

Pricing practices working paper

Introduction

1. There has been much discussion, in the UK and elsewhere, as to whether certain pricing practices of some grocery retailers distort competition and harm consumers. Two pricing practices have received the most attention: below-cost selling and price flexing. Below-cost selling is where a retailer sells certain items to consumers for less than the input cost paid. Price flexing refers to the practice by some grocery retailers of charging different prices in stores according to the competitive conditions in that area, such variation not being related to cost.¹
2. This paper presents a preliminary assessment of whether each of these pricing practices is likely to distort competition and harm consumers, and sets out our approach going forward.² The paper is structured in two sections. The first section presents an assessment of below-cost selling, and the second section presents an assessment of price flexing.³

Section 1: Below-cost selling

3. In general, we would expect consumers to benefit from lower prices, but below-cost selling would raise concerns in the following cases:
 - (a) if it is a predatory strategy aimed at excluding rivals—in particular, convenience stores and specialist grocery retailers. If successful, this exclusionary strategy could result in the deterioration of the retail offer to consumers; or

¹Price flexing is a form of price discrimination. Price discrimination occurs when two similar products with the same marginal cost are sold by a firm at different prices. Marginal cost is the increment to total cost that results from producing an additional increment of output.

²Although below-cost selling can also be considered a form of price discrimination in some circumstances, in this paper we treat it separately from our consideration of price flexing in order to address specific concerns regarding the effect, intentional or otherwise, of these practices on smaller retailers.

³As set out in the market definition working paper, in light of the evidence and our analysis to date, and while remaining open on the issue of the appropriate market definition of the relevant geographic market, we have adopted a working assumption of local markets for the purposes of progressing our analysis.

- (b) if below-cost selling adversely affects smaller retailers whether intentional or not, causing them to exit, and the consequent changes in the availability of different shopping outlets do not reflect consumer preferences; or
- (c) if below-cost selling misleads consumers into thinking that the prices of all products sold by a grocery retailer are lower than they really are—assuming grocery retailers increase the price of other products to subsidize the sale of below-cost products, consumers may pay more overall than they would otherwise.

4. In 2000, the CC considered each of these elements of below-cost selling and concluded that there was little direct evidence that grocery retailers were employing below-cost selling as a predatory strategy, but considered that when practised by the major grocery retailers, it could harm smaller retailers, leading to adverse effects on competition. In particular, the CC was concerned that below-cost selling distorted consumers' perceptions of the value for money offered by grocery retailers, thus unfairly damaging smaller retailers. The CC decided that given that the market was generally competitive, and the remedies to below-cost selling that the CC considered would have had unintended and undesirable effects, no remedy was appropriate in light of the need for proportionality in any remedy and a desire to minimize regulatory cost.⁴

5. The first section of this paper is structured in four parts. The first part presents the results of our preliminary analysis of the extent and nature of below-cost selling by grocery retailers. The second part sets out a framework for assessing whether below-cost selling is likely to be a predatory strategy. The third part assesses whether the exit of smaller grocery retailers or specialist grocery stores as an unintended

⁴*Supermarkets: a report on the supply of groceries from multiple stores in the UK*, TSO, October 2000, paragraph 2.387.

consequence of below-cost selling by supermarkets is likely to distort competition and harm consumers. The final part assesses whether consumers are misled by below-cost selling.

Extent and nature of below-cost selling

6. Ten grocery retailers told us that they engaged in below-cost selling to varying extents. These were Aldi, Asda, the Co-op, Lidl, Morrisons, Netto, Sainsbury's, Somerfield, Tesco and Waitrose.^{5,6} For each of these parties, below-cost selling represented, by sales value, up to 3 per cent of total revenue.

7. Price may be below cost because of a number of different pricing mechanisms including:
 - (a) promotional discounts such as multi-buy offers;
 - (b) coupons or promotional offers that offer the consumer a price discount on one product (eg fuel) if they purchase a minimum value of other products (eg groceries); and
 - (c) list price set below cost.

