

APPENDIX 3

Experian Data

APPENDIX 3A

**Definition of Convenience
Goods (Extract)**

1. Estimating consumer spending on retail goods

1.1 SOURCES

Estimates of consumer spending on retail items are taken from estimates of household spending contained in the Office for National Statistics' (ONS) publication *Consumer Trends* (latest issue June 2007).¹ This breaks total household spending down according to the internationally recognised COICOPS categories (Classification of Individual Consumption by Purpose). This is consistent with the definitions used in the ONS' *National Accounts (Blue Book also June 2007)* publication.

Note that these estimates are based on surveys of consumers and are not the same as the ONS' estimates of retail sales, which are based on surveys of shops and businesses. The difference between the two estimates is discussed in Section 1.3 below and in more detail in Section 5.

1.2 DEFINITIONS

In Retail Planner, consumer spending on retail goods is available at either a 'fine' or 'coarse' level of detail.² Forecasts and market share estimates (see Sections 2 and 4) are only provided at a coarse level. The coarse categories are aggregations of the fine categories and are detailed in Table 1.1. Other special aggregations are also available, such as 'comparison goods', 'convenience goods', 'core DIY goods' and 'core bulky goods' (see Section 1.5 below).

1.3 ALLOWANCE FOR NON-RETAIL SPENDING

In all cases but one, spending estimates refer to retail outlets.³ The exception is tobacco, where the figures include spending in pubs, clubs and restaurants. We allow for this non-retail spending and for tobacco which is smuggled into the country. Estimates are based on data from the Annual Business Inquiry (ABI).

1.4 ALLOWANCES FOR SPENDING MADE BY FOREIGNERS

The National Accounts definition of household outlays includes spending in the UK by foreigners.⁴ This is deducted from the sum of spending by category (which is also net of UK residents' spending abroad) to give the figure for total household spending by UK residents that appears in the *National Accounts* and the ONS' GDP releases.

In 2006, the ONS estimated that foreigners spend £18.6bn pounds in the UK out of total household spending in the UK of £746bn (2.4 per cent of the total). The bulk is used for

¹ The ONS now refers to consumer spending as household spending.

² Note that this does not represent the full level of detailed spending estimates available from Experian Business Strategies, but it is the most detailed level for which ONS currently publishes national spending totals (in *Consumer Trends* and the *Blue Book*).

³ This includes spending in some non-retail outlets such as mail order and sales by wholly internet companies.

⁴ European System of Accounts 1995 (or ESA95). Note that this was also the case with previous definitions of consumer spending.

accommodation, catering and travel services, but, on the basis of Input-Output tables and the *International Passenger Survey*, we estimate that some 25 per cent of this is spent on retail goods. Table 1.1 shows this estimate broken down by coarse category and Table 1.2 shows the full, fine category detail.

While this is genuine spending, most of which finds its way into UK retail outlets (rather than into special forms of trading), we have separated it out from the resident totals. This is because most spending by foreigners takes place around tourist centres and cannot be allocated to small areas on the basis of population and socio-economic mix as for residents.⁵

Note that the current version of Retail Planner covers spending by residents in the UK. It does not include any estimates of retail spend by tourists in local areas, although information on this is planned for future versions.

1.5 AGGREGATIONS

Aside from COICOPS, Retail Planner contains a number of special aggregations of retail goods. These are:

1. **Convenience goods** – low-cost, everyday items that consumers are unlikely to travel far to purchase. Defined as food and non-alcoholic drinks, tobacco, alcohol, newspapers and 90 per cent of non-durable household goods.⁶
2. **Comparison goods** – all other retail goods.
3. **Core DIY goods** – goods that might be sold in a DIY store. These are defined to be:
 - a. Materials for repair and maintenance of the dwelling
 - b. Small tools and miscellaneous accessories
 - c. Major tools and equipment
 - d. Gardens, plants and flowers
 - e. Furniture and floor coverings (10 per cent of total sales)
 - f. Non-durable household goods (10 per cent of total sales)

There is also a category called **core DIY goods excluding gardening**.

4. **Bulky goods** – defined as:
 - a. DIY goods (as above)
 - b. Furniture and floor coverings (remaining 90 per cent of sales)
 - c. Major household appliances whether electric or not
 - d. Audio-visual equipment

1.6 NHS PRESCRIPTION COSTS

Official estimates of household spending include the cost of prescription charges but not the cost of the subsidy paid by the NHS. This means that household spending on medical goods will understate the potential sales of pharmacists. To allow for this shortcoming we have estimated, based on NHS data, that spending by the NHS on prescriptions was £151 per person in 2006.

⁵ In 2004 almost half of all spending in the UK by overseas tourists took place in London (International Passenger Survey).

⁶ Non-durable household goods comprise cleaning materials, kitchen disposables, household hardware and appliances, kitchen gloves, cloths etc and pins, needles, tape measures and nuts and bolts. We have assumed, based on EFS data, that 10 per cent of non-durable household goods are DIY-type goods and, therefore, are properly classified as comparison goods while the remaining 90 per cent have the characteristics of convenience goods.

APPENDIX 3B

**Convenience Goods
Expenditure Per Head**

ZONE 1

Total Retail per Household	11,518	10,557	109.107	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	115	121	95.657	88
Total Retail per Household	11,518	10,557	109.107	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	236	368	64.177	59
Total Retail per Household	11,518	10,557	109.107	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	323	265	121.689	120
Cultural services per Household	514	543	94.624	94
Games of chance per Household	289	379	76.173	75
Hairdressing salons & personal grooming establishments per Household	238	199	119.584	118
Recreational and sporting services per Household	336	274	122.846	121
Restaurants, cafes etc per Household	2,614	2,603	100.428	99
Total Leisure per Household	4,314	4,264	101.188	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,246	2,850	113.872	102
Total Convenience per Person	1,763	1,649	106.899	96
Total Retail per Person	5,008	4,499	111.316	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	42	49	85.896	77
Spirits (off trade)	56	54	104.122	94
Wine, cider and perry (off trade)	132	102	129.922	117
Total Retail per Person	5,008	4,499	111.316	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	102.652	92
Other appliances, articles & prods for personal care per Person	265	237	111.980	101
Appliances for personal care per Person	282	254	111.358	100
Total Retail per Person	5,008	4,499	111.316	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	72	81	89.441	80
Information processing equipment per Person	73	88	83.273	75
Photographic and cine eqpt and optical instruments per Person	113	63	178.455	160
Telephone and telefax equipment per Person	17	15	109.878	99
Total Retail per Person	5,008	4,499	111.316	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	9	22	42.034	38
Total Retail per Person	5,008	4,499	111.316	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	63	58	107.555	97

ZONE 2

Total Retail per Household	10,793	10,557	102.236	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	98	121	81.464	80
Total Retail per Household	10,793	10,557	102.236	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	269	368	73.172	72
Total Retail per Household	10,793	10,557	102.236	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	283	265	106.767	111
Cultural services per Household	511	543	94.019	98
Games of chance per Household	318	379	83.769	87
Hairdressing salons & personal grooming establishments per Household	202	199	101.525	105
Recreational and sporting services per Household	298	274	109.038	113
Restaurants, cafes etc per Household	2,496	2,603	95.896	100
Total Leisure per Household	4,109	4,264	96.361	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	2,905	2,850	101.910	102
Total Convenience per Person	1,584	1,649	96.070	96
Total Retail per Person	4,489	4,499	99.769	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	43	49	88.127	88
Spirits (off trade)	51	54	95.330	96
Wine, cider and perry (off trade)	108	102	106.132	106
Total Retail per Person	4,489	4,499	99.769	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	98.436	99
Other appliances, articles & prods for personal care per Person	241	237	101.878	102
Appliances for personal care per Person	258	254	101.648	102
Total Retail per Person	4,489	4,499	99.769	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	71	81	87.207	87
Information processing equipment per Person	71	88	80.851	81
Photographic and cine eqpt and optical instruments per Person	98	63	154.716	155
Telephone and telefax equipment per Person	17	15	108.255	109
Total Retail per Person	4,489	4,499	99.769	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	11	22	48.694	49
Total Retail per Person	4,489	4,499	99.769	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	54	58	91.638	92

