OFFICE OF FAIR TRADING

Completed acquisition by DS Smith PLC of LINPAC Containers Limited

The OFT's decision on reference under section 22 given on 20 May 2004

PARTIES

DS Smith PLC (DS Smith) is an international firm involved in the paper and corrugated packaging, plastic packaging, office products wholesaling, and office products manufacturing sectors. In the year ended April 30th 2003, DS Smith had a worldwide turnover of £1,479 million, of which £873 million was achieved in the UK. The paper and corrugated packaging business accounted for £747 million of sales.

LINPAC Containers Limited (LINPAC Containers) is a division of the LINPAC Group involved primarily in the supply of corrugated paper packaging. In 2002 its turnover was approximately £163 million, with all turnover generated in the UK.

TRANSACTION

Under the acquisition agreement, DS Smith agreed to purchase all of the shares in LINPAC Containers for a consideration of £170 million. The acquisition agreement was conditional on shareholder approval at an EGM held on 22 March 2004, but not on regulatory clearance. The EGM voted in favour of the resolution to approve the proposed acquisition of LINPAC Containers Limited and the acquisition was completed on 22 March 2004. The enterprises ceased to be distinct on 22 March 2004 and the statutory deadline for a reference therefore expires on the 21 July 2004.

The OFT received a satisfactory submission on 3 March 2004, which created an administrative deadline for a decision of 30 April 2004, however, the deadline has not been met in this case.

JURISDICTION

As a result of this transaction, DS Smith and LINPAC Containers have ceased to be distinct. The UK turnover of LINPAC exceeds £70 million, so the turnover test in

section 23(1)(b) of the Enterprise Act 2002 (the Act) is satisfied. A relevant merger situation has been created.

RELEVANT MARKET

The parties overlap in the manufacture and sale of corrugated cardboard sheet, and in the manufacture and sale of cases constructed from corrugated cardboard sheet. DS Smith is vertically integrated backwards into the production at paper mills of the corrugated case materials (CCM) used in the production of corrugated cardboard sheet (see note 1). LINPAC Containers is only active in CCM as a purchaser.

Product market

The corrugated packaging industry is made up of the following:

- vertically integrated companies, producing the full range of products — CCM, corrugated cardboard sheet and corrugated cardboard cases, e.g. DS Smith;

- integrated companies that produce corrugated cardboard sheet and corrugated cardboard cases, e.g. LINPAC Containers;

- companies that produce just corrugated cardboard sheet, e.g. Western Corrugated; and

- companies that just produce corrugated cardboard cases.

The major groups all have a range of plants, which include integrated plants designed to produce cases from sheet produced internally, as well as specialised plants that operate at either the sheet — or case — producing level only. There appears to be some transfer of sheet between a group's own integrated plants and its non-integrated case plants. Operators of case-only plants also buy in sheet from third parties; purchasing their sheet on the open market from integrated as well as non-integrated suppliers of sheet. Different machinery is required to produce corrugated cardboard sheet and cases and the customers differ: sheet is sold to intermediate producers, whereas cases are sold to the end user of the box. Hence the constraints acting on sheet producers and case producers have been found to differ, in line with the conclusions of the EC (see note 2).

DS Smith argued that there was some constraint on corrugated cardboard cases from other forms of packaging, most notably Returnable Transit Packaging (RTP). However, case customers have universally argued that a move to RTP packaging would not be cost effective. This is in line with EC and Competition Commission findings (see note 3) that constraints from other forms of packaging are weak.

The parties have also submitted that there is substitutability on the supply-side between various grades of corrugated cardboard sheet, with the exception of heavy duty and microflute grades (see note 4). This is in line with EC findings. Third party enquiries typically indicated that it is not efficient to utilise the same machinery to generate the different standard grades, but the parties inform us that whilst such substitution is not optimal, there would be supply-side switching for a 5-10 per cent price increase. This is supported by evidence from DS Smith's 'Abbey' plant demonstrating that corrugated cardboard sheet of different grades has been run on the same machines during a given day in accordance with the outstanding orders.

There is also potential supply-side substitutability between producing sheet for in-house needs and merchant customers (even for integrated plants). All that is needed is to add packaging facilities to the integrated facility to allow for the sheet to be transported out of the plant at this earlier stage in the production process. However, merchant sales of large quantities of sheet from an integrated plant are unlikely to represent an efficient use of resources as this is likely to leave the case producing facility within the plant under-utilised. One integrated plant operator indicated that it would not be interested in merchant sheet sales since margins were low and it was more profitable to develop its own integrated operations. It argued that it would not consider entering the external sheet segment without a substantial price rise of around 30 per cent. There is insufficient evidence to suggest that it would be profitable to switch from integrated supply to merchant supply, and we do not have any evidence to suggest that anyone has done so other than on a small scale 'dipping' basis complementary to their integrated operations.

