

Terms of reference and conduct of the inquiry

Terms of reference

1. On 18 February 2011 the OFT sent the following reference to the CC:
 1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 ('the Act') to make a reference to the Competition Commission ('the CC') in relation to an anticipated merger the Office of Fair Trading ('the OFT') believes that it is or may be the case that—
 - (a) arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a relevant merger situation in that:
 - (i) enterprises carried on by or under the control of Ratcliff Palfinger Limited will cease to be distinct from enterprises carried on by or under the control of Ross & Bonnyman Limited; and
 - (ii) as a result, the conditions specified in section 23(3) of the Act will prevail, or will prevail to a greater extent, with respect to the supply of spare parts for commercial vehicle tail lifts in the UK; and
 - (b) the creation of that situation may be expected to result in a substantial lessening of competition within any market or markets in the UK for goods or services, including the supply of column tail lifts for commercial vehicles.
 2. Therefore, in exercise of its duty under section 33(1) of the Act, the OFT hereby refers to the CC, for investigation and report within a period ending on 4 August 2011, on the following questions in accordance with section 36(1) of the Act—
 - (a) whether arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in a substantial lessening of competition within any market or markets in the UK for goods and services.
 3. In relation to the question whether a relevant merger situation has been created, the CC shall exclude from consideration one of the subsections (1) and (2) of section 23 of the Act if they find that the other is satisfied.

Amelia Fletcher

Chief Economist, Office of Fair Trading
18 February 2011

Conduct of inquiry

2. On 24 February 2011, we posted on our website an [invitation to express views](#) to us about the merger, and, on 22 March 2011, we posted an administrative timetable for our inquiry. A revised administrative timetable was published on 24 May 2011.

3. We also invited competitors, agents and customers to comment and fill out a questionnaire on the proposed merger. We gathered oral evidence through seven hearings with selected third parties. [Summaries of these hearings](#) are on our website.
4. On 1 April 2011, we published an [issues statement](#), which we posted on our website.
5. Members of the inquiry group, accompanied by staff, visited R&B's facilities in Forfar.
6. We received written evidence from Ratcliff and R&B, and we posted [a non-sensitive version of Ratcliff's main submission](#) on our website. We also held a hearing with Ratcliff.
7. In the course of our inquiry, we sent to Ratcliff and R&B some working papers for comment.
8. We published our [provisional findings](#) on 18 May 2011.
9. A non-confidential version of our final report has been placed on our website.
10. We would like to thank all those who have assisted in our inquiry.

Interim measures

11. We took steps to ensure the separate and independent operation of the Ratcliff and R&B businesses during the course of our inquiry. On 6 and 13 April 2011 respectively, the CC accepted the interim undertakings given by [Ratcliff](#) and [R&B](#) under section 80 of the Act to prevent pre-emptive action by the parties, which might prejudice the reference or impede the application of effective remedies at the end of our inquiry should they be required, which are on our website.

Supporting financial information

1. This appendix contains supporting information relating to the profitability of the products produced by R&B, and the consolidated results of the company itself.
2. The appendix is structured as follows:
 - (a) financial pressures on R&B;
 - (b) decline in sales of tail lifts;
 - (c) profit margins for tail lifts;
 - (d) company cost structure; and
 - (e) transaction value.

Financial pressures on R&B

3. This section examines the financial performance of R&B by reviewing its profitability, returns on capital, working capital, cash-flow generation, balance sheet, financial structure and credit ratios and its access to capital. The analysis indicates that R&B was facing financial pressures which were a factor in its decision to sell the spare parts business.
4. The analysis is based on audited accounts in the period 31 December 2006 to 2009, management accounts for the years ended 31 December 2009 and 2010 and discussions with R&B's management.

Profitability and return on capital

5. As shown in Table 1 below, in 2006 R&B generated sales of £9.4 million; a gross profit of 35 per cent; earnings before interest, tax, depreciation and amortization (EBITDA) margin of 8 per cent; and an operating profit (earnings before interest and tax—EBIT) of 5 per cent. Sales increased 14 per cent in 2007 and remained at this level with over £10.3 million of annual sales in 2008. However, gross margin reduced to around 32 per cent and EBIT margin was 2 per cent. There was a sharp decline of –24 per cent in sales to £7.8 million in 2009, which resulted in a break-even EBIT. This was followed by a further decline in sales of [X] per cent to £[X] in 2010 (unaudited), which resulted in an EBIT [X]. The return on capital employed (ROCE) has been relatively volatile, falling from 37 per cent in 2006 to 8 per cent in 2007, recovering to 20 per cent in 2008 before falling to just 3 per cent in 2009, and was [X] per cent, in 2010 (unaudited). After deducting interest expenses on R&B's debt, profit before tax was 3 per cent in 2006 but has been negative since then.¹ The [X] before tax [X] per cent in 2010 (unaudited).

¹Excluding one-off gain of £203,593 from sale of Shutter Doors business in December 2009.

