

# 8 Profitability

## Contents

	<i>Page</i>
Introduction .....	145
The supermarket industry .....	146
Profitability and performance .....	146
Tesco .....	146
Sainsbury .....	148
Asda .....	149
Safeway .....	150
Morrison .....	151
The major parties .....	152
Somersetfield .....	153
Other main parties .....	155
Overall profitability of the grocery industry .....	157
UK comparisons .....	157
Overseas comparisons .....	158
Gross margins .....	158
Operating margins .....	159
Return on capital employed .....	161
Internal rate of return .....	162
Weighted average cost of capital .....	164
The effect of land prices on store profitability .....	164
Trade credit .....	165
Store profitability .....	165
Profitability of stores facing limited competition .....	166
Profitability of stores under differential pricing arrangements .....	169
Tesco .....	169
Sainsbury .....	171
Product group profitability .....	171
Gross margins .....	173
Contribution .....	173
Other measures of product profitability .....	173
Asda's Direct Product Profitability .....	174
Sainsbury's Activity Based Profitability .....	176
Common features .....	176
Petrol sales .....	177
Profitability of branded vs own-label products .....	178

## Introduction

8.1. In his press notice accompanying the reference, the DGFT referred to his conclusion that the level of profitability in the industry required further investigation by the CC (see Appendix 3.1). The OFT had examined the profits of the four largest multiples using a range of measures.

8.2. We too have examined the results of the major parties using a number of different measures. This chapter starts with a brief analysis of the overall financial performance of the major parties including all their activities. The analysis includes the profitability of these companies in terms of gross

margins and operating profit and their respective rates of growth in recent years. We then compare the profitability of 11 UK supermarket groups with that of UK industry as a whole, and with the results of overseas supermarket companies. The chapter also describes the IRR achieved by the major parties in their UK grocery business in recent years and compares these returns on capital employed with their average cost of capital. The chapter then covers certain aspects of the financing of supermarkets and of store and product group profitability. It concludes with a comparison of the profitability of selected own-label and comparable branded products.

## The supermarket industry

8.3. The industry has experienced considerable growth in recent years. The percentage growth from 1993 to 2000 in the sales, operating profits and fixed assets of the five major parties identified in Chapter 5 are set out in Table 8.1. The data relate to the total group results in each case. The RPI increased by around 20 per cent over the period.

TABLE 8.1 Comparative growth indicators, 1993 to 2000

	<i>per cent</i>				
	<i>Tesco</i>	<i>Sainsbury</i>	<i>Asda*</i>	<i>Safeway</i>	<i>Morrison</i>
Sales (excl VAT)	147.9	68.0	77.7	47.4	125.5
Operating profit	108.9	-11.9	123.0	-18.1	117.9
Fixed assets	118.1	52.1	77.0	96.1	141.5
RPI†	20.7	21.0	17.5*	21.0	20.8

Source: CC from company data.

\*Asda figures are for the period 1993 to 1999. Following the acquisition of Wal-Mart, results will in future be consolidated with the rest of Wal-Mart figures.

†RPI is calculated to the financial year end of each company.

8.4. Of these five groups, Tesco achieved the greatest sales growth, Asda reported the highest increase in operating profit and Morrison the highest growth in fixed assets. Morrison and Safeway grew their fixed assets faster than their sales.

8.5. We set out in the following paragraphs more detailed summaries of the published results of the major parties followed by information relating to Somerfield which, whilst not being a major party, is a major buyer, together with financial information on the other main parties. The published results are not all prepared on consistent bases. For example, depreciation policies and the definition of gross margin differ in several cases. We asked the parties to calculate gross margins on a consistent basis (the results are shown in Table 8.19) and we adjusted the results for depreciation differences in making our international comparisons.

8.6. We found that average gross margins and ROCE had been broadly maintained over the period 1993 to 1999. ROCEs had increased from 1993 to 1996 but then declined gradually over the period to 1999. Other measures of profitability (IRRs and operating margins) also showed declining trends up to 1999. Results for 2000 indicated that profitability was declining throughout the industry—in some cases, markedly so.

## Profitability and performance

### *Tesco*

8.7. Table 8.2 summarizes the key financial indicators of Tesco for the eight years to 26 February 2000. The data relate to the Tesco plc group.

TABLE 8.2 Financial statement indicators

£ million

	Years ended February*							
	1993	1994	1995	1996	1997	1998†	1999	2000
Turnover (excl vat)	7,582	8,600	10,101	12,094	13,887	16,452	17,158	18,796
Gross margin	710	722	803	954	1,041	1,235	1,308	1,431
Operating profit	496	521	617	724	774	912	960	1,030
Profit before tax	525	435	551	675	750	760	842	933
Fixed assets—tangible	3,732	4,241	5,092	5,338	5,687	6,176	6,960	7,902
Net operating assets	3,130	3,519	4,279	4,354	4,615	4,898	5,655	6,362
Capital employed	3,412	3,736	4,127	4,214	4,521	4,725	5,624	6,382

Source: Published financial information.

\*Tesco's accounting reference date is the last Saturday in February. For the year ended 1999/2000, the accounting date was 26 February 2000. 1998 was a 53-week period.

†In 1998 Tesco purchased the Irish stores of ABF plc.

8.8. Table 8.3 summarizes a number of financial ratios in respect of Tesco for the eight years to 26 February 2000. Tesco depreciates land premiums, that is the difference between the cost of a store site and its alternative use value. The premium is determined when the store is opened and is written off over 25 years, the expected useful life of a store. Tesco is the only one of the major parties that identifies and depreciates land premiums in this way although some other groups have chosen different methods of depreciating land costs. Tesco told us that it first calculated land premiums and began to depreciate them in 1993/94 to comply with a new accounting standard, which required the difference between the cost of an asset and its estimated residual value to be depreciated. In 1998/99 the annual provision was £[ 8 ] million, about [ 0.5 ] per cent of the turnover of Tesco's UK food retailing business. The total cost of land premiums was stated to be £[ 8 ] billion out of a total cost of land of £[ 20 ] billion, and about one-third of Tesco sites had such premiums.

TABLE 8.3 Financial ratios

per cent

	Years ended February							
	1993	1994	1995	1996	1997	1998	1999	2000
Returns on sales:								
Gross margin*	9.4	8.4	7.9	7.9	7.5	7.5	7.6	7.6
Operating margin	6.5	6.1	6.1	6.0	5.6	5.5	5.6	5.5
Growth in turnover		13.4	17.5	19.7	14.8	18.5	4.3	9.6
Growth in operating profit		-1.5	18.4	17.3	6.9	17.8	5.3	7.3
Growth in capital employed		9.4	10.5	2.1	7.3	4.5	19.0	13.5
Return on average capital employed†	14.5	16.9	18.0	17.4	17.7	19.7	18.6	17.2
RONOA‡	15.6	14.8	14.4	16.6	16.8	18.6	17.0	16.6

Source: Published financial information and CC analysis.

\*Tesco includes certain costs in arriving at gross margin that other groups treat as operating costs. Gross margins for the major parties on a consistent basis are shown in Table 8.19.

†Calculated as operating profit over the average of current and prior year capital employed.

‡Calculated as operating profit over the average of current and prior year net operating assets.

8.9. Analysis of the income statement indicators highlights the following:

- Turnover increased strongly from 1993 to 1998 by an average of 16.8 per cent annually, but growth in turnover for 1998 to 2000 has slowed with increases of 4.3 per cent and 9.6 per cent for 1999 and 2000 respectively.
- Gross and operating margins as reported fell by about one-seventh between 1993 and 1996, but have remained stable since 1997 at 7.5 per cent and 5.5 per cent respectively.

8.10. Analysis of the balance sheet indicators highlights the following:

- (a) The company repaid a substantial portion of its long-term debt in 1996 and 1997 thus resulting in a reduced growth in capital employed for those years. During the period 1998 to 2000 the company employed further long-term debt resulting in increased growth of capital employed for the latter period.
- (b) The ROCE was fairly stable between 1994 and 1997, averaging 17.5 per cent, improved to a peak of 19.7 per cent in 1998 but fell back to 18.6 per cent in 1999 and 17.2 per cent in 2000. Tesco told us that it calculated ROCE on a different basis that included all net debt (we included only long-term debt). On Tesco's basis its ROCE for 1993 to 2000 was 15.7, 15.7, 16.1, 16.9, 17.1, 18.7, 17.2 and 16.0 per cent respectively. Tesco explained that the peak in 1998 reflected the acquisition in that year of the Irish stores of ABF plc. Goodwill of £434 million on the acquisition had been written off to reserves, thereby reducing capital employed and resulting in a ROCE higher than would have been the case had the goodwill not been written off.

8.11. More detailed financial information relating to Tesco for 1993 to 1999 is set out in Appendix 8.1.

## Sainsbury

8.12. Table 8.4 summarizes the key financial indicators of Sainsbury for the eight years to 1 April 2000.

TABLE 8.4 Financial statement indicators

	Years ended April*								£ million
	1993	1994	1995	1996	1997	1998	1999	2000	
Turnover (excl VAT)	9,686	10,583	11,357	12,627	13,395	14,500	16,433	16,271	
Gross margin	997	1,009	1,116	1,106	1,032	1,211	1,338	1,070	
Operating profit	727	740	838	804	708	810	902	528	
Profit before tax	733	369	809	755	615	691	888	509	
Fixed assets—tangible	4,315	4,494	4,745	5,275	5,659	5,986	6,272	6,563	
Net operating assets	3,529	3,687	3,896	4,585	4,856	4,982	5,187	5,462	
Capital employed	3,730	3,621	3,934	4,106	4,376	5,046	5,451	5,736	

Source: Published financial information

\*Sainsbury's accounting periods are 52 weeks each. As a result, the financial year becomes earlier and earlier each year. To correct this, Sainsbury periodically adopts an accounting period of 56 weeks. The most recent 56-week period was the year 1998/99.

8.13. Table 8.5 summarizes a number of financial ratios in respect of Sainsbury for the eight years to 1 April 2000.

TABLE 8.5 Financial ratios

	<i>Years ended April</i>								<i>per cent</i>
	1993	1994	1995	1996	1997	1998	1999	2000	
Returns on sales:									
Gross margin*	10.3	9.5	9.8	8.8	7.7	8.4	8.1	6.6	
Operating margin	7.5	7.0	7.4	6.4	5.3	5.6	5.5	3.3	
Growth in turnover†	11.4	9.3	7.3	11.2	6.1	8.2	13.3	-1.0	
Growth in operating profit	17.8	1.8	13.2	-4.1	-11.9	14.4	11.2	-41.4	
Growth in capital employed	16.2	-2.9	8.6	4.4	6.6	15.3	8.0	5.2	
Return on average capital employed‡	21.0	20.1	22.2	20.0	16.7	17.2	17.0	9.4	
RONOA§	20.6	20.1	21.5	17.5	14.6	16.3	17.7	9.9	

Source: Published financial information and CC analysis.

\*Sainsbury includes certain costs in arriving at gross margin that other groups treat as operating costs. Gross margins for the major parties on a consistent basis are shown in Table 8.19.

†Calculated as operating profit over the average of current and prior year capital employed.

‡The figures for 1999 are distorted for the fact that the 1999 year was a 56-week period and other years are 52-week periods. The ratios based on pro-rated 52-week results are as follows:

	1999	2000
Growth in turnover	5.2	6.6
Growth in operating profit	3.3-1.8	-
	36.9	
<i>Return on average capital employed</i>		
Operating profit	15.8	
<i>RONOA</i>		
Operating profit	16.5	

§Calculated as operating profit over the average of current and prior year net operating assets.

8.14. Analysis of the income statement indicators highlights the following:

- (a) Growth of turnover has ranged between 11.4 and 5.2 per cent over the period, including annual growth of 5.2 and 6.6 per cent in 1999 and 2000 respectively when adjusted for the 56-week year in 1999.
- (b) Gross and operating margins declined significantly in the period 1993 to 1997. During 1996 and 1997 operating profit showed negative growth despite the growth in turnover and gross margin. 1998 saw some pick-up in margins, though this was not fully sustained in 1999, and both gross and operating margins fell substantially in the year to 2000.

8.15. Analysis of the balance sheet indicators highlights the fact that the ROCE ratio has declined from a level of approximately 21 per cent for the period prior to 1996 to a level of just above 16 per cent for 1997 to 1999, and to only 9.4 per cent in 2000.