ZONE 3

Total Retail per Household	10,918	10,557	103.415	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	105	121	86.657	84
Total Retail per Household	10,918	10,557	103.415	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	239	368	64.942	63
Total Retail per Household	10,918	10,557	103.415	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	298	265	112.241	116
Cultural services per Household	499	543	91.945	95
Games of chance per Household	301	379	79.422	82
Hairdressing salons & personal grooming establishments per Household	217	199	108.723	113
Recreational and sporting services per Household	315	274	115.002	119
Restaurants, cafes etc per Household	2,484	2,603	95.412	99
Total Leisure per Household	4,113	4,264	96.474	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,198	2,850	112.200	102
Total Convenience per Person	1,737	1,649	105.332	96
Total Retail per Person	4,935	4,499	109.683	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	43	49	88.237	80
Spirits (off trade)	57	54	106.677	97
Wine, cider and perry (off trade)	126	102	124.357	113
Total Retail per Person	4,935	4,499	109.683	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	18	17	105.224	96
Other appliances, articles & prods for personal care per Person	266	237	112.212	102
Appliances for personal care per Person	283	254	111.746	102
Total Retail per Person	4,935	4,499	109.683	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	74	81	90.909	83
Information processing equipment per Person	74	88	84.043	77
Photographic and cine eqpt and optical instruments per Person	108	63	170.559	156
Telephone and telefax equipment per Person	17	15	110.874	101
Total Retail per Person	4,935	4,499	109.683	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	10	22	44.801	41
Total Retail per Person	4,935	4,499	109.683	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	60	58	102.694	94

ZONE 4

Total Retail per Household	11,039	10,557	104.570	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	111	121	91.762	88
Total Retail per Household	11,039	10,557	104.570	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	229	368	62.353	60
Total Retail per Household	11,039	10,557	104.570	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	314	265	118.393	120
Cultural services per Household	515	543	94.770	96
Games of chance per Household	270	379	71.318	72
Hairdressing salons & personal grooming establishments per Household	228	199	114.466	116
Recreational and sporting services per Household	324	274	118.299	120
Restaurants, cafes etc per Household	2,559	2,603	98.300	100
Total Leisure per Household	4,210	4,264	98.740	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,151	2,850	110.561	103
Total Convenience per Person	1,681	1,649	101.938	95
Total Retail per Person	4,832	4,499	107.401	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	41	49	83.887	78
Spirits (off trade)	54	54	100.244	93
Wine, cider and perry (off trade)	128	102	125.466	117
Total Retail per Person	4,832	4,499	107.401	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	18	17	105.153	98
Other appliances, articles & prods for personal care per Person	257	237	108.774	101
Appliances for personal care per Person	275	254	108.533	101
Total Retail per Person	4,832	4,499	107.401	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	74	81	91.823	85
Information processing equipment per Person	71	88	81.392	76
Photographic and cine eqpt and optical instruments per Person	111	63	174.577	163
Telephone and telefax equipment per Person	16	15	106.490	99
Total Retail per Person	4,832	4,499	107.401	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	9	22	39.951	37
Total Retail per Person	4,832	4,499	107.401	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	68	58	116.118	108

ZONE 5

Total Retail per Household	11,367	10,557	107.670	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	107	121	89.030	83
Total Retail per Household	11,367	10,557	107.670	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	235	368	63.926	59
Total Retail per Household	11,367	10,557	107.670	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	322	265	121.349	125
Cultural services per Household	501	543	92.304	95
Games of chance per Household	314	379	82.738	85
Hairdressing salons & personal grooming establishments per Household	214	199	107.586	111
Recreational and sporting services per Household	339	274	123.995	128
Restaurants, cafes etc per Household	2,452	2,603	94.174	97
Total Leisure per Household	4,142	4,264	97.150	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,217	2,850	112.858	102
Total Convenience per Person	1,774	1,649	107.577	97
Total Retail per Person	4,991	4,499	110.923	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	44	49	89.462	81
Spirits (off trade)	59	54	110.296	99
Wine, cider and perry (off trade)	140	102	137.267	124
Total Retail per Person	4,991	4,499	110.923	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	101.883	92
Other appliances, articles & prods for personal care per Person	253	237	106.830	96
Appliances for personal care per Person	270	254	106.500	96
Total Retail per Person	4,991	4,499	110.923	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	67	81	82.184	74
Information processing equipment per Person	83	88	94.136	85
Photographic and cine eqpt and optical instruments per Person	102	63	160.647	145
Telephone and telefax equipment per Person	18	15	116.839	105
Total Retail per Person	4,991	4,499	110.923	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	12	22	55.005	50
Total Retail per Person	4,991	4,499	110.923	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	62	58	105.368	95

ZONE 6

Total Retail per Household	11,961	10,557	113.299	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	122	121	100.775	89
Total Retail per Household	11,961	10,557	113.299	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	227	368	61.704	54
Total Retail per Household	11,961	10,557	113.299	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	354	265	133.322	129
Cultural services per Household	530	543	97.506	94
Games of chance per Household	291	379	76.613	74
Hairdressing salons & personal grooming establishments per Household	241	199	121.102	117
Recreational and sporting services per Household	366	274	133.698	129
Restaurants, cafes etc per Household	2,637	2,603	101.291	98
Total Leisure per Household	4,418	4,264	103.612	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,275	2,850	114.888	103
Total Convenience per Person	1,758	1,649	106.617	95
Total Retail per Person	5,033	4,499	111.857	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	43	49	87.608	78
Spirits (off trade)	56	54	104.739	94
Wine, cider and perry (off trade)	140	102	137.631	123
Total Retail per Person	5,033	4,499	111.857	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	99.165	89
Other appliances, articles & prods for personal care per Person	260	237	109.834	98
Appliances for personal care per Person	277	254	109.123	98
Total Retail per Person	5,033	4,499	111.857	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	71	81	87.920	79
Information processing equipment per Person	76	88	86.363	77
Photographic and cine eqpt and optical instruments per Person	116	63	182.568	163
Telephone and telefax equipment per Person	19	15	121.716	109
Total Retail per Person	5,033	4,499	111.857	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	11	22	48.431	43
Total Retail per Person	5,033	4,499	111.857	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	60	58	102.211	91

ZONE 7

Total Retail per Household	11,731	10,557	111.119	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	113	121	94.002	85
Total Retail per Household	11,731	10,557	111.119	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	256	368	69.532	63
Total Retail per Household	11,731	10,557	111.119	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	322	265	121.312	117
Cultural services per Household	533	543	98.058	95
Games of chance per Household	310	379	81.880	79
Hairdressing salons & personal grooming establishments per Household	228	199	114.354	111
Recreational and sporting services per Household	345	274	125.879	122
Restaurants, cafes etc per Household	2,674	2,603	102.723	99
Total Leisure per Household	4,411	4,264	103.461	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,068	2,850	107.631	103
Total Convenience per Person	1,637	1,649	99.285	95
Total Retail per Person	4,705	4,499	104.572	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	44	49	90.043	86
Spirits (off trade)	52	54	97.127	93
Wine, cider and perry (off trade)	120	102	117.984	113
Total Retail per Person	4,705	4,499	104.572	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	98.229	94
Other appliances, articles & prods for personal care per Person	254	237	107.407	103
Appliances for personal care per Person	271	254	106.795	102
Total Retail per Person	4,705	4,499	104.572	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	70	81	86.182	82
Information processing equipment per Person	72	88	82.598	79
Photographic and cine eqpt and optical instruments per Person	106	63	167.143	160
Telephone and telefax equipment per Person	17	15	110.574	106
Total Retail per Person	4,705	4,499	104.572	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	11	22	48.579	46
Total Retail per Person	4,705	4,499	104.572	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	54	58	92.948	89