TABLE 1 R&B consolidated income statement extracts

	£'000				
	12 months ended December				
	2006*	2007*	2008*	2009*	2010†
	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Unaudited</i>
Turnover	9,366	10,646	10,342	7,822	[X]
Gross profit	3,294	3,259	3,349	2,591	[X]
EBITDA	729	379	484	317	[X]
EBIT	426	78	195	34	[X]
Interest expense	222	265	277	137	[X]
Profit before tax (pre-exceptional)	204	-187	-82	-103	[X]
Net profit	137	-77	-72	-124	[X]
					<i>per cent</i>
<i>Profitability</i>					
Sales growth		14	-3	-24	[X]
Gross margin	35	31	32	33	[X]
EBITDA margin	8	4	5	4	[X]
EBIT margin	5	1	2	0	[X]
PBT margin	2	-2	-1	-1	[X]
ROCE	37	8	20	3	[X]

Source: R&B consolidated financial statements.

*Annual report.

†Management accounts.

Notes:

1. Gross profit is stated after charging: materials, subcontractors, direct labour, variable overhead, carriage.
2. EBIT is stated after charging depreciation and amortization of fixed assets and amortization of intangible assets.
3. ROCE is defined as EBIT / net assets.
4. 2008 operating profit includes income of £16,000 release of capital grant. 2009 operating profit includes £35,707 income from release of revenue grant.
5. 2009 profit excludes one-off gain of £203,593 from sale of Shutter Doors business.

6. In 2008 and 2009, operating profit benefited from the inclusion of two items of income relating to the release of grant income. In our judgement, grant income is an exceptional income and should be stripped out of the results to present a clearer view of underlying performance. R&B's profits are stated after the cost of management remuneration. [X] This is shown in Table 2.

TABLE 2 Adjustment to earnings for exceptional items and market rates

	£'000				
	12 months ended December				
	2006	2007	2008	2009	
	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	
Unadjusted EBIT	[X]	[X]	[X]	[X]	
Adjustment to management remuneration*	[X]	[X]	[X]	[X]	
Non-recurring grant income†	[X]	[X]	[X]	[X]	
Adjusted EBIT	[X]	[X]	[X]	[X]	
					<i>per cent</i>
Adjusted EBIT margin	[X]	[X]	[X]	[X]	
Adjusted PBT margin	[X]	[X]	[X]	[X]	
Adjusted return on capital employed	[X]	[X]	[X]	[X]	

Source: R&B, CC analysis of R&B data.

*CC analysis based on R&B data.

†R&B annual reports.

Working capital

7. As shown in Table 3, the working capital cycle shortened between 2006 and 2009, with a reduction in days of stock, debtors and trade creditors. In 2010, there was a

reversal of this trend, indicating that the working capital requirements of the business had increased relative to sales and cost of goods.

8. The current and quick ratios declined, with the quick ratio falling below 1 in 2009 and it remained at this level in 2010. A quick ratio below 1 is an indication of financial pressure on R&B.

TABLE 3 Working capital ratios

	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Unaudited
<i>Days</i>					
Stock days	63	65	57	54	[⊗]
Debtor days	83	71	84	64	[⊗]
Trade creditor days	85	72	74	61	[⊗]
<i>Ratio</i>					
Current ratio: current assets / current liabilities	1.9	1.7	1.6	1.4	[⊗]
Quick ratio: (current assets – stock) / current liabilities	1.1	0.9	1.0	0.8	[⊗]

Source: R&B consolidated financial statements.

Note: Stock and debtor days based on gross turnover, trade creditor days based on cost of goods sold. Calculated using a 365-day year.

Cash flow from operations

9. The working capital ratios above do not reveal the substantial unwinding of working capital that occurred alongside the reduction in sales and business activity between 2008 and 2010.
10. In general, the pre-tax operating cash flow of a company can be approximated by EBITDA minus capex. However, it is important to note that the statutory accounts are prepared using the accruals method. The difference between accounting estimates using cash and accruals is significant for R&B during this period due to large movements in working capital that were associated with the reduction in the scale of activities. Working capital fell by £0.1 million in both 2007 and 2008, and by a much larger amount, £0.8 million, in 2009. It [⊗] in 2010 (unaudited).
11. The analysis in Table 4 shows that EBITDA minus capex was around £0.2–£0.3 million per year between 2007 and 2009 (total £0.8 million), and the release of working capital was significant (total £1.0 million in the same three-year period), resulting in cumulative pre-tax operating cash flow of £1.8 million in 2007–2009.
12. Capital expenditure was maintained at around 2 per cent of sales in 2007–2008, but was reduced significantly in 2009–2010. Furthermore there were asset disposals of approximately £0.5 million in this period. The ratio of capex to depreciation has been volatile, but indicates low levels of reinvestment in fixed assets in 2009 and 2010.

