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Mergers

Introduction

Firms propose mergers for many different reasons. For horizontal mergers they may be buying technology or customers in anticipation of synergies or economies of scale. For vertical mergers they may see advantages in coordinating activities and reducing transaction costs. For conglomerate mergers, they may expect economies of scope, perhaps in marketing a product range. Where technologies are evolving fast and in difficult-to-anticipate directions, they may even view mergers as an insurance policy or a way to experiment with new ideas. All these can be claimed as efficiency motives. Mergers are also a way to change corporate control. The threat of takeover is a discipline against an ineffective management team. The threat does not always work and some mergers are proposed by managers seeking personal aggrandisement at the expense of shareholders. Other mergers are a way for a family firm to capitalise on its wealth creation when there is no natural successor. A further motive, of course, is the pursuit of market power. Competition policy is important even if this is not the object of the merger – efficiency or corporate control motives may still result in mergers that have the effect of impeding competition.[1]

The EC Merger Regulation (ECMR) was first implemented in 1990.[2] The original test for a merger was that it would not be allowed if it created or strengthened a dominant position. Notice that it is not the current level of competition that needs to be assessed, but the change in competition that

[1] Empirically, we find that many mergers turn out to disappoint shareholders. This is not a concern for competition policy. Systematically poor selection of mergers by senior managers would suggest that corporate governance needs reform. It is not the role of a competition authority to act as a management consultancy. More relevant for competition policy is that firms often have no clear idea of specific efficiencies they are hoping to achieve and are rarely able to provide reasonable evidence that they will be achieved.

[2] See Lyons (2008) for an economic assessment of EC merger control.

would result from the merger. This requires the formation of an expectation of future competition to be compared with a counterfactual of what would happen in the absence of the merger. Merger appraisal is therefore subtly different from Article 81 and 82 investigations which appraise observed competition.[3] The wording of the test was reformed in 2004, replacing the original dominance test with the prohibition of mergers which would be a significant impediment to effective competition. It is not necessary to go into the nuances. Suffice it to say that this was not a huge change in merger appraisal but was a definite nudge towards more explicit analysis of economic effects.[4] Each of the mergers in this book pre-dates 2004 and some undoubtedly contributed to the climate for reform. It is sometimes argued that merger regulation need not be strict because firms that ex post exploit their market position can be investigated under Article 82. However, this is a dangerous assumption because Article 82 is almost never used to address exploitative pricing and is cumbersome to apply.

The economic analysis of mergers depends fundamentally on the range of businesses operated by each firm. Horizontal mergers between firms operating similar businesses raise most direct concern because they eliminate a direct competitor. This can affect two alternative types of pricing behaviour. First, the merger may enhance a firm's ability unilaterally to raise price. Second, it may enhance the ability for firms across the market to coordinate their pricing even without directly agreeing prices or exchanging information. Vertical and conglomerate aspects of a merger raise quite different concerns, in particular the ability to impede the effectiveness of rivals to compete. The six mergers considered in this part of the book are grouped in pairs according to these three categories of potential economic effect.

The first two chapters provide direct estimates of unilateral effects for horizontal mergers between firms with overlapping ranges of differentiated products. In such cases, market shares can be misleading. For example, the combination of two 20 per cent market shares may be either competitively innocuous (e.g. if consumers do not see the overlapping product ranges of the merging firms as effective substitutes) or competitively harmful (e.g. if remaining independent products are seen by customers as ineffective substitutes). It is therefore important to understand the pattern of substitutability between products (i.e. cross-elasticities of demand). Econometric methods use hard evidence

[3] Nevertheless, proper appraisal of harm and remedy in Articles 81 (other than cartels) and 82 does require an understanding of the counterfactual of competition in the absence of a business agreement or practice.

[4] As already discussed in the introductory chapter, 2004 saw a considerable number of other reforms, including horizontal merger guidelines. The non-horizontal merger guidelines followed in 2007.

to achieve this. The first step is to specify a demand model that captures the way people choose between alternative products (e.g. logit demand system). Statistical techniques can be applied to estimate this system from data on past prices and consumer purchases and so calculate cross-elasticities. An advantage of this approach is that it does not require a black-and-white market definition to rule some products into the market and others out. Instead, it estimates the shades of grey (i.e. cross-elasticities). The estimates can then be used in conjunction with a model of pricing behaviour to simulate (i.e. predict) the impact of a proposed merger.[5] The same techniques can be applied to apparently very different markets such as insurance or beer.