8. We have defined a product as being sold below cost if it has a negative gross margin. In general, a negative gross margin is equivalent to a price less than the delivered cost of the product to the grocery retailer, which includes most variable costs, with no contribution to fixed costs.^{7,8} This approach may overestimate the true

⁵The Co-op in this regard refers to the Co-operative Group (CWS) Limited and some independent co-operative societies, but not all.

⁶Fifteen grocery retailers which operate more than ten stores have provided information on below-cost selling. Ten stated that they engage in below-cost selling. Of these ten, Netto and Lidl did not provide sales value data for their below-cost selling and the Co-op had minimal below-cost sales. Four of these 15 respondents told us that they did not engage in below-cost selling, other than in some cases for products reduced to clear, short-dated products and promotions. These were Iceland, M&S, Booths and Costcutter. The remaining one respondent, Spar, is a symbol group and told us that it was unable to provide this information on behalf of its members.

⁷This calculation does not include transport and labour costs that might be considered variable costs. However, we think it is likely that these costs are so small for individual products that their inclusion would not greatly affect our results.

⁸In general, this is calculated as cash at the till less cost of goods and any adjustment for VAT (where required), and adding back any markdowns (eg goods close to sell-by date) and some types of promotional funding (eg multi-buys). It was not possible, due to the different IT systems and methods of storing data, to get a completely comparable measure of below-cost sales across all grocers. This calculation is an approximation to average variable cost.

extent of below-cost selling because there are a number of payments from suppliers to grocery retailers that are not specific to a single product. These include volume discounts, advertising support or business development payments. Grocery retailers tend to allocate these payments at a category level and have not been able to assign them to individual products for the purposes of our analysis.

9. We analysed the types of products that are sold below cost. For most grocery retailers, the majority of below-cost sales relate to two or three product groups. The main product groups in which items are sold below cost, by sales value, are dry grocery (tinned and packet goods) and alcohol.⁹ Other product groups in which items are sold below cost include CDs, DVDs and books, non-alcoholic beverages, confectionery and health and beauty products. The type of products sold below cost varies between grocery retailers.
10. We looked at the proportion of products sold below cost that are branded and own-label products. The proportion varied across the ten grocery retailers and there was no clear overall relationship.
11. Within own-label products sold below cost we found that there was a high proportion of the grocery retailers' 'cheapest on display' products. For example, for the four largest grocery retailers, Asda's Smartprice range represented [X] per cent of own-label below-cost sales with a value of £[X] million, Morrisons' Bettabuy range represented [X] per cent of own-label below cost sales with a value of £[X] million, Sainsbury's Basics range represented [X] per cent of own-label below-cost sales with a value of £[X]million and Tesco's Value range represented [X] per cent of own-label below-cost sales with a value of £[X] million. We found that these

⁹This does not include fresh meat, fish and poultry because of measurement issues.

products account for, by value, about [X] per cent of Asda's total below-cost sales, [X] per cent of Morrison's, [X] per cent of Sainsbury's and [X] per cent of Tesco. However, for the four largest grocery retailers, around 5 to 20 per cent of 'cheapest on display' products were, in general, sold below cost.

12. We also looked at the average length of time that products were sold below cost and found that for all below-cost products this ranged between 8 and 25 weeks with an overall unweighted average of 18 weeks. Branded products were generally sold below cost for shorter periods.
13. We asked the grocery retailers why they sold products below cost and were told that:
 - (a) Certain products may be priced below cost because the grocery retailer did not want to be beaten on price, either because of a price pledge or because it wished to maintain a certain price differential between itself and other grocery retailers.
 - (b) Grocery retailers did not want to sell their 'cheapest on display' products for more than their competitors.
 - (c) Grocery retailers might use some products as loss leaders to tempt customers into the store at certain times of the year, such as Christmas, or for events such as the World Cup.
 - (d) Some seasonal products such as fresh fruit might be sold below cost at times when grocery retailers had more stock than was necessary to meet customer requirements.
 - (e) On occasion, increases in costs from changes in supplier or supply chain logistics were not immediately reflected in the sales price.
 - (f) Grocery retailers sometimes supported the launch of a new product by selling it below cost.