8.16. More detailed financial information relating to Sainsbury for 1993 to 1999 is set out in Appendix 8.2.

## *Asda*

8.17. Table 8.6 summarizes the financial accounts of Asda for the seven years to 1 May 1999.

TABLE 8.6 Financial statement indicators

	Years ended May*							£ million
	1993	1994	1995	1996	1997	1998	1999	
Turnover (excl VAT)	4,614	4,882	5,286	6,042	6,953	7,619	8,198	
Gross margin	1,172	1,167	1,214	1,348	1,551	1,708	1,893	
Operating profit	190	196	252	316	373	413	423	
Profit before taxation	187	-127	258	311	407	404	410	
Fixed assets—tangible	1,883	1,782	1,810	2,319	2,655	2,895	3,325	
Net operating assets	1,552	1,385	1,355	1,749	1,933	2,134	2,505	
Capital employed	1,893	1,698	1,763	2,124	2,355	2,514	2,889	

Source: Published financial information.

\*Asda's account reference date has been 30 April with accounts being prepared to the nearest Saturday to that date. The most recently completed financial year ended on 1 May 1999. Following the acquisition by Wal-Mart, Asda results will in future be consolidated with those of Wal-Mart. The accounting reference date for future periods has been changed to 31 December.

8.18. Table 8.7 summarizes a number of financial ratios in respect of Asda for the seven years to 1 May 1999.

TABLE 8.7 Financial ratios

	Years ended May							per cent
	1993	1994	1995	1996	1997	1998	1999	
Returns on sales:								
Gross margin	25.4	23.9	23.0	22.3	22.3	22.4	23.1	
Operating margin	4.1	4.0	4.8	5.2	5.4	5.4	5.3	
Growth in turnover		5.8	8.3	14.3	15.1	9.6	7.6	
Growth in operating profit		3.2	28.6	25.4	18.0	10.7	2.4	
Growth in capital employed		-10.3	3.8	20.5	10.9	6.8	14.9	
Return on average capital employed*	10.0	10.9	14.6	16.3	16.7	17.0	15.7	
Return on net operating assets†	12.2	13.3	18.4	20.4	20.3	20.3	18.2	

Source: Published financial information and CC analysis.

\*Calculated as operating profit over the average of current and prior year capital employed.

†Calculated as operating profit over the average of current and prior year net operating assets.

8.19. Analysis of the income statement indicators highlights the following:

- (a) Growth in turnover accelerated from a low of 5.8 per cent in 1994 to a peak of 15.1 per cent in 1997 but has fallen back since then to 7.6 per cent in 1999.
- (b) Gross and operating profits increased somewhat faster than the growth in turnover until 1998, generating a steady rise in operating profit margin but with a slight deterioration in 1999.

8.20. Analysis of the balance sheet indicators highlights the fact that since 1996 the ROCE ratio has remained relatively stable at about 16 per cent, after much weaker performance prior to that date.

8.21. More detailed financial information relating to Asda for 1993 to 1999 is set out in Appendix 8.3.

## Safeway

8.22. Table 8.8 summarizes the key financial indicators of Safeway for the eight years to 1 April 2000.

TABLE 8.8 Financial statement indicators

	Years ended April*								£ million
	1993	1994	1995	1996	1997	1998	1999	2000	
Turnover (excl VAT)	5,196	5,608	5,815	6,069	6,589	6,979	7,510	7,659	
Gross margin	1,207	1,271	1,318	1,343	1,444	1,504	1,616	1,614	
Operating profit	387	365	383	417	461	410	422	317	
Profit before tax	417	362	176	429	419	340	341	236	
Fixed assets—tangible	1,936	2,314	2,492	2,757	3,036	3,341	3,601	3,798	
Net operating assets	1,548	1,865	2,051	2,237	2,575	2,818	3,070	3,265	
Capital employed	2,024	2,149	2,070	2,294	2,454	2,844	2,946	3,070	

Source: Published financial information.

\*Safeway's accounting reference date is the Saturday closest to the end of March each year. The most recently completed financial year ended on 1 April 2000.

8.23. Table 8.9 summarizes a number of financial ratios in respect of Safeway for the eight years to 1 April 2000.

TABLE 8.9 Financial ratios

	Years ended April								per cent
	1993	1994	1995	1996	1997	1998	1999	2000	
Returns on sales:									
Gross margin	23.2	22.7	22.7	22.1	21.9	21.6	21.5	21.1	
Operating margin	7.4	6.5	6.6	6.9	7.0	5.9	5.6	4.1	
Growth in turnover	9.9	7.9	3.7	4.4	8.6	5.9	7.6	2.0	
Growth in operating profit	18.3	-5.7	4.9	8.9	10.6	-11.1	2.7	-24.6	
Growth in capital employed	21.9	8.9	-3.7	10.9	7.0	15.9	3.6	4.2	
Return on average capital employed*	21.5	17.7	18.2	19.1	19.4	15.5	14.6	10.5	
Return on average net operating assets†	28.6	21.4	19.6	19.4	19.2	15.2	14.3	10.0	

Source: Published financial information and CC analysis.

\*Calculated as operating profit over the average of current and prior year capital employed.

†Calculated as operating profit over the average of current and prior year net operating assets.

8.24. Analysis of the income statement highlights the following:

- (a) Turnover growth has generally been rather modest, particularly in 1995 and 1996. A degree of recovery in 1997 was not fully maintained in 1998/99. Growth in turnover for 2000 was the lowest for the period with an increase of only 2 per cent.
- (b) Operating profit margins remained relatively high at around 6.8 per cent and even showed some growth until 1997, but have fallen back significantly since then to 5.6 per cent in 1999 and 4.1 per cent in 2000. Gross margins showed a slight but persistent fall throughout the whole period from 23.2 per cent in 1993 to 21.5 per cent in 1999.

8.25. Analysis of the balance sheet indicators highlights the fact that the ROCE ratios remained relatively stable at about 18 to 19 per cent for the period to 1997, but declined significantly in 1998 and 1999 to around 15 per cent and to 10.5 per cent in 2000.

8.26. More detailed financial information relating to Safeway for 1993 to 1999 is set out in Appendix 8.4.

## Morrison

8.27. Table 8.10 summarizes the key financial indicators of Morrison for the eight years to 30 January 2000.

TABLE 8.10 Financial statement indicators

	£ million							
	Years ended January*							
	1993	1994	1995	1996	1997	1998	1999	2000
Turnover (excl VAT)	1,317	1,538	1,779	2,099	2,176	2,297	2,534	2,970
Gross margin	281	335	393	458	497	555	629	748
Operating profit	84	101	114	126	134	148	170	183
Profit before tax	84	98	116	127	136	152	175	189
Fixed assets—tangible	509	603	711	815	895	1,012	1,129	1,229
Net operating assets	433	509	611	683	732	844	891	963
Capital employed	438	496	500	649	718	797	894	923

Source: Published financial information.

\*Morrison's account reference date has been 31 January. However, the accounting period of the group ends on the Sunday falling between 29 January and 4 February each year. The most recently completed financial year ended on 30 January 2000.

8.28. Table 8.11 summarizes a number of financial ratios in respect of Morrison for the eight years to 30 January 2000.

TABLE 8.11 Financial ratios

	per cent							
	Years ended January							
	1993	1994	1995	1996	1997	1998	1999	2000
Returns on sales:								
Gross margin	21.4	21.8	22.1	21.8	22.8	24.2	24.8	25.2
Operating margin	6.4	6.6	6.4	6.0	6.1	6.4	6.7	6.2
Growth in turnover		16.8	15.7	18.0	3.6	5.6	10.3	17.2
Growth in operating profit		20.1	13.2	10.4	6.0	10.2	15.4	7.7
Growth in capital employed		13.2	0.8	29.8	10.6	11.0	12.2	3.2
Return on average capital employed*	19.2	21.6	22.9	22.0	19.6	19.5	20.1	20.1
RONOA†	19.4	21.4	20.4	19.5	18.9	18.7	19.6	19.7

Source: Published financial information and CC analysis.

\*Calculated as operating profit over the average of current and prior year capital employed.

†Calculated as operating profit over the average of current and prior year net operating assets.

8.29. Analysis of the income statement indicators highlights the following:

- (a) Turnover increased strongly up to 1996, but fell to 3.6 per cent in 1997. Since then it has picked up to 5.6 per cent in 1998, 10.3 per cent in 1999 and 17.2 per cent in 2000.
- (b) Gross and operating profit margins have remained relatively stable over the period, but with a rising trend in gross margins emerging from 1997.

8.30. Analysis of the balance sheet indicators highlights the fact that the ROCE ratio has remained strong throughout the period though slightly lower for 1997 and 1998 (with an average of 19.6 per cent) compared with the period 1994 to 1996 (with an average of 22.2 per cent). The growth in the 1996 capital employed of 29.8 per cent reflects £75 million of additional long-term debt raised in 1996.

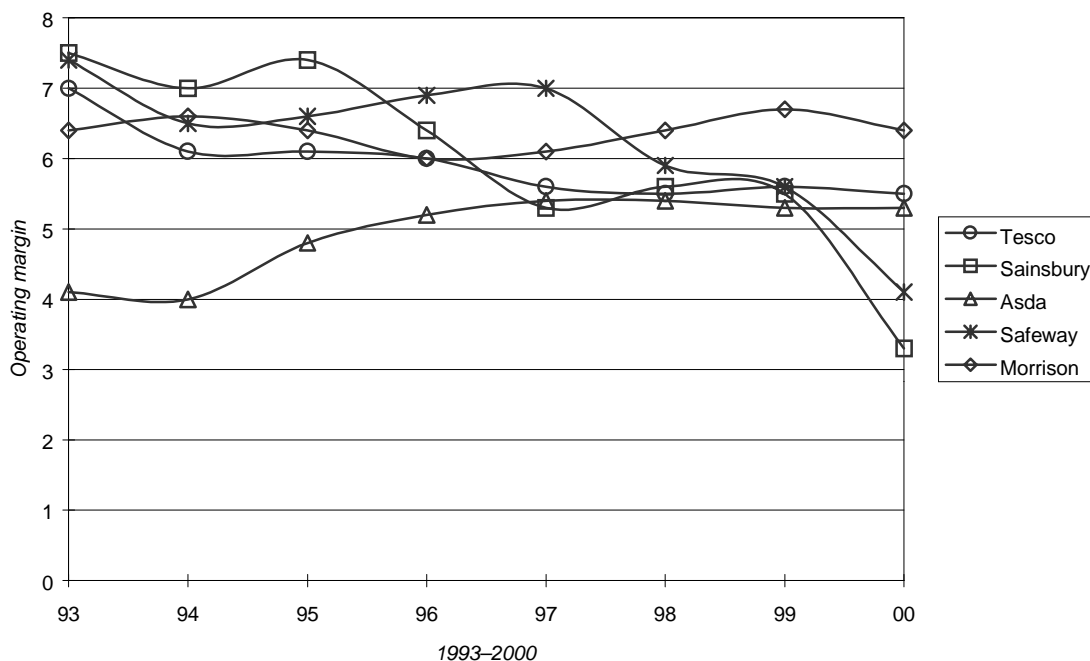
8.31. More detailed financial information relating to Morrison for 1993 to 1999 is set out in Appendix 8.5.

### *The major parties*

8.32. Figure 8.1 shows the operating margins for the major parties for the period 1993 to 2000. For detailed analysis of operating margins for 1996 to 2000, see paragraph 8.58.

FIGURE 8.1

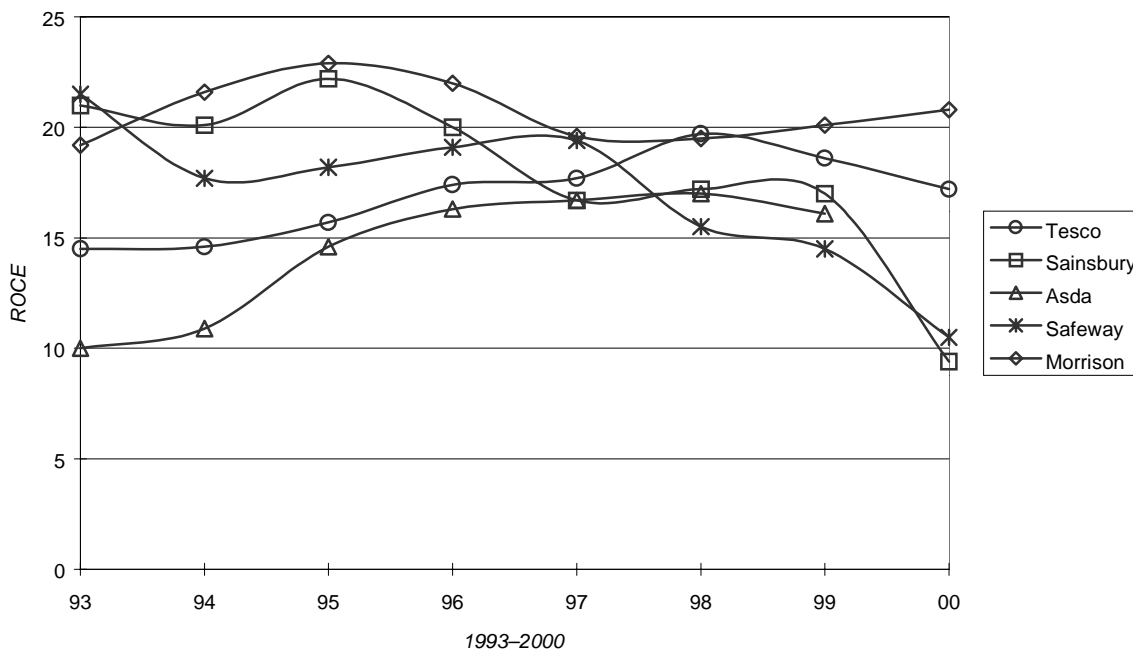
**Operating margins**



8.33. Figure 8.2 shows the ROCEs for the major parties for the period 1993 to 2000. For detailed analysis of the ROCEs, see paragraph 8.69.

