulty is that competitive constraints are themselves linked. For example, inter-firm rivalry is likely to be more intense when buyer power is strong and where there are low barriers to entry. Our attempt at categorising these constraints is therefore necessarily subjective.
- A.6 Chart A1 shows the frequency with which each competitive constraint is cited as a reason for clearing the merger.

Chart A1 – Main reasons cited in clearing mergers



- A.7 Inter-firm rivalry was the most commonly cited reason for a merger being cleared. This is perhaps unsurprising, for, if inter-firm rivalry is not considered to be strong after the merger, a merger is only likely to be cleared in circumstances where rivalry has not been significantly weakened compared to the counterfactual e.g. if the target is a failing firm.
- A.8 Low barriers to entry and expansion were cited in approximately half of all cleared cases as a reason for clearing the merger. This figure is perhaps overstated by the large number of bus companies in the sample. Nevertheless, the ease of entry and expansion is clearly an

important factor in the CC's decision making. In some cases the CC stated that the market was contestable, and in others there was a clear indication that the behaviour of incumbents would be constrained by the threat of entry, rather than entry itself.

- A.9 If bus cases are taken out of the sample, then buyer power emerges as the second most important reason for clearing a merger. This is consistent with our analysis of post-merger markets, where buyer power had a strong influence on outcomes in four out of ten cases. The relationship between buyer power and other competitive constraints such as ease of entry, inter-firm rivalry, and substitution from outside the market is complex, and different interpretations of the CC's reasons for clearing a merger could suggest that buyer power is even more important.
- A.10 In a number of cases a merger was cleared on the grounds that one of the parties to the merger was in some financial difficulties. Only in Air Canada/CAC did the CC go so far as to describe the target as a failing firm. However, in six other cases the target was regarded as being a weak competitor and, as such, they were either not providing a strong current competitive constraint, or unlikely to provide a significant competitive constraint in the future. In most, if not all of these cases the CC appeared to attach some importance to the target being able to survive.
- A.11 The 'substitution from outside the market' category includes cases where it was judged that suppliers which were not included within the CC's market definition could nevertheless act as a significant competitive constraint. For example, in the bus mergers, although buses were invariably defined as the relevant economic market, the CC often pointed to what they regarded as the strong competitive constraints provided by other transport modes. This does however beg the question that if a product acts as a significant competitive constraint, should it not be included in the relevant economic market?
- A.12 Finally, of the 29 cleared cases, five included a dissenting voice (i.e. a member of the group that was responsible for the report who did not agree with certain aspects of the decision).

Market concentration

- A.13 Is the CC more likely to clear a merger in markets which are relatively unconcentrated, or where the increment in market share is relatively modest? It is not possible to answer this question without looking at mergers that were both cleared and amended (i.e. blocked or allowed to proceed subject to remedies) by the CC. We have however sought to estimate the Hirschmann-Herfindahl Index (HHI) and HHI increments for each of the 29 cases to give some indication of the number of mergers that are cleared by the CC in markets where there are significant increases in market concentration.
- A.14 To estimate HHIs, data has been extracted from the CC reports where available. In several cases detailed data is not available for every company in a market, and in these markets the category 'other' has been excluded from the calculations.¹⁶ Several of the mergers considered by the CC raised competition concerns in more than one economic market, and where this is the case we have computed the HHI for each of the affected markets.

Table A1 – HHI for the 29 cleared mergers

Ranges	Pre-merger HHI Frequency	Post-merger HHI Frequency
0-1000	5	3
1000-1800	4	4
1800-2500	9	1
> 2500	27	37

¹⁶ This effectively means that the calculated HHI indexes will understate actual concentration, since the shares of the companies included in the calculations do not add up to 100 per cent. However, the excluded companies usually have very low individual market shares so that in most instances the difference between the calculated and true 'HHI' is likely to be modest.

Table A2 – Increment in HHI for the 29 cleared mergers

Ranges	Increment in HHI frequency	Increment in HHI where post-merger HHI > 1800 frequency
0-50	7	4
50-100	0	0
100-500	8	4
500-1000	12	12
1000-1500	6	6
1500-2000	4	4
> 2000	8	8

A.15 The OFT guidelines¹⁷ indicate that any market with a post merger HHI in excess of 1000 is likely to be regarded as concentrated and markets with an HHI in excess of 1800 as highly concentrated. The guidelines note that in a concentrated market an increment to the HHI of over 100 may give rise to competition concerns whereas in a highly concentrated market an increment of as little as 50 could give rise potential concerns.

