2 SEPTEMBER 2007

Market Definition and Competition

1. Introduction

1.1 This submission contains Asda's comments on the CC's working papers related to market definition and competition. In relation to market definition these are the Market Definition Working Paper, the Grocery Shoppers Working Paper and the Store Level Demand Estimation Working Paper.[1] In relation to competition this is the GfK Report – Local Case Studies.[2]

1.2 Asda's main comments on market definition are as follows:

(i) Asda agrees with the CC that product market definition may appropriately be delineated using store size and fascia.

(ii) Asda considers that it operates in a distinct product market comprising one stop shops (OSS), being those shops designed to cater for one-stop shopping missions.

(iii) Asda considers that 1400 m^2 is around the minimum size required to operate an OSS and forms an appropriate cut-off for the purposes of market definition. While the *exact* figure of 1400 m^2 is arbitrary, it is around the level below and above which grocery shops have a significantly different customer proposition and is therefore *meaningful* in economic terms.[3]

(iv) Asda considers that the relative size of OSS above 1400 m^2 is a factor that affects competitive constraints among OSS but is not in itself decisive enough for how competitive constraints operate to be the basis for delineating further market boundaries.

(v) Asda considers that the OSS competitor set previously identified by the CC remains appropriate. This is consistent with the CC's latest analysis, except in the case of M&S where Asda shares the CC's concerns about the reliability of that result.

(vi) Asda agrees that geographic markets are local and considers that most of the CC's evidence points to competitor interaction within 10 minutes' drive time.

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1 Asda takes the CC's Market Definition Working Paper (May 2007) to supersede Emerging Thinking and the first version of the Margin and Entry Analysis Working Papers.

2 Asda has previously submitted comments on the CC's Coordinated Effects Working Paper and does not repeat those comments here (see Asda's submission of 30 March 2007).

3 The 'Safeway 75% rule' (i.e. including in the OSS market shops at least 75% the size of the smallest OSS even if below 1400 m^2) can accommodate any uncertainty at the margin of this market definition.

1.3 In relation to competition and choice, the CC's work is at a more preliminary stage. However, Asda believes that the CC's analysis to date is consistent with:

(i) An absence of coordinated effects.[4]

(ii) A lack of adequate choice in many local markets, with consumers frequently unable to shop at their preferred fascia. This is because the store entry-exit process, which should respond to consumer preferences, is inhibited. This is associated with a consumer detriment distinct from that arising from a lack of competition.

(iii) A lack of competition arising from inadequate choice in many local markets, which may be reflected in adverse variation of the retail offer (PQRS but also store infrastructure) at the local level and/or deterioration in the retail offer at the national level through the aggregation of local market conditions.

1.4 The remainder of this submission contains Asda's more detailed comments. Appendix B contains comments on the Store Level Demand Estimation Working Paper.

2. Product Market Definition: Summary of Asda's Case

2.1 Asda competes in a distinct product market comprising OSS.[5]

Customer preferences: customers value the distinct offering of OSS format shops

2.2 Asda's customer research indicates that its OSS customers want low prices, the ability to buy all products under one roof (range and depth) and ample car parking on the same level as the store. Only OSS format stores are able to provide all of these attributes. These points are linked: shops with these attributes (OSS format stores) have emerged to address a particular customer demand ('OSS missions' – defined below). See Asda Overview Submission paragraphs 2.4 and 2.5. Petrol may be provided but not at the expense of these other characteristics including car parking.[6]

2.3 This suggests that a hypothetical monopoly of OSS format stores could profitably implement a SSNIP above the competitive price to extract customers' valuation of these features. Moreover, since one-stop format stores are likely to have lower costs than secondary and convenience shops (and hence a lower competitive price), the prospect of a price rise that meets the SSNIP threshold is heightened.

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4 See footnote 2 above.

5 Asda also considers that one-stop shopping within one-stop shops could be defined as a distinct grocery market although this appears likely to lead to a similar picture of market structure.

