

PORTSMOUTH SHOPPING STUDY: UPDATE

On behalf of

PORTSMOUTH CITY COUNCIL

Appendix 5B

Definition of Convenience and Comparison Goods

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 ONS' publication *Consumer Trends*' (March 2004).¹ This breaks total household spending down by category according to the internationally recognised COICOPS (Classification of Individual Consumption by Purpose). This is also consistent with the definitions used in the ONS' *National Accounts (Blue Book)* 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 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' level of detail or at a 'coarse' level.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 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, the spending estimates refer to spending that could potentially take place in retail outlets.³ The exception is tobacco, where the estimates include both spending in pubs, clubs and restaurants. We have made an allowance for the share of spending on tobacco in pubs, clubs and restaurants or on tobacco which is smuggled into the country. This is based on data from the *Annual Business Inquiry (ABI)* on actual retail spending on tobacco.

1.4 ALLOWANCES FOR SPENDING MADE BY FOREIGNERS

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

In 2003, the ONS estimated that foreigners spend £14bn pounds in the UK out of total household spending in the UK of £680bn (2.1 per cent). The bulk of this goes on

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 information from the Input-Output tables produced by the ONS and from the *International Passenger Survey*, we estimate that some 25 per cent goes on retail goods. Table 1.1 shows this estimate broken down by coarse category while Table 1.2 shows the full, fine category detail.

While this is genuine spending, most of which is likely to find its way into UK retail outlets (rather than into special forms of trading), we have chosen to separate it out from spending by UK residents. Most spending by foreigners takes place in tourist centres and it would, therefore, be incorrect to allocate it to small areas on the same basis of population and socio-economic mix that we use for spending by residents.⁵

Note that the current version of Retail Planner covers spending by UK 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

Retail Planner contains a number of aggregations of retail goods categories. These are:

1. **Convenience goods** – low-cost, everyday items, for which consumers are unlikely to travel far to make purchases. We have defined convenience goods as comprising 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 sales).⁷
 - f. Non-durable household goods (10% of sales).

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

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

⁵ In 2002 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 FES 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.

⁷ This is the equivalent of the estimated share, based on FES data, of spending on furniture and floor coverings accounted for by bathroom fittings, garden furniture and hard floor coverings.

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 £119 per person in 2003.

1.7 ESTIMATED SPENDING ON RETAIL GOODS IN 2003

Tables 1.1 and 1.2 show spending estimates for coarse and fine expenditure categories for 2003.

TABLE 1.1
ESTIMATES OF SPENDING ON RETAIL GOODS IN 2003 – COARSE CATEGORIES

COICOPS	Description	Total Spending Em	Non-Retail Share	Spend by Foreigners	UK Res. Spend in UK	UK Spend per Head
				13953		
1	Food and non-alcoholic beverages	64034		654	63380	1067
2.2	Tobacco	15268	0.41	84	6969	151
2.1	Alcohol (off trade)	12010		73	11937	201
9.5.2	Newspapers and periodicals	4671		25	4646	78
3.1.1, 3.1.2, 3.1.3	Clothing materials & garments	33648		1823	31825	536
3.2.1	Shoes and other footwear	5052		243	4809	81
4.3.1	Materials for maintenance & repair of the dwelling	7260		20	7240	122
5.1.1, 5.1.2	Furniture and furnishings; carpets & other floorcoverings	17796		63	17733	299
5.2	Household textiles	5029		20	5009	84
5.3.1	Major household appliances whether electric or not	4519		43	4476	75
5.3.2	Small electric household appliances	614		35	579	10
5.5.1, 5.5.2	Tools and miscellaneous accessories	3578		3	3575	60
5.4	Glassware, tableware and household utensils	5279		10	5269	89
5.6.1	Non-durable household goods	3343		80	3263	55
6.1.1, 6.1.2	Medical goods & other pharmaceutical products	3716		24	3692	62
6.1.3	Therapeutic appliances and equipment	3445		0	3445	58
7.1.3	Bicycles	1043		23	1020	17
9.1.4	Recording media	5060		13	5047	85
9.2.2, 9.3.1, 9.3.2	Games, toys & hobbies; sport & camping equipment; m	13479		35	13444	226
9.3.3	Gardens, plants and flowers	3526		0	3526	59
9.3.4	Pets and related products	2360		0	2368	40
9.5.1, 9.5.3, 9.5.4	Books & stationary	6476		13	6463	109
0.2.9, 1.1, 9.1.2, 9.1.3	Audio-visual, photographic & info processing eqpt	11988		51	11937	201
12.1.2, 12.1.3	Appliances for personal care	12163		48	12115	204
12.3.1	Jewellery, clocks and watches	3920		24	3796	64
12.3.2	Other personal effects	1671		3	1668	28
	Total Convenience	90992		908	91858	1546
	Total Comparison	151884		2503	149361	2514
	Total Retail	250856		3412	241219	4061
	NHS Prescription Costs	7080		0	7080	119
	Other Aggregations:					
	Core DIY Goods	16478			17603	296
	Core DIY Goods exc Gardening	12952			14077	237
	Bulky Goods	49001			54451	917

