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The Impala judgement: law and economics singing from the same hymn sheet?

One of the most significant developments in EU competition law during 2006 was the Court of First Instance's annulment of the European Commission's clearance of the merger of Sony and BMG, after an appeal brought by Impala, an association of independent music producers. Can the reasoning underlying this judgement be reconciled with the economics literature on collective dominance?

The judgement of the Court of First Instance (CFI) was made primarily on the basis that the European Commission did not adequately prove that the merger would not create a position of collective dominance (or coordinated effects) in the market for sales of recorded music on CDs in a number of Member States.[1] As such, it adds to the body of cases decided on the basis of collective dominance which have been appealed to the CFI, notably *Gencor/Lonrho* and *Airtours*.[2] However, the Impala judgement stands out as the first case where the Commission's decision to approve a merger has been successfully appealed at the CFI, and the merger may therefore have to be unwound.

Underlying facts of the case

A number of the facts of the case (which were not in general in dispute during the appeal case) are important in understanding the underlying economic structure of the market.

- The industry is characterised by a lengthy vertical supply chain. The various stages include the signing of artists; recording and manufacture of CDs; and the marketing of artists. CDs are then distributed to retailers to sell to end-consumers.
- The largest five firms ('majors') hold market shares of between 72% and 93% in each of the main Member States (the UK, Germany, France, Italy and Spain). The remainder of the market is held by a range of smaller firms ('independents'), which are less vertically integrated than the majors, in many cases not possessing their own manufacture and distribution facilities.
- The market for recorded music is not a homogeneous good market, as different artists are only partially substitutable for one another. However, the Commission had found that the manner in which records are produced and marketed is the same regardless of artist or genre under consideration.[3]
- There was a substantial drop in demand in the years immediately prior to the merger. Sales fell by 13% in the EEA between 1999 and 2002, and a further 7% between 2002 and 2003.[4]
- Prices fell slightly in real terms between 2000 and 2003. In the UK, the drop in real prices was in the range of 5–10%, while reductions of 0–5% were observed in the other major European countries.[5]
- Average prices in each Member State were found to be broadly aligned across the majors. Each major promoted different albums at different prices, but had similar prices when averaged across all of their portfolios. Furthermore, each major had a portfolio spanning different artists and genres.

The Commission's decision

The Commission cleared the merger after analysing in detail whether it could result in the creation of a position of joint dominance in the recorded music market. The conditions (set out in *Airtours*, para 62) for a merger to give rise to concerns of collective dominance are as follows.

- Enough transparency for each member of the oligopoly to know sufficiently precisely and quickly how the other members are behaving in the market.
- The tacit collusion must be sustainable through time—that is, there must be sufficient methods of retaliation to discipline members of the oligopoly.
- The reactions of current and potential competitors, and of consumers, must not jeopardise the coordinated policy.

The Commission found that, although there were retaliatory measures available to the majors, which may be capable of disciplining one another (through excluding defectors from multi-label compilation albums, which make up 15–20% of the overall market), there was found to be insufficient transparency in the market to enable a coordinated equilibrium to be sustained. In particular, the presence of certain categories of discounts from list prices meant that monitoring could not be fully effective, and that coordination could therefore not be supported. In addition, the Commission found no evidence of retaliatory measures having been used in practice.

There were also a range of issues which were not analysed in detail by the Commission in its decision, but which may be of importance in considering the dynamics of the market. In particular, the Commission specifically did not consider whether different genres of music might represent distinct product markets, nor whether there might be scope for entry, or substantial expansion, by independents that might undermine any coordinated equilibrium. Furthermore, the Commission did not attempt to identify direct evidence of prices being in excess of competitive levels by undertaking financial analysis of the merging parties.

Grounds of annulment

One of the main grounds of annulment was that the CFI considered this to be a market in which joint dominance was likely to be a concern. Most significantly, in this regard, the CFI found that the market was in fact sufficiently transparent for effective monitoring by members of the oligopoly to take place. In particular, it pointed to the weekly hit charts which provided information on the sales of each of the bestselling albums; the presence of list prices in majors' catalogues; and the fact that average transaction prices were closely linked to list prices as discounts were low and showed little variation. Many retailers also claimed that the majors had some knowledge of the levels of each other's discounts.