6 See transcript of Asda's Second Hearing, page 33, lines 21 to 30.

OSS shopping requires a store of around 1,400 m^2

2.4 One-stop shopping requires a minimum range and depth of products, which can only be found in stores of around 1,400 m^2 or more.[7]

2.5 The CC should note that this is not driven by Asda's desire to include some form of GM offer in its stores. [ ]. And that [grocery] footprint generally needs to be above 1,400 m^2.[8]

2.6 Asda notes Figure 4 of the working paper on Market Definition. Asda agrees with the CC's comment that "*to the extent that products are available in larger stores – due to their broader range – but not in smaller stores, this will constrain the extent to which a consumer would view shopping in a smaller store as a satisfactory substitute for shopping in a larger store*".[9] However, it appears to Asda that the CC's graph may include non-grocery products and as a result may not provide a good indication of the relationship between store size and range in the grocery market. Whilst in the CC's graph the number of SKU's increases approximately proportionally with store size across all store sizes (suggesting no particular significance of 1400 m^2), [ ]. [ ].[10]

There are distinct competitive dynamics among OSS operators

2.7 Asda faces competition at the local level from other OSS format stores. Indeed, when evaluating the potential for a new store, Asda only takes into account [ ]. See Asda's response to question 27 of the MPQ.

2.8 Of the operators Asda encounters at the local level, the vast majority of Asda's "head to heads" (in the sense of that operator being locally the strongest OSS competitor) are with the OSS format stores of Tesco, Sainsbury's and Morrison.

2.9 As a consequence, these operators' OSS format stores represent Asda's principal competitors. [ ]:

(i) [ ].

(ii) [ ].

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7 Asda considers that one-stop shopping comprises those missions with a high number of items and categories (see paragraph 1.4 of Asda's MPQ response).

8 [ ].

9 Market Definition Working Paper (May 2007), paragraph 14.

10 [ ].

Impact of the planning regime

2.10 To the extent that there is a degree of blurring between shop formats or missions, Asda considers that this may partly be attributable to the planning regime. For example, in the absence of an adequate choice of OSS format stores, consumers may conduct more shopping in smaller formats than would otherwise be the case. Since planning is among the issues being examined by the CC, Asda considers that it would be inappropriate to allow any such blurring (which in itself in Asda's view reflects a market distortion) to be taken into account in market definition.[11]

3. Product Market Definition: Asda comments on CC Working Papers

Little substitutability between formats

3.1 Asda accepts that product markets are not hermetically sealed. Some OSS shopping does take place in non-OSS format stores – notably where a customer has difficulties accessing an OSS format locally (e.g. due to the planning regime).

3.2 But OSS format revenues are heavily weighted to OSS shopping missions, in contrast to smaller format operators. See Table 2.1 and Figure 2.1 of Asda Overview Submission and Asda site visit presentation "Asda and Market Context", Slide 19. Over [ ]% of Asda revenue is accounted for by OSS missions and the same proportion of Asda revenue is accounted for by baskets larger than £[ ].

3.3 Asda notes in this context the following findings of the CC which are consistent with Asda's position on market definition:

(i) Larger stores have larger average baskets. See Market Definition Working Paper, paragraphs 12-13.

(ii) Presence of mid-size stores even within 5 minutes generally does not have a significant effect on margins for stores larger than 1400 m^2. See margin-concentration analysis reported in Market Definition Working Paper.

(iii) Medium-term impact of entry of mid-range stores on stores larger than 1400 m^2 is significantly smaller than that of large and very large stores between 0 and 10 minutes.[12] See entry-revenue analysis reported in Market Definition Working Paper, Table 2.

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11 Similar considerations apply to restrictions arising from Sunday trading legislation which may cause some consumers to carry out shopping missions in formats they would not otherwise select.

12 Based on its trading experience, Asda considers that the result showing a statistically significant impact at the 10% level from the entry of mid-range stores in the 10-15 minute distance band on OSS incumbents is not plausible given the model does not detect a significant impact from the entry of OSS stores in this distance band.

