

CRA Competition Memo



The Competitive Effects of Headline Price Announcements

In the recent *DS Smith/Linpac* merger investigation¹, the UK Competition Commission explored the question of when headline price announcements by competitors are likely to be anticompetitive. In the end the Commission backed away from its initial view that such announcements in the industry under investigation were a ‘facilitating practice’ that promoted tacit collusion (coordinated effects). The case is important because headline price announcements are a practice in many industries.

The industry

The corrugated cardboard packaging industry has three stages of manufacture: the conversion of waste cardboard or wood pulp into corrugated cardboard materials (“CCM”) in a paper mill, the manufacture of corrugated sheet and finally the conversion of corrugated sheet to cases (or boxes) for the customer. The degree of integration of the sheet and case stages varies. Cases can be produced in a single company or sheet can be produced by one company and sold to another for conversion to cases.

Most sheet suppliers also produce cases and such integrated producers supply about 80 per cent of the market for cases. Non-integrated case producers (which account for the remaining 20 per cent of the market for cases) rely on sheet purchased from the integrated producers and from independent sheet producers (sheet producers that do not also produce cases). The core of the Commission’s concerns related to the third party sheet market.

The merger brought together DS Smith and Linpac Containers. DS Smith is an integrated manufacturer producing CCM, corrugated sheet and cases. Linpac Containers produced both corrugated sheet and cases but not CCM. Hence there was overlap in the corrugated sheet and case markets, but not in the CCM market. DS Smith’s share of third party sales of sheet increased from 15 to 20 per cent to around 25 per cent as a result of the merger. DS Smith also doubled its market share in the cases market to around 20 per cent as a result of the merger to become the largest case producer in Great Britain.

Headline price announcements

When a producer of corrugated sheet wishes to initiate a general price increase, it typically sends letters to its customers announcing the forthcoming (percentage) price increase. Headline price announcements provide customers with advance information that is potentially beneficial to

planning. Percentage price increase letters can be an efficient means of informing customers that prices will increase in an industry where there are hundreds of product specifications. Headline price announcements however also provide information to rivals. They make it clear, credibly and correctly, that the price increase is general rather than specific.

The Commission’s analysis of the merger suggested that the latter effect was the more important and viewed the practice of headline price announcements as an indication that the corrugated sheet industry might have been prone to (and perhaps already engaged in) tacit or explicit collusion.

Economic analysis

The issues raised by the Commission required dealing directly with questions that arise in many cases. Under what circumstances are headline price announcements anti-competitive? What is the trade off between the anti-competitive effects (if any) of the announcements and the benefits in terms of an efficient interaction between producers and customers?

Parallel price increases can occur in both competitive and collusive situations². In particular, we would expect to see parallel price increases in a competitive industry when the industry is subject to industry-wide cost or demand shocks, but we would also expect to find parallel behaviour in industries characterised by tacit or explicit collusion.

Corrugated sheet producers sell sheet to non-integrated case producers on an individual basis. There are no list or published prices. Customers are supplied on the basis of individually negotiated prices. Transaction prices vary significantly across customers and relative prices across customers vary over time.

The facts that prices are negotiated individually and vary across customers and that relative prices vary across customers over time are very important in considering the competitive effects of headline price announcements in the corrugated sheet industry. The relevant economic literature³ explains that for industries where prices are negotiated individually, general industry-wide information such as a headline price announcement is usually useless

¹ See Competition Commission, “A report on the completed acquisition of Linpac Containers Ltd by DS Smith Plc”, 21 October 2004, available at www.competition-commission.org.uk. Lexecon acted as economic advisers to DS Smith in front of both the Office of Fair Trading and the Competition Commission.

² See for instance Competition Commission – Merger References: Competition Commission Guidelines, June 2003.