With regard to transparency, however, the CFI went somewhat further. It stated that, even in the absence of *direct* evidence of transparency in the market, transparency could be inferred if there were evidence that prices were closely aligned and in excess of competitive levels, and if there were not an alternative reasonable explanation for these features. It went on to state that, in the case of *Sony/BMG*, the alignment of prices for six years, and their maintenance at a stable level despite a

The economics of coordinated effects

The idea of coordinated effects (also known as joint dominance or tacit collusion) is based on oligopoly theory. Most oligopoly models have the following 'one-shot' game as a starting point. Two oligopolists each have the choice to price 'high' or 'low'. Both firms pricing 'low' represents the competitive outcome (each earning a profit of 5); both pricing 'high' represents the collusive outcome. If Firm 1 prices 'high'—ie, it attempts to reach the collusive outcome (each earning 10), Firm 2 has a strong incentive to cheat on Firm 1 by pricing 'low' and taking all the profit (ie, 15, with Firm 1 ending up with zero). The same incentives to cheat apply to Firm 1. The only equilibrium in this one-period game is therefore for both firms to price 'low'—they cannot reach the collusive outcome (in the absence of explicit collusion, which would be illegal). However, if this game is repeated indefinitely—ie, firms compete with each other over a long period—the outcomes can be changed by firms signalling their behaviour to each other over time and creating certain reputations (eg, as a 'cheat' or as an accommodating rival).

	Firm 2	
Firm 1	High	Low
High price	10, 10	0, 15
Low price	15, 0	5, 5

how to collude? ⇒ repeated game

Two of the most significant models of coordination in such a multi-period setting are those of Green and Porter (1984) and Friedman (1971).[1]

Friedman's finding was that if firms are 'patient' enough, any ratio of one-period gains (from cheating) to long-term losses (from no longer being able to price 'high') is insufficient to break down coordination. However, the greater the ratio of the gains from defecting from coordination to the losses from never returning to coordination, the more patient firms have to be in order to coordinate.

In the Green and Porter model, there are demand shocks which are not fully observed. Firms only observe the market price for a (homogeneous) good and their own outputs—they cannot observe the sales volumes of other firms. Firms again try and organise themselves to set a price higher than the competitive level. The greater the output of each firm, the lower the expected price level. In this model, firms set a 'trigger price'—that is, when the price level falls below a certain level, firms engage in a price war. Although if this trigger price is set correctly, no firm will ever overproduce, it is still rational for each firm to enter into the price war: if its competitors do not do so, it becomes rational for a firm to overproduce. The outcome of the model is therefore that when demand is particularly low, the price falls below the trigger price, resulting in a price war for some period of time, after which coordination is resumed.

Note: [1] Green, E.J. and Porter, R.H. (1984), 'Noncooperative Collusion under Imperfect Price Information', *Econometrica*, **62**, 87–100; and Friedman, J.W. (1971), 'A Non-cooperative Equilibrium for Supergames', *Review of Economic Studies*, **28**, 1–12.

fall in demand—and at a price level which was seen as high—might constitute an indication that the market has been sufficiently transparent to allow tacit price coordination.[6]

The CFI also dismissed the fact that there had been no observed episodes of retaliatory conduct in the market—whether through price wars or exclusion of any of the majors from joint compilation albums—stating that:

> The mere existence of effective deterrent mechanisms is sufficient, in principle, since if the members of an oligopoly conform with the common policy, there is no need to resort to the exercise of a sanction. As the applicant observes, moreover, the most effective deterrent is that which has not been used.[7]

Overall, therefore, the CFI found that the Commission had made a 'manifest error of assessment' in determining that the market was not sufficiently transparent to support tacit coordination.[8]

Economic theory and *Impala*

In light of the economic theory on joint dominance and coordinated effects (see box above), what can be said about the judgement in *Impala*? A number of points are evident.