3.4 The CC suggests in its Grocery Shoppers Working Paper that higher frequency and less planned shopping suggest greater substitutability between shop formats with potential implications for product market definition. Asda has a number of concerns about this Working Paper:

(i) As a general point, Asda is concerned that the Working Paper is unduly focused on discerning any changes in consumer behaviour. While this is interesting, what matters more are the persisting fundamentals – and Asda considers that one of these is a distinct customer demand to be able to undertake one-stop shopping in shops well suited to that purpose (i.e. with low prices, large range and car parks). By focusing on changes (which may in any case reverse) rather than levels, the CC risks reaching the wrong conclusions about market definition.

(ii) While Asda has perceived a slight increase in frequency, evidence on frequency is mixed and Asda is concerned that the CC may have overemphasised such changes. Asda has provided the CC with National Travel Survey data specific to food which suggests falling frequency (see Asda submission of 18 April 2007).

(iii) Furthermore, it is too simplistic to suggest any increase in overall frequency implies a blurring of product market definition:

(a) An increase in overall frequency would be consistent with customers changing their behaviour within missions rather than switching between missions. Asda has presented evidence suggesting that OSS has increased its share marginally (and has seen no evidence to the contrary).[13] See Asda's Overview Submission paragraph 2.13. An increase in frequency within missions is consistent with missions becoming more or less distinct.

(b) Even if it were the case that OSS missions were declining in importance, this would not in itself be evidence of greater substitutability between missions. In that scenario, the OSS market may be smaller but still distinct (in the sense envisaged by the SSNIP test).

(iv) As regards planning of shopping trips, a lack of a shopping list does not mean that OSS is not chosen in expectation of range (indeed without a shopping list it is more important to have a large range available at the shop visited).

Relative size is relevant - but it is not decisive

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[13] Given that the share of OSS missions appears to have remained constant, any increase in frequency would be driven by within mission effects.

3.5 The CC has suggested that relative size among stores should be a basis for market definition.

3.6 The CC appears particularly reliant on its Store Level Demand Estimation Working Paper for its preliminary conclusions in relation to the importance of relative size. However, this result is artificial in the sense that it is a consequence of the methodology.[14]

3.7 Asda agrees with the CC that relative size between stores above 1400 m^2 is a relevant factor governing a store's ability to compete. Size is relevant to range – although range for grocery does not appear to increase as steeply as total range (including GM). See Appendix A.

3.8 But size is one factor amongst a number of other factors such as location, PQRS, store infrastructure and layout.

3.9 For instance, a store may be larger in terms of square footage but due to its compromised layout (e.g. multi-storey in town centre) be a less effective competitor than a smaller store. See Denis Mallas' evidence at Asda's Second Hearing (page 14, line 30 to page 15, line 7[15] and page 53, lines 9 to 20[16]). Asda considers that a simple rule based on relative store sizes, would not adequately capture the factors influencing effective competition to an existing store.

3.10 Asda notes the CC's guidelines which indicate that market definition is intended to be "*a framework within which to analyse the effects of market features*".[17] In view of the points above, Asda considers that relative size is more appropriately handled as a factor relevant to competitive effects analysis within the market rather than as a factor to guide market definition.[18]

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14 See further Appendix B for Asda's more detailed comments on the Store Level Demand Estimation Working Paper. The CC appears possibly to have recognised this point at paragraph 10 of the working paper.

15 *"[...] You could have a very large store that may not actually be very competitive because of accessibility issues. It may not be well located. It may have restricted parking. The configuration of the unit for customers may not be convenient. In those cases, again at the lower end of the OSS scale there may be an opportunity to profitably enter that market. So it is a factor, but it is one of a number of factors, its relative size."*

16 *"The largest competitor [in [ ]] is a 3,500 square metre Tesco, but there are three other OSS stores in out of town locations. I have a concern about that store in terms of our performance at that store that we have learnt from recent openings. Even though we will be larger there, we have got control[led] car parking, we have got deck parking, we have got our offer split across a shopping mall. In terms of what customers picture as an OSS store we have taken a lot of compromise. That is a good example of where, despite achieving the square footage, I am not sure we will achieve the competitive impact with customers in OSS."*

17 Market Investigation References: Competition Commission Guidelines, June 2003, paragraph 2.2.

18 However, the 'Safeway 75% rule' (i.e. including in the OSS market shops at least 75% the size of the smallest OSS even if below 1400 m^2) can accommodate any uncertainty at the margin of this market definition.