TABLE 4 Pre-tax operating cash flow

	£'000				
	2006	2007	2008	2009	2010
	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Unaudited</i>
EBITDA	729	391	483	317	[X]
Capital expenditure	49	162	163	76	[X]
EBITDA – capex	680	229	321	242	[X]
Reduction / (increase) in working capital	N/A	113	123	791	[X]
Pre-tax operating cash flow	N/A	330	444	1,033	[X]
					<i>per cent</i>
Capex / depreciation and amortization	25	84	85	37	[X]
Capex / sales	0.5	1.5	1.6	1.0	[X]
Memo: net disposals (£'000)				[X]	[X]

Source: R&B.

Notes:

1. Depreciation and amortization excludes charges against intangible assets.
2. Net disposals: Total proceeds of £469,000 in 2009.
3. [X].
4. N/A = not available.

Balance sheet

13. Table 5 shows an extract from the consolidated balance sheet. This shows that the tangible assets declined relatively modestly during the period 2006 to 2010. The total assets, which includes fixed assets, stock and debtors, increased to £5.2 million in 2007–2008, and fell to £3.5 million in 2009–2010. Net assets [X] from £1.2 million in 2006 to £[X] in 2010 (unaudited) [X]. Net debt [X] from £3.7 million in 2006 to £[X] in 2010 (unaudited).

TABLE 5 Consolidated balance sheet extracts

	£'000				
	<i>12 months ended</i>				
	2006	2007	2008	2009	2010
	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Unaudited</i>
Net book value of tangible assets	1,124	1,140	1,159	1,105	[X]
Total assets	4,870	5,113	5,154	3,640	[X]
Net assets	1,163	1,037	964	1,044	[X]
Net debt	3,684	3,719	3,543	2,439	[X]

Source: R&B.

Note: Net debt includes director's loans.

Capital structure and bank debt

14. The preceding sections focused mainly on the operational performance of R&B, largely irrespective of its capital structure. It has historically relied on bank debt (term loans) and finance leases as the main sources of external finance. This section examines the capital structure and financial risk.
15. Table 6 sets out a series of standard credit ratios for R&B. Early indications of high financial risk were apparent in 2007. For instance, the level of net debt peaked at £3.7 million in 2007, and was already over three times net assets and almost ten

times EBITDA at this time. These ratios indicate that the level of borrowings was high relative to the size and earnings of R&B. [⌘] However, asset cover² was in the region of 1.4 to 1.5 between 2007 and 2010 (unaudited), suggesting that R&B had sufficient assets to repay debt in the event of liquidation. The ratios of net debt:net assets and net debt:shareholders' funds was brought down from over 3 to [⌘] in 2009 and 2010.

16. The interest payments on the debt increased to almost £0.3 million per year in 2007, whereas EBIT reduced significantly from £0.4 million in 2006 to less than £0.1 million in 2007, resulting in the interest coverage (EBIT / interest) ratio falling to 0.3. [⌘] Interest coverage ratios below 1, or indeed negative, signal high financial risk.

TABLE 6 R&B credit ratios

	12 months ended December				
	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Unaudited
<i>Credit ratios</i>					
Interest cover I (EBITDA / interest)	3.3	1.4	1.7	2.3	[⌘]
Interest cover II (EBIT / interest)	1.9	0.3	0.7	0.2	[⌘]
Interest cover III (pre-tax operating cash flow / interest)	N/A	1.2	1.6	7.6	[⌘]
Net debt / EBITDA	5.1	9.8	7.3	7.7	[⌘]
Asset cover (total assets / total borrowings)	1.3	1.4	1.5	1.5	[⌘]
Net debt / net book value of tangible assets	3.3	3.3	3.1	2.2	[⌘]
Net debt excluding director's loans / (shareholders' funds + director's loans)	3.2	3.4	3.5	2.3	[⌘]
<i>Memo</i>					
Net debt (£'000)	3,684	3,719	3,543	2,439	[⌘]
Interest expense (£'000)	222	265	277	137	[⌘]

Source: CC analysis.

Notes:

1. EBIT has not been adjusted for one-off items or management remuneration.
2. Pre-tax operating cash flow defined as EBITDA – capex + change in working capital. Stated before asset disposals.
3. Total assets = Net book value of tangible assets + stock + debtors.
4. Net debt includes director's loan.
5. N/A = not available.

17. We understand that R&B paid dividends of £50,000 in both 2006 and 2007, but that it has not paid a dividend subsequently. In light of the high level of debt, it is not in a position to distribute profits. It generated a net loss (after interest and tax) in each year since 2007.
18. In the 2009 statutory accounts, the auditors inserted an 'emphasis of matter—going concern', but did not qualify the accounts. We understand that R&B has changed its year end to 30 June, and will report for an 18-month accounting period. The 2010 audit has been postponed until September 2011.
19. In summary, the financial ratios indicate that capital structure included unsustainably high levels of debt.

Access to capital

20. It should be noted that the capital structure of a company is usually a result of decisions that the shareholders have made based on a variety of factors, and high

²Asset cover = fixed assets + stock + debtors / net debt.

levels of borrowing are not necessarily an indication of financial distress. Shareholders' access to capital is an important consideration.