A logit model of consumer choice between non-life insurance companies is estimated by Gollier and Ivaldi to understand how consumers respond to price differences between different firms. Their work was used to advise a national competition authority about a proposed merger. Identities have been suppressed to preserve commercial confidentiality. The authors were working under severe pressure of time in a real merger situation, so this case illustrates what can be achieved in practice. Having used the limited amount of available data to estimate own-price elasticities, cross-elasticities and cost functions, the authors fed these parameters into a merger simulation. Assuming firms adopt unilateral pricing, they were able to estimate expected post-merger price changes. They predict small and statistically insignificant long-run price rises. Since consumers need to recognise and act on price changes, the authors conclude that the merger should be allowed subject to a remedy of better information for customers about price offers.

Slade is much less sanguine about the ability of simulation techniques to estimate unilateral effects. She compares a range of available techniques. Relatively simple demand models (e.g. logit) are attractive because they can be implemented in a short period of time and can be understood by non-experts. However, she argues that their predictions are often misleading. Complex models are more reliable but they require more time to implement and are less transparent (e.g. the econometrician has to make some subtle judgements). She illustrates the use of merger simulations and the sensitivity of predictions to modelling choices with an application to mergers in the UK brewing industry. Slade's estimates were not done under the pressure of an investigation and they include work that would have been too time-consuming to achieve during a live

[5] With much less econometric sophistication Davies and Lyons (2007) apply a much simplified form of merger simulation to be used as an indicator of possible effects (rather than as potentially decisive evidence). They provide estimates for six paper and pharmaceuticals mergers previously investigated by the EC.

case. She assesses the merger between S&N and Courage, which was allowed by the UK authorities without horizontal remedy, and the proposed merger between Bass and Carlsberg–Tetley, which was eventually blocked. She finds substantial differences in the estimated effects of each depending on the specification of the econometric demand model. She concludes that merger simulations should not be decisive but they should be used to focus analysis away from crude market shares and towards the degree of brand substitutability.

The next two chapters address a different type of price concern. This is that the merger might facilitate the coordination of prices. For our purposes, we can consider tacit collusion, collective dominance and coordinated effects as equivalent terms for when firms observe each other's behaviour and eschew profitable price cuts in the short run with a view to maintaining long-term high prices.[6] In addition to legal considerations, coordinated effects differ from an explicit cartel because it is much more difficult to reach an implicit agreement over price, let alone monitor it, without explicit communication. Although unilateral effects is the main line of argument in most European merger cases, confidence in arguing a collective dominance theory of harm rose through the 1990s until the 2002 Airtours appeal, which is the subject of one of our case studies. There are important differences in the analysis of coordinated compared with unilateral effects. In particular, it places a greater burden on understanding the behaviour of all major firms in the market, not just the merging parties. Coordination is more likely when market shares are fairly symmetric because this balances the incentives to undercut and to respond to rivals undercutting. It appears to be very difficult if there are more than two or three major firms in the market. The presence of a competitive 'maverick' with an aggressive business strategy can also disrupt coordination.

In 1999, the EC prohibited the merger of two package holiday operators, Airtours and First Choice, on the grounds of collective dominance. The merger would have reduced the number of major competitors from four to three. This decision turned out to be a landmark case for the application of economics in competition cases. The EC decision was appealed and the appeal upheld. In rejecting the EC reasoning, the CFI made explicit reference to the game theoretic underpinnings of the theory of tacit collusion to provide what have become known as the Airtours Criteria. These set out three conditions necessary for coordinated effects to be feasible: sufficient price transparency for rivals to know

[6] Tacit collusion is the traditional term used by economists. Collective dominance was the term used by the EC prior to the 2004 ECMR revision, since when 'coordinated effects' has been used. The reasons behind the different terminology are legal more than economic.

when one is cutting price, a credible response ('punishment') by other firms to exert a discipline on those who deviate from the collusion and the absence of 'external' constraints in the form of new or smaller firms expanding output in response to higher prices by the market leaders or of consumers switching to other products. Garces-Tolon, Neven and Seabright (two of whom advised on opposite sides in the appeal) take the opportunity to review the academic literature in order to clarify how the conditions favouring tacit collusion and the realistic expectation of collusive behaviour can each be established. They go on to assess the impact of the CFI decision and the extent to which the Court's criteria provide a reliable guide for the analysis of other markets.