FIGURE 8.2

**Return on capital employed**



**Somerfield**

8.34. Table 8.12 summarizes the key financial indicators of Somerfield for the four years to 24 April 1999.

8.35. Somerfield was listed on the London Stock Exchange on 9 August 1996. Prior to listing, the company was a wholly-owned subsidiary of another incorporated entity and was not required to produce consolidated financial statements. In view of this, and because of the capital reorganization undertaken prior to flotation, the available prior year financial information is not directly comparable and we have excluded it from our analysis.

TABLE 8.12 **Financial statement indicators**

	<i>£ million</i>			
	<i>Years ended April*</i>			
	<i>1996</i>	<i>1997</i>	<i>1998 (restated)</i>	<i>1999†</i>
Turnover (excl VAT)	3,161.0	3,200.6	3,483.6	5,898.0
Gross margin	147.7	176.4	203.2	350.0
Operating profit	100.7	115.1	108.7	235.7
Profit before tax	92.0	105.4	71.8	208.5
Fixed assets—tangible	512.3	673.9	1,209.2	1,240.1
Net operating assets	927.7	449.2	942.3	910.2
Capital employed	729.3	461.3	931.5	973.9

Source: Published financial information.

\*Somerfield's accounting reference date is 27 April. The most recently completed financial year ended on 24 April 1999.

†Somerfield results incorporate the results of Kwik Save.

8.36. Table 8.13 summarizes a number of financial ratios in respect of Somerfield for the four years to 24 April 1999.

TABLE 8.13 **Financial analysis**

	<i>per cent</i>			
	<i>Years ended April</i>			
	<i>1996</i>	<i>1997</i>	<i>1998 (restated)</i>	<i>1999</i>
Returns on sales:				
Gross margin	4.7	5.5	5.8	5.9
Operating margin	3.2	3.6	3.1	4.0
Growth in turnover	N/A	1.3	8.8	69.3
Growth in operating profit	N/A	14.3	-5.6	116.8
Growth in capital employed	N/A	-36.8	101.9	4.6
Return on average capital employed*	13.8	19.3	15.6	24.7
Return on average net operating assets†	10.9	16.7	15.6	25.4

Source: Published financial information and CC analysis.

\*Calculated as operating profit over the average of current and prior year capital employed.

†Calculated as operating profit over the average of current and prior year net operating assets.

8.37. Somerfield acquired Kwik Save in March 1998. The results for the year to April 1999 reflect a full year's trading for Kwik Save although the acquisition is included in the April 1998 balance sheet. More detailed analysis of the impact of the acquisition of Kwik Save on the results of Somerfield is in Chapter 5.

8.38. The growth in operating profit of 116.8 per cent in 1999 represents the increase from £108.7 million in 1998 to £235.7 million in 1999 as shown in Table 8.12. Turnover increased by 69.3 per cent as a result of the acquisition of Kwik Save, and the 1999 operating margin improved from 3.1 to 4 per cent. Towards the end of our inquiry, Somerfield announced its results for the year ended April 2000. These showed that turnover had decreased from £5,898 million in 1999 to £5,466 million in 2000 and operating profit had decreased from £235.7 million in 1999 to a loss of £79.5 million in 2000.

8.39. More detailed financial information relating to Somerfield is set out in Appendix 8.6.

## Other main parties

8.40. The following paragraphs and tables summarize financial information for the other main parties identified in Chapter 5.

8.41. Following the order in which the companies are dealt with in Chapter 5, we deal first with M&S, Waitrose and Booth, then with Iceland and Budgens followed by the hard discounters and the Co-ops. All sales figures are inclusive of VAT unless otherwise stated.

8.42. Table 8.14 sets out summary financial information for M&S, Waitrose and Booth.

TABLE 8 14 Summary financial information for M&S, Waitrose and Booth

	<i>£ million</i>			
	<i>Years ended March</i>			
	1996	1997	1998	1999
<i>M&amp;S</i>				
Sales*	7,234.0	7,842.0	8,243.0	8,224.0
Operating profit	937.0	1,038.0	1,117.0	512.0
Net fixed assets	3,428.0	3,610.0	4,176.0	4,388.0
Capital employed	4,640.0	5,044.0	5,272.0	5,670.0
Operating profit as percentage of sales (%)	12.9	13.2	13.6	6.2
ROCE (%)	20.2	21.4	21.7	9.4
<i>Years ended January</i>				
<i>Waitrose</i>				
Sales	1,380.0	1,540.0	1,672.0	1,728.0
Operating profit	46.0	64.0	67.0	54.0
Net fixed assets	452.0	476.0	509.0	541.0
Capital employed	226.7	246.8	263.7	274.0
Operating profit as percentage of sales (%)	3.3	4.2	4.0	3.1
ROCE (%)	20.3	27.0	26.3	20.1
<i>Years ended March</i>				
<i>Booth</i>				
Sales	86.0	95.0	104.0	109.0
Operating profit	4.0	5.0	6.0	5.4
Net fixed assets	33.0	39.0	39.0	43.0
Capital employed	25.3	28.7	30.4	33.6
Operating profit as percentage of sales (%)	4.7	5.3	5.8	5.0
ROCE (%)	15.8	18.5	20.3	16.9

Source: Published financial information and CC analysis.

\*Figures exclude VAT.

8.43. The table shows that M&S, Waitrose and Booth improved their operating profit as a percentage of sales and ROCE for 1997 and 1998 over the returns for 1996, but for all three the results for 1999 were significantly below those for 1998. M&S has experienced the biggest decline in both operating profit as a percentage of sales and ROCE in 1999 of 54.4 and 56.7 percentage points respectively. The operating profit as a percentage of sales for Waitrose and Booth were 22.5 and 13.8 percentage points lower respectively than those for 1998 and ROCEs were 23.7 and 32.5 percentage points lower respectively.

8.44. Table 8.15 sets out summary financial information for Iceland and Budgens.

TABLE 8.15 Summary financial information for Iceland and Budgens

	<i>£ million</i>			
	<i>Years ended December</i>			
	1996	1997	1998	1999
<i>Iceland</i>				
Sales*	1,375.0	1,427.0	1,566.0	1,742.0
Operating profit	77.0	62.0	65.0	72.0
Net fixed assets	420.0	439.0	453.0	460.0
Capital employed	329.0	302.0	393.0	380.0
Operating profit as percentage of sales (%)	5.6	4.3	4.1	4.1
ROCE (%)	23.4	19.7	14.6	18.6
<i>Years ended April</i>				
<i>Budgens</i>				
Sales	320.0	340.0	386.0	440.0
Operating profit	9.9	11.6	14.2	15.8
Net fixed assets	109.0	117.0	133.0	144.0
Capital employed	98.0	107.0	107.0	113.0
Operating profit as percentage of sales (%)	3.1	3.5	3.6	3.6
ROCE (%)	10.2	11.7	13.1	14.6

Source: Published financial information and CC analysis.

\*Figures exclude VAT.

8.45. The table shows that the operating profit as a percentage of sales for Budgens improved in 1997 compared with those in 1996 whereas those for Iceland decreased in 1997 from 1996, but both have remained relatively stable from 1997 to 1999. The ROCE illustrates that for the period 1996 to 1998, the returns for Iceland were reducing, but improved in 1999 to 18.6 per cent. The ROCE returns for Budgens show a consistent improvement in the annual results for the period 1996 to 1999 from a low of 10.2 to 14.6 per cent in 1999.

8.46. Table 8.16 sets out summary financial information for Netto and Aldi. As explained in Chapter 5, Lidl did not provide us with detailed financial information relating to its UK operation.

TABLE 8.16 Summary financial information for Netto and Aldi

	<i>£ million</i>				
	<i>Years to August</i>				
	1995	1996	1997	1998	
<i>Netto</i>					
Sales	290.3	350.9	367.7	422.7	
Operating profit	4.2	-5.1	0.0	11.1	
Net fixed assets	61.4	70.1	74.7	72.3	
Operating profit as percentage of sales (%)	1.4	-1.5	0	2.6	
<i>Years to December</i>					
<i>Aldi</i>					
Sales*	548.0	632.0	678.0	798.0	839.0
Operating profit	11.5	13.0	15.0	18.5	23.0
Net fixed assets	140.0	155.0	184.0	255.0	332.0
Capital employed	130.0	168.2	215.0	540.0	651.1
Operating profit as percentage of sales (%)	2.1	2.1	2.2	2.3	2.7
ROCE (%)	8.9	7.7	7.0	3.4	3.5

Source: Published financial information and CC analysis.

\*Figures exclude VAT.

†Figures not available as pre-incorporation.

8.47. Table 8.17 sets out summary financial information for the ten Co-ops identified in Chapter 5.

TABLE 8.17 **Co-ops**

	Years to January					
	1996	1997	1998			
<i>Sales</i>						
Anglia Co-op	(	)	)			
Colchester Co-op						
CRS						
CWS						
Midlands Co-op						
Oxford Co-op						
Plymouth Co-op						
Scotmid Co-op						
United Norwest Co-op						
Yorkshire Co-op						
Total						
<i>Operating profit</i>						
Anglia Co-op				(	)	)
Colchester Co-op						
CRS						
CWS						
Midlands Co-op						
Oxford Co-op						
Plymouth Co-op						
Scotmid Co-op						
United Norwest Co-op						
Yorkshire Co-op						
Total						
Operating profit as Percentage of sales (%)						
<i>Net fixed assets</i>						
Anglia Co-op	(	)	)			
Colchester Co-op						
CRS						
CWS						
Midlands Co-op						
Oxford Co-op						
Plymouth Co-op						
Scotmid Co-op						
United Norwest Co-op						
Yorkshire Co-op						
Total						

*Figures omitted.  
See note on  
page iv.*

Source: Company data and CC analysis.

8.48. Operating margins as a percentage of sales decreased by 23.8 percentage points in 1997 from those in 1996, and decreased by a further 6.3 percentage points in 1998.

### **Overall profitability of the grocery industry**

8.49. As noted in paragraph 8.2, we examined a range of different measures of profitability based on margins, returns on capital, and cash flow analysis. As appropriate, we compared these with the companies' cost of capital, returns in other industries and with the results of supermarket companies in other countries.

### ***UK comparisons***

8.50. We compared the recent aggregated results of 11 of the companies described above (that is, all the main parties except the hard discounters and the co-ops) with the results of (a) 11 other UK food and drug retailers; (b) 19 food producers and processors; and (c) with the aggregated results of over 650 UK commercial and industrial companies. The results are summarized in Table 8.18.

TABLE 8.18 UK comparisons, 1999

	<i>per cent</i>			
	<i>The 11 multiples</i>	<i>Food and drug retailers</i>	<i>Food producers and processors</i>	<i>Commercial and industrial</i>
Operating profit as percentage of sales	5.4	5.2	4.3	11.5
RONOA	17.4	16.2	18.1	19.1

Source: CC analysis.

8.51. The results of the multiples were slightly higher than those of the other food and drug retailers but were lower than those of the commercial and industrial group. Their operating margins were somewhat higher than those of food producers and processors but their RONOA was slightly lower.