A.16 The HHI is only one tool used by the OFT to filter out those mergers that are likely to raise competition concerns. It is notable however that the vast majority of mergers that were cleared by the CC were in markets where the post-merger HHI was in excess of 2,500, and where there was an increment to the HHI of over 500. This shows that the CC is prepared to clear mergers that do lead to very highly concentrated market structures.

A.17 However, the calculated HHIs may overstate competition concerns in a number of respects. For example, in cases where a firm is failing or is regarded as a weak competitor, the calculated HHIs attribute high market shares to a firm that is offering a very limited degree of competition. Similarly, the calculated HHI and HHI increments may overstate concerns where the merging parties compete in the same economic market, but are more distant competitors. For example, one of the highest HHI and HHI increments arose in the NTL/Cable and Wireless merger in the pay-TV market, where although the merging

¹⁷ 'Mergers - substantive assessment guidance' OFT May 2003.

cable companies were regarded as operating in the same economic market, they competed in separate geographic areas. The HHI will also overstate potential competition concerns where the CC defined the market relatively narrowly whilst accepting that firms that lie outside the market provide an important competitive constraint.

Table A3 – Brief description of the 29 cases

Merger	Main markets considered	Main reasons for clearance
Prosper de Mulder/Croda (1991)	Rendering animal waste	Competition Commission saw no competition effect arising from the merger
BAE/Thomson – CSF (1991)	Guided weapons manufacture	Inter-firm rivalry (complementary nature of the parties would enhance global competition)
Lloyds/Macarthy (1992)	Retail pharmacies and health food stores	Retail pharmacy: no material competitive effect, Department of Health has some influence Health food stores: no entry barriers, declining market share for health food stores
Hillsdown/ABF (1992)	Canned fruit and vegetables	Failing firm, buyer power, and inter-firm rivalry (including international competition)
Gillette/Parker Pen (1993)	Disposable and refillable writing instruments (the Competition Commission focused on refillable writing instruments)	Inter-firm rivalry, potential new entry, buyer power

Merger	Main markets considered	Main reasons for clearance
Alcatel/STC (1994)	Submarine cable systems	Inter-firm rivalry (including international competition), buyer power, regulation
NEG/Saltire Holdings 1994	Long haul coach services	Substitutes from outside the market
SB Holdings/Kelvin (1995)	Bus services in part of Strathclyde region	Inter-firm rivalry, potential entry, substitutes from outside the market
Stagecoach/Chesterfield (1996)	Bus services in north Derbyshire and north Nottinghamshire	Failing firm, potential competition/new entry (if fares rise and service levels fall)
Go Ahead/OK (1996)	Bus services in Tyne, Wear and adjacent areas	Inter-firm rivalry, failing firm, substitutes from outside the market
British Bus/Arrowline (1996)	Bus services in Cheshire and Greater Manchester	Limited loss of competition, potential entry
Nutricia/Milupa (1996)	Baby food and baby milk (also considered but no adverse effects expected were: baby drinks, and enteral clinical nutrition)	Inter-firm rivalry, buyer power, failing firm. For baby foods: low barriers to entry
Klaus J Jacobs/SCIA (1997)	Industrial chocolate (couverture)	No substantial entry barriers, buyer power
Cowie/British Bus Group (1997)	Bus services in the UK	LBSL in a position to encourage competition and could even provide services themselves, low barriers to entry
Technicolor/Metrocolor (1997)	Film processing for cinema and television	Inter-firm rivalry, buyer power, low barriers to entry, failing firm