21. R&B told us that it had been under pressure from its bank to repay debt since 2008, that its banking relationship deteriorated in 2010 and that [REDACTED].
22. The deterioration in the banking relationship appears evident from correspondence and meeting notes. For example:
 - (a) [REDACTED] Overall borrowing had reduced by £[REDACTED] between mid-2008 and June 2010 [REDACTED];
 - (b) July 2010: bank declined request to increase borrowing by [REDACTED];
 - (c) [REDACTED];
 - (d) [REDACTED];
 - (e) [REDACTED];
 - (f) January 2010: call between the OFT and Lloyds TSB [REDACTED]. Company was currently servicing its debt obligations.
23. R&B's net debt at the transaction date, 5 November 2010, was just over £[REDACTED], comprising £[REDACTED] of term loans and overdrafts, £[REDACTED] of invoice financing, £[REDACTED] of finance leases and £[REDACTED] of director's loans.
24. At the end of 2010 R&B's net debt was £[REDACTED], including £[REDACTED] of bank term loans, overdrafts and invoice financing, £[REDACTED] of finance leases and £[REDACTED] of director's loans.
25. The interest rate on the term loan is 3.5 per cent over the Bank of England rate and on the overdraft it is 4.0 per cent over Bank of England. The invoice financing facility is currently £[REDACTED], of which £[REDACTED] is in use currently.
26. In the absence of new bank debt, R&B sought alternative sources of capital in 2010, and raised £[REDACTED]:
 - (a) Sale of the Roberts Street property in order to reduce the term loan by £[REDACTED].
 - (b) Director's loan of £[REDACTED] to R&B on [REDACTED].
 - (c) Sale of stock to Ratcliff for £[REDACTED] on [REDACTED].
27. On 9 February 2011, the Bank of Scotland agreed to renew R&B's overdraft facility. [REDACTED].³
28. Alan Honig told us that the bank required R&B to reduce its borrowing and that the proceeds of the sale of the spare parts business to Ratcliff would be used for this purpose. [REDACTED]
29. [REDACTED]
30. Alan Honig told us that the Honig family had invested £[REDACTED] in the business, [REDACTED].

³[REDACTED]

31. In summary, R&B continues to face pressure to repay its bank debt, and the overdraft facilities have been agreed on the presumption of the sale of the spare parts business, to repay the term loans that were due for repayment in [X] and reduce the overdraft. R&B appears to have fully used the likely sources of capital from directors and shareholders, and requires all other business assets for use in the business. Given the unwillingness of the bank to provide lending facilities until this transaction completes, R&B has very limited access to capital, unless new equity is invested in the company.

The decline in sales of tail lifts

32. This section examines the trends in the sale of tail lifts relative to the competitors and to commercial vehicle registrations.
33. In order to examine the sources of the decline in sales over the period, we have constructed a sales bridge to explain the main changes in annual sales. This is set out in Table 7 below. This shows that the major drop in the sales of commercial vehicle tail lifts, –£2.6 million, occurred in 2009, with a further moderate reduction in 2010. In 2009, the drop in sales of commercial vehicle tail lifts (finished goods and spare parts) was partly offset by growth of £0.5 million in the sales of other products. The sale of the shutter doors business represented the largest element of the decline in sales in 2010, –£0.6 million.

TABLE 7 Sales bridge for company sales by product

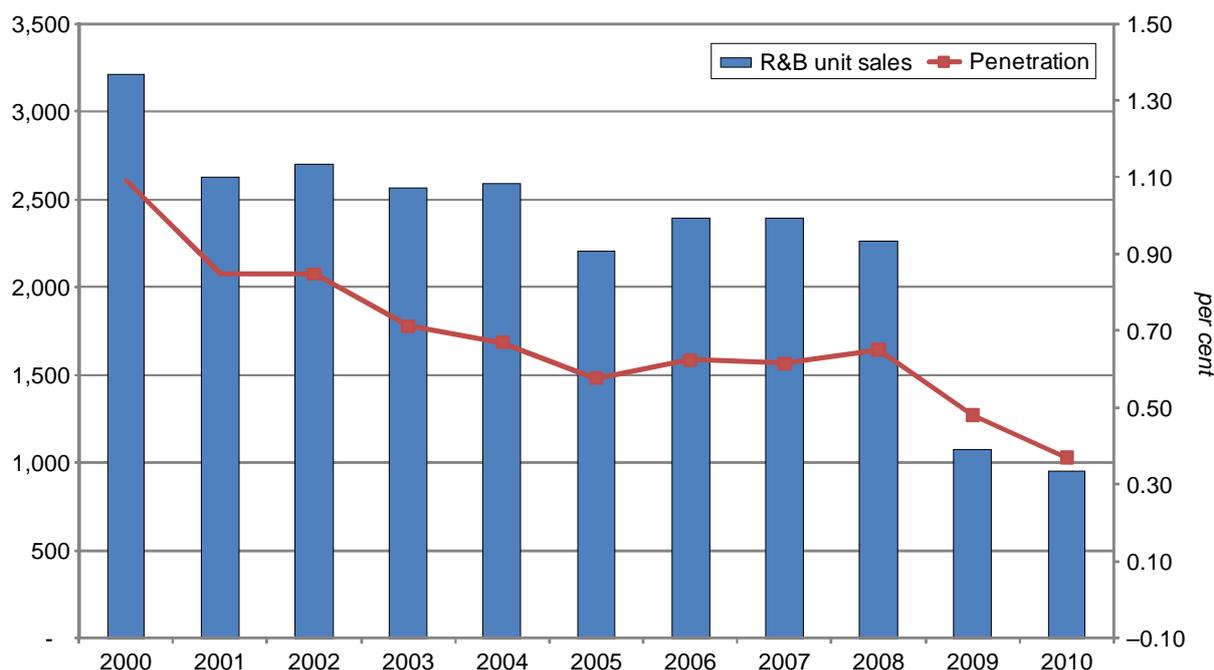
	£'000			
	<i>12 months ended December</i>			
	<i>2007 Actual</i>	<i>2008 Actual</i>	<i>2009 Actual</i>	<i>2010 Unaudited</i>
Total sales of all products	10,646	10,342	7,822	[X]
Annual change in sales		–304	–2,520	[X]
<i>Of which</i>				
Change in sale of finished goods		305	–2,608	[X]
Change in sale of spare parts		–70	–444	[X]
Exit of shutter doors business				[X]
Balance (change in other activities)		–539	532	[X]