3.11 Asda notes that a relative size rule applied continuously above 1400 m^2 is likely to lead to unstable and odd results. For example, the stores deemed in and out of the market would seem unreasonably sensitive to store extensions or definitional issues related to size. It would also be odd if an OSS store was deemed to be a monopoly but the entry of an OSS more than 33% bigger was also deemed to be a monopoly.

3.12 There is a risk that such a relative size rule could be taken to mean that equalisation of OSS store sizes was desirable (such that all OSS were deemed to constrain all other OSS).

3.13 The proposed method would also appear likely to make the use of market definition as a tool in merger analysis and potentially planning unduly complicated, noting that the merger regime established in Somerfield/Morrisons already allows for a detailed competition effects analysis in Stage 2.

Stores below around 1400 m^2 cannot compete effectively for OSS

3.14 For the reasons outlined above, irrespective of relative size, Asda considers that a store cannot compete effectively in the OSS market where it is materially smaller than 1400 m^2.

3.15 Asda has the following comments on the evidence cited by the CC to suggest that there may not be a cut-off at 1400 m^2:

(i) The CC reports that there is no discontinuity of store size around 1400 m^2, but the CC data include the non-OSS formats of Tesco and Sainsbury's. In fact, almost all regular supermarket format stores operated by Tesco, Sainsbury's, Asda and Morrisons are larger than 1400 m^2 (see Figure 2.3 of Asda's Overview Submission). Thus although there may be no discontinuity in the frequency of stores, there <u>is</u> a discontinuity in the brands or sub-brands. This is for a good reason: the brand (or sub-brand) has to change because the customer proposition that it signals also changes around this level.

(ii) As regards the retailers not included in the CC's analysis, Waitrose does have a higher proportion of smaller stores (34% below 1400 m^2). But it has shown a trend towards larger stores. Its average store size has increased from 1995 (1320 m^2) to 2007 (1850 m^2). Meanwhile, the average sizes of Somerfield, Co-op or Iceland have stagnated or declined over time.[19] Following its acquisition of Safeway, Morrisons sought to sell smaller format stores.[20] These facts <u>do</u> point to a discontinuity, in particular that grocery retailers below and above 1400 m^2 have a significantly different customer proposition.

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19 Verdict on Grocery Retailers 2007, sections on individual players, subsections on "Store Portfolios".

20 Verdict on Grocery Retailers 2006, section on Morrisons, page 1.

(iii) The pattern of store sizes might be affected by the planning regime, restricting a retailer's ability to build larger formats, even if these would be commercially preferred.

(iv) In its margin-concentration analysis the CC reports similar results for 1200 m^2 as for 1400 m^2 and 1600 m^2. But the CC's method does not provide a sound basis to assess whether there is a break at 1400 m^2 – in that the CC included stores larger than 1600 m^2 when looking at stores larger than 1400m^2 and it included stores larger than 1400 m^2 and 1600 m^2 when looking at stores larger than 1200 m^2 (such that the results are likely to be highly correlated). The CC should have looked at the incremental effect of stores and even then there may be blurring at the margin due to the planning regime (see paragraph 2.10 above).

3.16 None of the other quantitative evidence cited by the CC is inconsistent with there being a "cut off" around 1400 m^2.

Fascia is relevant: LADs and M&S are not part of the OSS market

3.17 Asda agrees with the CC that fascia (in addition to store size) is relevant to assessing the product market. Only certain fascias provide the attributes necessary to satisfy OSS missions.