Merger	Main markets considered	Main reasons for clearance
Universal Foods/Pointing (1999)	Synthetic and natural colours and flavours used in food products	Inter-firm rivalry (including international competition), buyer power
CHC/HSG (2000)	Helicopter services to oil and gas installations on the UK Continental Shelf	Low barriers to entry, buyer power
Air Canada/CAC (2000)	Domestic air services within Canada, and international air services to and from Canada	Failing firm, inter-firm rivalry
NTL/Cable and Wireless (2000)	Supply of cable telephone and pay-TV services in the UK	No geographic overlap, competition from (strong) suppliers in the telephone and pay-TV market
Duralay/Gates (2001)	Gripper, underlay and other carpet laying accessories	Low entry barriers, threat of increased imports, buyer power, inter-firm rivalry, excess capacity, large customers could foster new entry
Kodak/ColourCare (2001)	Supply of wholesale photo processing	Buyer power
Octagon/BRDC (2001)	Operation of motor racing circuits in the UK	Substitutes from outside the market, inter-firm rivalry
BASF/Takeda (2001)	Supply of vitamins	Little competition effect arising from the merger, overcapacity, inter-firm rivalry
Reed Elsevier/Harcourt (2001)	Publishing of science, technical and medical journals	No expectation that merger would operate against the public interest
Cargill/Cerestar (2002)	Glucose syrup and blends	Inter-firm rivalry, buyer power

Merger	Main markets considered	Main reasons for clearance
Neopost/Ascom (2002)	Supply of postal franking machines	Merger was expected to result in a more effective competitor to the market leader
Linpac/Paxton (2002)	Returnable transit packaging	Inter firm rivalry (including international competition), buyer power, low entry barriers
PandO/Royal Caribbean (2002)	Cruises	Inter firm rivalry, low entry barriers, market growth, substitutes from outside the market
Compass/Rail Gourmet (2002)	On-board rail catering services	Limited loss of competition, low barriers to entry, buyer power

B OVERVIEW OF LITERATURE

B.1 There is a very wide and extensive literature on all aspects of mergers. The literature that relates most directly to this study falls into four main categories: evidence on post-merger performance, analysis of the consistency of competition authorities' decision making, the effectiveness of remedies, and ex post merger appraisals.

Post-merger performance

B.2 Much of the literature concerning the effects of mergers looks at the question of whether mergers deliver benefits to the companies involved. There are two main approaches to this question. The first is to look at the effect of a merger on the accounting profits of the merged entity. Most studies compare profits of merging firms with a control group in the periods before and after the merger. An example is the study by Ravenscraft and Scherer (1987),¹⁸ which covers a large number of manufacturing companies in the US which merged in the late 1960s and early 1970s. Part of the study showed a negative relationship between intensity of mergers in a particular line of business and profitability. Mueller (1980)¹⁹ carried out an international study of this type, and found that merged firms experienced a loss compared to non-merging entities. In general the results of this literature are mixed, but there is evidence that many mergers reduce profitability.

B.3 The second approach is to look at the effects of mergers on the share prices of the companies involved. Whereas the first set of studies limit their scope to current profits, share prices reflect the expected future stream of profits. Event study analysis attempts to assess the effect of a merger announcement on a firm's market value (this approach assumes that the stock market is efficient). These studies are generally slightly more positive than the first group. In particular, there is evidence of large increases in the values of targeted firms.

¹⁸ 'Mergers, sell-offs, and economic efficiency', Ravenscraft, D. J. and Scherer, F. M., 1987, Washington DC, Brookings Institution.

¹⁹ 'The determinants and effects of mergers: an international comparison', Mueller, D. C. (ed.), 1980, Cambridge, Massachusetts, Oelgeschlager, Gun and Hanin Publishers Inc.

B.4 There is also a body of literature which attempts to distinguish benefits of mergers which arise from efficiency gains, and those which arise from increased market power. There are three broad approaches to this question. One is to assess whether prices rise or fall post-merger. The second is to consider the post-merger market share of the merged firm (if it falls it may indicate that it has exercised market power). The third is to assess the impact of the merger on the share price of close competitors (if these rise when the merger is announced it indicates that investors in those firms also expect to see an increase in prices and market power).

Analysis of the consistency of authorities' decisions

B.5 A smaller set of literature seeks to assess the consistency of competition authorities' decisions. These studies generally use econometric methods to determine what factors influence a competition authority to clear or prohibit a merger.

B.6 Bergman, Jakobsson and Razo (2003)²⁰ carried out a study examining the EU merger decision process. They found that the Commission was not influenced by political factors, although a change in Commissioner may have led to stricter enforcement. Decisions did appear to have been influenced by economic factors such as high post-merger market shares, entry barriers, and the ease of collusion.

