

Working paper on market definition

Introduction

1. The market shares of firms and other measures of concentration (eg HHI, fascia counts) can give an indication of a firm's ability to exercise market power. The calculation of market share presupposes the definition of a market with both geographic and product dimensions and the identification of firms participating in it. This paper presents the concept of the relevant market and how it might be best applied in this investigation. It then assesses the views of the main parties and the qualitative evidence on market definition received to date.
2. This paper focuses on the relevant market(s) for the supply of groceries to consumers (ie the market served by grocery retailers). We are not seeking at this stage to define comprehensively each upstream market (ie the markets in which suppliers compete) as we do not consider this to be a practical way forward given the large number of separate markets that are likely to be involved.
3. The analytical tool traditionally used to define the relevant market is the 'SSNIP' test. This test considers whether a hypothetical monopolist of a product or set of products, supplied within a specified location, could profitably impose a small but significant non-transitory increase in price.
4. The test is applied iteratively, starting with the narrowest candidate market. If it is considered that a hypothetical monopolist would be unable to impose a price increase over this narrowly defined set of products/location, either because of demand-side substitution or supply-side substitution, the candidate market should be widened to take account of these constraints and the SSNIP test applied again. The relevant market is normally defined as the smallest group of products (in the

narrowest geographic area) over which a hypothetical monopolist could profitability sustain a SSNIP.

5. In the context of the supply of groceries, demand-side substitution occurs when consumers switch either all of their grocery expenditure (total substitution) or part of their grocery expenditure (partial substitution) to another store. The extent of the loss of marginal sales to a competitor is informative about market definition. This might be in response to a change in price, but may also be in response to a change in one or more of the other non-price aspects on which stores compete such as product range, quality or service.
6. Supply-side substitution might involve entry into a particular location, expansion, or brand repositioning—at short notice—by a potential competitor. However, given the substantial investment required for these strategies, and the timescale for implementation, supply-side substitution is not considered further. We note, however, that the effect of any degree of supply-side substitution would be to widen the market.
7. There is not always an obvious starting point for a SSNIP test. The constraints between grocery retailers of different sizes, different fascia or different locations are likely to differ. Further, any two grocery retailers may not necessarily both impose an equal competitive constraint on each other. As such, the starting point for the SSNIP test crucially affects the outcome of the market definition exercise.
8. The process of analysing and defining the relevant market(s) in this investigation will further our understanding of the constraints between stores of different sizes, fascia and locations and thus allow us to assess particular competition concerns, eg the extent to which larger stores constrain convenience stores.

Product market

9. There are many differentiating factors between grocery retailers from a consumer's viewpoint, for example: price, range of products, quality of products, cleanliness, parking facilities etc.¹ We refer to the sum of these aspects as a 'retail offer' which is essentially the product sold by retailers to consumers. For the purposes of our analysis, in this paper we consider two observable variables which capture many aspects of the retail offer: store size and store fascia.

10. This section is structured as follows. Paragraphs 11 to 13 set out the findings of previous CC reports and the methodologies used to assess relevant markets. Paragraph 14 describes the main parties' views on the relevant product market. Consumer behavioural patterns are discussed in paragraphs 15 to 23. Finally, paragraphs 24 onwards discuss evidence of competition between stores of different sizes and different fascia.

Findings of previous CC reports

11. Previous CC inquiries have found that:
 - (a) Stores over 1,400 sq metres in size compete with each other (and may compete with stores of up to 75 per cent of their size).
 - (b) Stores between 280 and 1,400 sq metres are constrained by each other and by stores over 1,400 sq metres in size.
 - (c) Stores below 280 sq metres in size do not exert a competitive constraint on larger stores.

¹These have sometimes been collectively termed 'PQRS', which is an abbreviation of price, quality, range and service, but also encompasses other factors such as convenience (eg see *Somerfield plc/Wm Morrison Supermarkets plc: a report on the acquisition by Somerfield plc of 115 stores from Wm Morrison Supermarkets plc*, TSO, September 2005—'Somerfield report').

12. These findings have been motivated by the notion that if one store constrains another store, the converse is not necessarily true. The CC's previous findings are consistent with the idea that large stores (over 1,400 sq metres) constrain smaller stores but not necessarily vice versa. This asymmetry could apply not only to store size but also to store fascia. Fascia are differentiated (by price, quality, range, service and convenience) to appeal to different types of consumers. For example, the Limited Assortment Discounters (LADs) Aldi, Lidl and Netto are traditionally perceived as lower-price, lower-quality operators and, at the other end of the scale, M&S and Waitrose are perceived as charging higher prices that reflect the higher-quality products provided.

13. The relevant set of competing fascia (the 'competitor set') may therefore differ according to the starting point of analysis. In recent CC merger investigations, the Safeway report² found that fascia competing with Safeway included: Asda, Tesco, Sainsbury's, Morrisons, Co-op, Somerfield, Booths, Budgens and Iceland. The more recent Somerfield report considered that Iceland's competitive offering had changed since the Safeway report, and that it was not in the same market as Somerfield or Safeway.