### *Overseas comparisons*

8.52. We also sought to compare the results (gross margins, operating margins and ROCE) of the five major parties with those of certain overseas supermarket companies. In making these comparisons, we used financial statements for the overseas companies for the periods (usually to 31 December) that ended prior to the UK companies' year ends (which all fall in the first half of the calendar year). Thus the 1999 column for UK companies includes the results of Tesco for the year to 27 February 1999 and the 1999 column for international companies includes the results of Ahold for the year to 31 December 1998 and for Wal-Mart to 31 January 1999. The overseas companies are inevitably dissimilar in some respects from the UK groups and some of these differences are highlighted in the following paragraphs. Nevertheless we consider that the comparisons are of value in helping us to make our assessment of profitability.

### *Gross margins*

8.53. As noted above, UK multiples disclose gross margins in their accounts on a consistent basis. As a result, we asked Tesco, Sainsbury, Safeway, Asda and Morrison to restate their gross margins where appropriate to reflect a strictly consistent definition of cost of sales, which we specified to include only the purchase cost of goods sold, adjusted for changes in stock.

8.54. These results are summarized in Table 8.19.

TABLE 8.19 Gross margins

	<i>per cent</i>			
	<i>Years ending in calendar years</i>			
	1996	1997	1998	1999
Tesco	<div style="font-size: 3em; display: inline-block; vertical-align: middle;">[</div> <div style="display: inline-block; vertical-align: middle;"> <p><i>Figures omitted.</i> <i>See note on page iv.</i></p> </div> <div style="font-size: 3em; display: inline-block; vertical-align: middle;">]</div>			
Sainsbury				
Asda				
Safeway				
Morrison				
Revenue weighted average	24.7	24.5	24.9	25.1

Source: CC from company data.

8.55. The reported gross margins of the international companies are stated in Table 8.20.

TABLE 8.20 **Gross margins—international comparators**

	<i>per cent</i>		
	1997	1998	1999
Wal-Mart	20.4	20.8	21.0
Safeway Inc	27.6	28.5	29.1
Ahold	21.7	22.8	23.4
Delhaize	23.5	23.7	24.3
Carrefour	19.3	20.2	21.1
Average of 5	22.5	23.2	23.8
Metro	27.7	27.3	22.2
Promodès	18.6	18.9	19.3
Average of 7	22.7	23.2	22.9

Source: CC from published company data.

8.56. As measured, average UK gross margins held steady during the period and were around two percentage points higher than those of the international comparators.

8.57. However, the information for the international groups was not available on an entirely consistent basis because the interpretation of cost of sales varies among them. Carrefour, for example, uses our strict definition, while Ahold includes storage and transportation costs thereby reducing its measured gross margins. Moreover, Robert Fleming & Co said that own-label penetration in the UK was double that on the Continent and that, because gross margins are normally higher on own-label products, this might account for up to two percentage points of any difference in gross margin. This estimate of own-label penetration was corroborated by Deutsche Bank, which calculated that own label accounted for 40 per cent of sales on average for UK retailers compared with 21 per cent in France, 24 per cent in Germany and 9 per cent in Italy. See paragraphs 6.70 to 6.79 and Chapter 9 for more analysis of own-label sales.

### ***Operating margins***

8.58. The reported consolidated operating margins of the major parties are stated in Table 8.21.

TABLE 8.21 **Operating margins**

	<i>per cent</i>				
	1996	1997	1998	1999	2000
Tesco	6.0	5.6	5.5	5.6	5.5
Sainsbury	6.4	5.3	5.6	5.5	3.3
Asda	5.2	5.3	5.4	5.3	*
Safeway	6.9	7.0	5.9	5.6	4.1
Morrison	6.0	6.1	6.4	6.7	6.2
Revenue weighted average	6.1	5.7	5.6	5.6	4.5

Source: CC from company data.

\*2000 data were not available for Asda as a result of its change in accounting date.

8.59. The operating margins of the non-UK companies are stated in Table 8.22. We have shown an average for the companies excluding Metro and Promodes because the results of these two companies appear to be affected by their significant wholesaling activities.

TABLE 8.22 Operating margins—international comparators

	<i>per cent</i>		
	1997	1998	1999
Wal-Mart	4.2	4.4	4.8
Safeway Inc	5.2	5.7	6.5
Ahold	3.4	3.7	3.8
Delhaize	4.0	4.1	4.4
Carrefour	3.4	3.7	4.2
Average of 5	4.0	4.3	4.7
Metro	2.0	1.9	1.9
Promodès	2.2	2.4	2.4
Average of 7	3.5	3.7	4.0

Source: CC from published company data.

8.60. Reported operating margins for the UK groups were higher than those of the international comparators, though the UK companies' margins have been falling while the overseas companies' margins have been rising, so that the difference has fallen from 1.7 per cent in 1997 to 0.9 per cent in 1999 when the UK companies are compared with the first five companies in Table 8.22.

8.61. One reason put to us for higher UK figures was the longer asset lives assumed by UK multiples in calculating depreciation. We adjusted the UK companies' operating profits to reflect the differences in the estimated useful lives of assets, particularly buildings and construction related assets. The UK multiples depreciate these assets over 40 years on average, compared with an average of 18 to 20 years for Continental European and US retailers. Some financial analysts have made adjustments to the UK multiples' depreciation charges as part of their international comparisons. Whilst adjustments of this nature are inevitably subjective we thought it would be reasonable for us to do the same. To facilitate this part of our work we therefore combined the depreciation adjustments of two analysts to arrive at the restatements we have made. Estimates of the impact on UK operating margins of restating depreciation on to a comparable basis varied in the range 0.6 to 0.8 percentage points lower each year.

8.62. Table 8.23 shows the UK operating margins restated by us to reflect higher depreciation charges. After this restatement UK operating margins were 1.1 percentage points higher in 1997, falling to 0.3 percentage points higher than those of the international comparators in 1999.

TABLE 8.23 Operating margins—restated for depreciation

	<i>per cent</i>			
	1996	1997	1998	1999
Tesco	5.3	4.9	4.9	5.0
Sainsbury	5.7	4.6	4.9	4.6
Asda	4.4	4.6	4.7	4.6
Safeway	6.0	6.1	5.0	4.8
Morrison	5.2	5.4	5.6	6.0
Average	5.3	5.1	5.0	5.0

Source: CC analysis.

8.63. As noted, the operating margin trend in the USA and Continental Europe has been upwards, while in the UK it has on average remained flat or slightly declining. In part this may reflect different stages of the economic cycle, particularly in Europe, but two additional reasons were suggested for this trend. First, there was increased scarcity of selling area in Europe. The Governments of the Netherlands, Belgium, France and Italy have all recently passed more restrictive laws intended to prevent the development of large-format stores, resulting in increased land costs and rising capital intensity. This will tend to generate greater sales density and rising operating margins. In the USA, apart from the effects of a buoyant economy, rising margins may also reflect increasing sector consolidation.

8.64. Overall, therefore, gross margins were around two percentage points higher on average in the UK in 1999 and operating margins 0.3 percentage points higher. The fact that higher gross margins do not translate significantly into higher operating margins may reflect different measurement bases, different cost structures or, alternatively, relative inefficiencies in the UK businesses. The factor most frequently cited to us was higher capital costs associated with food retailing in the UK. This in turn may reflect higher land prices, superior building specification or higher construction costs. These are considered in Chapters 10 and 12.

8.65. [

*Details omitted. See note on page iv.*

]

8.66. As explained in paragraph 8.8, Tesco identifies the excess of land costs over the value of the land for alternative use and depreciates this premium over 25 years. The annual cost of this is some £52 million. If this additional cost is excluded, Tesco's 1998/99 operating margin would have increased from 5.6 to 5.9 per cent. Some other groups have chosen different methods of depreciating land premiums.

### ***Return on capital employed***

8.67. We compared the financial structure and business activities of the UK and non-UK groups respectively. This comparison indicated a number of differences in balance sheet composition. As a result we concluded that the usefulness of RONOA for more detailed comparative purposes was likely to be limited. Using ROCE appeared preferable as a conventional return measure because it captures total investment (including intangibles such as goodwill which form a significant component of most non-UK company balance sheets). We took the definition of capital employed in this instance to be shareholders' equity plus long-term debt.

8.68. For purposes of comparing and analysing the capital invested in UK and non-UK companies we include total investment irrespective of accounting classifications. Given that the non-UK companies generally amortize goodwill over 20 years, this is effectively equivalent to a fixed asset in the UK which is depreciated over a 20-year life, which is consistent with our restatement of UK depreciation on to a 20-year store life basis.

8.69. The ROCE figures for the major parties, prior to any adjustments for depreciation, are stated in Table 8.24.

TABLE 8.24 **Return on capital employed**

	<i>per cent</i>							
	1993	1994	1995	1996	1997	1998	1999	2000
Tesco	14.5	14.6	15.7	17.4	17.7	19.7	18.6	17.2
Sainsbury	21.0	20.1	22.2	20.0	16.7	17.2	17.0	9.4
Asda	10.0	10.9	14.6	16.3	16.7	17.0	15.7	N/A
Safeway	21.5	17.7	18.2	19.1	19.4	15.5	14.5	10.5
Morrison	19.2	21.6	22.9	22.0	19.6	19.5	20.1	20.1
Weighted average	17.3	16.6	18.3	18.5	17.6	17.7	17.0	13.3
Weighted average ROCE								
1993 to 1999							17.6	
Weighted average ROCE								
1996 to 1999							17.7	
Weighted average ROCE								
1993 to 2000								17.1
Weighted average ROCE								
1996 to 2000								16.8

Source: CC from company data.

8.70. Restating the results of the UK companies for the period up to 1999 so as to depreciate stores over 20 years and hence aid our international comparisons gives returns as set out in Table 8.25.

TABLE 8.25 ROCE restated for depreciation

	<i>per cent</i>						
	1993	1994	1995	1996	1997	1998	1999
Tesco	13.0	14.1	14.4	15.2	15.5	17.4	16.2
Sainsbury	18.6	18.1	19.7	16.6	12.8	14.4	15.0
Asda	9.0	11.2	15.1	17.0	16.9	17.1	15.7
Safeway	19.3	17.7	16.5	17.4	17.8	14.0	13.2
Morrison	19.2	20.7	19.7	18.8	18.2	18.1	18.8
Weighted average	15.5	15.9	16.7	16.5	15.4	15.8	15.4
Weighted average ROCE 1993 to 1999							15.9
Weighted average ROCE 1996 to 1999							15.8

Source: CC analysis.

8.71. The return on average capital employed of the various non-UK companies is stated in Table 8.26.

TABLE 8.26 ROCE—international comparators

	<i>per cent</i>		
	1997	1998	1999
Wal-Mart	16.1	18.0	22.1
Safeway Inc	N/A	23.6	23.9
Ahold	16.6	21.5	19.2
Delhaize	17.8	20.2	21.4
Carrefour	16.7	18.4	15.1
Average of 5	16.8	20.3	20.3
Metro	19.5	13.3	14.2
Promodès	15.2	16.9	13.7
Average of 7	17.0	18.8	18.5

Source: CC from published company data.

8.72. In 1997 the unadjusted UK average ROCE exceeded that of the international comparators by 0.6 percentage points but by 1999 the UK ROCEs had fallen and the international ROCEs had increased so that they exceeded UK returns by 1.5 percentage points. The returns restated for depreciation show the UK companies to be 1.6 percentage points lower than the international comparators in 1997, and 3.1 percentage points lower in 1999. Paragraph 8.6 indicates that for 2000, the overall results of the major UK multiples show a decline compared with 1999.

8.73. The returns of Wal-Mart and Safeway Inc may in fact be slightly overstated due to their policy of amortizing goodwill over a longer period than the Continental European groups. In addition the business composition of the Continental European groups needs to be considered when assessing returns. As noted, wholesaling activities are significant features of the activities of both Metro and Promodès, whilst Ahold and Delhaize have significant franchising operations. The ROCE figures as calculated for the companies are detailed in Appendix 8.7.

### ***Internal rate of return***

8.74. As part of our examination of the overall profitability of the major UK multiples for the period from 1993 to 1999 we asked them for financial information that would enable us to derive an IRR. The return so derived was then compared with estimates of the companies' WACC.

8.75. We asked the major parties to estimate the value of the fixed assets used in their UK grocery business in 1993 and 1999 and to provide us with the operating cash flows (revenues and costs) for each of the years 1993 to 1999. By treating the 1993 asset valuation as a cash outflow and the 1999 valuation as an inflow we were able to calculate the IRR achieved by each of the companies over that period.