TABLE 1.2
ESTIMATES OF SPENDING ON RETAIL GOODS IN 2003 – FINE CATEGORIES

COICOPS		Total Spending £m	Non-Retail Share	Spend by Foreigners	UK Res. Spend in UK	UK Spend per Head
				13953		
UVAF	01.1.1	Bread and cereals		93	9056	152
CCRL	01.1.2	Meat		142	13775	232
CCRM	01.1.3	Fish		24	2371	40
CCRN	01.1.4	Milk, cheese and eggs		7736	7657	129
CCRO	01.1.5	Oils and fats		1188	1176	20
CCRP	01.1.6	Fruit		4752	4713	79
UVDX	01.1.7	Vegetables		9500	8492	143
UVER	01.1.8	Sugar, confectionery and ice cream		7068	6996	118
UVFB	01.1.9	Other food		1414	1400	24
CCWH	01.2.1	Coffee, tea and cocoa		1683	1666	28
CCRW	01.2.2	Fruit and vegetable juices and other soft drinks		6142	6079	102
ZWUO	02.2	Tobacco	0.41	84	8969	151
UIIE	02.1.1	Spirits (off trade)		18	3155	53
UTHU	02.1.2	Wine, cider & perry (off trade)		36	9671	95
UUPI	02.1.3	Beer (off trade)		18	3112	52
CDZX	09.5.2	Newspapers and periodicals		25	4646	78
XYDZ	03.1.1	Clothing materials		26	455	8
ZAVJ	03.1.2	Garments		1732	30241	509
XYEA	03.1.3	Other articles of clothing & clothing accessories		65	1129	19
ATKU	03.2.1	Shoes and other footwear		243	4809	81
ATOB	04.3.1	Materials for maintenance & repair of the dwelling		20	7240	122
ATMA	05.1.1	Furniture and furnishings		48	13642	230
ATME	05.1.2	Carpets and other floor coverings		15	4091	69
ATMF	05.2	Household textiles		20	5009	84
XYEB	05.3.1	Major household appliances whether electric or not		43	4476	75
XYEC	05.3.2	Small electric household appliances		35	579	10
XYEE	05.5.2	Small tools and miscellaneous accessories		3	3023	51
ATMJ	05.4	Glassware, tableware and household utensils		10	5269	89
XYED	05.5.1	Major tools and equipment		1	551	9
UVGI	05.6.1	Non-durable household goods		80	3263	55
UTXN	06.1.1	Pharmaceutical products		21	3207	54
UVGV	06.1.2	Other medical products		3	485	8
UVGW	06.1.3	Therapeutic appliances and equipment		0	3445	58
TMNN	07.1.3	Bicycles		23	1020	17
ATNH	08.1.4	Recording media		13	5047	85
ATNL	09.1.3	Games, toys and hobbies		28	10717	180
XYEO	09.3.2	Equipment for sport, camping & open-air recreation		7	2586	43
XYEF	09.2.2	Musical instruments & major durables for indoor recreation		0	161	3
AWUF	09.3.3	Gardens, plants and flowers		0	3526	59
UVJK	09.3.4	Pets and related products		0	2368	40
CDZF	09.5.1	Books		6	3052	51
XYEH	09.5.3	Miscellaneous printed matter		0		
XYEI	09.5.4	Stationery and drawing materials		7	3411	57
ATMV	09.1.1	Eqpt for recptn, recrdng & reprodn of sound & pics		17	3935	66
ATMZ	09.1.2	Photographic & cine eqpt & optical instruments		10	2429	41
ATND	09.1.3	Information processing equipment		21	4820	81
ATMR	08.2	Telephone and telefax equipment		3	753	13
XYEJ	12.1.2	Electric appliances for personal care		5	1197	20
ATNP	12.1.3	Other appliances, articles & prods for personal care		43	10918	184
ZAVL	12.3.1	Jewellery, clocks and watches		24	3796	64
ATNX	12.3.2	Other personal effects		3	1668	28
		Convenience		908	91858	1548
		Comparison		2503	149361	2514
		Total		3412	241219	4061
		NHS Prescription Costs		0		119

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Appendix 5C

**Consumer Retail Expenditure:
Projections and Forecasts**

3. Projections and forecasts

3.1 CONCEPTS

Future spending levels have an important bearing on the need and capacity of future retail space. Consequently, stakeholders in the planning process, such as the local authority, retailers and consultants and surveyors, need an appreciation of how the amount spent on goods and services is likely to change in the future.