Views of the main parties

14. The views of the main parties are as follows:
 - (a) The ACS submitted that a binary division of shopping habits into one-stop and top-up is not accurate. Consumers' shopping habits are now much more diverse than that, and similar types of shopping trip can be conducted in different types of store.

²*Safeway plc and Asda Group Limited (owned by Wal-Mart Stores Inc); Wm Morrison Supermarkets PLC; J Sainsbury plc; and Tesco plc: a report on the mergers in contemplation*, TSO, September 2003—'Safeway report'.

(b) Asda told us that 'one-stop shops' over 1,400 sq metres (15,000 sq feet) in size compete with each other (although it believed that there was a degree of competitive constraint from other grocery retailers). Asda did not take a view on the product market for smaller stores. It believed that its main competitors are the one-stop shops of Tesco, Morrisons and Sainsbury's. In its MPQ response, Asda told us that in addition to its main price/value basket of [redacted] lines, Asda monitored a much smaller basket of [redacted] 'value' focused lines against [redacted]. At the hearing on 6 October 2006, Asda elaborated that it sought to [redacted] due to its commitment never to be beaten on price. Asda considered that its low price assurance is, however, consistent with its submission that its customers do not in general see Asda as competing with the LADs, which it believed could not offer the range and depth of the one-stop shop retail offer.

(c) CGL proposed three product market definitions as follows:

- (i) a one-stop shopping market, consisting of stores in excess of 1,400 sq metres (15,000 sq feet) owned by a chain within the competitor set;
- (ii) a top-up shopping market, consisting of all stores in excess of 280 sq metres (3,000 sq feet) including those over 1,400 sq metres (15,000 sq feet), as one-stop shops can also service top-up needs; and
- (iii) a convenience shopping market, consisting of all stores falling within the scope of the current inquiry.

It was CGL's view that the market is asymmetric in the manner described above in paragraph 12. Accordingly, CGL submitted that it does not compete in the 'one-stop' shopping market. In the market in which stores above 280 sq metres (3,000 sq feet) supplying top-up shopping competed, it believed that Tesco, Sainsbury's, Morrisons, Asda, Budgens, Booths, Somerfield, Waitrose and CGL are the principal competitors. CGL monitored its prices against a number of retailers, with a particular focus on [redacted].

- (d) M&S stated that defining relevant markets for the supply of groceries in either one-stop or secondary shopping is still valid and represents a useful starting point for any competition assessment. However, it considered that a number of market developments should be taken into account—including increased shopping frequency, increased emphasis on fresh and chilled food products, and the increase in the number of smaller format stores—which increases the extent to which different sizes of grocery store compete. M&S said that it competed with everyone including the main supermarkets, although it competed less strongly with LADs and independent convenience stores.
- (e) Morrisons said in its hearing that it competed with Tesco, Asda, Sainsbury's, Somerfield and Waitrose.
- (f) Sainsbury's proposed a two-tier product market: 'convenience' (below 280 sq metres) and 'one stop' (above 1,400 sq metres). It considered that stores between these thresholds should be allocated to one of these 'markets' according to local conditions. It considered that competing fascia in the 'one-stop shopping' market include Tesco, Sainsbury's, Asda, Morrisons, Somerfield, Waitrose, Co-op, M&S and the LADs.
- (g) Somerfield referred to four 'shopping missions', but did not explicitly relate these to four product markets.
- (h) Tesco considered that all grocery retailers compete with one another.
- (i) Waitrose favoured separate product markets for one-stop shopping and secondary shopping.

Evidence on consumer behaviour

15. As noted in paragraph 12 above, previous CC reports have found that, in grocery markets, consumers respond to changes in price, quality, range, and service (of which one aspect is convenience). Table 1 shows that consumers value price and

convenience highly when choosing their main grocery store, followed by quality and range.

TABLE 1 Reason for choosing store for main grocery store

	%
Lower price	
Closer to home	
Better quality than others	
Wide range of different types of food	

Source: TNS 2005.

16. The importance of these factors may vary according to individual consumers' needs. Evidence from the retailers indicates that there are a vast number of reasons that lead a customer to shop in grocery stores ('shopping missions'). Different retailers have different ways of classifying shopping missions, but they typically describe one-stop shopping, planned top-up shopping, unplanned top-up shopping, ingredients shopping, gifting, one-need shopping (eg snacks, drinks) and fuel shopping. Previous CC reports have broadly grouped these shopping missions into 'one-stop shops', 'top-up shops' and 'convenience shops'.

17. Different shopping missions may result in different basket sizes and different amounts of expenditure. For example, a one-stop shop is likely to involve much higher expenditure on a wider range of products than a convenience shop. However, a customer's shopping mission is not easily identifiable by a retailer, and customers may carry out all types of shopping mission in all types of store.

18. TNS Worldpanel data provided by Sainsbury's suggests that in larger store formats, expenditure tends to be higher, the number of items purchased greater and the range of items purchased wider than in smaller stores. This seems intuitive, as larger stores are more likely to meet the requirements of consumers carrying out larger shopping missions.