Source: CC analysis based on R&B data.

34. To examine the long-term trend in sales, we reviewed R&B's sales volumes for commercial vehicle tail lifts since 2000. We compared this with statistics for new commercial vehicle registrations over the same period. This is shown in Figure 1, which indicates a modest reduction in volumes between 2001 and 2008, followed by a sharp fall in 2009–2010. The indication of market penetration, which is based on new vehicle registrations, has declined by about half, from 1 per cent to less than 0.5 per cent in the period since 2000.

FIGURE 1

Sales units relative to commercial vehicle registrations



Source: R&B unit sales data from Ratcliff merger filing and Society of Motor Manufacturers and Traders.
 Note: Penetration calculated as R&B units sales of commercial vehicle tail lifts divided by total number of commercial vehicle registrations (LCVs up to 3.5, rigids, artics, excluding bus and coach). January 2011 based on monthly data.

35. In 2009 there was a substantial fall in vehicle registrations due to the financial crisis/recession, with a resulting fall in the need for new tail lifts. Table 8 shows that all suppliers experienced a decline in sales between 2008 and 2009. However, R&B's decline was at a higher rate and continued into 2010.

TABLE 8 Sales of all commercial tail lifts—units

	2008	2009	2010	% change 2008–2009	% change 2009–2010
R&B	[X]	[X]	[X]	[X]	[X]
Ratcliff	[X]	[X]	[X]	[X]	[X]
Dhollandia	[X]	[X]	[X]	[X]	[X]
Del	[X]	[X]	[X]	[X]	[X]

Source: CC analysis based on data from the parties.

36. The market data corroborates the proposition that R&B had not achieved growth, and appeared to be losing ground relative to the broader market.

Profit margins for tail lifts

37. This section assesses the financial performance of the products manufactured and supplied by R&B, based on two metrics: mark-up on materials costs and product margin.

38. The proposed transaction involves the acquisition of the spare parts business for commercial vehicle tail lifts. This represents approximately 82 per cent of the total sales of spare parts for all R&B products. The remaining spare parts will remain with

R&B because they relate to other R&B products (eg ambulance lifts, yard lifts, mezzanine lifts). The sales of spare parts in 2008 and 2009 is summarized in Table 9 below. Note that the financial analysis in this section is primarily based on the total sales of spare parts, because historical data is not available for the subset of spare parts relevant to the transaction.

TABLE 9 Spare parts by type

	12 months ended	
	2008	2009
R&B total spare parts (£)	[REDACTED]	[REDACTED]
Ratcliff acquired spare parts (£)	[REDACTED]	[REDACTED]
% of total R&B spare parts	[REDACTED]	[REDACTED]

Source: Ratcliff.

39. R&B monitors the performance of individual products by producing a schedule containing the monthly sales volume and values and the cost of materials, labour and overheads. From this it is possible to derive a comparison of the relative profitability of R&B's products based on two methods:

- (a) mark-up on materials; and
- (b) product margin (after partial recovery of overheads).

40. We examined each in turn.

Mark-up on materials cost for individual products

41. First, we examined the mark-up on materials costs achieved on individual products.

42. Alan Honig told us that an important indicator of whether to accept a particular order was the cost of materials relative to the value of the product. We examined the mark-up on materials costs for the products supplied by R&B to compare across product types.