ZONE 8

Total Retail per Household	10,914	10,557	103.380	100
	Target	Base	Penetration	Index
Therapeutic appliances and equipment per Household				
Therapeutic appliances and equipment per Household	106	121	87.523	85
Total Retail per Household	10,914	10,557	103.380	100
	Target	Base	Penetration	Index
Tobacco (Retail) per Household				
Tobacco per Household	235	368	63.928	62
Total Retail per Household	10,914	10,557	103.380	100
	Target	Base	Penetration	Index
Prescription costs per Household				
Prescription costs per Household	356	356	100.000	-
Leisure per Household				
	Target	Base	Penetration	Index
Total Leisure per Household				
Accommodation services per Household	296	265	111.599	120
Cultural services per Household	508	543	93.465	101
Games of chance per Household	286	379	75.346	81
Hairdressing salons & personal grooming establishments per Household	228	199	114.549	123
Recreational and sporting services per Household	297	274	108.375	117
Restaurants, cafes etc per Household	2,350	2,603	90.283	97
Total Leisure per Household	3,965	4,264	92.981	100
Total Retail per Person				
	Target	Base	Penetration	Index
2006 Total Expenditure per Person (in 2006 prices)				
Total Comparison per Person	3,009	2,850	105.572	101
Total Convenience per Person	1,699	1,649	103.026	98
Total Retail per Person	4,708	4,499	104.639	100
	Target	Base	Penetration	Index
Alcohol (off trade) per Person				
Beer (off trade)	41	49	84.673	81
Spirits (off trade)	62	54	116.640	111
Wine, cider and perry (off trade)	131	102	128.942	123
Total Retail per Person	4,708	4,499	104.639	100
	Target	Base	Penetration	Index
Appliances for personal care per Person				
Electric appliances for personal care per Person	17	17	102.049	98
Other appliances, articles & prods for personal care per Person	241	237	101.995	97
Appliances for personal care per Person	259	254	101.999	97
Total Retail per Person	4,708	4,499	104.639	100
	Target	Base	Penetration	Index
Audio-visual, photographic and information processing equipment per Person				
Eqpt fr recptn, recrdng and reprdtn of sound and pics per Person	81	81	100.275	96
Information processing equipment per Person	93	88	106.118	101
Photographic and cine eqpt and optical instruments per Person	84	63	133.039	127
Telephone and telefax equipment per Person	19	15	123.099	118
Total Retail per Person	4,708	4,499	104.639	100
	Target	Base	Penetration	Index
Bicycles per Person				
Bicycles per Person	17	22	74.890	72
Total Retail per Person	4,708	4,499	104.639	100
	Target	Base	Penetration	Index
Books & stationary per Person				
Books per Person	62	58	106.209	102

APPENDIX 3C

**Expenditure Forecasts
(Extract)**

3. Projections and forecasts

3.1 CONCEPTS

Future spending levels will have a critical bearing on the need for retail space. Consequently, stakeholders in the planning process, such as the local authority, retailers, consultants and surveyors, need to understand how spending on goods and services will change.

Traditionally, planners have used a mixture of methods to forecast spending levels. There is no one correct method for the different considerations of each planning application. But experts must decide which is best suited to the particular circumstance.

Retail Planner presents the two principal methods of looking at trends in spending on retail and leisure goods:

- 1 **Projections** – estimates based on the extrapolation of past trends, with alternative projections estimated over different time periods (say 5, 10, 20 and 40 years).
- 2 **Forecasts** – estimates of future spending based on an econometric model of consumer spending. This approach also allows scenarios to be produced with different assumptions about the key macroeconomic drivers (such as interest rates).

The following sections describe the methodology used to forecast retail spending and the results achieved, though we do not make value judgments about which is best.

3.2 CHAIN LINKING

Before we can estimate past trends in convenience and comparison goods spending, we need historical time series. Traditionally this has involved aggregating ONS constant price (or inflation adjusted) estimates of spending by detailed category. This is problematic because:

“Comparisons of aggregates of volume series over time are complicated by changes in the relative prices of different goods and services and by qualitative changes in the goods and services themselves. As time passes some goods escalate in price more rapidly than others. Others change so much that they become, in effect, different goods and services from those produced previously under the same name.”⁷

Because of these shifts, relative prices of goods and services in the base year become increasingly unrepresentative over time. As a result, changes in measured volumes will also be less reliable in periods distant from the base year. This is particularly problematic for goods or services such as audio-visual equipment that have seen sharp declines in price over time. So, valuing this spending at 2005 prices, when estimating aggregate retail spending growth rates from 1965 for example, is likely to cause distortions.

Until 2003, the ONS approach used fixed-base chain linking, whereby estimates using different price bases were spliced together every five years. In 2003, the ONS moved to annual chain-linking for its constant price aggregates. This is similar to fixed-base chain linking except that the weights change every year and growth over time is estimated by linking together year-to-year estimates. This method is in line with the recommendations of the *System for National Accounts 1993 (SNA93)*, which is incorporated into the *European System of Accounts 1995*

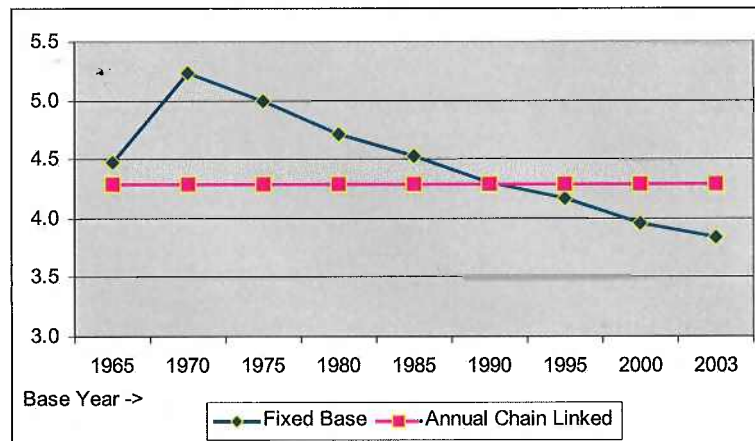
⁷ National Statistics (1999), *United Kingdom National Accounts, the Blue Book*, p.25.

(ESA95) and has been widely adopted internationally. The main drawback of annual chain linking is a loss of additivity – as the components of, say, comparison spending only sum to totals in the base year.

Since 2004, we have adopted the annual chain-linking methodology. This brings an additional advantage in increasing the stability of retail spending growth, particularly for comparison goods where changes in relative prices are most pronounced. This is largely because the volume of spending on audio-visual equipment has been rising particularly rapidly in recent years, accompanied by sharp falls in price. So comparison spending growth tends to fall relative to the last estimate, as audio-visual equipment has a lower weight each time the data is re-based and this revision affects all previous years. This problem disappears with annual chain-linking.

Figure 3.1 shows how the estimated ultra long-term trend (25 years to 2003 in this example) would have varied with different base years and compares it against the stability in the annual chain-linked estimate. Using 1990 prices, for example, the fixed-base method gives an estimated annual growth rate of 4.3 per cent per annum, which is similar to the annual chain-linked estimate. But the fixed-based estimate gives an estimate of 5.2 per cent per annum when estimated at 1970 prices and a rate of 3.9 per cent per annum when estimated at 2003 prices.