19. Similarly, consumer research by Harris International Management (HIM) suggests that shoppers in smaller stores place less value on range, availability and parking, and far more importance on convenience. Again this is not surprising, as smaller stores are unlikely to appeal to consumers looking to purchase a wide range of products, but are likely to appeal to 'convenience' or 'top-up' shoppers.
20. The relationship between store size and shopping mission may explain the tendency for some parties to define markets according to customer behaviour.
21. Tesco argued that as a customer's shopping mission was unobservable from the retailers' perspective at the point the customer enters the store, retailers have no ability to differentiate the 'retail offer' that they provide to customers in a particular store. As a result, it argued that any mission that was conducted in a store received the same retail offer and therefore that all sizes of grocery store fell into the same product market.
22. This argument does not take into account three points:
 - (a) Stores may differentiate their size or format in alignment with customer shopping missions. Customers wanting to stock up on many products are more likely to do so in a larger store where the range is greater. Those wanting a small number of products such as bread and milk can obtain them more easily in smaller stores (as supermarkets typically place these items at the back of the store while convenience stores place them in more accessible places). In this context, it should be noted that Sainsbury's has a different price list for its convenience stores at an average premium of around [X] to [X] per cent on the standard price lists for its supermarkets, and Tesco has a different price list for its Express and some Metro stores at an average premium of around [X] to [X] per cent on the standard price list for its supermarkets. This pricing may be cost reflective.

- (b) Stores may differentiate their store layout in alignment with customer shopping missions. For example, many larger stores offer services which are directly targeted at convenience shoppers, eg express food ranges located at the front of the shop, express tills (therefore improving the 'value' to convenience shoppers).
- (c) Loyalty card data enables retailers to send targeted vouchers and promotional material to customers identified by their shopping habits (eg average spend, frequency, number of categories purchased).

23. We have been informed that a number of trends have emerged in recent years which are claimed by some to have 'blurred' the distinction between the shopping trips that were previously defined. These include increased frequency of shopping due to the increased importance of fresh and chilled product categories (although a Department for Transport survey suggests otherwise—see paragraph 48), the entry of one-stop retailers into the convenience stores sector and the continued diversification of the retailers into a non-food offer. We will be considering how these developments affect consumers' choices, with particular regard to consumer research submitted by some of the main parties.

Evidence on store size

24. Other than the main party views set out in paragraph 14, very little evidence has been provided to date to show the constraints that stores of different sizes place on each other. An overview of the other evidence that has been provided is set out below.
25. CGL commissioned Oxera to assess the impact on its revenues of new store openings. The results are set out in Table 2.

TABLE 2 Impact of CGL store sales of new store openings within 4 km

Size of competitor	% change in CGL sales – period +6+7 against –6–7	% change in CGL sales – period +1+7 against –1–7	Number of 'events'	Average competitor store size (ft ²)
Mid-tier/top-up competitor	()	✂)
Large/one-stop shop competitor				
All competitors				

Source: CGL submission.

26. This analysis suggests that the opening of a larger store has almost twice as large an impact on the revenue of a CGL store within 4km (as the crow flies) than the opening of a smaller store (large implies greater than 1,400 sq metres or 15,000 sq feet). The 4km radius was used as a proxy for a 5-minute drive-time.

27. We note that this analysis does not control for fascia or distance. For example, a smaller store opening next door to a CGL store might have a greater impact than a large store opening 4km away. Further, larger stores might be associated with stronger fascia.

Evidence on fascia

28. Grocery retailers differentiate themselves in various ways along the PQRS spectrum, which consumers associate with their fascia. There is obviously some tension between some of these characteristics (eg low price vs high quality). Arguably, two fascia are more likely to compete if their PQRS offering/brand positioning is similar.

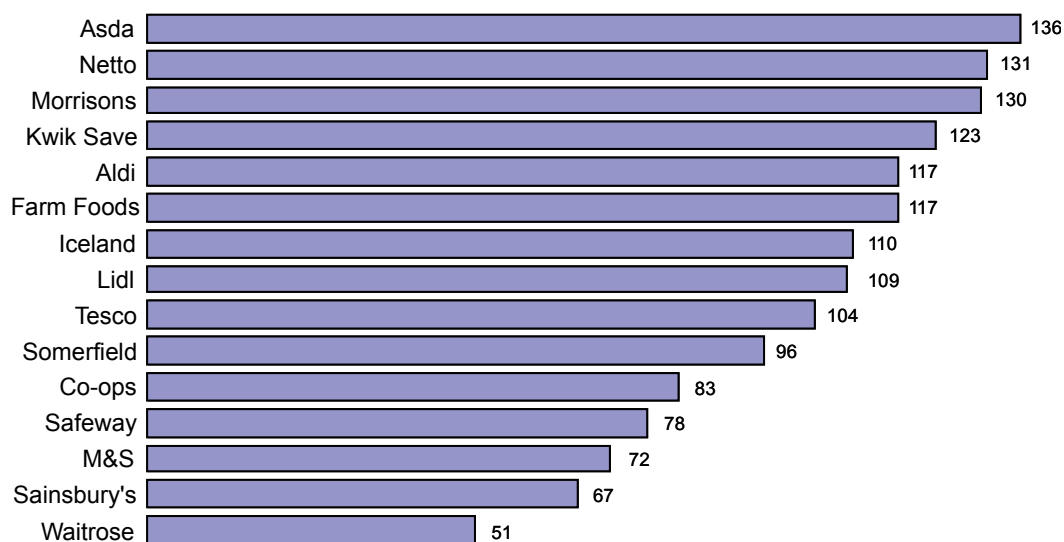
29. This is evident in the views presented by the retailers: for example, [✂]. This is not surprising given that our perception is that Sainsbury’s focuses more on product quality whereas Asda focuses more on price.