14. These explanations for below-cost selling are in line with those set out in the 2000 investigation. In the following parts of this section of the paper, we assess whether below-cost selling by these grocery retailers is likely to distort competition and harm consumers.

Predation

15. Predation involves the short-term sacrifice of profits with the intent of raising prices (or otherwise profitably deteriorating the retail offer) above the competitive level to recoup lost profits once a rival or rivals has/have been excluded from the market.¹⁰ It has been defined in economic terms as a price reduction that is profitable only because of the added market power the predator gains from eliminating, disciplining or otherwise inhibiting the competitive conduct of the prey.¹¹

16. This definition provides a useful framework for our assessment of whether below-cost selling by some major grocery retailers is a predatory strategy that may distort competition and harm consumers. In order to prove that an instance of below-cost selling is a predatory strategy, it is necessary to show that there is a strong likelihood that the predator will recoup the profit it has initially sacrificed.¹² If the predator is

¹⁰More than 20 years ago, Ordover and Willig (1981) articulated the modern definition of predatory behaviour as a strategy 'that sacrifices part of the profit that could be earned under competitive circumstances were the rival to remain viable, in order to induce exit and gain consequent additional monopoly profit' in 'An Economic Definition of Predation: Pricing and Product Innovation', (1981) 91 *Yale Law Journal* 8.

¹¹See 'Predatory Pricing: Strategic Theory and Legal Policy', Bolton, P, Brodley, J, and Riordan, M, *The Georgetown Law Journal*, Vol 88:2239. Today the established models of rational predation include three main scenarios all deriving from informational asymmetries regarding demand, the target's performance, or the predator's competitive advantages in one or more markets. These modern theories provide a justification of why the target will exit (or fail to enter) and how the recognition of such possibility provides the motivation for a rival firm to predate. Three major motivations have been formally articulated. A firm may predate to:

- drive a *financially constrained* competitor out of the market;
- gain a *reputation* as an aggressive competitor; and
- *send a signal* with the goal of deterring new entry. The signal may be that either demand is weak or that the incumbent's costs are low. In either case, the intended message may be that there is no prospect of profitable entry.

¹²The legal test for predation, and its application, differs noticeably in different jurisdictions. In the UK, the OFT assesses predation allegations under Chapter II of the Competition Act 1998 using guidelines that follow the judgements of the European Court of Justice. The ECJ legal standard was defined in *AKZO* (Case C-62/86 *AKZO v Commission* [1991] ECR I-3359), and is mostly a pure price-cost comparison. The *AKZO* test may include a presumption of predation if costs are below average variable cost, and if so, this may be too rigid a test because of its apparent failure to acknowledge that prices below average variable cost may be set pro-competitively. However, when prices are below average total cost, but above average variable cost, it must be established that these prices are part of a plan to eliminate competitors. The current US legal standard was laid out by the US Supreme Court in *Brooke Group Ltd v Brown & Williamson Tobacco Corp* 509 US 209 (1993). This is a two-pronged test. First, it requires a demonstration that prices are set below a measure of cost, and second, proof of recoupment must be established.

unlikely to recoup its lost profit, then setting low prices is unlikely to be part of a predatory strategy.

17. Recoupment is more likely the less profit is sacrificed and the greater the added market power the predator gains from excluding the target. Added market power from excluding the target is greater the closer the target is as a competitor (ie the greater the constraint it exerts over the behaviour of the predator, while no other rivals maintain the same degree of competitive pressure) and the greater the barriers to entry and re-entry.
18. A framework for assessing whether below-cost sales are predatory should therefore consider: the extent of sacrificed profits (and, therefore, not only how far below cost prices are set, but also the duration of the below-cost episode); the identity of the predator and the target, and in particular, the extent to which the target constrains the predator's price; the market structure in the recoupment period; and the nature of barriers to entry and re-entry in the market.
19. In paragraphs 20 to 25, we use this framework to consider possible predation by grocery retailers distinguishing, first, between persistent and temporary sales below cost, and second, between temporary sales below cost at all stores (regardless of location) and temporary sales below cost at stores of a specific location. Our preliminary assessment is that temporary, local below-cost pricing could raise concerns about possible predatory behaviour.