**FIGURE 3.1: COMPARISON GOODS ULTRA LONG-TERM TREND:
FIXED BASED VS. ANNUAL CHAIN LINKING**



National Accounts currently use annual chain linking to 2003 and a fixed-base methodology for 2004 onwards, with volumes being presented in 2003 prices. Retail Planner has adopted a slightly different convention, with annual chain linking for every year to the latest data point and volumes in 2006 prices. We believe it is useful to have spending volumes based in the closest year possible to current prices.

The annual chain-linked data has been used to estimate past trends for the broad aggregates and for projections. Forecasts have been prepared at a more detailed level and aggregated up to the broad totals using annual chain linking. Note the lack of additivity means spending on retail goods no longer equals the sum of convenience and comparison spend except in the base year, although the discrepancies tend to be small.

3.3 PROJECTIONS

We have estimated trends in spending per head on retail goods using the following equation:

$$\Delta \ln(\text{Spend}_t) = \beta + u_t$$

where:

$\Delta \ln(\text{Spend}_t)$ is the annual change in the log of spending per head.
 β is the estimated annual growth rate.

This method has been used to estimate trends over the following time periods:

1. 1967-2006 – ultra long-term trend
2. 1977-2006 – long-term trend
3. 1987-2006 – medium-term trend

Tables 3.1 and 3.2 show projections and forecasts of future spending volume growth by broad retail headings.

Results summary:

- Projections for future spending based on the medium-term (20-year) trend show the highest rates, reflecting the surge in retail expenditure during the 1980s and 1990s.
- Total retail spending growth over the next ten years is projected to be between 2.5 per cent (EBS, consensus) and 3.9 per cent per person a year (medium-term trend).
- Spending on comparison goods over the next ten years is projected to grow by between 3.5 per cent (EBS, consensus) and 6.0 per cent per cent, with projections of convenience spending growth of between 0.6 and 1.0 per cent.

TABLE 3.1
FORECASTS & PROJECTIONS OF UK SPENDING PER HEAD VOLUMES 2007-2011 (2006 PRICES)

	EBS forecast	Consensus forecast	Ultra long- term trend	Long-term trend	Medium-term trend
Convenience	0.7	0.6	0.6	0.8	1.0
Comparison	3.8	3.6	4.8	5.3	6.0
Total retail	2.6	2.5	2.9	3.3	3.9
Core DIY	2.4	2.2	3.0	3.5	3.0
Core DIY excluding gardening	2.5	2.3	2.9	3.6	2.7
Bulky goods	4.0	3.8	5.6	6.0	6.6
Non-bulky goods*	3.7	3.6	4.4	5.0	5.7
Leisure services	1.2	1.0	2.4	1.8	1.9
Total consumer spending	1.9	1.8	2.4	2.6	2.7

TABLE 3.2
FORECASTS & PROJECTIONS OF UK SPENDING PER HEAD VOLUMES 2007-2016 (2006 PRICES)

	EBS forecast	Consensus forecast	Ultra long- term trend	Long-term trend	Medium-term trend
Convenience	0.8	0.8	0.6	0.8	1.0
Comparison	3.5	3.5	4.8	5.3	6.0
Total retail	2.5	2.5	2.9	3.3	3.9
Core DIY	2.3	2.3	3.0	3.5	3.0
Core DIY excluding gardening	2.5	2.5	2.9	3.6	2.7
Bulky goods	3.5	3.5	5.6	6.0	6.6
Non-bulky goods*	3.4	3.4	4.4	5.0	5.7
Leisure services	1.1	1.1	2.4	1.8	1.9
Total consumer spending	1.8	1.8	2.4	2.6	2.7

* comparison goods only

3.4 FORECASTS

3.4.1 Experian Business Strategies

The forecasts presented in this paper are from Experian Business Strategies' model of disaggregated consumer spending. This uses our UK macroeconomic forecast variables (chiefly consumer spending, incomes and inflation) as an input and projects forward using assumptions about income and price elasticities. The shares of the individual components of consumer spending, not just the levels, will be sensitive to the UK outlook. Growth forecasts are also sensitive to the position of the base year in the economic cycle. If this is near to a cyclical peak, future growth will generally be lower than when close to a trough.

3.4.2 Consensus forecasts

Consensus views for GDP growth are taken from the Treasury (*Forecasts for the UK Economy, September 2007*) and also from Medium-Term Fiscal Projections in the 2007 *Budget Report*. Forecasts for household spending for 2007-08 are also from the Treasury. Differences between household spending and GDP growth after 2009 are taken from Consensus Economics (October 2007). We have not used their household spending or GDP forecasts, as they can be erratic due to the small sample.

Results summary:

- Experian Business Strategies' forecasts for total household spending over the next 5-10 years have moved close to the consensus, with growth at 1.8 per cent a year over the next decade.
- Forecasts for total retail and comparison goods spending growth are less buoyant than trend-based projections. This reflects a view among economists that the growth in spending will slow. Household savings rates are already very low and household indebtedness is at an all-time high - regarded as unsustainable in the long term.
- The trend-based projections are little changed from the last report, aside from some downward revisions to DIY spending.
- Spend per head volumes grew by 0.9, 4.9 and 3.5 per cent for convenience, comparison and total retail last year. The current forecasts for 2007 are for a pick up in convenience good growth to 1.9 per cent, but for comparison demand to slow to 4.6 per cent with total retail growing at 3.6 per cent.
- Note that the growth rates given are in volume terms. Trends in relative prices vary considerably between different categories of goods and services, so the volumes figures are not necessarily a guide to value trends. Annex 1 gives our view of future trends in values, volumes and prices.

TABLE 3.3
FORECAST VOLUME GROWTH FOR THE COARSE CATEGORIES (2006 PRICES)¹

	2007-2011	2007-2016
Food and non-alcoholic beverages	1.1	1.2
Tobacco	-4.2	-3.5
Alcohol (off trade)	2.7	2.3
Newspapers and periodicals	-3.0	-2.8
Clothing materials & garments	4.8	4.2
Shoes and other footwear	2.9	2.4
Materials for maintenance & repair of the dwelling	1.7	1.5
Furniture and furnishings; carpets & other floorcoverings	1.9	2.0
Household textiles	4.7	4.4
Major household appliances whether electric or not	2.6	2.6
Small electric household appliances	-4.4	-0.1
Tools and miscellaneous accessories	4.3	4.4
Glassware, tableware and household utensils	3.2	3.3
Non-durable household goods	1.6	2.0
Medical goods & other pharmaceutical products	2.8	2.6
Therapeutic appliances and equipment	1.4	1.1
Bicycles	3.9	3.8
Recording media	3.0	3.3
Games, toys & hobbies; sport & camping equipment; musical instruments	5.1	4.6
Gardens, plants and flowers	1.9	1.8
Pets and related products	1.1	1.6
Books & stationary	1.5	2.0
Audio-visual, photographic & info processing eqpt	8.6	6.9
Appliances for personal care	2.8	2.8
Jewellery, clocks and watches	0.3	0.3
Other personal effects	3.7	3.4
Total Convenience	0.7	0.8
Total Comparison	3.8	3.5
Total Retail	2.6	2.5
Other Aggregations:		
Core DIY Goods	2.4	2.3
Core DIY Goods exc Gardening	2.5	2.5
Bulky Goods (Comparison)	4.0	3.5
Non-Bulky Goods (Comparison)	3.7	3.4
Leisure	1.2	1.1

¹ Experian Business Strategies Forecasts, September 2007.