Friedman model

The temptation for firms to price below the collusive price is disciplined by the future losses that they would incur. However, the relative gains and losses of cheating versus punishment are the important factor. Consequently, if there is an expected permanent drop in demand, there will be high incentives to cheat on the collusive equilibrium, as the relative gains from defection will now be large compared with the long-term loss of profits. This would imply that price wars occur just before periods when large falls in demand are expected, as firms seek to exploit high demand while it lasts. In this regard, it is interesting that neither the CFI nor the Commission in its initial investigation appears to have sought to establish whether the fall in demand in the music market, which occurred just prior to the notification of the merger, had been predicted.[9] As to whether the fall in demand was permanent or temporary, the Commission's decision looks ahead to 2004–06, with the expectation by the merging parties that the falls in demand would continue during 2004, with demand stabilising in the near future. However, longer-term estimates do not appear to have been identified by the Commission.

Green and Porter model

This model does not appear to be a good fit for behaviour in the recorded music market, on the basis of both theoretical considerations and observed behaviour. On a theoretical basis, the market for recorded music is one in which all firms can observe the outputs of other firms via the album charts; while on the basis of observed behaviour there have been no price wars of the type predicted in this model. However, its relevance to the current case is that it provides an example of a model that predicts the type of price war in the event of a sudden fall in demand that the CFI seems to have expected in a competitive market, and yet is itself a model of coordination. It therefore provides a potential counterexample to any inference that a fall in demand should lead to sharp price reductions.

Product heterogeneity

The models considered above, and indeed most of the literature, assume that firms are producing homogeneous products, so that a single firm is able to capture the whole market. In the context of concentrations being assessed by the European Commission, the blocking of a merger on the grounds of coordinated effects in a differentiated goods market would be unprecedented, at least after appeal to the CFI.[10] The presence of differentiated goods is likely to blunt competition between firms somewhat and, in a market with barriers to entry, will mean that firms are able to price consistently in excess of competitive levels, even in the absence of coordination. This is particularly likely to be important in an intellectual-property-based industry such as recorded music, where firms are unable to produce precise replicas of each other's outputs.

Alternative outlets for competition

It is also notable, in the context of product heterogeneity, that in such markets there are often alternative forms of competition to pricing alone—for example, through advertising and R&D. In the case of the market for recorded music, it is promotional activity that is likely to be the crucial form of non-price competition. In a market where non-price competition is important, coordination will tend to be more difficult to sustain, as firms' efforts to gain market share may take the form of increases in advertising and promotional budgets rather than price cuts. This will decrease transparency, particularly if advertising expenditure is difficult to monitor (or at least more difficult to monitor than pricing policy). Promotional activity for albums—other than by providing discounts to retailers—is not considered in either the Commission's original decision or in the CFI's judgement in relation to coordinated effects.[11]

Role of charts in increasing transparency

The role of weekly hit charts in increasing transparency is stressed in both *Sony/BMG* and *Impala*. However, there is a potentially important positive feedback effect that does not appear to have been considered by either the Commission or the CFI. Many radio stations, which are a crucial outlet for promoting sales of singles and albums, tend to play records more often if they have been commercially successful and appeared in weekly hit

charts. Furthermore, the charts themselves effectively act as advertising for records, particularly those that may not have been heavily promoted by other means. These factors will strengthen incentives to reduce prices in order to gain market share, particularly for releases that do not perform well when initially released, or that are beginning to slip down the charts and lose the free advertising provided by a high chart position. The overall effect of the charts may therefore be less unambiguously anticompetitive than the Commission and CFI have suggested.