30. We have some evidence of price positioning as perceived by consumers. TNS research, set out in Figure 2, shows a ranking of stores according to how valuable their consumers consider low prices to be when choosing a store.

FIGURE 2

Index of consumers choosing store by price

Reasons for Store Choice—Prices are always Low



Source: TNS Outlet Share Index 24 w/e October 14 2001.

Fascia monitoring activities

31. If two fascia compete, we might expect them to monitor each other's offerings. The information that we have on retailers' monitoring activities is set out below:

- (a) Asda monitors [redacted].
- (b) Morrisons monitors [redacted].
- (c) Sainsbury's benchmarks Tesco as a surrogate for the market, and claims that the LADs may occasionally spark price changes across the market.
- (d) Tesco compares prices with competitors using the 'National Basket' of products. This basket aims to cover all products with sales above a minimum threshold. Each week, Tesco compares around 23,000 lines in this basket (accounting for around [redacted] per cent of total Tesco UK sales) against Asda, Sainsbury's and Morrisons, and it aims not to be beaten by them on the prices of comparable

products. In 2005, Tesco introduced the [X] in response to research that showed that its customers were increasingly shopping in [X] in addition to Tesco. This [X] and covers around [X] products from the Tesco range for which a comparable product has been found in [X]. Tesco also carries out weekly price checks against [X], monthly checks against [X] and periodic or quarterly checks against [X]. One Stop monitors its price basket of over [X] lines on a weekly basis against [X] and [X].

(e) Waitrose monitors [X].

CGL survey results

32. CGL commissioned a survey by Synovate in a number of town centres to assess consumer shopping patterns at CGL and other fascia. Synovate asked respondents which store they would switch to if their usual store closed. Oxera analysed the results, estimating the 'diversion ratio' from other stores to CGL (ie the proportion of shoppers for each fascia that would switch to CGL). This analysis is carried out for both customers' main shopping trips and smaller shopping trips.

33. The results suggest that:
 - (a) Customers carrying out main shopping trips at [X] are most likely to switch to CGL.
 - (b) Customers carrying out main shopping trips at [X] are least likely to switch to CGL.
 - (c) Customers carrying out smaller shopping trips at any store are more likely to switch to CGL than those carrying out larger shopping trips.
 - (d) Customers carrying out smaller shopping trips at [X] are more likely to switch to CGL than those shopping at other stores.

34. The analysis also looks at the constraint imposed on CGL by other stores. It suggests that customers carrying out one-stop shops at CGL are most likely to divert to [X], and least likely to divert to [X]. The results are very similar for customers carrying out smaller shopping trips.
35. We note that the above analysis is based on small sample sizes and does not control for other factors which might influence a consumer's choice such as distance. The full results are set out in the annex.

Local competitive responses

36. Finally, the evidence described in paragraph 55 onwards below—in the context of geographic market definition—is relevant to the extent that stores target local competitors according to their fascia. Notably, Tesco gave examples of local strategies aimed at [X] and [X]; Asda described how it competed with [X] locally; and Sainsbury's targeted [X] in a particular area.

Conclusion on product market

37. Our preliminary thinking is that larger grocery stores are an effective substitute for smaller grocery stores, and as a result, constrain the 'retail offer' of these stores. However, we do not currently view smaller grocery stores as providing a similarly effective substitute for larger grocery stores. Further, it is not clear that consumers view the retail offer of different grocery retailers of the same size as equally substitutable. Going forward, we will be undertaking our own quantitative analysis to assess the extent to which different fascia constrain each other, and how stores of different sizes impact each other's retail offers. Based on evidence reviewed in this paper, our assumption is that larger grocery stores constrain the behaviour of smaller grocery stores (ie stores above 280 sq metres constrain those below 280 sq metres

in size) but not vice versa. The extent and nature of constraints between fascia, however, is less clear.

Geographic market

38. This section is structured as follows. Paragraphs 39 to 44 set out the findings of previous CC reports and the methodologies used to assess relevant markets. Paragraphs 45 and 46 describe the views of the main parties. Paragraphs 47 to 65 set out the evidence of local aspects of grocery retail competition: on consumer preferences; local price and range flexing; and local entry. The evidence provided to support a national market definition is discussed in paragraphs 66 to 79.

Findings of previous CC reports

39. Previous CC reports have focused on the geographic scope of competition from the point of view of the customer and considered that ‘taking the evidence as a whole, our view is that the ambit of consumers’ search is essentially local’.³

40. The CC has previously analysed local markets using isochrones—lines joining points of equal travel time to a store or population centre. For larger stores (greater than 1,400 sq metres), isochrones of 10 or 15 minutes have been used, depending on whether the area is urban or rural (as defined by the Department for Communities and Local Government⁴). For smaller stores, isochrones of 5 to 10 minutes have been used.