3.18 Asda considers the evidence presented by the CC to be generally consistent with its position:

(i) Asda agrees with the CC that the extent to which different grocery retailers monitor the behaviour of each other should be seen as an indicator of competition between those retailers. [ ]. See paragraph 2.9 above.

(ii) The CC's entry-revenue analysis shows Asda, Morrisons, JS, Tesco and Waitrose stores greater than 1400 m^2 as having significant impacts on each other (with a few exceptions).

(iii) The CC draws on its quantitative analysis to suggest that the LADs do not form part of the OSS market. Asda agrees with this. The LADs operate a different model without the range to compete for OSS missions. The CC would need to consider whether a hypothetical OSS monopolist excluding the LADs could (i) raise price generally by 5%; or (ii) charge a 5% premium over elements of the range.

(iv) The CC reports that there is 'some evidence' to suggest entry by M&S may affect revenues of stores above 1400 m^2. [ ]. Asda agrees with the CC's caveat that the observed effect may relate to non-grocery revenues. M&S does not sell brands and TNS data suggest its focus is on small baskets[21] with a high share of non-OSS missions.[22] Again, the CC would need to consider whether a hypothetical monopolist excluding M&S could (i) raise price generally by 5%; or (ii) charge a 5% premium over branded elements of the range.

4. Geographic Market Definition: Summary of Asda case

4.1 Asda agrees that the relevant market is local – customers shop locally and are prepared to travel only small distances. See Table 2.2 of Asda's Overview Submission.

4.2 Asda provides an assessment of local one-stop shop competition within [ ] minutes drive time as part of each application to the Wal-Mart Real Estate Committee (REC) for any new development. This drive time threshold has been consistently applied since the inception of the REC process introduced after the acquisition of Asda by Wal-Mart in 1999.

4.3 As for product market definition, when looking at how far customers are prepared to travel, the CC needs to bear in mind the distorting effect of the planning regime. Customers deprived of any (or their favourite) OSS fascia locally may be forced to travel further than they might otherwise.

5. Geographic Market Definition: Asda comments on CC Working Papers

Markets are local

5.1 The CC's analysis is consistent with local markets:

(i) The CC reports that most customers use a car and shop close to their home. See Market Definition Working Paper paragraphs 51-52.

(ii) The CC's quantitative analysis suggests the magnitude of the margin-concentration relationship declines with distance. This is as Asda would have expected. However, Asda notes that the analysis based on 15 minutes appears to include the effect of stores between 0 and 10 minutes. The results are therefore in principle consistent with no incremental impact from beyond 10 minutes.

(iii) The CC's entry-revenue analysis finds that entry impacts are generally within 10 minutes. The main exception to this is the entry of very large stores which can

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21 Revenue share of baskets less than £20 was 59% for M&S compared to 16% for Asda and 30% for All Grocers (TNS Grocery, 52 w/e, July 2006).

22 Revenue share of non-OSS missions was 82% for M&S compared to 19% for Asda (TNS mission data, 52 w/e Feb 2006).

have an impact from beyond 10 minutes (a result which may be driven by non-grocery revenues). This suggests that the vast majority of OSS impacts are from within 10 minutes. See Market Definition Working Paper, Table 2.

5.2 Asda notes that it is corresponding with the CC staff in order to understand the degree of comparability of drive times as measured by the CC and by Asda.

Tesco SSNIP analysis

5.3 Tesco has presented a theoretical model which is at odds with the way that competition takes place in practice – as outlined at paragraph 4.1-4.3 above.

5.4 Asda notes the Tesco model assumes a uniform price increase across all stores in the candidate market. The DOJ/FTC merger guidelines make it clear that it should be sufficient for the hypothetical monopolist to raise prices in a subset of stores (which can include a single store).[23] The monopolist could therefore (for instance) raise prices at a store towards the centre of the relevant isochrone whilst leaving prices relatively unchanged at stores on the edge of the isochrone (where switching is more likely).