APPENDIX 3D

**Forecasts by Special Forms
of Trading (Extract)**

5. Non-store retail sales (special forms of trading)

The ONS/ABI definition of non-store retail sales fails to cover the full market, as it does not include the internet sales (e-tailing) of stores with a physical presence. This has been the subject of an earlier briefing paper.⁸ Table 5.1, below, gives an update of this based on more recent data from ONS and IMRG.

Table 5.1
ESTIMATED AND PROJECTED MARKET SHARE OF NON-STORE RETAIL SALES

	ONS Definition of Non-store Retail Sales excluding E-tailing			E-tailing			Broad Definition of Non-Store Retail sales		
	Convenience	Comparison	Total	Convenience	Comparison	Total	Convenience	Comparison	Total
2004	0.9	4.0	2.9	1.6	3.1	2.6	2.5	7.1	5.5
2005	0.5	3.5	2.4	2.2	4.5	3.6	2.7	8.0	6.1
2006	0.5	3.2	2.2	3.0	5.6	4.7	3.6	8.8	6.9
2007	0.5	2.9	2.0	4.3	8.2	6.8	4.8	11.0	8.8
2008	0.5	2.6	1.8	5.0	9.5	7.9	5.6	12.1	9.7
2009	0.5	2.3	1.7	5.6	10.7	8.8	6.1	13.0	10.5
2010	0.5	2.1	1.5	6.1	11.6	9.6	6.6	13.6	11.1
2011	0.5	1.9	1.4	6.5	12.2	10.2	7.0	14.1	11.6
2012	0.5	1.7	1.3	6.7	12.7	10.6	7.2	14.3	11.8
2013	0.5	1.5	1.1	6.8	12.9	10.7	7.3	14.4	11.9
2014	0.5	1.5	1.1	6.8	12.9	10.7	7.3	14.4	11.9
2015	0.5	1.5	1.2	6.8	12.9	10.8	7.3	14.4	11.9
2016	0.5	1.5	1.2	6.8	12.9	10.8	7.3	14.4	11.9

Sources: National Statistics, Experian

The current estimates are based on the ONS e-commerce Survey of Business, updated using data from the monthly Interactive Media Research Group (IMRG) survey. The projections are based on work done by Forrester Research on behalf of IMRG.

Important points to note are:

- An internet sale does not necessarily imply that items have not passed through a retail outlet. Some supermarkets source internet goods from store space. This means that the 3.0 per cent share of e-tailing in convenience sales in 2006 may be an over-estimate.
- There is a high degree of uncertainty in projecting the uptake of new technology. Much speculation about e-commerce could be exaggerated, with the recent acceleration a one-off surge due to broadband.
- A plausible "low case" from the broad market share of all Non-Store Retail sales in 2016 (i.e. including e-tailing) would be around 6, 13 and 10 per cent for convenience, comparison and total spending respectively.

⁸ Retail Planner Briefing Note 2.3D "Estimates & Projections of the Share of E-tailing in UK Retail Spending", December 2005.

APPENDIX 3E

**Changing Store
Productivities (Extract)**

8. Changes in the efficiency of retail floor space

8.1 ESTIMATING SALES DENSITY

Experian Business Strategies has recently completed a research project for the British Council of Shopping Centres, which re-assessed retail efficiency estimates and projections.⁹

This new work includes a number of additions and, most importantly, it gives more coverage to two neglected areas:¹⁰

- changes in net-to-gross space ratios
- comparison sales in convenience stores

8.2 RETAIL SPACE AND SALES DENSITY

The total volume of sales that can be delivered by a given floorspace – the sales density – is a variable in any planning inquiry. Projections of sales density will profoundly influence how much of any increase in in-store retail sales can be accommodated from existing space without new building.

Sales density can change for many reasons, including:

- Improvements in the efficiency of existing processes or technology, for example, a more effective till arrangement to reduce peak-time queues
- The replacement of older capacity with newer, more efficient space
- Changes in opening hours (such as Sunday trading), potentially increasing the amount of sales made from the same floorspace in a given time
- Shifts in the mix of goods offered towards smaller or higher value items, such as a move from furniture to electronic equipment
- Planning restrictions limiting the amount of new space, forcing densities higher as sales increase from existing capacity
- Retailers squeezing more selling space out of a building, for example by cutting down on storage, increasing gross, but not net density

Sales densities also tend to move with the economic cycle. In sales booms, they tend to rise as people buy more, only to decline again in the subsequent slowdown. Although they do have an impact on sales density, such cyclical fluctuations in demand are temporary and need to be carefully isolated from the underlying trend in any long-term analysis.

Generally, more successful centres or stores in the UK will see high and rising densities, while those in decline experience the opposite. But this does not mean that high densities are good for profitability, as retailers face different cost structures in different places. It is entirely possible, for example, that a retailer could meet stronger demand and make more profit from a lower sales density, provided the space enabled the more efficient use of labour or logistics, or was in a location where rents and overheads were lower.

⁹ Previous estimates and projections for the changes in the efficiency of retail floorspace were presented in Retail Planner Briefing Note 2.2 (April 2005).

¹⁰ See http://www.bcsc.org.uk/publication.asp?pub_id=221 for a summary of the BCSC work.

8.3 MEASURING SALES DENSITIES

Sales density is typically measured as either:

- Sales relative to the total floorspace (gross) – as used in official statistics and planning requirements. This is sales relative to the actual area covered by the buildings.
- Sales relative to the net sales area (shopping space) only, as quoted by retailers. This excludes storage space, offices and toilets, but includes display areas.

An investigation of trends in sales densities is hampered by a lack of quantitative information. Estimation of sale density requires a space measure. At present, UK retail floorspace estimates are derived from two sources:

- The Valuation Office Agency (VOA), which is part of HM Customs and Revenues and publishes a measure of retail space close to the property industry's gross definition.
- Larger retailers provide net density estimates, although definitions are not standardised.

The VOA data is potentially most valuable, although it has limitations:

- These figures are defined as net space, but exclude only non-useable areas – such as staircases, but not storage – and so are actually closer to a total or gross floorspace.
- VOA totals vary between an all-retail and A1 space definition, depending on the year. Neither is precise and there are large jumps in the data, notably in 1998 and 2005.
- The data only covers England and Wales.
- There is no breakdown into comparison and convenience stores, or between comparison and convenience goods space.¹¹

VOA numbers only indicate gross retail space (i.e. the total space occupied by the buildings), with no details on the split for different goods, or of how net capacity has changed. To provide a fuller breakdown, a combination of industry benchmarks and consultation was used to split the total into convenience and comparison, into in-town and out-of-town and to identify net, or actual shopping space, as well as the total space occupied by the buildings.

Experian's new methodology uses expert estimates to inform a view on the key unknowns:

- Gross floorspace split in-town, out-of-town, modern, old, convenience and comparison
- Net-to-gross ratios
- Proportions of convenience store space used for selling comparison goods
- Detailed sales densities in 2006 and growth rates between the benchmark years

These estimates are combined to estimate figures that can be compared with official data. For example, does net comparison floorspace multiplied by its sales density, summed across all types of comparison space (including space in convenience stores) give total in-store comparison goods sales? Afterwards, if there is any mismatch, this process is repeated until estimates are within £½ million of the figures.

The results are not data in the strict sense, but an educated guess consistent with the available evidence. There is little alternative to the iterative process used for the final figures and, given the uncertainty, some experts may reasonably question the estimates. But they provide the most satisfactory combination of the official data and expert opinion available.

The detailed calculations are given below, with data in bold type.¹² All other numbers are derived using assumptions in italics. Note spending and density figures are expressed in constant (2006) prices. This means that historical sales densities will be different from current price figures, except in the base year. Constant prices measures are necessary to gauge the relationship between sales and space required.

¹¹ It is important for this kind of analysis to distinguish between comparison and convenience goods (as defined earlier in this report) and convenience and comparison stores. Convenience or comparison stores can and do sell a mix of both convenience and comparison goods and an increasing share of convenience stores' sales has been coming from comparison goods.