Assessment

20. To determine whether below-cost selling is a form of predatory conduct against *convenience stores or specialist grocery retailers* rather than price competition between the major grocery retailers, it must be established that once the target has

exited or has been disciplined, the major grocery retailers expect to increase prices above the competitive level to recoup their lost profits and gain a further increase in profits. This requires, first, that the major grocery retailers have sufficient market power after the predatory episode, and second, that the firms that would be excluded (the convenience stores or specialist grocery retailers) actively constrain the pricing behaviour of the larger retailers. Without providing a current pricing constraint, their exclusion would not confer an ability on the major grocery retailers to increase prices above the competitive level. Finally, predation also requires that there are barriers to entry (or re-entry). Otherwise new stores will find it profitable to (re)open when the predator increases prices to recoup its losses.

21. The CC has not yet reached a view on the extent or existence of local market power of the major grocery retailers, but because sacrificed profits are likely to increase with the length of the predatory period, recoupment may be more likely the shorter the period of unusually low prices. Therefore, it is our current thinking that a grocery retailer could not expect to recoup profits sacrificed from products that are sold below cost for a prolonged period. At this stage, we think below-cost selling over shorter periods is of more concern as a potential predatory strategy. In what follows, we assess whether temporary below-cost sales by major grocery retailers may be a predatory strategy directed at convenience stores and specialist grocery retailers.

Temporary periods of below-cost sales

22. Recoupment is more likely the stronger the competitive constraint on the predator from the target. The question of whether convenience stores and specialist grocery retailers constrain the pricing behaviour of the major grocery retailers is closely related to market definition. As set out in the working paper on market definition, our current thinking is that larger grocery stores provide a competitive constraint on smaller stores, but that smaller stores do not constrain the larger outlets. On this

basis, our current thinking is that it is not very likely that the major grocery retailers will recoup sacrificed profits from a predatory strategy directed at all convenience stores and specialist grocery retailers across the country. Rather, absent collusive conduct, to increase prices above competitive levels, grocery retailers would need to eliminate all other grocery retailers capable of providing a pricing constraint and not just convenience stores or specialist grocery retailers. Therefore, pending our finding on product market definition, our current thinking is that it is unlikely that sales below cost at all stores regardless of location (a 'national' strategy) for a limited period is part of a predatory strategy.

23. However, smaller stores operated by major grocery retailers may be constrained by convenience stores and specialist grocery stores. Therefore, if major grocery retailers can limit the profit sacrifice by varying prices according to the location of a store, for example through the use of vouchers or coupons targeted at consumers living in the area around the target store, major grocery retailers might be able to recoup profits sacrificed from a predatory strategy directed at a retailer that exerts an actual or potential constraint in a specific location (a 'local' strategy).
24. We plan to assess the likelihood of recoupment in such low-price episodes on a case-by-case basis. In addition, we must also consider whether a predatory strategy targeted at (potentially) constraining retailers in specific locations might have an effect on the reputation of the predator in other local areas. If the predator gains a reputation for particularly aggressive behaviour towards smaller stores, it may be able to raise barriers to entry not just in the predation markets but also in other areas where it is present.¹³

¹³In *Micro-Marketing and Discriminatory Practices* Professor Dobson says that predatory effects arising from discriminatory practices (ie below-cost selling and setting different prices for the same products in different local areas) may also serve to deter entry. If this is the case, then predatory behaviour could serve to increase barriers to entry or re-entry.

25. At this stage, the allegations we have received regarding predation have been quite general in their nature. The OFT considered one allegation of predatory pricing that was made against a major grocery retailer, but dismissed the complaint in 2005. In the period up to provisional findings, we will consider certain specific individual allegations that have been made, and the likely effect of any predatory strategy on entry deterrence.