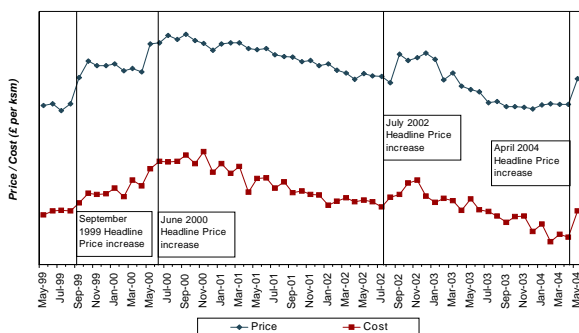
³ See for instance Kühn, Kai-Uwe and Xavier Vives, (1995) “*Information Exchanges among Firms and their Impact on Competition*”, Office for Official Publications of the European Community, Luxembourg, 1995, Kühn, Kai-Uwe, (2001) “*Fighting Collusion: Regulation of communication between firms*”, Economic Policy, April 2001 and Scheffman, David and Mary Coleman, “*Quantitative Analyses of Potential Competitive Effects from a Merger*”, June 2003.

for coordination at the customer level. It is generally useless because a headline price announcement only indicates the target percentage price increase and *reveals nothing* about individual customer transaction prices or volumes. The actual effect on transaction prices can vary significantly across customers, depending on the outcome of the individual negotiations. The economic literature explains that what is needed for coordination among suppliers in an industry in which prices are negotiated individually is information on the prices and purchases of specific customers. Headline price announcements lack the detail required to facilitate coordination in an industry with individually negotiated prices and prices that vary across customers and for individual customers over time.

There was other economic evidence that ran counter to the Commission's view that the corrugated sheet industry might have been prone to (or perhaps already engaged in) tacit or explicit collusion. Industries in which prices are negotiated individually are essentially bidding markets. Collusion in bidding markets frequently involves customer allocation as well as coordination of prices. In this case, there was no evidence of customer allocation. Both the Commission's customer survey and other information indicated a high rate of customer switching between suppliers. The Commission summarised the conclusions of its analysis on this issue as follows: "the questionnaire responses that we received showed that 47 per cent of customers switched main supplier in the last 3 years, 67 per cent started using a new supplier, and 40 per cent stopped using an existing supplier [during the same period]."⁴

In considering the impact of headline price announcements, the Commission examined price performance in the industry over a five-year period from May 1999 through May 2004. During this period there were four general price increases. Figure 1 below shows average transaction prices for sheet and costs for DS Smith⁵. The vertical lines correspond to price increase announcements. Sheet announcements were made only after CCM announcements, so there is an obvious cost based explanation that is consistent with competitive behaviour in the marketplace.⁶

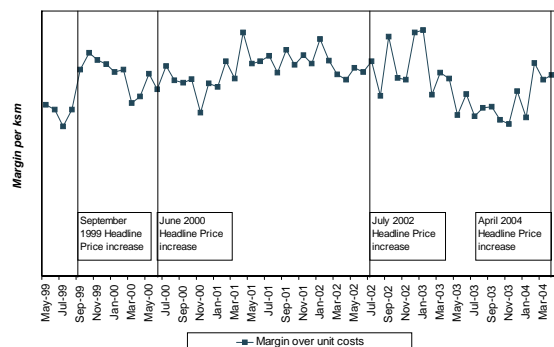
Figure 1
Unit prices and costs



⁴ Competition Commission Decision, paragraph 5.25
⁵ All prices are actual prices including transport cost and discounts.
⁶ Corrugated sheet production costs are dominated by the cost of the CCM inputs (accounting for approximately two-thirds of the cost).

The Commission was suggesting that price announcements alone were allowing the sheet producers to coordinate to raise margins. Figure 2 shows margins over time for DS Smith. There is no evidence that headline price increases led to higher margins and profits in periods *immediately after* price announcements. More specifically, between June 2000 and July 2002 there was a long period of declining input costs and prices. Margins at the end of this period were broadly similar to the margins after price announcements. If the announcement determines the margins we observe afterwards, what is the mechanism that maintains margins at a similar level when there have been declining costs and prices for many months?

Figure 2
Changes in margins over time



Summary

Headline price announcements are a practice in many industries. While there may be situations in which this practice can facilitate coordinated behaviour among suppliers, headline price announcements are unlikely to have anti-competitive effects when prices are negotiated individually and when there is empirical evidence that prices vary across customers and that relative prices across customers also vary over time. Under these circumstances – which were the circumstances of the corrugated sheet industry – headline price announcements do not provide suppliers with information that would allow them directly or indirectly to infer the prices being offered to specific customers. As a result, under these circumstances, headline price announcements have little value as a facilitating practice for tacit collusion.

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