Traditionally, planners have used a mixture of methods to calculate future spending levels. Indeed, there is no single right answer, reflecting the unique considerations of each planning application. Consequently, it is up to the planning expert to decide which approach is best suited to the particular circumstance.

This version of Retail Planner presents the two principle methods of looking at future trends in spending on retail (and leisure) goods:

- 1 **Projections** – estimates of future spending based on the extrapolation of past trends, with alternative projections being based on trends estimated over different periods of the past.
- 2 **Forecasts** – estimates of future spending based on an econometric model of disaggregated consumer spending. Different scenarios can be produced using alternative assumptions about the key macroeconomic drivers (the key one being total consumer spending).

The following sections describe the methodology used to calculate projections and forecasts of retail spending, and the results achieved. We do not, however, make a value judgment about which method to use.

3.2 CHAIN LINKING

Before we can estimate past trends in convenience and comparison goods spending, we need to create historical time series. Traditionally this has been done by simply aggregating the ONS' constant price 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.”⁸

Because of these changes the relative prices of goods and services in the base year become less and less representative of the relative values put on them for other periods. As a result, the changes in measured volume will not be representative of the actual growth in periods distant from the base year. This is particularly problematic for goods or services such as audio-visual equipment that have seen big changes in their relative price over time. In other words, valuing audio-visual equipment at 2003 prices does not make much sense when estimating aggregate retail spending growth rates from 1965.

⁸ National Statistics (1999), *United Kingdom National Accounts, the Blue Book*, p.25.

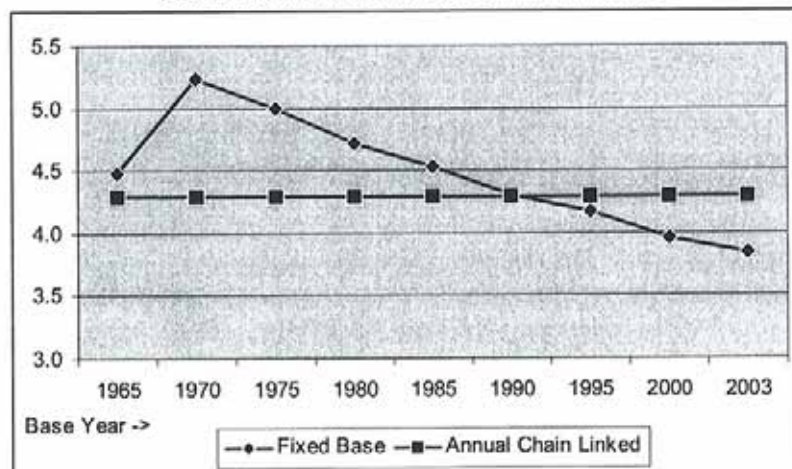
Until 2003, the ONS' approach to this problem was to use a method called fixed-base chain linking whereby estimates generated using different price bases were spliced together approximately every five years. Note that this was not the method used in earlier versions of Retail Planner or in the generation of similar estimates of convenience and comparison spend, where the detailed categories at a given price base were simply aggregated to give convenience and comparison totals (known as the fixed-base method). Fixed-base chain linking was, however, the method used by the ONS to create estimates of total household spending and various published aggregates (such as alcohol and tobacco; and clothing and footwear).

In 2003, the ONS moved to a method known as annual chain linking for producing constant price economic aggregates. This is similar to fixed-base chain linking except that the weights change every year and estimated growth over a series of years is estimated by linking together a set of year-to-year growth estimates. This is in line with the recommendations of the *System for National Accounts 1993 (SNA93)*, which is incorporated into the *European System of Accounts 1995 (ESA95)* and has been widely adopted on an international basis. The main drawback of annual chain linking is a loss of additivity – the components of comparison goods spending, for example, no longer add up to total comparison goods spending except in the base year.