¹² That is total gross space estimates (Valuation Office Agency definition) and constant price spending.

**FIGURE 8.1: ESTIMATED FLOORSPACE, SALES AND SALES DENSITIES
1986-2006**

			Growth rates (%p.a.)					
			1986	1999	2005	1987-99	2000-05	1987-05
1	Total (England & Wales) A1 Retail		57,827	72,408	77,438	1.7	1.1	1.5
2	Proportion in town		0.85	0.80	0.75			
3	Proportion out-of-town		0.15	0.20	0.25			
4	In-town		49,153	57,926	58,079	1.3	0.0	0.9
5	Out-of-town		8,674	14,482	19,360	4.0	5.0	4.3
6	Allowance for Gross-VO definition discrepancy		1.025	1.025	1.025			
7	Convenience Store Share							
8	In-town		0.30	0.25	0.25			
9	Out-of-town		0.55	0.41	0.34			
Convenience Stores								
Stock of Space (VO definition)								
10	In-town		14746	14539	14520	-0.1	0.0	-0.1
11	Proportion modern		0.50	0.55	0.60			
12	Modern space		7373	7997	8712	0.6	1.4	0.9
13	Old space		7373	6543	5808	-0.9	-2.0	-1.2
14	Out-of-town		4771	5937	6582	1.7	1.7	1.7
15	Proportion modern		1.00	1.00	1.00			
16	Modern space		4771	5937	6582	1.7	1.7	1.7
17	Old space		0	0	0			
18	Total		19517	20477	21102	0.4	0.5	0.4
19	Proportion of all retail		0.34	0.28	0.27			
Net-to-Gross ratios								
20	In-town	modern	0.64	0.67	0.70			
21		old	0.60	0.60	0.60			
22	Out-of-town	modern	0.64	0.67	0.70			
23		old	0.60	0.60	0.60			
24	All modern		0.64	0.67	0.70			
Stock of Space (net)								
25	In-town	modern	4837	5492	6251	1.0	2.2	1.4
26		old	4534	4024	3572	-0.9	-2.0	-1.2
27	Out-of-town	modern	3130	4078	4723	2.1	2.5	2.2
28		old	0	0	0			
29	Total		12501	13593	14545	0.6	1.1	0.8

8. 1 continued

			1986	1999	2005	1987-99	2000-05	1987-05
Proportion of Convenience Store Sales Area Devoted to Comparison Goods								
30	<i>In-town</i>	<i>modern</i>	0.05	0.10	0.20			
31		<i>old</i>	0.00	0.05	0.10			
32	<i>Out-of-town</i>	<i>modern</i>	0.10	0.20	0.30			
33		<i>old</i>	0.00	0.00	0.00			
34	<i>Total</i>		0.04	0.12	0.21			
Stock of Convenience Space (net) in Convenience Stores								
35	<i>In-town</i>	<i>modern</i>	4595	4943	5001	0.6	0.2	0.4
36		<i>old</i>	4534	3823	3215	-1.3	-2.8	-1.8
37	<i>Out-of-town</i>	<i>modern</i>	2817	3262	3306	1.1	0.2	0.8
38		<i>old</i>	0	0	0			
39	<i>Total</i>		11946	12027	11521	0.1	-0.7	-0.2
Sales Densities for Convenience Space in Convenience Stores (net)								
40	<i>In-town</i>	<i>modern</i>	6329	7148	7724	0.9	1.3	1.1
41		<i>old</i>	2959	3053	3090	0.2	0.2	0.2
42	<i>Out-of-town</i>	<i>modern</i>	8489	9587	10299	0.9	1.2	1.0
43		<i>old</i>	2971	3356	3605	0.9	1.2	1.0
44	<i>Total</i>		5559	6508	7170	1.2	1.6	1.3
Convenience Spending - Total								
45	Spending (constant prices, UK)		76974	90814	98761	1.3	1.4	1.3
46	<i>E&W share of UK</i>		0.891	0.893	0.890			
47	Spending (KP, E&W)		68584	81097	87897	1.3	1.4	1.3
48	<i>Share of non-store share</i>		0.009	0.009	0.027			
49	Sales of convenience goods		67967	80367	85524	1.3	1.0	1.2
50	Convenience goods space (net)		11946	12027	11521	0.1	-0.7	-0.2
Aggregate Convenience Goods Sales Densities (net)								
51			5543	6509	7170	1.2	1.6	1.4
Comparison Stores								
Stock of Space (VO definition)								
52	In-town		34407	43387	43559	1.8	0.1	1.2
53	<i>Proportion modern</i>		0.35	0.38	0.40			
54	Modern space		12042	16487	17424	2.4	0.9	2.0
55	Old space		22365	26900	26135	1.4	-0.5	0.8
56	Out-of-town		3903	8544	12777	6.2	6.9	6.4
57	<i>Proportion modern</i>		1.00	0.95	0.90			
58	Modern space		3903	8117	11500	5.8	6.0	5.9
59	Old space		0	427	1278			
60	<i>Total</i>		38310	51931	56336	2.4	1.4	2.1
61	Proportion of all retail		0.66	0.72	0.73			

8.1 continued

			1986	1999	2005	1987-99	2000-05	1987-05
Net-to-Gross Ratios								
62	In-town	modern	0.59	0.65	0.70			
63		old	0.55	0.58	0.58			
64	Out-of-town	modern	0.65	0.70	0.80			
65		old	0.60	0.70	0.70			
66	All modern		0.60	0.67	0.74			
Stock of Space in Comparison Stores(net)								
67	In-town	modern	7283	10984	12501	3.2	2.2	2.9
68		old	12608	15992	15537	1.8	-0.5	1.1
69	Out-of-town	modern	2601	5824	9430	6.4	8.4	7.0
70		old	0	307	917			
71	Total		22491	33107	38385	3.0	2.5	2.9
Comparison Space in Convenience Stores (net)								
72	In-town	modern	242	549	1250			
73		old	0	201	357			
74	Out-of-town	modern	313	816	1417			
75		old	0	0	0			
76	Total		555	1566	3024	8.3	11.6	9.3
77	Total Comparison Space		23046	34673	41409	3.2	3.0	3.1
Sales Densities for Comparison Stores (net)								
78	In-town	modern	2644	3645	4586	2.5	3.9	2.9
79		old	1616	2228	2802	2.5	3.9	3.1
80	Out-of-town	modern	1469	2025	2548	2.5	3.9	3.1
81		old	735	1013	1274	2.5	3.9	3.1
82	Total		1932	2651	3284	2.5	3.6	2.8
Sales Densities for Comparison Goods in Convenience Stores (net)								
83	In-town	modern	2938	4050	5095	2.5	3.9	2.9
84		old	2057	2835	3567	2.5	3.9	3.1
85	Out-of-town	modern	2938	4050	5095	2.5	3.9	3.1
86		old	2057	2835	3567	2.5	3.9	3.1
87	Total		2938	3894	4915	2.2	4.0	2.7
Comparison Spending - Total								
88	Spending (KP, UK)		51113	105889	166077			
89	E&W share of UK		0.891	0.893	0.89			
90	Spending (KP, E&W)		45542	94559	147809	5.8	7.7	6.4
91	Non-store share		0.026	0.026	0.080			
92	Sales of comparison Goods		44357	92101	135984	5.8	6.7	6.1
93	- from convenience stores		1630	6098	14863	10.7	16.0	12.3
94	- from comparison stores		42727	86003	121121	5.5	5.9	5.6
Aggregate Comparison Goods Sales Densities (net)								
95			1956	2707	3403	2.5	3.9	2.9