In view of this, a cautious approach has been adopted, and for the supply of corrugated cardboard sheet the impact of this transaction has been considered at the merchant supply level.

Geographic market

The parties submit that the relevant geographic frame of reference for the sale of both corrugated cardboard sheet and corrugated cardboard cases is the UK and third party responses have supported this. The maximum distance that producers consider it to be viable to transport sheet varies between 100-150 and 250 miles. Typically it was felt that cases could economically be transported over distances of up to 250 miles (further for specialist product). Overlaps between these various radii around different plants indicate the presence of overlapping catchment areas, and third parties have indicated that prices for both sheet and cases are fairly uniform across the UK. There are minimal exports and imports of sheet (4 per cent of GB supply) and cases. Service levels cannot be easily maintained in the import of sheet as it is necessary to bring only full trailer

loads across the Channel, which does not fit with the general strategy of daily deliveries.

The relevant frames of reference for the consideration of this merger therefore appear to be the merchant supply of corrugated cardboard sheet in the UK and, separately, the supply of corrugated cardboard cases in the UK.

HORIZONTAL ISSUES

Corrugated Cardboard Cases

The parties' combined share of supply in case production is lower than their share of sheet production, due to the existence of a number of case-only producers. The merged firm will become the largest producer of cases, with two other competitors of a similar size and a number of much smaller firms. The relatively fragmented nature of this industry is demonstrated by the HHI (see note 5) figures (post merger HHI 925, HHI increment 188), which indicate that even post-merger the sector will be 'unconcentrated'. There are no indications that only large firms can bid for major contracts, and the majority of case customers said that, whilst this sector is becoming more concentrated, at the current time it remains strongly competitive with a range of firms competing for contracts. One case customer, however, raised concerns about the transaction (discussed below). While the transaction does not appear to raise direct horizontal concerns in the supply of cases, any impact that the transaction may have in the sheet sector is likely to eventually feed through to the end user as a result of increased prices for sheet.

Corrugated Cardboard Sheet

The parties have submitted that the corrugated packaging sector generally is very competitive; characterised by multiple-sourcing, few contracts, frequent switching and falling prices.

Pricing data suggests that prices have fallen, but that there have also been some substantial increases at specific times over the past five years.

The parties will, as a result of the merger, have the highest share of production of corrugated cardboard sheet in the UK, as well as the second highest share of merchant supply to the open market. In merchant sheet, the merger results in a post-merger HHI of 2257, which indicates a highly concentrated market, with a significant increment of 256. The supply of sheet to the merchant market is much more concentrated than the production of all sheet, largely because many of the small integrated competitors either sell only a very limited quantity of sheet to third parties or do not sell sheet to third parties at all.

Co-ordinated Effects

Various third parties raised the possibility that the merger may lead to or strengthen co-ordinated effects within the sheet sector. This was said to be due to LINPAC Containers' unique position as a major supplier of sheet and cases not vertically integrated backwards into CCM production. Third parties argued that LINPAC Containers was a driving force for lower prices within the sheet and case sector due to its lack of upstream vertical integration into CCM and was preventing the fully integrated suppliers from exploiting their upstream market power. Hence, it was argued, the removal of LINPAC Containers may facilitate collusion in the sheet market. In order for co-ordinated effects to be successful or to become more likely, according to OFT Guidance, (see note 6) three conditions must be met or be created by the merger:

- the participants must have an ability to align their conduct on the market;
- the firms must have incentives to maintain coordinated behaviour; and
- the coordinated behaviour should be sustainable.

The ability to align conduct

In order for a co-ordinated effects analysis to be upheld, the parties need to be able to 'reach' terms of collusion, albeit tacitly.

As noted above, the supply of corrugated sheet is very concentrated. Aside from the HHI data quoted, the leading four merchant suppliers would, post merger, account for approximately 93 per cent of UK merchant sheet supply. Further, one third party has claimed that the inter-relationships between the various suppliers (including sales of CCM and sheet between the various suppliers) give these firms knowledge about each other's costs and businesses.

As to product homogeneity —which may make alignment or terms of co-ordination easier — there are many different combinations of grade and cut length of corrugated cardboard sheet, such that co-ordination on price levels for each specific combination is not feasible. However, it appears that any given combination of grade and cut length can be produced by all suppliers on a homogeneous basis, and the price increase letters issued by DS Smith and its competitors sought across the board increases of equal magnitude for all corrugated cardboard sheet products.