41. The size of these isochrones has been determined according to how far customers are willing to travel to a store. A ‘primary’ isochrone drawn around a store therefore represents the ‘catchment area’ of the majority of its customers.

³*Supermarkets: a report on the supply of groceries from multiple stores in the United Kingdom*, TSO, October 2000.

⁴Previously the Office of the Deputy Prime Minister (ODPM).

42. In principle, however, the geographic market is defined according to whether consumers would switch to a store in another location in response to some degradation in the retail offer of their current store. The consumer choice set is thus dictated by the number of stores within a certain drive-time (or distance) of the consumer (the demander) rather than of the store (the supplier). Stores that are outside each other's catchment areas may still fall within the same choice set of consumers located between the two stores. If sufficient consumers would be willing to substitute between two such stores in response to some degradation of PQRS, the stores will be in the same geographic market.
43. To address this, the Safeway report (2003) and the Somerfield report (2005) used 'population recentring' in their assessment of local markets. This methodology delineates isochrones around areas of population served by a particular store.⁵ It then considers which alternative fascia serve each of those areas of population, and whether a sufficient proportion of consumers could switch to those fascia to render a degradation of PQRS unprofitable.
44. The issue of population recentred isochrones will be pursued in the quantitative analysis that we will be conducting in the period up to provisional findings.

Views of the main parties

45. The main parties have different views on the geographic boundaries of the market:
- (a) The ACS identified both local and non-local aspects to competition. It observed that for larger players some practices were decided nationally, with effects

⁵In the Somerfield report, the recentring was carried out around census output areas which covered up to 150 households. The data was used to assess the proportion of households within the acquired store's catchment area that had access to four or more competing fascia post-merger, and whether this proportion was sufficient to prevent the merging parties from exercising market power.

reaching through to almost every local retail market. For smaller players, competition was, the ACS argued, for the most part experienced locally.

- (b) Asda believed that markets are local and told us that previous CC market delineations were appropriate for one-stop shops.
- (c) Sainsbury's believed that markets are local, and suggested that the following drive-times were appropriate: 10 minutes in urban areas; and 15 minutes in rural areas. In exceptional cases, larger stores may give rise to slightly longer drive-times. These should be looked at on a case by case basis.
- (d) Tesco argued that the relevant geographic market was national, primarily because of national pricing, marketing, branding, quality and service strategies, because of the presence of 'chains of substitution' and because it considered that entry by national retailers in many locations throughout the country indicates that supply side substitution is possible.⁶
- (e) Morrisons saw the differences between the primary and secondary grocery retail markets as being less distinctive than in 2000 and 2003. However, it believed that larger grocery stores of at least 1,400 sq metres (15,000 sq feet) of sales area serve primarily one stop shoppers and that smaller stores serve top up shoppers.
- (f) Somerfield, Waitrose, CGL and M&S consider a local market definition to be appropriate.

46. We consider below evidence provided by the parties and taken from industry sources.

⁶Tesco has provided empirical evidence to the CC—including a SSNIP analysis, and a number of regressions between local concentration measures and certain individual measures of PQRS—to support its contention that the geographic scope of the market is national. The CC is pursuing further information from Tesco and will assess this material in the period up to publication of provisional findings.

Evidence on local aspects of retail competition

47. This section sets out evidence supporting the following local aspects of retail competition:
- (a) consumers' preferences are local;
 - (b) retailers typically assess competition within a catchment area based on a travel time of 10 to 20 minutes;
 - (c) there are some local price and range adjustments and local marketing initiatives;
and
 - (d) local entry can have a substantial impact on incumbent store revenues.

Consumer preferences

48. If consumer preferences are local, demand-side substitution is unlikely to occur between two stores which are geographically distant.⁷ This is because consumers bear the transport costs involved in switching from one store to another. The Department for Transport National Travel Time Survey (2005) found that the average distance travelled by consumers for grocery shopping is 4.3 miles⁸ (equivalent to 8 to 9 minutes' drive-time in an urban area).
49. As noted in paragraph 41 above, a store's catchment area is the area from which it draws the majority of its customers. This area will depend on how far customers are willing to travel to do their grocery shopping.
50. Evidence from the major retailers suggests that that the majority of their consumers live within 10 and 20 minutes' drive-time from the store that they frequent:
- (a) Tesco's analysis of its Clubcard data suggests that:

⁷Although some consumers may switch between, for example, a store near their home and a store near their work, which might not be 'local' to each other.

⁸Based on a survey of 8,400 people who filled in travel diaries for one week. The results suggest that people are willing to travel further than ten years ago (when the average was 3.9 miles) and that they conduct fewer shopping trips.