8.76. The IRRs derived from the responses of the companies selected are summarized below.

8.77. The calculation of IRR is sensitive to the timing of capital expenditure and to the trend of profitability. We therefore also estimated the IRRs for a shorter, more recent period, 1996 to 1999. This required us to make asset valuation estimates for 1996. Appendix 8.7 describes how these were made. The IRRs for both periods are set out in Table 8.27. We derived a weighted average by a combination of turnover and fixed asset weightings. The individual company IRRs varied by up to nearly five percentage points from the weighted average for the period 1993 to 1999 but were rather closer to the weighted average for the period 1996 to 1999.

TABLE 8.27 Internal rates of return

	<i>per cent</i>	
	1993– 1999	1996– 1999
Tesco	( )	⊗
Sainsbury		
Asda		
Safeway		
Morrison		
Weighted average	17.0	13.7

Source: CC analysis from company data.

8.78. IRR calculations are not directly comparable with ROCE. IRR is calculated on a cash basis and ROCE on an accrual basis. The IRR takes the timing of cash flows into account through the discounting element in the calculation; and the IRR is sensitive in particular to the valuation of working capital and fixed assets as well as to the timing of the annual cash flows.

8.79. Table 8.28 compares the IRRs of the major parties for the periods 1993 to 1999 and 1996 to 1999 with their respective average ROCEs.

TABLE 8.28 IRRs and ROCEs of the major parties

	<i>per cent</i>				
	<i>1993 to 1999</i>		<i>1996 to 1999</i>		<i>2000</i>
	<i>IRR</i>	<i>Average ROCE</i>	<i>IRR</i>	<i>Average ROCE</i>	<i>ROCE</i>
Tesco	( )	17.0	( )	18.4	17.2
Sainsbury		19.2		17.7	9.4
Asda		14.5		16.6	N/A
Safeway		18.0		17.1	10.5
Morrison		20.7		20.3	20.1
Average		17.6		17.7	13.3

Source: CC from company data.

8.80. Overall, the average IRR was significantly lower in the later years 1996 to 1999 than for the period 1993 to 1999. In contrast the average ROCE remained virtually constant as between the two periods, but fell significantly in the financial year to 2000. [

*Details omitted. See note on page iv.*

]

8.81. Morrison has thus remained a strong performer throughout the period. Safeway and Sainsbury have both experienced weaker financial performance relative to the others since 1997, while Asda and

Tesco have both improved. Tesco, however, has had the faster growth of capital, second only to Morrison.

### ***Weighted average cost of capital***

8.82. We asked the five major parties to estimate their WACC for the period 1993 to 1999 in order that we could compare this with their IRRs. The WACC figures submitted by the companies are detailed in Appendix 8.8. Whilst not all companies submitted WACC figures on a consistent basis, we calculated the average pre-tax nominal WACC for each of the five companies for the period 1993 to 1999. The overall average was 13 per cent and the average for the period 1996 to 1999 was 12.6 per cent.

8.83. It has been conventional in setting allowable revenues for regulated utilities to seek to allow efficient companies to earn an IRR equivalent to their cost of capital. This reflects the view that persistent returns greater than the cost of capital are excessive.

8.84. This inference does not automatically apply here. First, in a regulatory regime the IRR is calculated for anticipated revenues and costs. There is no presumption that any company or even the industry concerned must or will make a return equal to its cost of capital. Some companies will exhibit superior efficiency and do better, others the reverse.

8.85. Second, in the non-competitive environment of a regulatory regime it is reasonable to assume that all the companies concerned will survive. Even if some do not this does not undermine the appropriateness of setting revenues to bring the IRR and WACC into line for the purpose of setting prices. In a more competitive environment there is the potential for a so-called 'survivor bias'. If some companies earn more than their cost of capital and some less, and if some of the latter group, as a result, cease to trade, then the measured average IRR of the surviving companies will exceed their cost of capital, even if all of them are in a fully competitive market. As a result a degree of caution is needed when making comparisons of IRR and cost of capital in the case of multiples.

8.86. Another complication is that our analysis considers IRRs only for the major five companies. Evidence from data on ROCEs suggest that the IRRs of other companies will generally have been lower, so that the average industry IRR will have been lower. Against this, if a small group of large companies do possess any market power, it would tend to show up in their having IRRs which are higher than elsewhere and above the cost of capital.

8.87. Bearing these matters in mind, the weighted average IRR for the five companies for 1993 to 1999 was 17.0 per cent as against an average cost of capital of 13 per cent. For the period 1996 to 1999, which is a better guide to the current situation, the weighted average IRR was 13.7 per cent against an average cost of capital of 12.6 per cent and for three out of the four largest multiples the difference between IRR and WACC was less than 0.7 per cent.

8.88. Our analysis highlights the fact that growth in turnover has dropped over the period 1997 to 2000 compared with the period 1993 to 1996, yet gross and operating margins have remained moderately stable for the period 1993 to 2000. Operating margins decreased in 1997 by 0.4 percentage points from 1996 and have since been steady at around 5.5 per cent to 1999. Both the gross and operating margins have been slightly in excess of those of our international comparators. Gross margins were approximately two percentage points in excess, while operating margins as reported were approximately one percentage point higher.

8.89. In addition, our analysis of IRR and ROCE shows that the returns over the period 1996 to 2000 have been lower than those for the earlier period 1993 to 1996 which supports our margin analysis that returns over the latter years have been declining. Further, the ROCEs have been on average three percentage points lower than those of the international comparators.

### **The effect of land prices on store profitability**

8.90. The DGFT in making the reference drew attention to the potential impact of land prices on multiples' costs and prices. We therefore carried out a simulation, based on representative assumptions of costs and revenues for a large superstore including a land cost of £1,250,000 per hectare. This gave a

RONOA of 19.6 per cent. We then increased the cost of land to £2.5 million per hectare, leaving all other assumptions unchanged, and the return fell to 16.0 per cent of the increased net operating assets.

8.91. We then calculated the price increase that would be required to restore RONOA to 19.6 per cent, with all other assumptions unchanged, and found that it was just under 1.4 per cent. (Given the structure of our simulation, the relationship between returns and prices was linear so, for example, an increase in land costs of £125,000 per hectare would have required an increase in prices of 0.14 per cent.) We assumed that the higher retail prices would have no effect on sales volumes—had volumes fallen as a result of higher prices, the required price increase would be bigger. Our detailed calculations are set out in Appendix 8.9.

## Trade credit

8.92. We examined whether the major parties had increased creditor payment periods as a means of funding operations. We therefore calculated the trade creditors in terms of days' sales for the seven years from 1993 to 1999 in order to identify any change in delays in payment to creditors. The details are set out in Appendix 8.10 and the data for 1993 and 1999 are shown in Table 8.29.

TABLE 8.29 Trade creditors in terms of days' sales

	1993	1999
Tesco	24.3	23.4
Sainsbury	25.7	27.3
Asda	28.8	30.7
Safeway	36.6	33.1
Morrison	29.7	36.9
Weighted average	28.0	27.9

Source: Company data and CC analysis.

8.93. The analysis shows that trade creditors expressed in terms of the number of days' sales has not increased over the period 1993 to 1999. For 1999 the payment periods for Tesco, Sainsbury and Asda remained almost unchanged from their 1993 repayment period and Safeway showed a decrease in the payment period from 36 days to 32.5 days. Morrison appears to be the only company that took more credit from suppliers with the number of days increasing from 29.7 to 36.9 days from 1993 to 1999 with most of the increase occurring in 1999.

## Store profitability

8.94. We looked at the profitability of two groups of stores that were of concern to us. The first of these groups was made up of those reference stores that we believed to be facing limited competition within an isochrone. The second group was made up of the reference stores of some of the major parties who charged different prices in some of their stores under one or more pricing schemes.

8.95. The major parties gave us information on each of their stores for their 1998/99 financial years. Financial information included: the sales (including VAT) of all goods and of groceries; the gross margin from all goods; the store contribution after deduction of operating expenses from gross margin; the cost of land, buildings, and other fixed assets; and the amount of accumulated depreciation on those fixed assets. Other information included: the net sales area of the store; the sales area devoted to groceries; the date (year and month) in which the store opened; and the presence or absence of a petrol filling station.

8.96. Using this information we calculated several ratios that measured the profitability and other aspects of performance for stores and groups of stores that were of interest to us. These included:

- (a) Gross margin (per cent): The ratio of store gross margin to sales (including VAT) for all goods.
- (b) Contribution margin (per cent): The ratio of store contribution to sales (including VAT) for all goods. The difference between gross margin and contribution margin is therefore the ratio of operating expenses to sales.

- (c) Return on net fixed assets (per cent): The ratio of store contribution to the cost of all store-related fixed assets, less depreciation.
- (d) Return on gross fixed assets (per cent): As for (c) but without deducting depreciation, because of concerns that some assets might be over- or under-depreciated.
- (e) Sales density (£ per sq metre): The ratio of all sales (including VAT) to net selling area.
- (f) Grocery sales density (£ per sq metre): The ratio of sales of reference goods to grocery sales area.
- (g) Land cost (£ per sq metre): The ratio of the cost of land to the net sales area of the store.

We were also able to calculate the age of the store at the end of 1998/99 from the store opening date.

8.97. The financial information is not entirely consistent from one company to another, because of different definitions of store gross margin and differences in allocating operating costs to stores. Some companies excluded petrol sales and gross margins from the financial information on their stores. Where stores had been acquired from other companies, some of the main parties gave the opening date as the date of acquisition and others the opening date under its original owner (and neither approach took account of any subsequent refurbishment or extension).

8.98. These inconsistencies did not present a problem for our exercises, since we wanted to compare groups of stores within one company rather than make comparisons between companies. For this reason we have not shown the absolute levels of the measures described in paragraph 8.96 in the tables in this section. We have instead shown the deviation from the average of a company's reference stores. For those ratios that would normally be expressed as percentages (items (a) to (d) in paragraph 8.96), we show them as a percentage-point deviation from the value for all reference stores. So, if one of the companies has a gross margin of 25.5 per cent for all its reference stores, and the gross margin for its Category 1 stores is 26.9 per cent, it will appear in the table as +1.4. For the other measures (items (e) to (g)), we show the percentage difference from the average for all reference stores. So, if the cost of land for all reference stores was £16 per sq metre and the cost for Category 1 stores was £24, it would be shown in the table as +50.0. We also show in the left-hand columns the number of stores in each category and the sales of each category as a percentage of total sales.

### ***Profitability of stores facing limited competition***

8.99. In paragraphs 6.5 to 6.25 we described how we used isochrones to single out reference stores operated by the five major parties that seemed to be facing limited competition. We originally identified 220 such stores. We identified three situations where stores might face limited competition within an isochrone:

- (a) where there was only one store;
- (b) where a store operated by one of the major parties faced only one other store, operated by one of the other four major parties; and
- (c) where a store operated by one of the major parties faced only one other store, operated by a main party that was not one of the five major parties.

We refer to these stores as Category 1, Category 2 and Category 3 stores respectively.

8.100. We wanted to establish whether these stores enjoyed higher profitability or differed in other ways from the other reference stores. A comparison of 209 stores with all the reference stores of the same company is set out in Table 8.30 (we excluded 11 stores at this stage—six that did not meet the criteria set out above and five that operated in urban areas). Following discussions with the major parties we were able to reduce the number of stores that met the criteria to 175. The data in Table 8.30 and the comments in paragraph 8.101 relate to the original 209 stores but when we examined the effect of reducing the number of stores to 175 we found it made little difference.

