

CRA Competition Memo



Minority Shareholdings

Buying a minority share in a company rather than a controlling interest might at first glance appear innocuous from a competition perspective. However, economic analysis shows that under some circumstances minority shareholdings can raise serious competition concerns. Until recently European merger and competition policy have not paid much attention to this issue, except in a fairly *ad hoc* and unscientific way (e.g. the 'structural links' approach in past collective dominance cases). However, more recently, the Commission has indicated an interest in pursuing partial ownership cases more thoroughly,¹ which may mean closer competition scrutiny under the Merger Regulation, Article 81 and Article 82.² Most recently, the minority interest retained by Telecom Italia in the proposed combination of Stream TV and Telepiù in Italy has raised concerns on the part of the Commission over future competition in the provision of pay-TV services.³

This new focus brings European practice in line with the approach taken in the US. The US authorities have always been closely interested in acquisitions of minority shareholdings that do not constitute controlling interests. Many cases have been investigated and companies required either to commit to treating them as a purely passive financial investment (for instance, no board representation) or to divest the interest altogether.

The potential impact of minority stakes

The Commission's increased interest in minority shareholdings can have broad implications for firms: even when not acquiring minority shareholding directly, competition issues can arise – for instance when the target company in a merger in turn owns a minority share in a competitor (third-party minority shareholding), or a stake in a competing joint venture. Minority shareholdings can sometimes have elements of reciprocity (cross-minority share-holdings), either directly (e.g. A owns shares in B, and B in A) or indirectly (e.g. A owns shares in B and C, which are competitors). This memo focuses on the analysis of potential anticompetitive effects of minority shareholdings. As in merger analysis, this should distinguish between unilateral pricing incentives and the facilitation of coordination among rivals.

¹ See, for example, Moavero, Milanese and Winterstein, *Minority Shareholdings, Interlocking Directorship and the EC Competition Rules*, Competition Policy Newsletter February 2002.

² Recent EU merger cases where minority shareholdings were an issue include *Volvo/Renault*, *Allianz/Dresdner* and *Nordbanken/ Postgirot*. In the UK, the Competition Commission blocked BSKyB's acquisition of Manchester United Football Club, based on a variant concern about minority stakes: 'toehold ownership'.

³ Lexecon advised NewsCorp and Stream TV in their acquisition of Telepiù (Case M.2876).

Unilateral effects: ownership, incentives and control

To generalise, ownership of shares in a rival reduces the acquirer's incentives to compete aggressively. To take a simple example, suppose that firm A acquired 30% of competitor B. Before the acquisition, A would contemplate a price increase only if the additional revenues generated by the higher price more than compensated lost sales from customers put off by the price rise. But after the acquisition, A's shareholder will appropriate 100% of A's profits and 30% of B's: thus if A unilaterally raised prices and lost some customers to B, it would make up for some of this 'loss' through the 30% of B's profits it receives.

Hence in deciding whether to raise prices, A should be less concerned about losing customers to B, and be more willing to raise prices. The same logic applies in more complex cases, where for instance A was not a direct competitor of B, but controlled B's rival C. Then if A bought a minority stake in B, C's pricing decisions would rationally also take into account the impact on B.

The magnitude of this effect depends in practice on the size of the minority interest; the market share of the 'target'; the substitutability between A and B's products (and therefore the amount of demand that would be captured by B in the event of a price increase by A); and the respective variable costs of A and B.

Control is also a key issue: minority shareholdings have greater potential impact if they provide for a degree of control to the minority shareholder. This raises the question of how price effects can be quantified for a specific transaction.

Measuring the unilateral effects

An unsophisticated approach to quantification would be simply to modify traditional concentration indices. Thus the Herfindahl-Hirschmann Index (HHI) – i.e. the sum of the squares of the market shares of all players in the market – might be modified to reflect the fact that, for a given distribution of market shares, market power may be higher with minority interests. Because the effect of minority shares depends on the distribution of control rights, for given ownership shares the index will differ depending on the specific pattern of control. But modified indices, like the standard HHI, can be no more than screening devices.

It may be possible to be more precise about the possible unilateral price effects associated with minority shareholdings. As in the case of full mergers, the specific effects of a minority stake on market equilibrium

prices can be simulated. It may therefore be possible to develop an oligopoly model that takes into account partial profit interests, and calibrate it to the market (in particular, to the observed market shares, and the patterns of ownership and control).