8.1 continued

	1986	1999	2005	1987-99	2000-05	1987-05	
Summary (net)							
96	Convenience spending	67967	80367	85524	1.3	1.0	1.2
97	Convenience goods space	11946	12027	11521	0.1	-0.7	-0.2
98	Convenience goods sales densities	5690	6682	7423	1.2	1.8	1.4
99	Comparison spending	44357	92101	135984	5.8	6.7	6.1
100	Comparison goods space	23046	34673	41409	3.2	3.0	3.1
101	Comparison sales densities	1925	2656	3284	2.5	3.6	2.9
102	Total spending	112324	172468	221508	3.4	4.3	3.6
103	Total space	34992	46700	52931	2.2	2.1	2.2
104	Total sales densities	3210	3693	4185	1.1	2.1	1.4
Summary Gross (all space)							
105	Total space	57,827	72,408	77,438	1.7	1.1	1.5
106	Total spending	112324	172468	221508	3.4	4.3	3.6
107	Total sales densities	1942	2382	2860	1.6	3.1	2.1

Units: Floorspace is in thousands of square metres; densities are £ per square metre and spending in £m at constant (2006) prices.
Source: *Experian*. Spending data are in constant (2006) prices. Estimates may not sum exactly.

The relationship between the rows

Rows 1-9 – show the breakdown of total gross space (VOA basis) into in-town and out-of-town and the assumed shares of convenience and comparison stores. The estimates show a continuing rise in total out-of-town share and a downward drift in the convenience share out of town.

Rows 10-19 – show the breakdown of convenience store space into 'modern' and 'old' space. Modern space can be newly built or created by the refurbishment of old space. So:
Row 10 = Row 4 x Row 8 Row 12 = Row 10 x Row 11 Row 13 = Row 10 - Row 12

Rows 20-29 – show the conversion of convenience store gross space into net space. This involves multiplying VOA basis space by a VOA discrepancy¹³ and by the net-gross ratio. Thus:
Row 25 = Row 11 x Row 6 x Row 20.

Estimates show although gross convenience space increased by 0.4 per cent a year between 1987 and 2005, net space increased twice as fast, as a result of increases in the net-gross ratio.

Rows 30-39 – show the proportions of convenience store net floorspace devoted to the sale of comparison goods. It is estimated that this was 21 per cent for all space and 30 per cent for modern out-of-town space. The relationship between the rows, for example, is:
Row 35 = Row 25 x (1 - Row 30)

Estimates imply only a small increase in net convenience floorspace in convenience stores between 1987 and 1999 and a decline after 2000. Note estimates were put together with consistency to the data in mind and informed by net sales densities published by the major supermarket chains¹⁴ (allowing for the increased share of comparison goods and performance more applicable to modern than old space).

Rows 40-51 – reconcile net floorspace, net sales densities and spending on convenience goods.

Row 44 is the weighted average of Rows 40-43 and Row 49 approximately equals Row 39 multiplied by Row 44 (divided by a thousand to correct the units). The answer is approximate because of the iterative process.

¹³ The VOA measure is closest to the property industry definition, but still excludes gross space such as stairwells.

¹⁴ These average under 1 per cent a year between 1987 and 1999 and under 1¼ per cent between 2000 and 2005.

Convenience goods densities increased at an average rate of 1.2 per cent a year between 1987 and 2000, but each of the individual components (Rows 40-43) increased more slowly. The reason for the discrepancy is the move from relatively-low-sales-density old space to relatively-high-sales-density modern space. A similar change is observed between 2000 and 2005.

Rows 52-61 – show the breakdown of comparison store space into 'modern' and 'old'. Thus:
 Row 52 = Row 4 x (1 - Row 8) Row 54 = Row 52 x Row 53 Row 55 = Row 52 – Row 54

Rows 62-71 – show the conversion of comparison store gross space into net space by multiplying estimated VOA space by VOA discrepancy and by the net-gross ratio. For example:
 Row 67 = Row 53 x Row 6 x Row 30

Estimates show average annual increases in net comparison store space of 3.0 per cent between 1987 and 1999, and 2.5 per cent from 2000 to 2005, comfortably outstripping the growth in gross comparison store space (at 2.4 and 1.4 per cent). As with convenience store space, this is due to increases in the net-gross ratio for comparison stores.

Rows 72-77 – show the estimated amount of comparison goods space in convenience stores and the implied total amount of comparison goods space. This is derived from Rows 25-28 multiplied by Rows 30-33.

We estimate that the amount of comparison goods space in convenience stores has been growing quite rapidly. So the total amount of comparison goods space (comparison store space plus comparison space in convenience stores) has been growing even faster (at 3.2 per cent and 3 per cent in 1987-99 and 2000-05, or Row 77 compared with Row 71).

Rows 78-92 – attempt to reconcile disaggregated estimated increases in sales densities (Rows 78-87) with estimate net floorspace (Rows 67-77) and estimated spending (Rows 88-92) for comparison goods. Thus: Row 71 x Row 82 + Row 76 x 87 \cong Row 92

Where the relationship is close, but not exact, it is because of the iterative process. Estimates show sales and net space are consistent with densities for each type of comparison good space, increasing at average annual rates of 2.5 for 1987-1999 and 3.9 per cent in 2000-2005.

Rows 93-94 – show the derived estimates of sales and sales gross of comparison goods from convenience and comparison stores separately. Note that the new estimate for 1987-99 is less than the 3.1 per cent a year previously published by Experian.¹⁵ The main reason for this is that the new sales density estimates are net rather than gross. More recent data on the impact of non-store retail sales also made a contribution.

Row 95 – shows sales density for all comparison goods space from Row 92 and Row 77.

Rows 89-107 – show a set of summary comparisons.

Our adjusted version of this series provides the most consistent estimate of recent trends in retail space available summarised below (see Figure 8.2). This shows growth in available retail space averaging 1.5 per cent a year between 1987 and 2005, though slowing in the recent past.

¹⁵ Retail Planner Briefing Note 2.2, Table 1, April 2005.

**FIGURE 8.2: FLOORSPACE, SALES AND SALES DENSITY GROWTH (ENGLAND & WALES)
(average annual growth, sales in constant prices)**

	1987-1999	2000-2005	1987-2005
Floorspace (% p.a.)			
Total (gross)	1.7	1.1	1.5
Total (net)	2.2	2.1	2.2
Convenience (net) ¹	0.1	-0.7	-0.2
Comparison (net) ²	3.2	3.0	3.1
Sales (% p.a.)³			
Convenience	1.3	1.0	1.2
Comparison	5.8	6.7	6.1
Sales Densities (% p.a.)			
Total (gross)	1.6	3.1	2.1
Total (net)	1.1	2.1	1.4
Convenience (net) ¹	1.2	1.6	1.3
Comparison (net) ²	2.5	3.6	2.9

¹ excludes comparison space in convenience stores, volumes

² includes comparison space in convenience stores, volumes

³ Based on official estimates of sales growth less non-store retail sales estimates described in the previous section.