- (i) for urban (rural) stores below 280 sq metres (3,000 sq feet), [X] per cent ([X] per cent) of customers live within 5 minutes from the store and [X] per cent ([X] per cent) live within 10 minutes;
 - (ii) for urban (rural) stores between 280 and 1,400 sq metres (3,000 to 15,000 sq feet), [X] per cent ([X] per cent) of customers live within 10 minutes of the store and [X] per cent ([X] per cent) live within 15 minutes; and
 - (iii) for urban (rural) stores above 1,400 sq metres (15,000 sq feet), [X] per cent ([X] per cent) of customers live within 10 minutes of the store and [X] per cent ([X] per cent) live within 15 minutes.
- (b) Asda uses [X]-minute drive-times to assess the projected profitability of proposed new stores. It considers that [X] per cent of its urban customers are located within that distance of its current network of stores ([X] per cent in rural areas) and that [X] per cent of urban customers are located within [X] minutes ([X] per cent in rural areas). [X]
- (c) Sainsbury's considers that its catchment area is 10 minutes in urban areas and 15 minutes in rural areas, corresponding with its views on the appropriate geographic market.
- (d) Morrisons assesses the population density within a 15- to 20-minute drive-time around a store when assessing the viability and potential of new store development opportunities.

51. The catchment area of a store appears to be narrower for smaller stores. The survey of stores—between 280 and 1,400 sq metres in size—undertaken in the Somerfield/Morrisons inquiry showed that the vast majority of urban customers came from within a 5-minute drive-time.

52. Harris International Management (HIM) produces a bi-annual Convenience Tracking Programme, which tracks 31 convenience fascia and 1,342 stores. It estimates the

proportion of consumers that shop at those stores who live within defined distance bands, as set out in Table 2.

TABLE 3 Proportion of consumers living within different distances from stores

<i>Distance band</i>	<i>Proportion of customers drawn from that band</i> %
Less than ¼ mile	50
¼ mile–2 miles	34
2 miles–5 miles	7
Over 5 miles	10

Source: HIM, Convenience Tracking Programme, Spring 2006.

53. This is consistent with evidence from Tesco, whose ‘One-Stop’ chain of smaller stores operates a simple rule of thumb—for the purpose of evaluating sites—for the extent of its catchment area based on a [X]. Tesco does not consider that this covers the location of all customers that use a particular store.

54. The above evidence on the size of store catchment areas is consistent with findings in previous CC reports. However, as noted in paragraph 42 above, a store’s catchment area is not necessarily equivalent to the geographic market in which it operates.

Local price adjustments

55. If markets for grocery retailing are local, we might expect to see competitive interaction between retailers at this level. The extent to which prices are adjusted locally is considered below.

56. Tesco, Asda, Sainsbury’s and Morrisons, despite pricing nationally (with the exception of fuel), all adjust their prices at the local level:

(a) Asda implemented three types of pricing trials within the last year: [X]. Asda also spent approximately £[X] million in voucher redemption in 2004 and 2005

(including the redemption of vouchers issued by competitors). The majority of these vouchers were targeted at shoppers in response to competition in Asda catchment areas, eg [redacted] (in 2004), [redacted] (2004); [redacted] (2005) and [redacted] (2005). Asda redeemed £[redacted] million of online vouchering activity between May 2005 and October 2006.

(b) Tesco told us that in the past it [redacted] but that these no longer occur. It also spent £[redacted] over the last six months matching Lidl's half-price produce offers. Cigarettes, which made up [redacted] per cent of sales in the Tesco 'One Stop' stores, were—for historical reasons—priced according to [redacted] different price lists that were applied to different stores according to the level of local competition that they faced. Tesco's local marketing campaigns are triggered by local competitor activity (eg new store openings, refurbishments or extensions) that are anticipated to have an impact of [redacted] or £[redacted] on the weekly turnover of a local Tesco store. In most years the number of local marketing campaigns in response to competitor store investments has been between [redacted] and [redacted]. This figure was greater in the last financial year due to the substantial investment of Morrisons in converting Safeway stores. Total local marketing expenditure is £[redacted]. [redacted] of the [redacted] local marketing campaigns last financial year were in response to rivals' local openings or refurbishments of which [redacted] were in response to Morrisons/Safeway conversions. Tesco issued [redacted] 'local marketing' vouchers in 2005 [redacted]. A further [redacted] 'thank you' vouchers were issued, which Tesco said were sometimes targeted at customers who shop in underperforming stores.

(c) Sainsbury's occasionally issued vouchers to Nectar cardholders as part of local marketing campaigns, aimed at retaining customers, when there were new entrants in a locality, eg [redacted], where it provided one of four types of voucher to [redacted] regular Sainsbury's shoppers. It also (infrequently) targeted vouchers when there was a 'specific and significant competitive threat from a multiple', eg 50p off a sandwich where one of its stores faced a newly-opened M&S store.