The 2004 version of Retail Planner has fully adopted the annual chain-linking methodology. There is an additional advantage for Retail Planner in that the new methodology brings greater stability to the estimated growth of retail spending, particularly for comparison goods (where there have been the biggest changes in relative prices). This is because the volume of spending on audio-visual equipment has been rising particularly rapidly in recent years, accompanied by sharp falls in its relative price. This has meant that the estimated growth of comparison spending tends to fall (relative to the last estimate, as audio-visual equipment has a lower weight for the new base year) every time that the data is re-based and this revision affects all years and not just recent estimates. This problem disappears with the annual chain-linking methodology.

Figure 3.1 shows how the estimated ultra long-term trend (25 years) would have varied if different base years had been used and compares it with the stability in the annual chain-linked estimate. Using 1990 prices, for example, the fixed-base method gives an estimated growth rate of around 4.3 per cent per annum, which is similar to the annual chain-linked estimate. At one extreme, however, 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**



Note that the *National Accounts* currently use annual chain linking to 2001 and a fixed-base methodology for 2002 onwards, with volumes being presented in '2001 prices'. Retail Planner has adopted a slightly different convention, with annual chain linking being used for every year down to 2003 and volumes being presented in '2003 prices'. We have done this as we believe it is useful to have spending data presented in prices that are as close as possible to those currently prevailing.

The annual chain-linked data has been used to estimate past trends for the broad aggregates and to create the projections shown below. The forecasts have been prepared at a more detailed level and aggregated up to the broad aggregates using annual chain linking.

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. 1965-2003 – ultra long-term trend
2. 1975-2003 – long-term trend
3. 1985-2003 – medium-term trend

Tables 3.1 and 3.2 show projections for the broad headings of convenience goods, comparison goods, total spending on retail goods, core DIY goods, core DIY goods excluding gardening, and bulky goods, together with the equivalent forecasts described below.

Results summary:

- Projections for future spending based on the medium-term trend have the highest growth in total retail spend, reflecting the surge in retail expenditure during the 1980s and 1990s.
- Total spending growth is projected to be between 2.6 per cent and 3.8 per cent per annum.
- Spending on comparison goods is projected to be between 4.3 per cent and 5.9 per cent over the next 5-10 years.

TABLE 3.1
FORECASTS & PROJECTIONS OF UK SPENDING PER HEAD VOLUMES 2003-2008 (2003 PRICES)

	EBS forecast	Consensus forecast	Ultra long-term trend	Long-term trend	Medium-term trend
Convenience	0.6	0.5	0.7	0.7	1.1
Comparison	4.4	4.0	4.3	4.8	5.9
Total retail	3.0	2.7	2.6	3.0	3.8
Core DIY	3.0	2.6	3.4	3.5	4.3
Core DIY exc. gardening	3.6	3.2	3.4	3.5	4.1
Bulky goods	4.7	4.2	3.9	4.1	5.3
Non-bulky goods	2.6	2.4	2.4	2.7	3.5
Leisure services	2.1	1.7	2.5	1.9	2.1
Total consumer spending	2.5	2.1	2.4	2.5	3.0

TABLE 3.2
FORECASTS & PROJECTIONS OF UK SPENDING PER HEAD VOLUMES 2003-2013 (2003 PRICES)

	EBS forecast	Consensus forecast	Ultra long-term trend	Long-term trend	Medium-term trend
Convenience	0.9	0.8	0.7	0.7	1.1
Comparison	3.7	3.5	4.3	4.8	5.9
Total retail	2.7	2.6	2.6	3.0	3.8
Core DIY	2.7	2.5	3.4	3.5	4.3
Core DIY exc. gardening	3.1	2.9	3.4	3.5	4.1
Bulky goods	3.9	3.7	3.9	4.1	5.3
Non-bulky goods	2.4	2.3	2.4	2.7	3.5
Leisure services	1.5	1.3	2.5	1.9	2.1
Total consumer spending	2.3	2.0	2.4	2.5	3.0

3.4 FORECASTS

3.4.1 Experian Business Strategies

The forecasts presented in this paper are produced using Experian Business Strategies' model of disaggregated consumer spending. This takes a number of macro-economic forecasts (chiefly consumer spending, incomes and inflation) and uses them to produce forecasts of disaggregated consumer spending volumes, prices and value.⁹ The model incorporates assumptions about income and price elasticities. Consequently, the shares of the individual components of consumer spending, not just the levels, will be sensitive to the macro-economic forecast. Forecast growth rates are also sensitive to the position of the base year in the economic cycle. If the base year is considered to be near a cyclical peak, forecast future growth rates will be lower than if the base year is considered to be close to a cyclical trough.