The question then is whether terms of co-ordination could be reached. Available evidence leads to consideration of both customer allocation and pricing as possible mechanisms for such co-ordinated effects. Pricing data over the past five years indicates that prices jump in big steps of up to 10 per cent (see note 7), and then drift down slowly over the coming months/ years before a new hike in prices. The correlation between the dates of implementation of price increases across the range of

suppliers would seem to suggest that there is some form of co-ordination or 'shadowing' occurring, but the subsequent drops in price may indicate that any outcome is not, at present, being successfully enforced. Since the merger was completed DS Smith has written to its customers announcing price increases, and all of the other major producers have written in similar terms (within a few days of DS Smith) asking for increases of very similar magnitudes: 14-15 per cent for sheet and 10-10.5 per cent for cases. Such a high degree of price parallelism is unusual. Although it may be consistent both with co-ordinated behaviour and highly competitive behaviour, it requires careful scrutiny to assess which is the case. The price of CCM represents around two thirds of the input costs for the production of sheet, and there is evidence of correlation between CCM and sheet price increases.

Transparency in actual prices is not apparent, with pricing generally being customer — (or even job) — specific. However, the suggested headline price increase letters from DS Smith and its major competitors may have had the effect of restricting customers' freedom to push back the increase through negotiation. [ ] (see note 8).

It could be argued that the loss of LINPAC Containers as a non-vertically integrated sheet producer has made it easier for the remaining parties to reach terms of collusion if LINPAC Container's strategy of sourcing CCM from abroad made a difference to the potential for co-ordinated behaviour. On the other hand, LINPAC Containers was not alone in sourcing its CCM on the open market; DS Smith itself sourced [ ] (see note 9) of its CCM requirement from third parties in 2002, and might therefore have had a similar interest in obtaining a 'good' price.

Incentives to maintain coordinated behaviour

If the price parallelism described above is a function of co-ordinated effects, or an attempt to coordinate, it may be that individual firms have had to date a strong incentive to 'cheat', either by lowering prices or by selling to other customers. Third parties have explained that the pricing pattern observed in the industry is due to the various producers offering better deals when they are quiet: in order to win custom from each other, the various sheet producers gradually drive down the prevailing industry price. Hence, while there may be some co-ordination in price setting, this is currently being made less effective by competition among the various producers.

As noted above, the sector does appear to be sufficiently transparent that suggested headline price increases are rapidly followed, although individual customers may negotiate some discount. The level of market transparency also appears to allow sheet producers to identify quickly price-cutting behaviour by rivals. Finally, there is a considerable amount of excess capacity in the market, which may enable firms to react to such behaviour.

DS Smith stated that all major competitors, including each of the parties, has over-capacity at the current time of on average 25 per cent, with an additional 25 per cent output possible if the factories were to switch to 24/7 shift patterns. This is in line with the Packaging Federation and Pira study (see note 10) which concludes that there is endemic over-capacity in the industry, with sub-economic capacity not leaving the market. A variety of sheet and case suppliers have indicated that there is excess capacity in the market, and that part of the rationale for this merger lies in the possibilities for plant closures and more efficient use of remaining production assets [ ] (see note 11). However, DS Smith has since argued that a lot of the spare capacity relates to the slack periods of the week when demand for sheet is low as well as the need to maintain some available capacity for any high margin orders coming in at short notice, and therefore that this capacity was not all 'spare'.

There may be strategic reasons behind the failure of this capacity to exit the market as it leaves the firms with a credible retaliation strategy, as well as possibly discouraging entry. The ability of suppliers to increase prices at the current time, when there is excess capacity in the marketplace, suggests that the presence of this excess capacity (and thus the threat of expansion) is not sufficient to act as a pricing constraint.

Sustainability

For the transaction to create or enhance a tendency to coordinated effects within a market there must be an ability to sustain the relevant behaviour. In the corrugated cardboard sheet market there is excess capacity, but the amount may be over stated, since it may relate to slack periods when demand is low and the spare capacity is effectively not exploitable. On the other hand there is both evidence of capacity exit and mothballing, as well as aggressive expansion by operators of integrated plants.

A key question in assessing the prospect of post-merger co-ordinated effects is the role of LINPAC Containers in sustaining or undermining any such co-ordination.