5.5 In addition Asda is concerned that Tesco's analysis:

(i) Was not implemented within Tesco's DCM;[24]

(ii) Ignores a wider set of price discrimination possibilities such as vouchers or lower prices (e.g. via BOGOFs) targeted on likely switchers;

(iii) Fails to look for profitable SSNIP for all price increases above 5%.

6. Competition: Summary of Asda's Case

6.1 Only [35-40%] of the urban population and [20-25%] of the rural population have a choice of four or more OSS fascias. Asda considers that there is a consumer detriment from the lack of choice as distinct from any detriment associated with competition. See Staff Meeting Presentation for an analysis of choice on various bases (location, store and population centred).

6.2 Asda considers that the retail offer (PQRS but also store infrastructure) is flexed to some extent locally. The extent to which the retail offer is set locally is likely to vary

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23 "*In performing successive iterations of the price increase test, the hypothetical monopolist will be assumed to pursue maximum profits in deciding whether to raise the price at any or all of the additional locations under its control.*" U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, Revised April 8, 1997.

24 See Asda's email to the CC, 30 April 2007.

across retailers and across time. Where set locally, Asda would expect the retail offer to be improved in response to local competition.

6.3 Asda has provided the CC with a detailed example as to how it reacted to a new [ ] OSS store at [ ].

6.4 In relation to its own behaviour Asda notes the following:

(i) Price:

- [ ].

(ii) Quality:

- [ ].

(iii) Range:

- [ ].

(iv) Service:

- [ ].

(v) Infrastructure:

- [ ].

6.5 Asda considers these aspects to be individually and cumulatively important.

6.6 Even when the retail offer is set nationally, Asda would expect this to reflect the aggregation of local market conditions. Thus, an absence of local choice in some local markets would still be expected to have a consumer detriment.

7. Competition: Asda's Comments on CC Working Papers

7.1 The CC's own evidence on choice suggests that consumers have a choice of fewer fascias within 10 minutes than suggested by Asda's analysis. Asda is working with the CC staff to understand why this is (e.g. different drive times or road networks).

7.2 As regards PQRS, Asda considers that the CC does or should have significant evidence of flexing of the local offer in some areas:

(i) Price:

- In the Store Level Demand Estimation Working Paper, the CC stated that the store level price measure employed "*varies mostly across chains of stores, but also within most chains*".[25]

- This is consistent with the fact that the smaller supermarkets (including Somerfield) flex prices locally.

- The CC should also be aware that some of the big 4 supermarkets have done so in the past and may do so in future.

- The CC has obtained information on vouchering. [ ] its perception is that Tesco in particular is able to voucher very effectively by using Clubcard data to focus on marginal customers. This is in effect targeted local pricing.

(ii) Quality:

- As noted above, Asda would not expect to see variation in quality (as defined by GfK).

(iii) Range:

- As regards range, the GfK Report concluded that there was no significant variation in range associated with the number of major supermarkets. However, according to GfK's results, range is between 10% and 61% worse in monopoly areas compared to those with three or more competitors across the 11 products examined. The average number of other specific services (measured within range) was 8% lower in monopoly areas. Furthermore, in some cases the situation was materially worse with 2 supermarkets than with 3. Asda considers that this evidence points to substantial range variation.

- Asda notes that the GfK analysis would only be able to capture range expansion as distinct from the effect of competition in encouraging retailers to 'get the range right'.

(iv) Service:

- Asda notes that some of the GfK results in relation to service are counterintuitive. However, Asda notes that some of these factors are very difficult to measure and in particular are sensitive to the time of day at which the measurement is taken.

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25 Store Level Demand Estimation Working Paper, paragraph 5.

7.3 Asda is concerned that the GfK analysis did not capture a number of important dimensions to local flexing (24 hour opening) and some important aspects of infrastructure (e.g. car park layout).

7.4 Although not recognised in its more recent analysis of PQRS, Asda notes that the CC referred to aggregation in its Emerging Thinking. Such aggregation is relevant to any overall conclusions on the impact of local market structure on PQRS.