43. Figure 2 below shows the mark-up on materials costs for R&B's products in 2009 and 2010. This shows that in 2009 and 2010, tail lift finished goods achieved the lowest mark-up on materials costs.

44. The chart also shows that spare parts achieved the highest margin. For completeness we also included a 'blended' mark-up on finished goods and spare parts in the chart by combining the revenues and costs for the relevant activities (see derivation in paragraph 50 below).

FIGURE 2

Mark-up on materials costs

[REDACTED]

Source: Company management accounts.

Note: [REDACTED].

Product margin

45. Secondly, we examined an estimate of the product margin achieved on individual products.
46. R&B recovers overheads by calculating a recovery rate that is derived from costs and production hours.⁴ The recovery rate is applied to the individual products based on production hours, to derive a product margin. As explained below (see paragraph 49), a material proportion of R&B's costs are not absorbed via this hourly rate. Given this limitation, the product margin provides a means of comparison between R&B's various products, but it cannot be used to compare margins with those of any other company.
47. Figure 3 below shows R&B's product margin by product in 2009 and 2010. This indicates that the product margin on tail lift products was lower than for other products.
48. The chart also includes an estimate of the blended product margin (including finished tail lifts and spare parts), based on the methodology set out in paragraph 50, below.

FIGURE 3

Product margin

[REDACTED]

Source: Company management accounts.

Note: [REDACTED].

49. There are a number of features of the overhead absorption policy that affect the calculation of product margin:
 - (a) The overhead recovery assumption excludes depreciation and amortization. This amounted to £0.3 million in 2009 (or 4 per cent of turnover).
 - (b) The hourly rate for overhead absorption is calculated one year in arrears. This means that there is a possibility of over- or under-recovery of overheads due to changes in overheads from one year to the next. Based on the 2010 management accounts, we estimate that there may be an over-recovery of overheads in 2010 due to the reduction in costs since 2009. An over-recovery of overheads will understate the profitability of products.
 - (c) The methodology relies on judgement to decide whether costs should be absorbed as production overheads or treated as administrative costs that are not absorbed. Based on the 2010 estimates, it appears that approximately [REDACTED] per cent of cash expenses (ie excluding depreciation and amortization) of R&B are absorbed via the recovery rate, and in the region of £[REDACTED] of company costs are not absorbed via the recovery rate.⁵
 - (d) No overheads are allocated to the spare parts business. This appears to be because there is no mechanism to record or estimate production hours for spare

⁴For example, for 2009 the hourly recovery rate was £[REDACTED].

⁵Based on hourly recovery rate of £[REDACTED], derived from £[REDACTED] direct labour plus £[REDACTED] overheads, totalling £[REDACTED] and [REDACTED] hours of production. The total cash operating costs excluding depreciation and amortization in 2009 were £[REDACTED], which means that £[REDACTED] of R&B's operating costs were not absorbed by products.

parts, so the recovery rate cannot be applied. (See derivation of blended margins in paragraph 50 below.)

Blended margins

50. In order to examine the tail lift manufacturing and spare parts business as a single profit centre, we have estimated the contribution of commercial vehicle tail lifts finished goods and spare parts on a blended basis using the information supplied to us. This is set out in Table 10 below, and the results are included in Figures 1 and 2 above. The calculations are an aggregation of the following products:

- (a) column lifts;
- (b) retractables; and
- (c) tuckaways.

51. This shows gross margin of [%] per cent in 2010 and a product margin of [%] per cent (based rolling forward the overhead absorption policy to 2010).⁶

TABLE 10 Estimated blended product margin: finished tail lift goods and spare parts

	12 months ended				£
	2007	2008	2009	2010	
Blended sales	[%]	[%]	[%]	[%]	
Blended cost of materials	[%]	[%]	[%]	[%]	
Labour and overheads	[%]	[%]	[%]	[%]	
Blended product margin	[%]	[%]	[%]	[%]	
					<i>per cent</i>
<i>Based on total spare parts sales</i>					
Mark-up on materials	[%]	[%]	[%]	[%]	
Product margin	[%]	[%]	[%]	[%]	
<i>Based on tail lift spare parts sales only</i>					
Mark-up on materials	[%]	[%]	[%]	[%]	
Product margin	[%]	[%]	[%]	[%]	

Source: CC analysis based on R&B data.

Note: N/A = not available.

Company cost structure

52. This section examines the operating costs in 2009 and 2010 and compares these costs with total sales for the year.
53. Table 11 sets out a breakdown of R&B's cost structure in 2009 and 2010. The company achieved some cost reductions between 2009 and 2010, but the sales fell faster than costs, resulting in lower margins.
54. We have not made a detailed assessment of the extent to which costs are fixed or variable. However, based on the management account cost headings, it would appear reasonable to expect the following:

⁶We have adjusted for the one-year time lag by using 2010 costs in place of 2009 costs. This requires one additional assumption, ie that [%] per cent of staff costs were absorbed via the recovery rate in 2010, consistent with the 2009 policy.