- On the one hand, a number of third parties saw LINPAC Containers as a driver of competition. Many third parties believed that LINPAC Containers had frustrated attempts by DS Smith to increase prices and perhaps had acted as a maverick. DS Smith had attempted to enforce a price increase in November 2003 for paper and therefore also sheet, which was not successful. LINPAC Containers and one other non- integrated supplier had argued that they did not need the price increase and were able to continue at their existing price levels. The pricing position of LINPAC Containers may therefore have been used as a negotiating tool by purchasers of sheet.

- On the other hand, there are plausible reasons for thinking that LINPAC Containers was not sufficiently important. Evidence provided by DS Smith

suggests that regardless of customer perception, LINPAC Containers did not regard itself as a maverick. Its prices had not fallen as quickly as DS Smith's; it did not believe that it was cost competitive [ ] (see note 12); DS Smith's main sales losses were to the other majors rather than LINPAC Containers and there was a non-integrated sheet producer with a greater merchant supply of sheet than LINPAC Containers.

Absent LINPAC Containers, we need to consider whether the remaining competitors could take LINPAC Containers' place. The main customers of corrugated cardboard sheet are the non vertically-integrated case producers who were generally concerned about the merger. Post-merger these customers will have the option of sourcing sheet from the fully vertically-integrated suppliers, one sheet supplier not integrated forwards into case production, or the smaller integrated sheet and case suppliers. A range of customers indicated that these smaller suppliers were not able to reliably supply the necessary volume of sheet to larger case producers. Case producers tend to have a sourcing policy using two, and sometimes three, suppliers. The loss of LINPAC Containers, therefore, was considered to represent the loss of an important alternative: a major supplier of sheet (and case) that was not vertically integrated into CCM. However, there are other potential mavericks within the market. One competitor in particular indicated that it continues to follow aggressive expansion plans,[ ] (see note 13), and imports of sheet may become profitable in the light of any UK sheet price rises. There have been some imports into the south of England by French and German producers.

Entry or expansion does not seem potentially likely to destabilise any post-merger co-ordination on sales of sheet. The parties submit that barriers to entry to the production of sheet and cases are low. Technology is established and freely available and machinery can be bought second-hand and remains serviceable for a long time. Third parties have supported the notion of low barriers to entry, as has the report produced by the Packaging Federation and Pira which argues that the industry 'suffers' from over-capacity due to low barriers to entry. It is necessary however to consider the likelihood of entry.

Competitors estimate that the cost of building a new plant for the production of sheet only would be in the region of £10 million, for cases only around £3 million, and for the construction of an integrated plant to produce both sheet and cases would be in the region of £30 million. Low returns in the industry indicate that it would take 10 to 15 years to recoup this investment and the existence of spare capacity may deter entry if potential entrants expect this to be used strategically.

There has been some recent entry to the industry, which appears generally to have taken the form of new entrants buying assets from UK firms no longer in business rather than through the development of new facilities. Expansion has been occurring by some aggressive competitors within the market, in spite of the apparent low returns and the tendency for the major suppliers to rationalise their facilities. However,

expansion appears to have focused on integrated plants which do not appear well placed to compete strongly for sales to the merchant market.

In the same way, buyer power itself seems insufficiently strong to act as an important destabilising force. Customers of sheet typically use more than one supplier, many using three, there are few long-term contracts and there is frequent switching. However, customers are not large relative to the industry, and any buyer power appears to result from playing one supplier off against another. This possibility evidently diminishes as the number of competitors falls, and some third parties have raised the concern that their buyer power will be diminished by this transaction. Overall, the market does not appear to be characterised by any strong degree of countervailing buyer power.

VERTICAL ISSUES

There is no horizontal overlap between DS Smith and LINPAC Containers in the supply of CCM. However, we have considered whether the increased vertical integration in the sector post-merger (as a result of LINPAC Containers' absorption into DS Smith) might facilitate coordination in the upstream CCM sector. This is because details of LINPAC Containers' pre-merger purchases of CCM will, post-merger, become available to DS Smith. This in itself will increase transparency in CCM supply. Furthermore, LINPAC Containers (as it did not produce CCM) is likely to have had a greater interest than its integrated competitors in acquiring the lowest priced CCM possible. Third parties argued that LINPAC Containers was a driving force for lower prices within the sheet and case sector due to its lack of vertical integration into CCM and was preventing the integrated suppliers exploiting their upstream market power. Post-merger, it may be the case that the loss of LINPAC Containers as an independent player would remove both of these constraints – allowing coordination at both sheet and CCM levels.

This possibility has to be reconciled with the knowledge that there are firms not vertically integrated into CCM that claim to be aggressively trying to increase market share for their integrated businesses. If they are able to access competitively priced CCM these alternative producers may be able to replicate any maverick purchasing behaviour on the part of LINPAC Containers.