Appendix A
Asda Range Chart

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Appendix B
Comments on Store Level Demand Estimation Working Paper

1. The "Finding" of Asymmetry is Artificial

1.1 The CC claims to find that diversion rates are higher to larger stores than to smaller ones. This finding is important since it implies that large stores tend to constrain the prices of smaller ones more than vice versa. However, based on its understanding of the CC's econometric model, Asda considers that the relative diversion rates over store sizes are an artificial result imposed by the way the CC set up the data and the model specification.

1.2 This is for the following reasons:

(i) First, the CC uses a nested logit model with stores nested into size categories. However, one property of a nested logit model is that it imposes proportional substitution over nests: a reduction in the share for one nest is predicted by a logit model to increase the share for other nests in proportion to their original shares. Therefore, nested lot implies, by its specification, that diversion ratios are higher for nests with larger market shares.[26]

(ii) Second, the CC defines the nests by creating store size categories in such a way that there are a nearly equal number of stores in each size category, and then used sales shares as the dependent variable. By construction, this procedure leads to larger market shares for the size categories with larger stores: with N stores in each size category, the sales share in category j is proportional to N*Sj, where Sj represents the sales per store in category j. Assuming that Sj is larger for larger stores, it follows that N*Sj and consequently the market share of that size category is larger for larger stores.

(iii) Third, since the nested logit gives diversion rates over nests that are proportional to the original shares in each nest (point (i)) and the original shares rise with the size categories (point (ii)), the model *must* predict larger diversion rates for larger stores. This is not a finding but rather a consequence of the model specification.

1.3 As a result, the CC's model does not provide any insights on the issue of asymmetry between stores of different sizes.

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[26] A standard logit model exhibits "independence from irrelevant alternatives" which implies proportional substitution over alternatives. A nested logit model exhibits a similar property over nests, which can be called "independence from irrelevant nests" and implies proportional substitution over nests.

2. Not Accounting for Geography is a Fundamental Flaw

2.1 The CC model attempts to control for geography by including the count of local population around each store as an independent variable in the model. Whilst this does allow market shares to vary with local population, it does not capture the essence of geography in retail competition, which is the location of stores relative to consumers and each other, captured e.g. as drive time or distance between households and stores.

2.2 In the CC's specification, two stores with the same characteristics (including local population counts) are equivalent, even if they are located at different ends of the country. The model implies that any two stores are substitutes for each other, no matter how far apart they are. There is nothing in the model that relates the substitution between stores to the distance between them. Essentially, aggregating over geography, as the CC's model does, does not make sense in an analysis of substitution between stores.

2.3 At the very least geography is a key variable, the omission of which makes the model unreliable.

2.4 If abstraction from geography was sensible when investigating substitution patterns, it would be better to first estimate a model including geography and then hypothetically place stores in the same location. But it is not in any case clear that abstraction from geography is useful because the SSNIP test should be applied simultaneously over the (actual) product and geographic dimensions.

3. Implausible Results

3.1 The own elasticities resulting from the CC's model seem much too high. An own price elasticity of -20, as reported in some instances, would suggest a gross margin of 5% (assuming Nash-Bertrand competition and one store). Margins at this level are unlikely to allow stores to cover their fixed costs.

3.2 Similarly, the reported diversion ratios appear implausible. The CC has provided no explanation for why 80% of the revenue lost by a particular store stays within fairly narrow size groupings, while less than 1-5% go to the next largest or next smallest size groupings. This would suggest that there are near discontinuities in preferences at the breakpoints of the size groupings: according to the CC's model, a store in group 8 of size 3220 m^2 provides a vastly greater competitive constraint on another store in group 8 than does a store of size 3221 m^2 (which is group 9). It seems implausible that a small OSS would on average be more constrained by another small OSS than by a large OSS, in particular given the selection of the size groupings is somewhat arbitrary in the first place.

4. Conclusion

4.1 Asda has other concerns about the CC's discrete choice model but in view of the above considers that the CC should not rely upon this Working Paper and set its results aside.

Should the CC not intend to set the Working Paper aside, Asda would wish to have the opportunity to make further points.