TABLE 8.30 Relative performance of monopoly stores, 1998/99

	Number of stores	Sales incl VAT (% of total)	Percentage point deviation			Percentage deviation			Average age of stores at March 1999	
			Gross margin	Contribution/sales	Contribution/net fixed assets	Contribution/gross fixed assets	Sales density	Grocery sales density		Land cost/sales area
<b>Tesco</b>										
Category 1 stores	33	3.8	+0.4	0.0	+0.1	+0.4	-3.2	-4.3	-36.9	4
Category 2 stores	37	6.3	-0.4	0.0	+0.7	+0.5	+7.8	+5.1	0.0	7
Category 3 stores	20	2.7	0.0	+0.3	-0.2	+0.7	+3.0	-3.2	-11.8	4
Categories 1 to 3	90	12.7	-0.1	+0.1	+0.3	+0.5	+3.3	+0.2	-14.1	6
Tesco Extra										
Other >1,400 sq m	[									]
Other <1,400 sq m										
All reference stores	549	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11
<b>Sainsbury</b>										
Category 1 stores	2	0.1	-2.7	-17.2	-76.5	-71.7	-19.7	-15.8	+43.9	0
Category 2 stores	15	4.2	+0.2	+1.6	+20.9	+20.6	+1.8	+1.9	+64.5	8
Category 3 stores	2	0.2	-0.7	-3.4	-42.1	-51.4	-13.3	-9.5	+86.4	1
Categories 1 to 3	19	4.6	+0.1	+1.0	+5.4	+5.4	-2.3	-0.8	+64.0	7
Savacentres										
Other >1,400 sq m	[									]
Other <1,400 sq m										
All reference stores	422	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
<b>Asda</b>										
Category 2 stores	7	2.4	+0.4	+0.1	-7.5	-6.0	-10.4	-8.0	+33.4	13
Other reference stores	220	97.6	0.0	0.0	+0.2	+0.2	+0.4	+0.3	-0.9	13
All reference stores	227	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13
<b>Safeway</b>										
Category 1 stores	43	7.8	-0.2	+1.3	+9.6	+10.4	+4.6	+4.5	-14.6	
Category 2 stores	22	5.3	+0.2	-0.2	+1.9	+1.1	-0.7	-0.3	-15.2	
Category 3 stores	24	5.4	-0.1	+1.5	+18.9	+20.2	+6.9	+5.4	-4.7	
Categories 1 to 3	89	18.5	-0.1	+0.9	+9.7	+10.2	+3.6	+3.3	-12.1	
Other >1,400 sq m	[									]
Other <1,400 sq m										
All reference stores	467	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Morrison</b>										
Category 2 stores	4	2.5	-0.4	-0.1	-30.4	N/A	N/A	-2.8	-10.4	11
Other reference stores	91	97.5	0.0	0.0	+1.1	N/A	N/A	+0.1	+0.4	10
All reference stores	95	100.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	10

Source: CC from company data.

8.101. Considering the relative performance of the stores originally identified as being in Categories 1 to 3 of each of the five companies in 1998/99:

- (a) *Tesco* had 90 stores in Categories 1 to 3 out of 549 reference stores. Only five out of *Tesco*'s 37 Category 2 stores faced an *Asda* or *Morrison*, while 32 faced a *Sainsbury* or *Safeway* store, reflecting the high concentration of its stores in southern and eastern England (see Table 5.7). Comparing the 90 *Tesco* stores in Categories 1 to 3 with its other 369 stores above 1,400 sq metres, there was little difference in any of our measures of profitability. It is notable that many of *Tesco*'s 33 Category 1 stores are relatively new—the average age of these stores was only four years. *Tesco* had 71 of the 175 stores eventually identified as being in Categories 1 to 3.
- (b) *Sainsbury*. Only 19 out of *Sainsbury*'s 467 reference stores were in Categories 1 to 3, many fewer than *Tesco* or *Safeway* who each have about 90. The underlying data show that the two Category 1 monopoly stores are new stores in Northern Ireland, and the two Category 3 stores are both recently opened, so it is difficult to make valid comparisons of their performance with that of other stores. Comparing the Category 2 stores with the 344 other reference stores that have a sales area above 1,400 sq metres, gross margins differ little but higher sales densities seem to have led to higher contribution margins. The principal difference was the higher land cost, not only of the stores in Category 2, but also in Categories 1 and 3. In spite of the high land prices the return on assets from these stores was above the *Sainsbury* average. *Sainsbury* had 12 of the 175 stores eventually identified as being in Categories 1 to 3.
- (c) *Asda* had no Category 1 or 3 stores and only seven Category 2 stores among its 227 reference stores. They had slightly higher gross margins than the other reference stores but higher operating costs relative to sales (possibly caused by lower sales densities), so that there was little difference in terms of contribution margin. The lower sales densities for all sales and for grocery sales suggest that these seven stores did not benefit from captive customers with a limited choice of supermarket. *Asda* paid 33 per cent more for the land for these stores than the average for all its stores, and returns on fixed assets were below the *Asda* average. *Asda* had five of the 175 stores eventually identified as being in Categories 1 to 3.
- (d) *Safeway* had 89 stores in Categories 1 to 3 out of its 467 reference stores. The detailed data provided by *Safeway* showed that 77 of them are in Scotland, the North-East, Wales and the South-West. The 12 stores in the southern and eastern regions of England did not appear to enjoy higher profitability. But taken together these 89 stores achieved a contribution margin that was 0.9 percentage points higher than the *Safeway* average. This was probably not caused by pricing—the gross margins were similar between the two groups—but by the higher sales densities of these 89 stores. With low land costs the returns on assets from the stores in Categories 1 to 3 were more than nine percentage points higher than the *Safeway* average. We did not ask *Safeway* to provide the opening dates of stores that opened before 1990. *Safeway* had 83 of the 175 stores eventually identified as being in Categories 1 to 3.
- (e) *Morrison* had no Category 1 or 3 stores and only four Category 2 stores among its 95 reference stores. The underlying data show that one of them only opened at the end of 1998/99 and recorded a small loss. The three remaining stores were very different from each other. One store had a low gross margin offset by low operating costs. The performance of the second was reasonably close to the *Morrison* average. A third store was more than 20 years old and smaller than most other *Morrison* stores and, with a low land cost, had a higher return on assets than most other stores. *Morrison* does not allocate depreciation to stores so we could not calculate the return on net fixed assets. We were also unable to calculate grocery sales density, because *Morrison* could not provide the area of its stores devoted to the sale of groceries (although they were clearly large enough to be reference stores). *Morrison* had four of the 175 stores eventually identified as being in Categories 1 to 3.

8.102. In Table 8.30 the returns for stores below 1,400 sq metres were calculated separately for *Tesco*, *Sainsbury* and *Safeway* (*Asda* and *Morrison* do not have stores of this size). For *Tesco* and *Sainsbury* these smaller stores were on average significantly older than the rest of their stores. *Sainsbury*'s small stores were on average 26 years old, compared with 11 years for its larger stores. For all three companies the small stores have much lower land costs.

## *Profitability of stores under differential pricing arrangements*

8.103. In Chapter 7 we give an account of the way in which some of the major parties, including Sainsbury and Tesco, operated different price arrangements in some of their stores. In this section we identify differences in profitability between stores of these two groups operating these arrangements in 1998/99.

### *Tesco*

8.104. Tesco gave us a full list of current store price codes and told us that only two of them had changed since February 1999. Out of 549 reference stores, 228 were on its Local pricing code while 270 were on its higher National code. Of the 51 remaining stores, 28 were on a Northern Ireland code, 12 were on a Metro code (covering only some of its Metro stores) and 7 had closed. We limited our analysis to stores on the Local and National codes. Tesco put it to us that it was the National code that represented the standard price. The Local code represented reductions from the National code. In our analysis we show the differing performance measures in terms of deviations from the average for all Tesco's reference stores.

8.105. As well as measuring the performance of the 549 reference stores, we split them into two groups, consisting of the 292 with a petrol filling station and the 257 without one. Petrol sales, with a much lower gross margin than groceries, reduce the recorded gross margin, and might have distorted our measures of profitability.

8.106. We then repeated our analysis for the 442 stores with a net sales area of 1,400 sq metres (15,000 sq feet) or more. This gave almost the same number of stores with a petrol filling station, because Tesco had only five stores below this size level that have one.

8.107. The results of our analysis are set out in Table 8.31. We added a further ratio, that of adjusted contribution to sales, where we added back to store contribution the amounts charged for land premium depreciation. (Tesco's depreciation of land premiums is described in paragraph 8.8.)

8.108. The variation in profitability is summarized:

	<i>A</i>	<i>B</i>	
	<i>Local</i>	<i>National</i>	<i>Difference</i>
<b><i>All reference stores</i></b>			
Gross margin	-0.7	+0.4	+1.1
Adjusted contribution margin	-0.7	+0.8	+1.5
Return on net fixed assets	-0.4	+0.8	+1.2
<b><i>Reference stores with petrol filling station</i></b>			
Gross margin	-1.4	-0.1	+1.3
Adjusted contribution margin	-0.7	+1.0	+1.7
Return on net fixed assets	-1.0	+1.4	+2.4
<b><i>Reference stores without petrol filling station</i></b>			
Gross margin	+1.4	+2.5	+1.1
Adjusted contribution margin	-0.8	-0.1	+0.7
Return on net fixed assets	+1.7	-2.0	-3.7
<b><i>All stores &gt;1,400 sq metres</i></b>			
Gross margin	-0.7	+0.3	+1.0
Adjusted contribution margin	-0.6	+0.9	+1.5
Return on net fixed assets	-0.3	+0.9	+1.2
<b><i>Stores &gt;1,400 sq metres with petrol filling station</i></b>			
Gross margin	-1.4	-0.1	+1.3
Adjusted contribution margin	-0.7	+1.0	+1.7
Return on net fixed assets	-1.0	+1.4	+2.4
<b><i>Stores &gt;1,400 sq metres without petrol filling station</i></b>			
Gross margin	+1.7	+2.8	+1.1
Adjusted contribution margin	-0.3	+0.4	+0.7
Return on net fixed assets	+2.1	-1.6	-3.7



TABLE 8.31 Tesco: relative performance of stores on Local and National price codes, 1998/99

	Number of stores	Sales incl VAT (£m)	Percentage point deviation					Percentage deviation			Average age of stores Years	
			Gross margin %	Contribution/sales %	Contribution/sales (adjusted)* %	Contribution/net fixed assets %	Contribution/gross fixed assets %	Sales density £/sq m	Grocery sales density £/sq m	Land cost/net sales area £/sq m		
<i>Reference stores</i>												
Local	228	⌋	-0.7	-0.6	-0.7	-0.4	-0.5	-11.6	-10.7	-35.7	12	
National	270		+0.4	+0.7	+0.8	+0.8	+0.7	+12.9	+11.9	+35.8	11	
Other	51											
	549			0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	
<i>With petrol filling station</i>												
Local	122			-1.4	-0.6	-0.7	-1.0	-0.8	-2.1	-5.0	-19.0	9
National	165			-0.1	+0.8	+1.0	+1.4	+1.2	+24.6	+19.0	+55.1	8
Other	5											
	292			-0.6	+0.3	+0.4	+0.6	+0.5	+13.2	+8.9	+23.6	8
<i>Without petrol filling station</i>												
Local	106			+1.4	-0.6	-0.8	+1.7	+0.4	-30.7	-21.6	-69.2	15
National	105			+2.5	-0.1	-0.1	-2.0	-1.3	-20.2	-8.2	-18.5	15
Other	46											
	257			+1.8	-0.9	-1.1	-2.2	-1.8	-27.1	-17.7	-48.4	13
<i>Stores &gt;1,400 sq metres</i>			⌋									
Local	185			-0.7	-0.5	-0.6	-0.3	-0.4	-10.8	-10.1	-32.1	0
National	229			+0.3	+0.8	+0.9	+0.9	+0.8	+14.4	+13.1	+40.5	0
Other	28											
	442			-0.1	+0.2	+0.2	+0.3	+0.3	+1.3	+1.1	+5.1	10
<i>With petrol filling station</i>												
Local	118		-1.4	-0.6	-0.7	-1.0	-0.8	-2.1	-5.0	-18.8	9	
National	164		-0.1	+0.8	+1.0	+1.4	+1.2	+24.6	+18.9	+55.1	8	
Other	5											
	287		-0.6	+0.3	+0.4	+0.7	+0.5	+13.3	+9.0	+23.9	8	
<i>Without petrol filling station</i>												
Local	67		+1.7	-0.1	-0.3	+2.1	+0.9	-32.6	-22.3	-65.3	14	
National	65		+2.8	+0.4	+0.4	-1.6	-0.9	-21.6	-7.9	-11.2	9	
Other	23											
	155		+2.0	-0.3	-0.4	-1.2	-0.9	-30.0	-19.3	-44.2	9	
<i>Stores &lt;1,400 sq metres</i>	107		+1.0	-2.7	-2.9	-5.9	-4.8	-16.0	-11.7	-60.9	14	

Source: CC from Tesco data.

8.109. The summary shows that the increase in gross margin flowed in whole or in part through to contribution margin. This indicates that the higher prices in the National stores were more than was required to meet higher operating costs, even though many of the National stores are in the southern and eastern regions of England where costs are thought to be higher. However, Table 8.31 shows that sales densities in National stores were higher than in Local stores, especially in stores with a petrol filling station. Even grocery sales densities were higher in stores with a petrol filling station. The higher densities in stores with a petrol filling station seem to have more than offset the effects of any higher operating costs.

8.110. In stores without a petrol filling station returns on net fixed assets were lower in National stores than in Local stores, despite the higher prices. However, Table 8.31 shows that for reference stores without a petrol filling station the cost of land for National stores was far higher at 81.5 per cent (100 per cent minus 18.5 per cent), compared with 30.8 per cent for Local stores. For stores over 1,400 sq metres without a petrol filling station, the cost of land was 88.8 per cent for National stores and 34.7 per cent for Local stores. The relatively low cost of land for the Local stores gave them a higher return on fixed assets than that of the National stores, even though their contribution margin was lower.