A sequence of mergers in the newsprint and magazine paper industry had increased market concentration in the 1990s. There were also allegations of cartel activity. It is, perhaps, not surprising that the EC was highly suspicious of the proposed UPM Kymmene/Norske Skog/Haindl merger. Combined market shares for these relatively homogeneous products were insufficient to suggest that the merger would result in significant unilateral effects, but the merger would eliminate a potentially disruptive maverick in Haindl and the EC concern was for coordinated effects. However, the EC theory of harm was not conventional. The lack of price transparency in individually negotiated contracts meant price coordination was not very plausible. Instead, the EC considered the likelihood that firms would jointly limit capacity expansion in order to keep prices high. Kühn and Van Reenen argue that the irreversibility of investment makes capacity coordination highly unlikely. They go on to show that their theory of competitive behaviour was more consistent with the empirical evidence than was the EC hypothesis. After a thorough Phase II investigation, the EC agreed and cleared the merger without need for remedy.

Most mergers with vertical or conglomerate dimensions also have an element of horizontal overlap and the multiplicity of effects often makes them complex to analyse. The last two cases fall into this category, though one focuses on vertical effects and the other on conglomerate effects. The latter has become another important test case. Like for agreements, vertical and conglomerate effects in mergers should start from a different presumption to horizontal mergers because they are more likely to be benign. Such cases can also put a competition authority under different pressures because the main theory of harm is that rivals will be foreclosed. This can lead to fierce lobbying against the merger by rivals who may be motivated by either genuine fear of anticompetitive foreclosure or commercial concern about facing a more competitive rival. The role of economics is to identify which should be the true concern.

The merger of Neste Oy and IVO brought together the national monopoly in gas distribution with the largest supplier of electricity in Finland. Both firms were largely owned by the Finnish state and the merger was encouraged by the Finnish Ministry of Trade and Industry to create a 'national champion' in anticipation of the opening of the international electricity market. The merger had horizontal, vertical and conglomerate dimensions. Although gas and electricity are substitutes for some purposes, the main concern in this case was in vertical issues because gas is a significant element in the fuel mix for electricity generation. Neste owned the pipelines and all Finland's natural gas was imported from Russia in a joint venture owned 75 per cent by Neste and 25 per cent by Gazprom. Much hinged on the expected future evolution of the market. At the time, 1998, the form of electricity regulation was still being decided and there was only light regulation of gas. Increasing transmission capacity was planned for electricity between the Nordic countries and this was expected to remove IVO's dominance in Finland. Swedish generators were expected to invest in gas-powered plant in Finland near the Russian border in order to diversify their fuel sources. However, Stenbacka argues that the merged entity would be well placed to create entry barriers through its investment and pricing policies. He also argues that there would be no synergies that could not be reaped by appropriate contracts short of joint ownership. The EC decided the merger would impede competition but that a satisfactory remedy was to reduce state ownership of the joint venture with Gazprom to below 50 per cent so the electricity generator would not control the gas supply of its potential rivals.

GE/Honeywell was a merger proposal between two major American firms and it was destined to create substantial transatlantic tension and debate. Because of the global reach of their sales, the merger was investigated by both US and European authorities: it passed US scrutiny subject only to a small divestment; it was prohibited on a number of grounds by the EC; and the prohibition was upheld by the CFI only on narrow grounds and with considerable criticism of other aspects of the EC decision. GE was a huge conglomerate with activities including large global market shares in a wide range of aircraft engines and power systems. It also had enormous financial strength including a business called GECAS, which bought and leased aircraft to airlines and accounted for 10 per cent of new aircraft sales. Honeywell was the global leader in avionics, engine controls and power systems, and made a limited range of aircraft engines. This was a very complex merger with horizontal, vertical and conglomerate issues in an array of markets. The horizontal effects were relatively straightforward, though the case raised tricky issues about how to measure market share (e.g. when there is a joint venture) and how meaningful is market

share when airlines find maintenance easier if all their engines come from one supplier and when there is bidding for engine sales. There were also interesting vertical issues, particularly relating to engine starters and to the GECAS policy of buying only GE engines with the possibility of extending that policy to Honeywell avionics and non-avionics. However, the most controversial element of the EC decision related to conglomerate effects. In particular, the EC argued that GE engines would be bundled with Honeywell products and this would foreclose rival suppliers who did not have the product range to offer bundled discounts. Vives and Staffiero provide an economic critique of all aspects of the EC decision, with particular detail on the bundling arguments. They also observe a significant transatlantic difference, not so much in the underlying economic analysis, as in the willingness of the EU authorities to consider possible long-term consequences while the US focuses on more certain short-term effects.