- (d) Morrisons offered vouchers at the opening of its stores. It did not undertake any technical modelling of entry but directors visited all potential sites to evaluate local competition and the potential of the catchment area prior to proceeding with a site purchase.
57. While this is evidence that there are some adjustments to prices at the local level, these examples are small in the context of £124 billion of annual retail sales of groceries in the UK.⁹
58. Costcutter, CGL and Somerfield each explained that they set their store prices according to the level of local competition. Among other factors:
- (a) Costcutter has three price lists (provided by Nisa). Each store selects the price band that is appropriate given the local competitive conditions.
- (b) CGL has four principal price bands, supplemented by a discrete band for Northern Ireland and two pilot bands. These are applied to specific stores depending on the format and size of store, the diversity of the estate, local conditions and distribution costs.
- (c) Somerfield defines price tiers for its stores according to the cost to serve, local demographics and competitor intensity. It has a system of determining or varying the format of a store according to these conditions: any store facing highly competitive conditions defaulted to the 'standard' format whilst stores in less competitive areas that were expensive to service or operate (eg the Highlands and Islands) might become 'premium' or 'convenience' formats.
59. The major retailers have different national price lists for different formats of store, but it is not clear whether their store formats vary according to local competitive conditions.

⁹Source: IGD.

Local range adjustments

60. As noted, grocery retailers may compete locally on factors other than price. It appears that retailers may adjust their product range according to local competitive conditions.
61. Tesco acknowledged typical range variations of local and regional products of 6 per cent in a store, attributed to variations in customer taste by area. M&S claimed to have observed Tesco moving its range upmarket in Clapham South in response to Waitrose entry into the area.
62. Sainsbury's also actively uses other parts of its offer to differentiate itself locally, although it emphasized that variations to its core range are a function of the demographics of a store's catchment area, which in turn affected which stores are sited in an area: 'We might put more up-scale ranges in stores that were head-to-head with Waitrose, as an example, in order to compete with some of their more esoteric, upmarket ranges. But, again, that is largely a function of the demographics of the catchment area in which we are competing.'¹⁰
63. Morrisons tailors its offer to regional preferences by selling different regional products in various regions. Local demographics also play a part in smaller stores: Morrisons adjusts the space devoted to its economy range ('Bettabuy') or premium range ('The Best') accordingly.

Impact of entry on incumbents

64. If competition occurs locally, we might expect entry in local areas to affect incumbent stores' revenues. Some retailers told the CC how they perceived the effect of local entry:

¹⁰Source: Justin King, Sainsbury's hearing on Friday 6 October 2006.

- (a) Asda said that it reacts to local competitor entry when [X]. It stated that in practice such an impact is only achievable by competitor [X]. The reaction itself would consist of one or more of: vouchers; local advertising; space reallocations; refurbishment; new facilities; and improvements to store service standards.
- (b) Asda provided the example of its Coatbridge store in Scotland, where it said that Tesco entry led to: [X].
- (c) Sainsbury's cited the example of [X].
- (d) Waitrose's competitor impact assessment works on the assumption that [X] per cent of sales in the relevant quadrant of its catchment area would be lost to a competitor entering in that quadrant.

65. Empirical analysis will be carried out to assess the effect of entry of new grocery stores at a local level.

Evidence on national aspects of retail competition

66. Despite the evidence above that is consistent with local markets for grocery retailing, Tesco argued that retailers compete nationally because the major retailers have national strategies and because catchment areas overlap to the extent that there is a national 'chain' of substitution. It has also been suggested by a number of parties that the emergence of Internet shopping may widen the geographic market. These viewpoints are assessed below.

National chains

67. Most grocery retail outlets are owned by a national chain. One consequence of this is that, with the exception of fuel, and the local variations described in paragraphs 56 onwards, the four major grocery retailers each set their prices on a national basis. Further, they have national marketing campaigns which deliver brand advertising through television, radio and national press. Tesco argued that 'clearly, the individual

can only choose from the range that is easily available to them. What they have to choose between is set nationally and does not vary'.¹¹

68. While the major supermarkets may set uniform list prices throughout all their stores in the UK, we consider it plausible that these national prices nonetheless reflect competitive conditions at the local level. Further, while a consumer chooses between fascia that are branded at a national level, their actual choice may extend only to those fascia that are present at the local level. Tesco argued that its prices were national as a necessity in terms of the way in which it engaged in competitive rivalry for the goodwill of customers. We do not consider that local competition and national PQRS strategies are inconsistent. As expressed by Asda in its hearing:

To the extent there is a lack of local competition, we believe that is reflected in two ways. One, where PQRS are set locally, that is likely to be reflected locally. Secondly, to the extent PQRS are set nationally, we think that the aggregation of the local competition conditions will be reflected in the way those strategic parameters, if you like, were set nationally. So we think that local competition feeds through in both of those ways.¹²

Overlapping catchment areas

69. Tesco argued that chains of substitution are sufficiently strong to form a national market for grocery retailing. Tesco provided maps (that it termed 'porcupine' maps) based on loyalty card data that suggest that the catchment areas of local Tesco stores overlap to the extent that they are joined up across the country. An example is set out in Figure 3.

¹¹Source: Tesco hearing, Wednesday 11 October 2006.

¹²Source: Asda hearing, Friday 6 October 2006.