- (a) Variable costs include: carriage, materials, subcontractor, direct labour, variable overheads.
- (b) Semi-variable costs include: indirect staff costs, fixed production overhead, warranty.
- (c) Fixed costs include: staff costs, sales and admin, depreciation, amortization.

55. Based on the information available, it is evident that the total of 'staff costs' and 'sales and admin' expenses increased by 8 per cent between 2008 and 2009 ([£]). This may suggest that R&B has some scope to reduce its cost base, but in our view this is not likely to be significant because to remain viable the company needs to maintain effective capabilities in product design, sales, marketing, finance, and other administrative functions to support the manufacturing activities.

TABLE 11 Change in operating costs, 2009–2010

	12 months ended December				2009 % total costs	2010 % total costs
	2009 Mgt ac £'000	2010 Mgt ac £'000	Change £	Change %		
Turnover	[£]	[£]	[£]	[£]		
Carriage	[£]	[£]	[£]	[£]	[£]	[£]
Materials	[£]	[£]	[£]	[£]	[£]	[£]
Subcontractor	[£]	[£]	[£]	[£]	[£]	[£]
Direct labour	[£]	[£]	[£]	[£]	[£]	[£]
Variable overhead	[£]	[£]	[£]	[£]	[£]	[£]
Indirect staff costs	[£]	[£]	[£]	[£]	[£]	[£]
Fixed production overhead	[£]	[£]	[£]	[£]	[£]	[£]
Warranty	[£]	[£]	[£]	[£]	[£]	[£]
Staff costs	[£]	[£]	[£]	[£]	[£]	[£]
Sales and admin	[£]	[£]	[£]	[£]	[£]	[£]
Depreciation	[£]	[£]	[£]	[£]	[£]	[£]
Amortization	[£]	[£]	[£]	[£]	[£]	[£]
Total costs	[£]	[£]	[£]	[£]	100	100

Source: Management accounts.

Note: In 2009, the management accounts records higher operating costs (ie revenue – EBIT) than the statutory accounts. The difference is £22,553. This difference is not material and it has no implications for the analysis set out in this table.

Transaction value

56. This section compares the consideration paid for the spare parts business with Ratcliff's discounted cash flow (DCF) valuation of the business, to identify whether or not Ratcliff offered a higher price than it believed the spare parts business to be worth—in other words, whether it paid a strategic premium paid for the spare parts business.

The Ratcliff valuation methodology

57. Ratcliff performed a valuation of the R&B spare parts business using a DCF model. This is set out in the due diligence report. A valuation range of £[£] million was derived from four point estimates, based on the following assumptions:

- (a) two business plan scenarios: realistic and pessimistic, each covering a ten-year forecast period; and
- (b) two discount rates within the range 5 to 20 per cent: [£] and [£] per cent.

58. The Ratcliff valuation calculated the net present value (NPV) of the expected cash flow from the spare parts business between 2011 and 2020 (ten years), and it calculated a separate value for a 'purchase price tax amortization benefit'.⁷ The sum of these two components of the valuation was described as the 'fair market value'. Ratcliff told us that it was comfortable that the tax benefit would be realized. On this basis, we concluded that the fair market value was the appropriate valuation of the business.
59. We noted that the Ratcliff due diligence report summarized the valuation range in euros, but it appears to us that all of the analysis and calculation was performed in £ (signified by the column headings used on each page of the analysis), and that the reference to euros is incorrect. We have therefore presented all analysis in this paper in £, and we have not made any currency conversions.⁸
60. As shown in Table 12, the pessimistic case shows a valuation range of £[redacted] and the realistic case shows a valuation range of £[redacted] for the spare parts business on a stand-alone basis.

TABLE 12 Ratcliff DCF valuation

	<i>Business plan scenario</i>			
	<i>Pessimistic case</i>		<i>Realistic case</i>	
Discount rate (%)	[redacted]	[redacted]	[redacted]	[redacted]
Fair market value (£'000)*	[redacted]	[redacted]	[redacted]	[redacted]

Source: Ratcliff due diligence report, September 2010.

*Fair market value includes tax amortization benefit.

61. The total consideration paid to R&B comprised three parts: initial consideration for the business (£[redacted]); purchase of stock (£[redacted]); and an earn-out⁹ based payment (£[redacted]) determined by the excess of spare parts sales over historic levels in the three years after the transaction.
62. The estimated earn-out payment under the realistic case is £[redacted], resulting in a total cash payment to R&B of £[redacted]. The consideration is set out in Table 13 below.

⁷[redacted]

⁸In September 2010, the €/\$ exchange rate was approximately 1.2. If in fact Palfinger considered the fair value to be in euros, then the sterling value would be some 17 per cent less, which would reduce any strategic premium accordingly.

⁹Earn-out model: 36 months after completion. Monthly earn-out on the additional spare parts sold (basis: historic average 36 months' spare parts sales, second, third year: historic 12 months' sales): [redacted] per cent of first £[redacted] additional spare parts sales; [redacted] per cent on all annual sales exceeding £[redacted].