B.7 These studies are however subject to considerable bias. The problem arises because the data used to determine whether a merger is likely to be cleared or blocked comes from the competition authorities' own reports. The data is thus correlated with the competition authorities' decisions.

²⁰ 'An Econometric Analysis of the European Commission's Merger Decisions', Bergman, Mats A, Jakobsson, Maria and Razo, Carlos, April 22 2003, Working Paper Series, Uppsala University, Department of Economics.

- B.8 Duso, Neven, and Röller (2003)²¹ developed a method to test the consistency of European Commission decisions without resorting to the use of the Commission's own analysis to assess competitive factors. Instead they used stock market data on competitors' share prices to judge whether a merger was anti-competitive, or competition enhancing. Cases where a merger announcement caused competitors share prices to rise were regarded as being anti-competitive, and where share price fell the merger was seen as being pro-competitive or competitively neutral. This market based assessment as to whether a merger was pro- or anti-competitive was then compared with the decision reached by the European Commission.
- B.9 The study found that overall around 25 per cent of decisions were 'wrong'. These were broken down into cases where a pro-competitive merger was prohibited (a type I error), and cases where an anti-competitive case was allowed (a type II error), with the proportion of 'wrong' decisions approximately the same in each. The study also found evidence of a certain bias in Commission decisions. Bigger EU countries had a higher chance of getting anti-competitive mergers through the approvals process, and mergers in the transport, storage and communications markets were more likely to have a pro-competitive deal blocked. Type II errors were more likely when cases were approved at the first stage of the decision process, before a detailed investigation, and these errors were increasing with the number of notifications.
- B.10 These studies provide a useful overview of how competition authorities make their decisions, and how these relate to the features of competition in the market. However they differ in approach to this study, which seeks to compare the CC's analysis of post-merger markets with the events that subsequently transpired, and the competitive constraints that actually emerged.

²¹ 'The Political Economy of European Merger Control: Evidence using Stock Market Data', Tomaso Duso, Damien J. Neven, Lars-Hendrik Röller, March 2003, CIC Working Papers.

Effectiveness of remedies

- B.11 There have been a number of studies that examine the performance of companies that have had remedies applied to them by competition authorities. These studies aim to determine whether remedies have been effective either in regulating the behaviour of the parties or in increasing effective competition in the market e.g. through facilitating entry or enhancing buyer power.
- B.12 The study produced by Clark, Davies and Driffield,²² attempts to answer this question through a series of interviews with market participants, combined with more general other market analysis. This methodology was similar to our own; a case study approach was adopted, and a considerable emphasis was placed on interviews with market participants. However their study differed in two important respects from our own. Firstly, it examined the effectiveness of remedies imposed on parties following monopoly investigations. It did not therefore consider merger inquiries. Secondly, the focus of the analysis was on whether remedies had been effective, as opposed to assessing whether the findings and analysis in the CC reports were reflected in the ex post evidence. In general the study found little evidence to suggest that remedies had made much difference to the competitive situation in post-merger markets, although they did not find much evidence that wider competition had eliminated market power either. The study found that price control and divestment were significantly more effective than behavioural remedies.

²² 'Monopoly Policy in the UK, Assessing the Evidence', Clarke, R, Davies, S and Driffield, N, 1998, Edward Elgar.

Ex post merger appraisals

- B.13 Ex post studies of mergers that have been cleared are not common, but there is at least one other example. In 1997 the OFT commissioned a research project to assess the impact of mergers in oligopolistic markets.²³ The study, which was carried out by National Economic Research Associates (NERA), provided an overview of the relevant theory, together with an assessment of whether horizontal mergers that had been cleared by the OFT (without reference to the CC) had led to any adverse effects on competition. This was also a case study approach, although interviews were limited to the views of the merged company.
- B.14 The study looked at 10 cases that had been cleared between 1990 and 1994. It found that in 8 of these cases the OFT's predictions that a merger would not lead to any significant adverse effects on competition were correct. Buyer power was found to be an important competitive constraint, particularly in markets where supermarkets or large retailers were involved. In general the report noted that it was important to go beyond analysis of past demand-side substitution, to consider what the dynamic supply-side response would be to a merger, including entry, and customer switching to producers who did not have large market shares prior to the merger.

²³ 'Merger appraisal in oligopolistic markets', Prepared for the Office of Fair Trading by National Economic Research Associates, November 1999, Research Paper 19.