Our estimates highlight a number of interesting trends since the late 1980s:

- **Comparison goods sales densities have shown exceptional growth** in the recent past. Comparison goods sales space increased at an average annual rate of 3.0 per cent between 2000 and 2005 (including for comparison goods sales in convenience stores). But sales volumes rose at an annual rate of almost 7 per cent over the same period, implying that net sales density has risen by 3.6 per cent a year to accommodate this (after rounding). This average was actually dragged down by an increase in the share of floor space taken by, lower density, out-of-town stores. Allowing for this the underlying growth rates were actually 3.9 per cent per annum. Retailers are therefore using new and existing space more efficiently to make more sales. For the earlier period, 1987-1999, both the underlying and actual growth rates were 2.5 per cent per annum.
- **Convenience goods sales density growth** has been considerably slower than comparison. In the case of convenience goods, however, the change in the space mix towards larger more efficient stores has pushed up the observed total increase relative to the underlying. Between 2000 and 2005 the overall increase in sales densities for convenience goods was 1.6 per cent per annum but the underlying growth rate was 1.2 per cent, the difference being accounted for by a move towards newer higher density stores. The equivalent figures for 1987-1999 were 1.2 and 0.9 per cent for actual and underlying respectively.
- **Net floorspace has consistently grown faster than gross** since the 1980s, implying an increasing proportion of floorspace has been converted to selling, and that space for storage and back-of-house activities has been reduced.
- **The growth in comparison space has greatly exceeded that for convenience**, which has been static or, more recently, contracting. This is partly because convenience stores such as supermarkets have expanded comparison goods lines, like clothes, electrical goods or DVDs. This trend is expected to continue, with Tesco aiming to reach an even balance between food and non-food in its larger stores in the next few years.
- **Comparison goods sales densities have increased at a far faster rate** than convenience goods, partly due to technological advances leading to smaller, higher-value products, for example the difference in size between a flat-screen and a traditional television.

On balance, the early 2000s was an unusually rapid phase of sales growth, reflected in big increases in densities. Part of this rise is likely to be cyclical and thus not sustainable. So it is important to also examine the 1987-99 figures in establishing a benchmark.

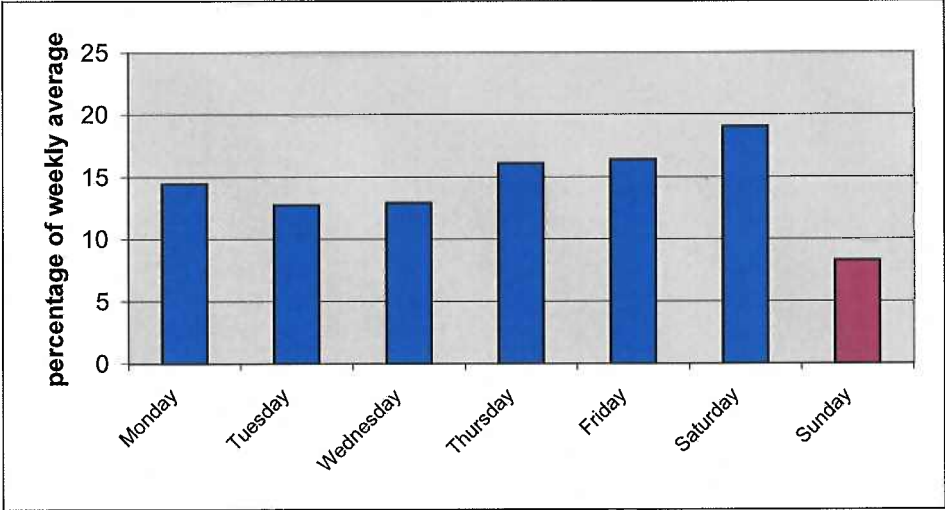
8.4 INFLUENCE OF LONGER OPENING HOURS

The introduction of Sunday shopping significantly lengthened opening hours in the 1990s, with profound implications for the trend in sales densities.¹⁶ Unfortunately, there are no statistics on Sunday business, or, more importantly, on how the extension affected sales in the rest of the week. But related evidence points to a major shift in consumer behaviour. Footfall figures on visits to retail centres, for instance, show that shopping patterns have changed markedly, with on average, around 8 per cent of weekly activity now taking place on a Sunday (Figure 8.3).¹⁷

When Sunday trading was first introduced it is likely that total retail spending remained largely unaffected and was spread over more days, with little impact on sales or densities. Over time, however – as Sunday trading effectively increased retail capacity at a stroke – it enables more sales to be made from the existing floorspace. As such, it allows new sales growth without the corresponding requirement for new retail space.

A store opening for 16 hours for example, could potentially realise twice the sales density of one open for eight hours. In practice this would require a considerable change in consumer behaviour, not least the desire to shop first thing in the morning or last thing at night. Along the same lines, the impact of an extra day’s trading is less, but still implies the potential for an increase in sales densities over time.

FIGURE 8.3: AVERAGE FOOTFALL BY THE DAY OF THE WEEK



Source: Footfall

But how much of the change in sales density does this explain? We can adjust our previous estimates to account for Sunday trading. Assuming that all of the impact occurred between 1986 and 1999 and that daily sales are proportional to footfall, longer opening would have accounted for 0.7 per cent of the annual increase in sales densities over this period.¹⁸

¹⁶ The Sunday Shopping Act was brought in in 1994 but a number of chains were already opening by then.
¹⁷ At any given time of the day stores may be busier on Sundays than on some weekdays, but shorter Sunday opening hours brings average Sunday footfall down relative to other days. Footfall data also shows big differences between shopping centres with Sunday being the second busiest day of the week in some centres.
¹⁸ The Footfall figures show Sunday footfall accounting for just over 8 per cent of the weekly total implying that the introduction of Sunday trading has increased capacity by just over 9 per cent (eight divided by one hundred minus eight per cent). This is the equivalent of 0.7 per cent per annum over thirteen years.

8.4 INFLUENCE OF 24-HOUR SHOPPING

Sunday trading is now a normal part of the UK retail environment, but 24-hour shopping's potential remains disputed: it could have a similar impact on potential sales densities as Sunday trading. At one extreme, it can be argued that the move to all-day shopping alone could cause any future growth in retail sales to be absorbed in higher densities and remove the need for more retail space in future.

But the evidence is not strong. Although there is 24-hour opening in some supermarkets, this is usually seen at out-of-town convenience stores, or at times of heavy demand such as Christmas, or in urban centres where footfall is particularly heavy. This has often been possible because the stores are staffed anyway, with the need for over-night restocking, rather than a result of demand from shoppers. Few other retailers have followed the supermarkets. Current lifestyles and habits do not suggest a wholesale move to 24 hour shopping. This may change in the future, but it is too early to make strong assumptions in our forecasts.

8.6 THE FUTURE FOR RETAIL SALES DENSITIES

The rapid increase in comparison goods sales densities in the recent past was a product of the retail spending boom and is unlikely to be sustainable. On balance the 1987-99 trend of 2.5 per cent a year increases in sales density may be a better start point for projections.

Yet even this includes one-off changes because of the advent of Sunday trading. As noted, the introduction of Sunday trading could have accounted for up to 0.7 per cent a year of the estimated increase in sales densities in this period. On the other hand, not all Sunday trading effects occurred between 1986-99 and there is still scope for further changes were the current restrictions on hours to be relaxed.

Consequently, projected sales densities are only reduced from the 1987 and 1999 by 0.3 per cent a year in the central case, to **2.2 per cent and 0.6 per cent a year for comparison and convenience space respectively**. The move towards more modern, higher density, stores and the demolition of older inefficient space means that the observed comparison rate is likely to be closer to 2.4 per cent a year.

The combination of unsatisfactory data and uncertainty about underlying trends mean that risk analysis is particularly important. Much slower density increases than in the central forecast imply there is higher demand for capacity. One possible cause is that the impact of longer opening hours has been overstated; another that the gains from technological change and efficiency are exhausted. As a result, increased sales growth can only be met by new retail.

In this alternative view, it is assumed that comparison goods sales densities grow at only 1.5 per cent a year (or 0.25 per cent a year for convenience goods). This was the benchmark figure for retail planning studies until recently and is significantly slower than historical trends. On the other hand, the more recent growth rates (2000-2005) were much higher than for the 1987-99 growth rates that we have used to create the central case. This means that there must be a significant upside and we suggest that a realistic upside would be 2.8 and 0.8 per cent for comparison and convenience goods sales densities respectively.