8.111. We observed differences in gross margin of more than one percentage point between Local and National stores. This may be attributable to factors other than variations in the prices of the relatively few lines in the Local basket. Tesco may be varying other prices, or there may be significant differences in product offerings and hence in purchasing patterns between stores with the two price codes, reflected in a different sales mix. Or Tesco may run more promotions in Local stores.

### *Sainsbury*

8.112. Sainsbury identified 116 stores that were on a lower price tier in April 1999, and we were able to find 111 of them in the list of stores for which we held data. In Table 8.32 we compare the profitability of stores on the higher and lower price tiers, first among all reference stores, then among reference stores with a sales area of more than 1,400 sq metres. In both cases there are 111 stores on the lower tier, because all Sainsbury stores below 1,400 sq metres are on the higher price tier. The table shows percentage differences, in this case from the average of all of Sainsbury's stores.

8.113. We calculated the ratio of contribution to sales in two ways, first as for the other companies, then adding back store rents. (Sainsbury had told us that many of the rents charged to stores were internal rents rather than payable to external landlords.)

8.114. Looking first at all stores, the table shows that the Sainsbury stores on the higher price tier had, as one would expect, slightly higher gross margins, but they also had a greater difference at the level of contribution margin (both unadjusted and with store rents added back). This indicates that the higher prices were not required to meet higher operating expenses, since the higher-priced stores benefited from higher sales densities, even though they were on average five years older than the lower-priced stores. Average land prices were greater for higher-priced stores, but in terms of returns on assets these stores outperformed the lower-priced stores, suggesting that the higher prices were not required to meet higher asset costs.

8.115. Turning to stores over 1,400 sq metres, the comparison is little changed, except that with the elimination of the 49 smaller stores the difference in store age is less marked.

## **Product group profitability**

8.116. We wanted not only to examine the overall profitability of companies engaged in the supply of groceries from multiple stores, but also the profits that they derived from the many different product categories which they stocked.

TABLE 8.32 Sainsbury: effect of price regime on profitability

Price regime	Number of stores	Sales incl VAT (£m)	Gross margin %	Contribution/sales %	Contribution/sales (adjusted)* %	Contribution net FAs %	Contribution gross FAs %	Sales density £/sq m	Grocery sales density £/sq m	Land cost/net sales area £/sq m	Average age of stores Years
<i>All stores</i>		}									
Lower	111		-0.1	-0.9	-0.7	-3.3	-2.3	-11.3	-10.0	-8.1	9
Higher	<u>311</u>		+0.1	+0.3	+0.3	+1.4	+1.0	+5.1	+4.3	+3.7	14
Total	<u>422</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
<i>Stores &gt;1,400 sq metres</i>		}									
Lower	111		-0.1	-0.9	-0.7	-3.3	-2.3	-11.3	-10.0	-8.1	9
Higher	<u>264</u>		+0.2	+0.5	+0.6	+1.3	+1.0	+5.9	+6.5	+9.7	11
Total	<u>375</u>		+0.1	+0.1	+0.2	-0.1	-0.0	+0.3	+1.2	+4.0	11
<i>Stores &lt;1,400 sq metres</i>	49		-1.7	-3.0	-4.3	+4.7	+0.1	-6.6	-21.7	-83.7	25

Source: CC from Sainsbury data.

\*Contribution with rent added back.

8.117. We asked each of the 24 parties to provide for its 1998/99 financial year information for 34 product categories. We had found that there was no uniformly accepted system for grouping the thousands of grocery lines into categories, and this was reflected in the widely differing management accounts that we received from the parties. We therefore based our categories on those used by Verdict,<sup>1</sup> since we expected them to be familiar to the parties.

8.118. For each category we asked for the sales including VAT, gross margin and contribution and the total number of lines stocked during the year. We received replies from all the main parties except for Lidl, with Somerfield and Kwik Save responding separately.

### ***Gross margins***

8.119. Table 8.33 shows the sales and gross margins for each category, aggregated from the 25 responses. Gross margin is struck before costs such as counter staff costs and refrigeration costs which inevitably vary significantly between products.

8.120. The total grocery sales in the table of £56,073.7 million is close to the figure in Table 5.6 of £56,601 million, which was the total of grocery sales from all the grocery stores of the main parties, including non-reference stores. The largest component of the difference arose from the inability of Sainsbury to provide information in the requested format for its Savacentre stores, which had been a separate operation from its remaining reference stores in 1998/99. There are some other limitations to the information in the table. First, we could not ask the companies to split the information in their replies between reference and non-reference stores, as they would not have made any such distinction at the time of purchase, and so the information relates to all their stores. As a result, companies such as Iceland, Budgens and the Co-ops, many of whose stores are non-reference stores, have a weighting in Table 8.33 that exceeds their share of the market for reference goods. Second, although the 34 categories were based on those used by Verdict, we cannot be certain that the parties allocated individual products to all these categories in a uniform way. Third, we did not provide a definition of gross margin, and this may account for some of the variations that we observed—the reported gross margins for total groceries varied from 12.8 to 33.1 per cent, with most companies reporting gross margins between 20.0 and 30.0 per cent.

8.121. The gross margins in the table are based on sales including VAT. Most food categories are zero-rated, but alcoholic drinks, soft drinks, cleaning products, toiletries, household goods and confectionery are generally subject to VAT at the standard rate of 17.5 per cent. For these categories the effect of calculating gross margins on sales including VAT is to reduce gross margin by about two to three percentage points. Alcoholic drinks, particularly spirits, are subject to heavy rates of duty, so this category has the lowest measured gross margin in the table.

### ***Contribution***

8.122. The request for information on contribution brought a response from only four companies. Several others told us that they only calculated gross margin, and did not attempt to assign operating expenses such as distribution and promotions to products or product groups to derive their contribution.

8.123. Looking at the contribution margins for the four companies that did provide information, those for perishable food categories were above those for other products, just as had been the case with gross margins. Categories such as bakery, fish counter and delicatessen, with high space costs, considerable direct labour and short shelf-life products, had contribution rates well below their gross margins.

### ***Other measures of product profitability***

8.124. We wanted to obtain more detailed information on product profitability and asked the five major parties if they used other measures to assess it. Safeway provided us with sales and contribution data for more than 100 grocery categories for 1998/99. Asda sent us an example of its Direct Product

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<sup>1</sup>Verdict on Grocers and Supermarkets 1999, Verdict Research Ltd.

Profit (DPP) reports for the last quarter of 1998/99 covering its provisions category, while Sainsbury provided its Activity Based Profit (ABP) report. Tesco and Morrison were unable to give us further information, and told us that they did not have DPP or similar information for 1998/99.

TABLE 8.33 Main parties: sales and gross margins by category, 1998/99

	<i>£ million</i>			
	<i>Sales incl VAT</i>	<i>Gross margin</i>	<i>Gross margin %</i>	<i>Proportion of sales %</i>
<i>Groceries</i>				
Sauces, pickles and condiments	1,279.4	412.6	32.2	2.3
Bread and cakes	2,401.0	625.0	26.0	4.3
Biscuits	1,442.5	324.2	22.5	2.6
Breakfast cereals	1,035.4	196.8	19.0	1.8
Crisps, snacks and nuts	1,301.1	350.1	26.9	2.3
Canned vegetables and pasta	683.6	130.7	19.1	1.2
Canned fruit and desserts	412.8	96.5	23.4	0.7
Canned meat and fish	578.3	106.3	18.4	1.0
Confectionery	1,519.3	330.4	21.7	2.7
Soups	340.3	90.6	26.6	0.6
Rice, pasta and pulses	478.7	161.6	33.8	0.9
Flour and home baking	547.4	142.6	26.1	1.0
Preserves	288.4	83.5	28.9	0.5
Other groceries	925.8	183.9	19.9	1.7
<i>Perishable food</i>				
Fresh produce	5,808.4	1,643.2	28.3	10.4
Frozen food	4,394.9	1,312.8	29.9	7.8
Chilled provisions	3,895.9	1,212.2	31.1	6.9
Dairy	4,332.7	1,111.7	25.7	7.7
Fresh meat, fish and poultry	4,076.4	1,010.5	24.8	7.3
Delicatessen (incl bacon and sausages)	2,481.9	860.8	34.7	4.4
Bakery	659.9	328.3	49.7	1.2
Fish counter	172.1	38.6	22.4	0.3
<i>Drinks</i>				
Alcoholic	5,042.9	809.2	16.0	9.0
Non-alcoholic	3,802.1	919.0	24.2	6.8
<i>Cleaning products</i>				
Detergents	1,320.7	193.0	14.6	2.4
Household cleaners	597.4	180.7	30.2	1.1
Other cleaning products	190.8	64.0	33.5	0.3
<i>Toiletries</i>				
Health and beauty	1,903.2	594.3	31.2	3.4
Other toiletries	586.8	172.4	29.4	1.0
<i>Household goods</i>				
Nappies, baby toiletries and food	633.0	148.8	23.5	1.1
Paper products	1,130.0	321.2	28.4	2.0
Pet food	1,077.8	229.3	21.3	1.9
Kitchenware and hardware	316.2	118.4	37.4	0.6
Other household goods	416.7	193.0	46.3	0.7
Total groceries	<u>56,073.7</u>	<u>14,695.9</u>	26.2	<u>100.0</u>
<i>Summary</i>				
Groceries	13,234.0	3,234.7	24.4	23.6
Perishable foods	25,822.1	7,518.1	29.1	46.1
Drinks—alcoholic	5,042.9	809.2	16.0	9.0
Drinks—non alcoholic	3,802.1	919.0	24.2	6.8
Cleaning products	2,108.9	437.7	20.8	3.8
Toiletries	2,489.9	766.7	30.8	4.4
Household goods	3,573.7	1,010.6	28.3	6.4

Source: CC from company data.

### *Asda's Direct Product Profitability*

8.125. Asda told us that it employed a measure called DPP to provide a directly comparable measure across different product areas. DPP was a methodology developed in the 1960s and 1970s. It allowed all

relevant direct costs to be allocated to a particular product or group of products to provide a measure of actual profit generated by each. This could be used as the basis for decisions on ranging, pricing and space allocation. At Asda, DPP was the primary basis on which space was allocated to broad product areas, the key measure it used being Direct Product Profit per sq foot (DPP/sq ft).<sup>1</sup>

8.126. [

*Details omitted. See note on page iv.*

]

TABLE 8.34 Asda: calculation of DPP/sq foot

	<i>Fresh milk</i>	<i>Cottage cheese</i>	<i>Butter, fats &amp; margarine</i>	<i>Total dairy</i>	<i>Total provisions</i>	per cent
<i>Gross margin</i>	[             ]	[             ]	[             ]	[             ]	[             ]	
Turnover bonus*						
'Fund 6' †						
Promotions‡						
Gross buying income						
Mark-downs						
Waste						
Wages						
Distribution						
Cost of stockholding						
Payment terms benefit						
Other DPP income/(costs)§						
DPP margin						
						£
Sales per sq ft	[  ]	[  ]	[  ]	[  ]	[  ]	
DPP/sq ft						

Source: Asda.

\*Turnover bonus is overrides.

†Fund 6 is promotional funds not allocated to specific products.

‡Mostly Linksave, ie promotions where the purchase of one product is linked to the purchase of another.

§Settlement discount less the costs of energy, packaging and contract cleaning.

8.127. Table 8.34 shows that while fresh milk and butter, fats & margarine had almost the same gross margin, fresh milk had a DPP margin that was [ 30% ]. There were several reasons for this. Milk is one of the few products that are delivered direct to stores, and so do not incur distribution costs (about 3 per cent of sales for most products). It also had significant promotional funding from suppliers. Even so, its gross margin and DPP margin were [ 30% ] cottage cheese. But fresh milk had [ 30% ] sales per sq foot, about [ 30% ] those of butter, fats & margarine and cottage cheese. As a result the DPP/sq ft of fresh milk was nearly [ 30% ] that of cottage cheese and [ 30% ] that of butter, fats & margarine.

8.128. It was clear that DPP/sq ft could give different relative profitability from gross margin information. We therefore asked Asda to provide DPP information not only for provisions but also for its other major grocery categories.