Effectiveness of deterrents

The CFI's statement that the most effective deterrent is one which never has to be used is interesting, but it runs into the problem of distinguishing a punishment that never has to be used because it is so effective from a potential punishment strategy that is never used because it is completely ineffective. This is particularly the case when a non-price deterrent mechanism is being used. In the case in question, exclusion from compilation joint ventures was considered an effective deterrent by the CFI. However, no firm evidence appears to have been cited as to the severity of the punishment which might be expected relative to the short-term gains from deviating from collusion. This is particularly the case for a merged Sony and BMG; the Commission found that combinations of two or three majors were necessary to ensure that compilation joint ventures were commercially successful, and the combined Sony/BMG would itself represent two of the majors which had previously participated in such compilations. It is notable that, were any one major to be excluded from such joint ventures, after a Sony/BMG merger there would be only one possible three-major combination after any exclusion, and only three two-major combinations. In fact, this punishment mechanism would seem to have the unusual feature that it may become *less* effective as the number of major players in the market decreases. As the majors grow, the need to have them in any compilation joint venture in order for the compilation to be commercially successful is likely to increase; or, if the success of compilations depends not on the number of majors, but the range of artists available, the scope to create successful in-house compilations would increase.

Conclusion

This article has attempted to reconcile the CFI's judgement in *Impala* with the economic theory on coordinated effects. Overall, it has found that there is no clear theory of consumer harm in either the CFI's ruling or as a standard to be tested against in the original Commission decision. Little consideration appears to have been given by either the Commission or the CFI regarding what the merger actually changes in the market. The debate appears to have been largely concerned with whether there is already joint dominance in the market. Furthermore, curiously, one of the models of tacit coordination (Green and Porter) predicts the type of behaviour that the CFI suggests would be necessary to disprove the existence of coordination.

Nonetheless, the presence of alternative explanations does not necessarily herald smooth sailing for any reconsideration of the merger by the Commission. In this market, each album is differentiated from every other album.[12] There is consequently some (limited) market power for each product. This means that there is not necessarily a single music market, suggesting that there may be a need to divest various artists in order to avoid horizontal overlaps between the merging parties—market shares at the level of the whole recorded music industry will not be particularly meaningful. Just because the CFI's judgement does not contain sufficient analysis to demonstrate that there is, or will be, collective dominance in the recorded music market, there is no guarantee that a more detailed economic analysis would not raise concerns on the basis of unilateral market power.

[1] Case T-464/04, *Independent Music Publishers and Labels Association v Commission of the European Communities*, 13 July 2006 (*Impala*). The Commission decision is Case no. COMP/M.3333, Sony/BMG, 19 July 2004 (*Sony/BMG*).
[2] Case T-102/96, *Gencor Limited v Commission of the European Communities*, 25 March 1999; and Case T-342/99, *Airtours plc v Commission of the European Communities*, 6 June 2002.
[3] *Sony/BMG*, para 110.
[4] *Impala*, para 259.
[5] *Sony/BMG*, paras 74, 81, 88, 95 and 102.
[6] *Impala*, para 253. This is despite the aforementioned evidence cited by the Commission of real price reductions of 0–10% in all main EU markets between 2000 and 2003, with reductions in excess of 5% in the UK. It is of note that the comment on high prices was originally made by the Commission in its decision in order to present arguments other than illegal file downloading for the fall in demand. 'The Commission's investigation also revealed other causes for the decline [in demand], namely the perceived high price level for CDs, the general economic downturn ...' (*Sony/BMG*, para 58). Neither the Commission nor the CFI undertook any form of economic or financial analysis to determine whether prices were in fact in excess of a competitive level, and, if so, to what extent.
[7] *Impala*, para 466.
[8] *Impala*, para 390.
[9] The Commission provides a list of potential reasons for the fall in demand in paras 57 and 58, but does not consider their predictability.
[10] The previous occasion on which a merger was blocked on the grounds of the potential for tacit coordination was *Gencor/Lonrho*, which was in the context of a market in which there was a perfectly substitutable product (platinum). Although the Airtours merger (involving packaged holidays, which are more differentiated) was initially prohibited, the Commission's decision in that case did not survive appeal to the CFI.
[11] Advertising is in fact mainly considered in the Commission's decision as a vertical issue—whether Bertelsmann's position as owner of RTL would enable it to benefit Sony/BMG artists relative to those of competitors. However, such vertical concerns were assessed as unfounded by the Commission (*Sony/BMG*, para 163).
[12] This is commonly expressed in terms of genres—for example, dance albums are more substitutable for each other than a dance album is for a country album.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

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