Lexecon undertook such an analysis in a recent case involving minority cross-shareholdings between parents in a commodity industry. The model allowed us to estimate the new industry output in equilibrium, after the proposed minority acquisition. Taking into account the possible redistribution of output between higher-cost and lower-cost production units controlled by the same firm, our model predicted that total industry output (and therefore the level of prices) would not be significantly affected – so that there was no justified competition concern. With the same model, it is also possible to estimate the total effect of any *existing* minority (cross)-shareholdings in an industry (relative to the case of ‘no links’). Although there was a web of minority shareholdings linking a number of competitors in the market, we estimated that the total effect on industry output was small. The same methods can be applied to different industry circumstances – e.g. where firms face capacity constraints and/or sell differentiated products.

Coordinated effects

A distinct question is to what extent holding a minority share (possibly reciprocally) in a competitor can facilitate tacit coordination.

In the spirit of the judgement of the EU Court of First Instance in *Airtours*, competition authorities cannot just point to the existence of such links and allege an increased convergence of interest, or an increased contact between the parties. Instead the authorities must make a careful and detailed analysis of the function of the link in terms of incentives and change in informational structure.

There are in principle two possibilities. The first is that the links may affect firms’ payoffs (as in the case of unilateral effects), and change the incentives to deviate from collusion and the incentives for punishment – potentially favouring a more collusive outcome. Secondly, minority shareholdings can provide information that can assist explicit or implicit ‘agreement’ on a coordinated strategy, and the monitoring of such ‘agreements’. We consider each in turn.

On pricing incentives, the conventional wisdom of competition authorities tends to be that minority shares (particularly cross-ownership stakes) make collusion more likely. However economics suggests that there are countervailing effects on firms’ incentives to ‘cheat’, and to ‘punish’ rivals who cheat. The net effect depends on the detailed facts – in particular on demand and cost conditions as well as on the extent and nature of the minority participation. Further, while a transaction that creates fairly symmetric cross-shareholdings between firms *may* facilitate collusion, a simple minority shareholding in a rival firm may not, if it increases the asymmetry in the parties’ respective interests. Indeed in some circumstances, an increase in the stake held by A in B could actually *reduce* the scope for collusion.

However, even in conventional merger cases, the

analysis of these effects is difficult and controversial. Given the extra complexity introduced by minority shareholdings, it is questionable whether robust conclusions can be reached in relation to incentives for coordination in the context of minority acquisitions.

Information exchanges

A more plausible concern is that minority shareholdings may facilitate collusion through information exchanges. The sustainability of all implicit agreements between competitors depends on the speed and accuracy with which ‘cheating’ can be detected. Similarly, successful coordination requires ‘agreement’ on the common strategy to be followed by the different market participants. Having a minority share in B might provide A with information on B’s plans, costs etc. which it would not otherwise have. Clearly, this will depend on issues such as board representation (which is why US agencies have often insisted that minority holdings be turned into passive financial investments).

But this argument can be pushed too far. Competition authorities need to investigate whether the shareholding will have a true impact on information flows. Returning to our last example, acquisition by A of an interest in B, which in turn has a JV with C, may not necessarily improve the information A and C have about one another: for example, is there a credible channel through which B’s ownership in the JV would allow A to have a better idea of C’s actions? or be able to detect cheating by C more accurately, e.g. by making it easier for the relevant managers to communicate between them? would the information be trustworthy? As in all collective dominance analysis, this issue has to be treated with care.

Conclusions

Given the emphasis the Commission is now placing on the need to consider transaction-specific efficiency gains, it will be important in any analysis of minority shareholdings to explain the business logic of the transaction: what does the company making the investment hope to achieve?

The intuition that minority shareholdings increase the potential for coordination is largely about information flows between competitors. These mechanisms can be looked at in detail, but it would be wrong to assume that there is a clear-cut effect on the effectiveness of punishments.

As to unilateral effects, while minority holdings can have anti-competitive effects, both the existence and the size of such effects depend crucially on the precise pattern of ownership as well as of control. Complexity increases as we move from simple ‘two-firm’ examples to more complicated structures. It may be possible to take these complexities into account by specifying a model tailored to the characteristics of the industry, and estimating the direction and magnitude of the effects that the new pattern of ownership will have on industry output and prices. But, as always, everything will depend on the facts of the industry and the transaction.

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