THIRD PARTY VIEWS

A number of customers and competitors of the parties were contacted; including the non-vertically integrated case producers — which are customers of the parties in the upstream market for sheet but compete against them in the downstream market for cases — and smaller producers integrated into the production of both sheet and case. Major competitors vertically integrated into CCM production were unconcerned about the merger, but some of the sheet/case producers not vertically integrated into CCM

raised concerns. Independent case producers generally raised some concerns, anticipating that their competitive position would be worsened by the merger. All except one case customer were not concerned, arguing that there remain a significant number of producers. However one case customer made an unsolicited complaint, arguing that the merger would lead to a greater risk of collusion and higher prices.

ASSESSMENT

The analysis above considers whether the merger may lead to or strengthen co-ordinated effects within the corrugated cardboard sheet sector, specifically in merchant supply. In the light of this analysis OFT's main concerns are: the suggested headline price increase letters sent out by DS Smith and its major competitors, which may have the effect of closing down the freedom of customers to push back the increase, and the perception of customers for sheet that LINPAC Containers performed the role of a maverick in the market, whose removal has affected their ability to negotiate competitive prices.

DS Smith has produced counter arguments to the effect that since all sheet manufacturers will feel the effect of a CCM price increase at a similar time it is not wholly unexpected to see proposals for price increases being sent to customers for a similar amount at a similar time, that a lot of the spare capacity on the market relates to slack periods of the week and the need to maintain available capacity for short notice orders so that it is in fact not 'spare', and that internal evidence suggests that LINPAC Containers did not regard itself as a maverick.

While there may be some force in the counter arguments put forward by DS Smith, the OFT makes the following observations. This merger would lead to a significant increase in DS Smith's share of supply of sheet to the merchant sector. DS Smith and other suppliers recently sought across the board price increases (which appear unrelated to this merger) which, given the size and number of market players, may indicate the ability of firms to align their behaviour in the market; and some third parties have expressed significant concerns. The degree of market transparency appears to allow firms to quickly identify price-cutting behaviour by rivals, and excess capacity in the market may indicate that there is scope for retaliation against deviation from co-ordinated behaviour, so that there may be incentives to maintain co-ordinated behaviour. Finally, customer perceptions of LINPAC Containers as an important maverick able to influence the market may be inaccurate, but that perception, itself may have been sufficient to encourage previous and effective price negotiation. Absent LINPAC Containers, co-ordinated behaviour may be sustainable.

In the light of these factors the OFT believes that it may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

UNDERTAKINGS IN LIEU

Notwithstanding its view that a substantial lessening of competition has not or will not result from the merger, DS Smith has made an offer of undertakings in lieu. To remove any competition concerns the OFT may have, DS Smith is prepared to offer the following undertakings to address possible competition concerns: **[ ]** (see note 14)

[ ] (see note 15). The second remedy would not appear to be sufficient on its own to remedy the perceived loss of a maverick as a result of the merger.

The OFT's published guidance (see note 16) indicates that undertakings in lieu will only be accepted if they represent a clear cut remedy to a clearly identified competition concern. It is not clear that either of the remedies offered met these criteria and the remedies offered are therefore rejected.

DECISION

This merger will therefore **be referred** to the Competition Commission under section 22(1) of the Act.

NOTES

1. CCM is manufactured using both recovered/ recycled fibres and virgin fibres. DS Smith is also active in the upstream market for the recovery of fibres, but has no upstream interests in virgin fibres.

2. For example Case No IV/M.1418 – SCA Packaging/ Rexam 11/02/99

3. Linpac Group Limited and McKechnie Paxton Holdings Limited: A Report on the Merger – Cm 5496, May 2002

4. As LINPAC Containers had only a very small share of supply of heavy duty and microflute corrugated cardboard sheet and no third parties raised issues about these products, these products will not be considered further.

5. Herfindahl-Hirschmann Index

6. Mergers — Substantive assessment guidance — May 2003 (OFT 516).

7. Summer 2002

8. Details excised at the request of the parties for reason of commercial confidentiality

9. Details excised at the request of the parties for reason of commercial confidentiality

10. Packaging in the 3rd Millennium: Competitiveness Study for the Packaging Industry in the UK – PIRA and The Packaging Federation (02/03/04)

11. Details excised at the request of the parties for reason of commercial confidentiality

12. Details excised at the request of the parties for reason of commercial confidentiality

13. Details excised

14. Details excised at the request of the parties for reason of commercial confidentiality

15. Details excised at the request of the parties for reason of commercial confidentiality

16. Mergers — Substantive assessment guidance — May 2003 (OFT 516)