Non-predatory effects of below-cost selling

26. The practice of below-cost selling could disproportionately affect convenience stores and specialist grocery retailers because:
- (a) The major grocery retailers might be able to sell some products below cost because they can increase the prices of other products that they sell. Smaller retailers typically sell fewer products, so might be less able than major grocery retailers to engage in cross-subsidization in order to support a below-cost selling strategy.
 - (b) The products that grocery retailers typically sell below cost, such as alcohol, are a particularly important source of revenue for convenience stores and specialist grocery retailers, so below-cost selling might have a significant effect on them.
27. In the paragraphs below we consider whether exit of convenience and specialist grocery retailers may be an *unintended* consequence of below-cost selling that could distort competition and harm consumers. We first discuss how below-cost selling might be consistent with non-exclusionary pricing by grocery retailers. We then discuss how changes in the composition of grocery retail outlets in local areas might have adverse consequences for consumers if these changes do not reflect consumer preferences.

Non-exclusionary reasons for pricing below cost

28. As set out in paragraph 13, grocery retailers told us that there were a number of reasons why they sold some products for less than cost, including a desire to match rivals' prices for 'cheapest on display' products, or to encourage customers to visit their stores at particular times of the year. We also consider that an alternative explanation for below-cost selling, other than exclusion, is that grocery retailers may use temporary promotions to attract consumers to the store and increase total sales. This is commonly referred to as 'loss leading'.
29. It may also be optimal for grocery retailers to price some products below cost, even for an extended period of time, because of the structure of costs and the complementary nature of products they sell.^{14,15}
30. Grocery retailers incur fixed costs, which they cover by adding a mark-up over the wholesale cost of products they sell. Grocery retailers must decide what mark-up to add to each product. Setting different mark-ups across products may allow grocery retailers to compete more fiercely on average price than they would be able to if they applied the same mark-up for all products.
31. It is possible that grocery shops compete on average price (the price of a basket of goods, or the total 'value proposition' of the shop) rather than the prices of individual products, if consumers value the convenience of buying many different products under one roof, and if they choose where to shop by comparing the price of a basket of shopping and not the prices of individual products.

¹⁴Two products are complements if demand for one product increases following a reduction in the price of the other product. One example of complements is bread and butter—consumers might buy more butter if the price of bread falls.

¹⁵See 'A Theory of Retail Pricing', Christopher Bliss, *The Journal of Industrial Economics*, Vol 36, No 4 (June 1988).

32. Generally, it is optimal for grocery retailers to spread their fixed costs over as many sales as possible; the higher the sales of a grocery retailer, the lower the average cost, which, in turn, results in lower average price for a basket of groceries. When they compete on average price, grocery retailers minimize the impact of a mark-up over wholesale cost on the sales of that product. They can achieve this if they set higher margins on those products for which consumers are not very price sensitive and lower margins on those products for which consumers are very price sensitive.
33. As a result, it may be efficient for grocery retailers to set different mark-ups for different products. When demand for two products is linked such that consumers buy more of one product when the price of the other falls, it can also be efficient for a retailer to set a negative mark-up (ie price below cost) for some products. This is because the low price of one product might give rise to an increase in demand for other products that the grocery retailer sells and if this increase is big enough it can more than offset the cost to the retailer of the below-cost sale. In this case, below-cost selling may be a profitable, and efficient, strategy.
34. In developing our understanding of the scope of price competition among grocery retailers, we are assessing how grocery retailers compete on price in order to understand whether they might focus competition on specific products or KVIs, or whether they compete on average price.¹⁶ In Annex A, we describe how Asda, Morrisons, Sainsbury's and Tesco monitor prices of other grocery retailers. The evidence we have seen at this stage of the inquiry suggests that while practices vary quite considerably between grocery retailers, most seek to compare the prices of a large subset of their products with those of their competitors. Our current thinking is

¹⁶KVIs are 'known value items' (ie products that have higher relative consumer price awareness).

that this is consistent with, but not proof of, grocery retailers competing over a significant range of products and not just a limited number of KVIs.

Does the exit of convenience stores and specialist grocery retailers harm consumers?