TABLE 13 Components of the total consideration

	£'000	
	<i>Business plan scenario</i>	
	<i>Pessimistic case</i>	<i>Realistic case</i>
Initial consideration for business	[X]	[X]
Purchase of stock	[X]	[X]
<i>Earn-out payments</i>		
2011	[X]	[X]
2012	[X]	[X]
2013	[X]	[X]
Subtotal	[X]	[X]
Total consideration	[X]	[X]

Source: Ratcliff due diligence report.

63. Table 14 compares the valuation to the consideration for the business. The results indicate that the consideration was higher than the fair market value when the higher ([X] per cent) discount rate is applied to both the realistic and pessimistic cases. If a lower discount rate of [X] per cent is applied, the consideration is less than the fair market value.
64. Using the higher discount rate of [X] per cent, the excess of the consideration over the fair market value, £[X] under the realistic case, and £[X] under the pessimistic, ie [X] per cent in excess of the total consideration. However, care should be taken when interpreting the results of the DCF valuation because the analysis is highly sensitive to the discount rate assumed. For example, a change of 1 per cent in the discount rate affects the valuation by £[X] (ie by more than the difference calculated in for the realistic case using the higher discount rate in Table 14 below).¹⁰

TABLE 14 Difference between total consideration and fair market value

	<i>Business plan scenario</i>			
	<i>Pessimistic case</i>		<i>Realistic case</i>	
Discount rate (%)	[X]	[X]	[X]	[X]
Total consideration (£'000)	[X]	[X]	[X]	[X]
Fair market value (£'000)	[X]	[X]	[X]	[X]
Difference	[X]	[X]	[X]	[X]

Source: Derived from Tables 12 and 13 above.

65. An alternative approach is to use the total cash consideration as the input, and instead to calculate the internal rate of return (IRR) of the cash flows. The IRR is a cross-check on the cost of capital and valuation. Given the mathematical relationship between NPV and IRR, if the IRR and the cost of capital are the same, then the NPV will be the same. As a result of this equivalence, if the IRR is below the cost of capital this may indicate that the valuation is too high. The IRR calculation is highly sensitive to the assumptions contained in the business plan and the timing of cash flows. The calculations indicate that the IRR would be between 10 and 20 per cent in both cases (see Table 15 below). Overall, the resulting range did not appear to be an unrealistically low return requirement for the spare parts business on a stand-alone basis.

¹⁰Assumption: change of discount rate from 10 to 11 per cent, based on realistic case, including tax benefit.

TABLE 15 **IRR calculation**

	<i>Business plan scenario</i>			
	<i>Pessimistic case</i>		<i>Realistic case</i>	
Cash flow convention	Year-end	Mid-year	Year-end	Mid-year
IRR* (%)	[§]	[§]	[§]	[§]

Source: CC calculation using the Ratcliff due diligence report.

*IRR includes tax amortization benefit.

Glossary

The Act	Enterprise Act 2002.
Agents	Companies used by the tail lift manufacturers to sell tail lifts and the spare parts.
Anteo UK	Anteo UK Ltd, a manufacturer of tail lifts and their spare parts.
APA	Asset Purchase Agreement—for the transfer of the R&B spare parts business.
Catalyst	The Catalyst Group Europe Ltd, financial advisers appointed by R&B to find a buyer for its business in 2008.
CC	Competition Commission.
Chassis-mounted lift	Chassis-mounted lifts operate only on a hydraulic or pneumatic system, which works by a set of rams attached to the chassis of the vehicle. There are multiple versions of the chassis-mounted lift including cantilever, tuckaway and retractable lifts.
Column lift	Column lifts are often mechanical, although they can be hydraulic or pneumatic. They run on 'tracks' fitted to the rear of the vehicle. From the tracks, a folding platform extends, which can be taken up and down.
DCF	Discounted cash flow.
Del Equipment	Del Equipment (UK) Limited, a manufacturer of tail lifts and their spare parts.
Dhollandia	Dhollandia UK Ltd, a manufacturer of tail lifts and their spare parts.
EBIT	Earnings before interest and tax.
EBITDA	Earnings before interest, tax, depreciation and amortization.
IRR	Internal rate of return.
OFT	Office of Fair Trading.
Palfinger AG	Ratcliff's parent company.
PBT	Profit before tax.
R&B	Ross and Bonnyman Holdings Ltd.
Ratcliff	Ratcliff Palfinger Limited.
ROCE	Return on capital employed.
SLC	Substantial lessening of competition.

Tail lift

A mechanical device permanently fitted to the back of van or lorry, which is designed to facilitate the materials handling of goods from ground level or a loading dock to the level of the load bed of the vehicle, or vice versa. The majority of tail lifts are hydraulic or pneumatic in operation, although they can be mechanical, and are controlled by an operator using an electric relay switch. There are two types, **column lifts** and **chassis-mounted lifts**.

Zepro

Zepro UK Ltd, a manufacturer of **tail lifts** and their spare parts.