3.4.2 Consensus forecasts

Consensus forecasts for GDP growth are taken from a mixture of the forecasts compiled by the Treasury and published in *Forecasts for the UK Economy* in May 2004 and the Treasury's

⁹ Experian Business Strategies' July 2004 forecasts of the UK economy.

projections that underlay the Medium-Term Fiscal Projections in the 2004 *Budget Report*. Forecasts for household spending for 2004 and 2005 are taken from the Treasury compilation of forecasts. The differences between household spending and GDP growth for 2006 to 2013 are taken from *Consensus Economics (2004)*, *Consensus Forecasts, A Digest of International Economic Forecasts, April 2004*. We have not used the Consensus Economics household spending or GDP forecasts directly as they look to be very low (GDP growth at 2.2 per cent per annum, 2003-2013, compared with Experian Business Strategies' view of 2.8 per cent and a Treasury Compilation/Treasury view of 2.5 per cent) and are, we believe, the result of the polling of a small and unrepresentative sample of forecasters.

Results summary:

- Experian Business Strategies' forecasts for total retail spending over the next 5-10 years are stronger than the Consensus Forecasts.
- Experian Business Strategies forecasts total retail spending growth of 3.0 per cent over the next five years. Growth is set to slow to 2.7 per cent in the longer term (2003-2013).
- The econometric model-based forecasts for the growth of comparison goods spend are both less than the trend projections for the 2003-2013 period. This reflects a view among economic forecasters that the growth in aggregate household spending is likely to slow down in the future as spending levels are now close to a cyclical peak. Household savings rates have already been driven down to very low levels and households' debt-income is at an all-time high. These trends are not sustainable in the long term.
- Note that the growth rates given are in volume terms. Trends in relative prices vary considerably between different types of goods and between goods and services so the relative trends in volumes are not necessarily a guide to trend in values. Annex 1 gives our view of future trends in prices, volumes and prices.

TABLE 3.3
FORECAST VOLUME GROWTH FOR THE COARSE CATEGORIES (2003 PRICES)

Description	Consensus		Experian Business Strategies	
	2003-8	2003-13	2003-8	2003-13
Food and non-alcoholic beverages	1.0	1.4	1.0	1.4
Tobacco	-4.4	-4.2	-3.7	-3.8
Alcohol (off trade)	2.4	2.2	2.7	2.3
Newspapers and periodicals	-2.3	-2.0	-2.7	-2.3
Clothing materials & garments	6.0	6.3	6.2	6.6
Shoes and other footwear	3.4	3.0	3.5	3.1
Materials for maintenance & repair of the dwelling	3.0	2.6	3.4	2.7
Furniture and furnishings, carpets & other floorcoverings	3.6	3.0	4.0	3.2
Household textiles	4.1	3.7	4.3	3.9
Major household appliances whether electric or not	1.4	2.1	2.2	2.5
Small electric household appliances	6.2	5.4	6.7	5.8
Tools and miscellaneous accessories	3.6	3.6	4.1	3.8
Glassware, tableware and household utensils	3.5	3.2	3.8	3.4
Non-durable household goods	1.2	1.1	1.2	1.1
Medical goods & other pharmaceutical products	4.1	3.7	4.0	3.5
Therapeutic appliances and equipment	-0.3	-0.8	0.1	-0.7
Bicycles	5.3	4.6	6.8	4.9
Recording media	2.4	2.6	2.7	3.0
Games, toys & hobbies; sport & camping equipment; musical instruments	3.2	3.4	3.6	3.6
Gardens, plants and flowers	0.2	1.2	0.5	1.4
Pets and related products	0.3	0.9	0.6	1.0
Books & stationary	0.2	0.8	0.8	1.2
Audio-visual, photographic & info processing eqpt	8.4	7.1	8.7	7.3
Appliances for personal care	4.6	3.2	4.9	3.3
Jewellery, clocks and watches	0.7	0.3	1.4	0.6
Other personal effects	4.6	3.9	5.0	4.1
Total Convenience	0.5	0.8	0.6	0.9
Total Comparison	4.0	3.5	4.4	3.7
Total Retail	2.7	2.6	3.0	2.7
Other Aggregations:				
Core DIY Goods	2.6	2.5	3.0	2.7
Core DIY Goods exc Gardening	3.2	2.9	3.6	3.1
Bulky Goods	4.2	3.7	4.7	3.9
Non-Bulky Goods	2.4	2.3	2.6	2.4