35. In the paragraphs above, we have discussed how convenience stores and specialist grocery retailers might be harmed unintentionally by below-cost selling. Below, we consider whether there are circumstances under which the exit of these retailers might result in consumer harm.
36. Entry and exit of firms is part of the normal competitive process. When a firm exits an industry because it is unable to make positive profits at current prices (those prices not being predatory), we would not normally expect consumer harm to result. However, exit of convenience stores and specialist grocery retailers could generate consumer harm when those retailers constrain the major grocery retailers at current prices and where there are significant barriers to (re-)entry. In this case, major grocery retailers could increase prices (or deteriorate the retail offer) after the competitors have left the market, whether the exit was predatory or not.¹⁷
37. Therefore, whether or not below-cost selling harms consumers unintentionally depends to some extent on the relevant product market definition. As discussed in paragraph 22, and as set out in our market definition working paper, our current thinking is that larger grocery stores exert a competitive constraint on smaller stores, but that smaller stores do not typically constrain the larger outlets. So it is our current thinking that, in general, smaller stores do not impose a greater constraint on larger

¹⁷In *Micro-Marketing and Discriminatory Practices in UK Grocery Retailing*, prepared on behalf of the ACS, Professor Dobson describes how the exit (or weakening) of convenience stores and specialist grocery retailers might come about as well as the possible consequences: ‘... dominant retailers can enhance their reputation with consumers (to gain more trust) and extend their market share, while causing smaller/specialist players unable to match the low prices to lose scale and thus be placed at an increasing cost disadvantage, eventually driving them out of the market while all the time ensuring that the dominant retailers avoid damaging their overall profit margins. With reduced competition, the remaining retailers may then be able to raise prices.’

grocery stores than the other larger grocery stores. Therefore, at this stage, we think that it is unlikely that the exit of convenience stores and specialist grocery retailers as an unintended consequence of below-cost selling by grocery retailers would, in general, lead to higher consumer prices or a deterioration in the retail offer.¹⁸

38. However, we recognize that the closure of these shops would result in a reduction in the number of stores that consumers can choose to shop at. Further, if the number and variety of products sold at specialist retail outlets, including specialist grocery retail outlets, is greater than that sold by grocery retailers, it is likely that there will also be a reduction in the range of products available to consumers.
39. Because these changes in the selection of retail outlets and product ranges come from consumers' decisions about where to shop, there might be no reason to suspect consumer detriment. However, absent the below-cost selling strategies of some grocery retailers, it is possible that consumers would choose to shop more at convenience stores and specialist grocery retailers, and be better off with a different selection of retailers.
40. More generally, we recognize that the variety of retailers might not be aligned with consumers' preferences if consumers do not have accurate or full information on the 'value' of the retail offer of different retailers when they decide where to shop. Going forward, we will look in greater detail at the type of products that are sold below cost, the duration of below-cost selling periods and the pattern of episodes. In the following part, we consider whether there is evidence that below-cost selling misleads consumers about the value of the retail offer.

¹⁸This finding is consistent with the advice of the staff of the US Federal Trade Commission (FTC) to a number of members of the US House of Representatives regarding the competitive impact of proposed legislation to prohibit sales of motor fuel below cost. Specifically, the FTC concluded that 'consumers are harmed only if below cost prices allow a dominant competitor to raise prices later to supracompetitive levels'. And 'economic studies, legal studies and court decisions indicate that below cost pricing that leads to monopoly occurs infrequently', *Advocacy letter from staff of the FTC to Representative of Michigan*, June 2004.

Does below-cost selling mislead consumers?

41. It is possible that consumers do not have accurate or full information on the 'value' of the retail offer of different retailers when they decide where to shop and that below-cost selling misleads consumers into thinking that products sold by a grocery retailer are cheaper than they are in reality. If this is the case, consumers who purchase products with a high mark-up may pay more than they would otherwise and the closure of some shops may not reflect consumer preferences.