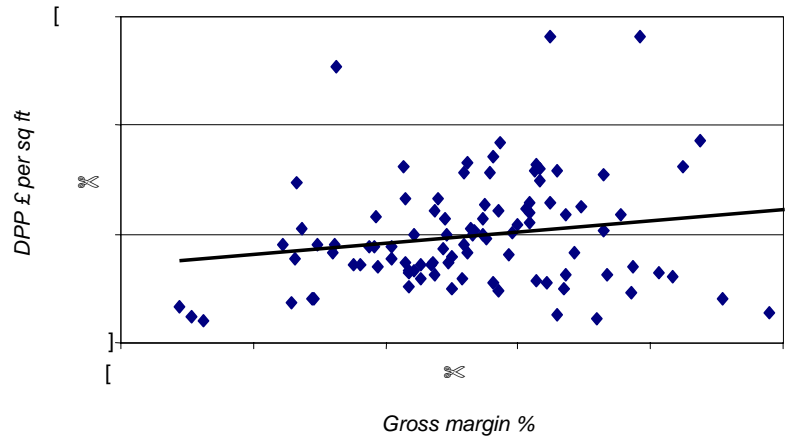
8.129. Asda divides its groceries into 8 major categories, 42 categories and over 230 sub-categories. The latter were in some cases too detailed for us, so for our analysis we merged categories and sub-categories to give us 99 grocery categories. Information on these categories is summarized in Appendix 8.11, first in category order and then in order of DPP/sq ft.

<sup>1</sup>We have retained this measure in paragraphs 8.125 to 8.130 and in Tables 1 and 2 of Appendix 8.11 rather than translating it into DPP per sq metre because this is the way it was provided to us.

8.130. Figure 8.3 shows the DPP/sq ft for these 99 categories plotted against their gross margins. The first line above the base line denotes the break-even level.

FIGURE 8.3

**ASDA: DPP/sq ft v gross margin**



8.131. In Figure 8.3 the trend line indicates that DPP/sq ft increases with gross margin, but the divergence of many of the observations from this trend shows that other factors influence DPP. Some categories with high gross margins have low or even negative DPP returns.

*Sainsbury's Activity Based Profitability*

8.132. Sainsbury provided us with a paper that it had prepared in September 1998 about a new product profitability system to replace its old DPP processes. The tool that it was now using was an Activity Based Costing system. Compared to DPP, costs had been broken down into much greater detail and key cost drivers had been identified. Instead of being based on a small sample of stores, costs for all stores had been included, and capital costs had been calculated to reflect the current store portfolio.

8.133. The paper gave ABP results for 1997/98 for five 'buying groups': primary agriculture; prepared foods; grocery; home & personal care; and off-licence. It also gave results for 140 'display groups' within the buying groups. We noted that primary agriculture and prepared foods enjoyed above-average ABP returns. Bacon, cooked meats, cheese, spirits and fresh poultry were among the display groups with an ABP that was more than twice the Sainsbury average in 1997/98. Others with high returns included ready meals, dairy milk, fruit, yoghurts & desserts, vegetables, red wine, salad and beef, all with an ABP/sq m that was 20 per cent or more above the Sainsbury average. Detergents and bread were among the display groups with ABP returns below 40 per cent of the Sainsbury average.

8.134. In view of the wide variation of ABP returns for 1997/98, we obtained the 1998/99 ABP report when it became available during our inquiry. The report is summarized in Appendix 8.11. Sainsbury stressed that it was still developing and refining its ABP data and it warned that we should not rely on the detailed figures. We considered that nevertheless the information was likely to be sufficiently accurate to enable certain overall inferences to be drawn.

*Common features*

8.135. Although there were differences in methodology between Asda's DPP system and Sainsbury's ABP, as well as differences in the categories, several features were common to the product profits of both companies:

- (a) To have high profits, a product must have one or more of the following:
- (i) a high gross margin;
  - (ii) high receipts from suppliers for promotions and discounts (if not included in the calculation of gross margin);
  - (iii) low direct costs such as distribution and in-store labour;
  - (iv) a high rate of sale; or
  - (v) a high unit sales value.

[ ~~§~~ ], which met several of these requirements, was the most profitable category for both Sainsbury and Asda.

- (b) Other categories with above-average profitability included [ *Details omitted. See note on page iv.* ].
- (c) Service counters and in-store bakeries performed poorly and were sometimes loss-making. High gross margins were eroded by in-store labour costs, while the large space occupied by the counters led to low sales densities.
- (d) [ *Details omitted. See note on page iv.* ] had poor profitability.
- (e) Categories that consisted mostly of branded products tended to be less profitable than those where own-label or unbranded products were predominant.

8.136. It appears likely that the product profitability of Tesco, Safeway and Morrison will not differ significantly from that of Sainsbury and Asda. They stock the same types of goods and sell them at broadly similar prices.

### ***Petrol sales***

8.137. Of the 3,925 reference stores, 950 have a petrol filling station. Stores with a petrol filling station are among the larger stores—only 17 of the 950 stores with a petrol filling station had a net sales area of less than 1,400 sq metres. The major parties operated 880 petrol filling stations:

Tesco	292
Sainsbury	213
Asda	134
Safeway	170
Morrison	71

with the remainder operated by the Co-ops (52), Somerfield (15) and Waitrose (3).

8.138. We looked at the effect of petrol sales on the UK grocery business of three of the five major parties, as recorded in their management accounts. Petrol had a much lower gross margin than the rest of the business, between 5.7 and 8.1 per cent, and the inclusion of petrol results caused reported gross margins to be reduced by 1.8 to 2.7 percentage points. Only one of the companies allocated operating costs to its petrol business, amounting to 4.5 per cent of sales, leaving a positive contribution from its petrol business. It did not allocate operating assets between its various businesses, so we were unable to calculate a return on assets.

8.139. Two of the companies when giving us details of the performance of individual stores eliminated petrol sales and profits. Tesco did include petrol sales and gross margin, so we were able to

compare the profitability of the stores with a petrol filling station against that of those without one, as shown in Table 8.35 (summarizing the information in Table 8.31).

TABLE 8.35 **Tesco: relative performance of stores with a petrol filling station, 1998/99**

	<i>Number of stores</i>	<i>Percentage point deviation</i>		
		<i>Gross margin</i>	<i>Contribution margin</i>	<i>Return on net fixed assets</i>
All reference stores	549	0.0	0.0	0.0
With petrol filling station	292	-0.6	+0.3	+0.6
Without petrol filling station	257	+1.8	-0.9	-2.2

Source: Tesco.

8.140. Table 8.35 shows that the stores with a petrol filling station have an overall gross margin 2.4 percentage points lower than those without one because of the diluting effects of the low gross margin of petrol. This is not continued at the level of store contribution, nor when comparing the ratios of contribution to net fixed assets. Stores with a petrol filling station have a contribution margin that is 1.2 percentage points higher than those without one, and returns on fixed assets that are 2.8 points higher. Some of the superior performance of stores with a petrol filling station can be attributed to higher sales densities for groceries and the lower average age of the stores, but Table 8.31 does not show that stores with a petrol filling station are less profitable.

### **Profitability of branded vs own-label products**

8.141. Five products (detailed below) were selected for a detailed composition of own-label versus branded product profitability. Although this is only a very small sample of products we thought it reasonable as a basis for examining this area.

8.142. We asked Asda, Morrison, Safeway, Sainsbury and Tesco to provide profitability data on their three top-selling branded and own-label lines from the list of products, shown in Table 8.36.

TABLE 8.36 **Product description**

<i>Product</i>	<i>Description</i>	<i>Approximate pack size</i>
Bacon	Prepacked back bacon unsmoked	200/250g
Baked beans	Baked beans in tomato sauce	415g can
Cola	Cola (regular)	2-litre PET
Tea	Tea bags	80s
Toilet tissue	Soft toilet tissue—white	4-roll

Source: CC.

8.143. The retailers supplied broadly comparable information. The analysis is based on a comparison of standard branded and own-label product lines. Economy and premium products are excluded.

8.144. Information was also obtained from suppliers which enabled us to calculate of composition of retail price (ie costs and margins for both suppliers and retailers). This allowed us to identify the total profit margins generated by both retailers and suppliers and the differences in profit margins between branded and own-label products.

8.145. Table 8.37 displays the results of this analysis and shows:

- (a) retail prices in pounds;
- (b) retailer's gross margin in pounds and in percentage terms;

- (c) supplier's gross margin in pounds and as a percentage of the retail price; and
- (d) supplier's costs in pounds.

TABLE 8.37 **Basket pricing**

Product	Retail price excl VAT £		Retailer's gross margin £		Retailer's gross margin %		Supplier's gross margin £		Supplier's gross margin as % of retail price		Supplier's costs £	
	Branded	Own-label	Branded	Own-label	Branded	Own-label	Branded	Own-label	Branded	Own-label	Branded	Own-label
<b>Asda</b>												
Bacon	2.29	1.99										
Baked beans	0.32	0.23										
Cola	0.89	0.59										
Tea	1.41	0.97										
Toilet tissue	1.19	1.36										
Asda basket	6.10	5.14										
<b>Morrison</b>												
Bacon	1.99	0.99										
Baked beans	0.31	0.23										
Cola	0.98	0.55										
Tea	1.50	0.97										
Toilet tissue	1.44	1.27										
Morrison basket	6.22	4.01										
<b>Safeway</b>												
Bacon	1.99	2.19										
Baked beans	0.33	0.23										
Cola	1.12	0.81										
Tea	1.66	1.19										
Toilet tissue	1.53	1.53										
Safeway basket	6.63	5.95										
<b>Sainsbury</b>												
Bacon	2.29	1.99										
Baked beans	0.31	0.23										
Cola	1.07	0.81										
Tea	1.57	1.19										
Toilet tissue	1.53	1.44										
Sainsbury basket	6.77	5.66										
<b>Tesco</b>												
Bacon	1.99	2.05										
Baked beans	0.31	0.23										
Cola	1.07	0.59										
Tea	1.51	0.89										
Toilet tissue	1.53	1.41										
Tesco basket	6.41	5.17										
Average basket	6.43	5.16	1.61	2.26	25.1	43.6	2.05	0.85	31.9	16.4	2.76	2.08

Figures omitted. See note on page iv.

Source: CC from company data.

\*Figures were derived as the average of those supplied to the other parties.

8.146. Table 8.38 shows the extent to which, for the selected products, the groups pass on in lower retail prices the savings made in the input cost of own-label products.

TABLE 8.38 Profitability of own-label products

	Supplier's cost saving £	Lower supplier margin £	Retailers' purchase saving £	Lower retail price £	Higher retail margin £	% of retailers' saving retained
Asda Morrison Safeway Sainsbury Tesco	[ Figures omitted. See note on page iv. ]					
Unweighted average	0.68	1.21	1.89	1.24	0.65	35
% composition and distribu- tion of retailers' purchase saving on own label com- pared with branded equivalent (%)	10.6	18.8	29.4	19.3	10.1	

Source: CC analysis.

8.147. The first column shows the suppliers' cost saving in providing own-label rather than branded products; the second column shows the lower margin that suppliers take on own-label; the third column shows how much cheaper it is for a retailer to purchase own-label (and therefore is the sum of columns 1 and 2); the fourth gives the extent to which the retail price of an own-label basket is lower than that of a branded basket (and is therefore column 1 plus column 2 minus column 5); the fifth shows the higher margin that the retailer takes. The final column gives the percentage of those savings which are retained by the retailer in the form of a higher retail margin (column 5 as a percentage of column 3). The figures are given for the five products for each multiple and the average for the five.

8.148. It appears from this analysis of the five products that:

- (a) On average multiples retain one-third of their own-label savings, passing two-thirds on to consumers.
- (b) Sainsbury, Asda and Tesco are, in broad terms, close to this average, but Morrison and Safeway are outliers in opposite directions. Morrison effectively retains very little of the savings, passing virtually all of them on to consumers, and, as a result, is much cheaper on own-label (£4.01 against an average for the other four of £5.48). In contrast Safeway retains 67 per cent passing on only one-third of the savings and, as a result, has the highest own-label price (£5.95).
- (c) While there is some degree of consistency between the overall savings made by the multiples in purchasing own-label (from £1.66 to £2.25, and with [ ] all very similar), a comparison of the first two columns of Table 8.37 suggests that there is a considerable difference in the extent to which this is comprised of suppliers' cost savings and lower suppliers' margin.

8.149. Higher gross margins on own-label sales typically arise because they need to cover certain costs that in the case of branded products are borne by the supplier. In many cases supermarkets seek to achieve a cash margin on own-label products that is similar to that achieved on the branded equivalent because the supermarkets' operating costs relating to both are similar. As typically the purchase cost of own-label and resulting price are lower, the same cash margin converts to a higher percentage margin.