FIGURE 3

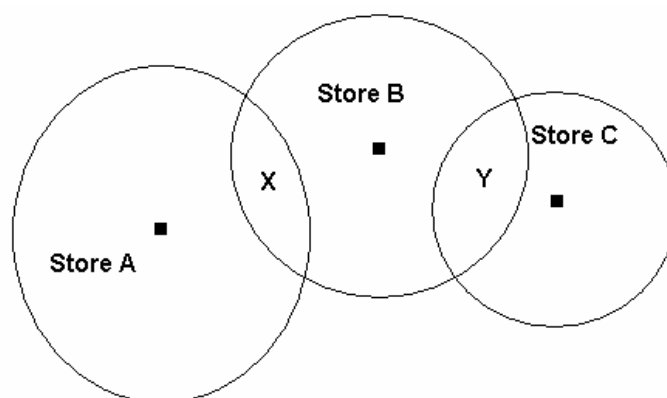
[✂]

Source: [✂].

70. The intuition for the chain of substitution argument is best introduced with an example. Figure 4 presents an example with three stores, A, B and C, each with a catchment area delineated by a circle around the store. Suppose we are interested in the relevant market for store A. If store A cannot profitably raise price by 5 per cent because the number of marginal consumers that would switch to store B, represented by group X in Figure 4, is sufficiently large, then store A and store B are in the same market.
71. To determine whether store A and B are part of a *distinct* geographic market, we then consider whether a hypothetical monopolist controlling stores A and B could profitably raise prices by 5 per cent. Consumers located in Y would likely switch to store C following the price increase, as store B also competes directly with store C. The hypothetical monopolist cannot profitably raise *all* prices by 5 per cent if the number of marginal consumers located in Y is sufficiently large. We must then include store C in the relevant geographic market, and ask again whether a hypothetical monopolist controlling stores A, B and C could profitably raise all prices by 5 per cent, and so on.
72. The hypothetical monopolist test ends when we have found a group of stores for which the monopolist can profitably raise prices. The chain of substitution argument therefore broadens the relevant geographic market by including stores that do not directly compete. In our example, stores A and C do not have overlapping catchment areas, but are part of the same market because of C's constraint on B.

FIGURE 4

A chain of substitution constraining the offer of stores A and C



73. There are several reasons why the chain of substitution argument may not broaden the market to a regional or national scope. First, the chain of substitution argument breaks down when there is discontinuity in the catchment areas. [✂] However, it seems unlikely that, given the physical geography of the UK, there will be a sufficiently large number of competing stores located in close physical proximity to prevent any breaks in the chain of substitution.
74. Secondly, even where there are a large number of closely located stores, the chain of substitution effect fades with distance. The size of the consumer group Y required to prevent both store A and store B, under common ownership, from raising prices simultaneously is larger than the size of the consumer group Y required to prevent store B alone from raising prices. This is because it is the *proportion* of revenue represented by consumer group Y that constrains the price increase. [✂]
75. Thus even if stores (eg A to Z) are located at equal distance from each other, there will be some point where the marginal group of consumers between two stores, say E and F, will not represent a sufficient proportion of revenues of stores A to E to make a price increase across all of those stores unprofitable. In this case, there is a

break in the chain of substitution such that store A would not be in the same market as store F.

76. Finally, a proper interpretation of the hypothetical monopolist test does not imply that *all* prices must be raised. SSNIP tests are typically applied assuming a unilateral SSNIP across products/stores. However, going back to the example in paragraph 71, it is plausible that a hypothetical monopolist of stores A and B could exercise market power by only increasing the prices of store A and not store B. By doing so, store B captures the lost revenues from consumers diverting away from store A, and store C does not act as a constraint on the monopolist. This breaks the chain of substitution.
77. For these reasons, we consider that ‘chains of substitution’ are unlikely to widen geographic market boundaries beyond local areas. This is consistent with findings in previous CC reports.¹³ Nonetheless, two stores outside each other’s catchment area might be in the same geographic market. However, the CC has implicitly assumed (through population recentring) that the maximum distance or drive-time apart that two competing stores may be located is twice the distance/drive-time of the catchment area. For example, according to the CC’s previous analysis, the maximum drive-time that two competing large stores could be apart in an urban area is 20 minutes (as a consumer on the edge of a 10-minute isochrone could choose either store).

Internet shopping

78. It is plausible that the emergence of Internet shopping may widen the geographic market for grocery shopping:

¹³Safeway report, 2003, p225.

(a) According to Tesco's main submission, 98 per cent of the population can receive deliveries from Tesco.com, 48 per cent from Ocado, 76 per cent from Sainsbury's to You and 43 per cent from Asda at Home.

(b) Online retailers typically deliver up to 30 minutes or more from the store.

(c) Some Internet retailers do not base their delivery service around particular stores ([X]). In such cases the catchment area of the service is decoupled from store location and replaced by the geographical coverage that the deliveries from depots can provide.

79. The parties broadly described Internet shopping as constituting 1 to 2 per cent of UK retail grocery sales. This seems likely to increase in the future but the extent of this likely increase is not clear. We consider that while the existence of Internet shopping may widen the precise boundaries of some local markets, these markets will still be local.

Conclusion on geographic market

80. The evidence assessed above is largely consistent with previous CC findings that the relevant geographic market is local. Views differ as to how the local market should be precisely defined. In the period up to the publication of our provisional findings we will be conducting empirical analyses to assess the most appropriate market boundaries. However, based on the evidence submitted to date, our current working assumption is that the relevant geographic market is local.