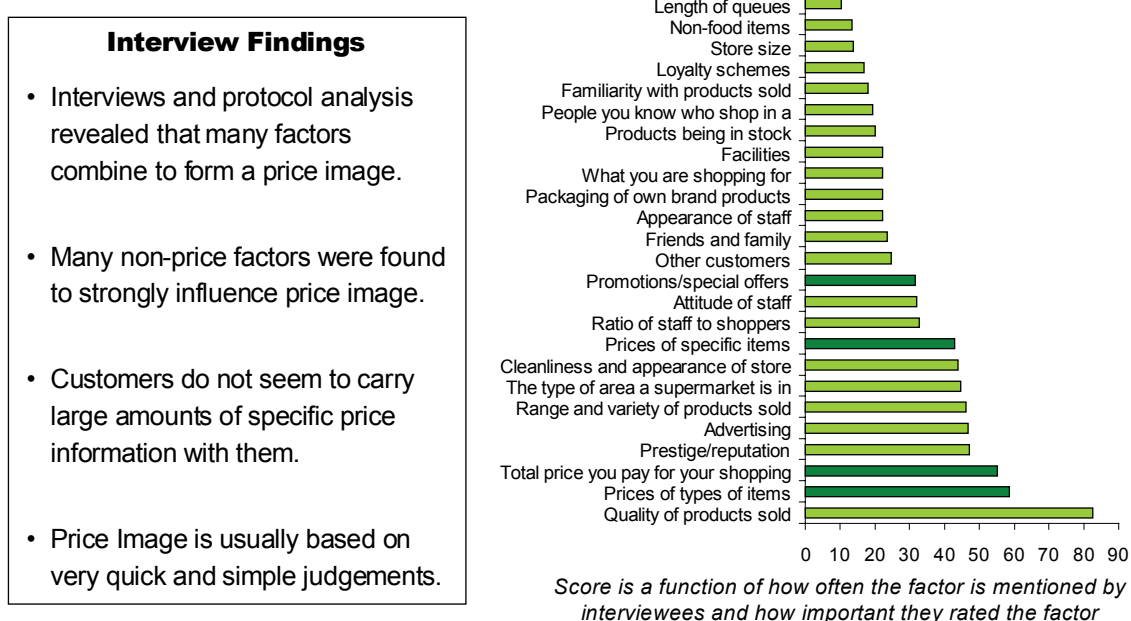
Assessment

42. Research conducted by the University of Warwick and commissioned by [X] shows that consumers' 'price image' is formed from a great deal of information including non-price factors, that shoppers do not seem to carry large amounts of specific price information with them, and that shoppers usually form very quick and simple judgements. The research also showed that when they are in a store, all aspects of price (including basket prices) are important to customers.

FIGURE 1

Price image research review, February 2004 to January 2005, Slide 10

IN-DEPTH INTERVIEWS WITH CUSTOMERS SHOWED THAT THERE ARE MANY FACTORS INFLUENCING PRICE IMAGE



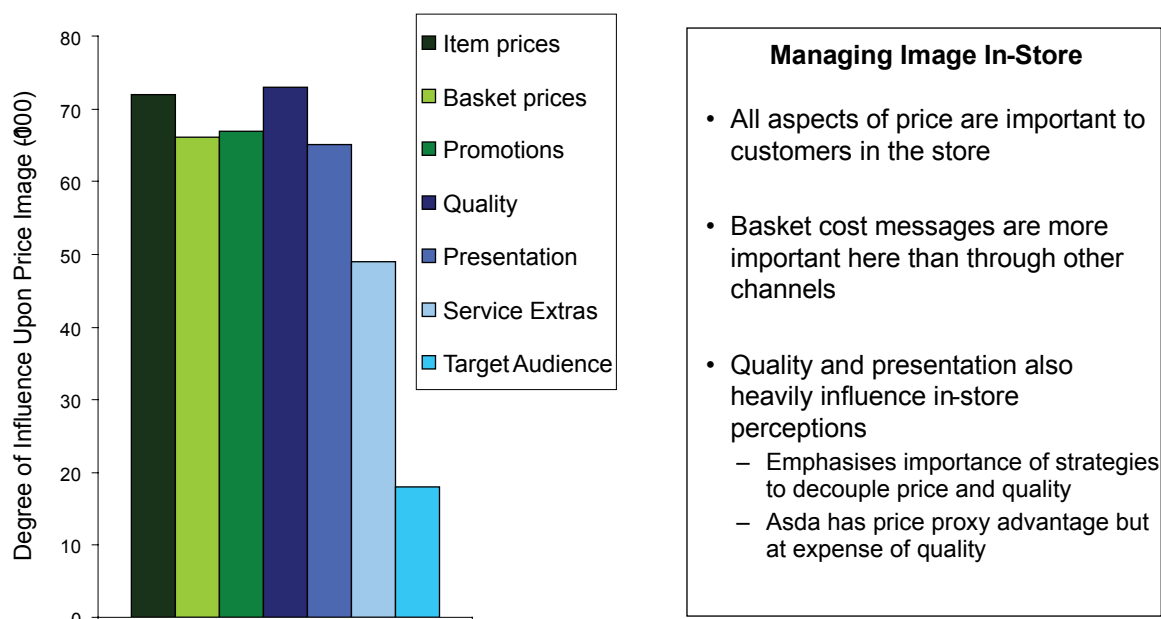
Source: Research conducted by the University of Warwick and commissioned by [X].

43. As Figure 1 illustrates, interviewees mentioned the total price paid for shopping more frequently, and rated it more importantly as a factor, than the prices of specific items and only slightly less than the prices of types of items.
44. On the other hand, Figure 2 shows that in an analysis of data relating to one retailer's customers, the University of Warwick found that the prices of specific items had more influence on consumers' price perceptions than basket prices and promotions. However, the results show that price image is not only driven by item prices, but also by all aspects of price and quality and presentation of the store.

FIGURE 2

Price image research review, February 2004 to January 2005, Slide 14

VISITS TO A STORE HAVE THE MOST INFLUENCE ON CUSTOMERS' PRICE IMAGE



Source: Research conducted by the University of Warwick and commissioned by [X].

45. The evidence we have seen at this stage shows that consumers' price comparisons of different grocery retailers are complex and depend not only on the price of a selection of KVIs, but also on the basket price and many other factors. However, given the prominence of basket prices, it is not clear that consumers would be easily misled by the below-cost selling of only a few KVIs.

46. Furthermore, we note that developments to the Internet since 2000 mean that it is now far easier for consumers to compare prices. In particular, there are now Internet price comparison sites that allow consumers to compare the prices of a wide range of products. For example, mysupermarket.com enables consumers to compare the cost their shopping at Asda, Ocado, Sainsbury's and Tesco.¹⁹ There are also sites that allow consumers to pick up money-off coupons and vouchers for a large number of retailers. For example, vouchercodes.com publishes the discount codes of over 400 retailers, including some grocery retailers.²⁰
47. In the next stage of our inquiry, we will be looking further at the ways in which customers form perceptions of the relative cost of shopping at different grocery retailers, and thus the extent to which they might be misled by below-cost selling. We invite submissions of evidence on this matter.

Section 2: Price flexing

48. In this section, we discuss the effects of price flexing and other practices that grocery retailers may use to vary prices (or, more broadly, the retail offer) at individual stores.
49. In 2000, the CC found that seven grocery retailers were setting retail prices in different geographical areas in the light of competitive conditions, such variation not being related to costs.²¹ The CC found that this practice contributed to a situation in which the majority of grocery products were not fully exposed to competitive pressures and which distorted competition in the supply of groceries. The CC concluded that when the practice was carried on by Safeway, Sainsbury and Tesco, which had market power, it operated against the public interest because customers

¹⁹www.mysupermarket.co.uk/GettingStarted/Home.aspx.

²⁰www.vouchercodes.com/?gclid=CLXW1YnJo4kCFUlvMAodKQnbOQ.

²¹These firms were Budgens, the Co-ops, Netto, Safeway, Sainsbury's, Somerfield and Tesco.

tended to pay more at stores that did not face particular competitors than they would if those competitors were present in the area.^{22,23}

50. This section of the paper is structured as follows. First, we review the evidence of prices varying between different stores owned by the same grocery retailer. Second, we consider possible explanations for these variations. Finally, we consider the effects of price flexing and describe our approach going forward.

Evidence of variation in price or retail offer between stores

51. The working paper on market definition describes the extent to which grocery retailers vary prices between stores. Asda, Morrisons, Sainsbury's and Tesco have national price lists for goods that are not discounted (with the exception of fuel), but all adjust their offering at the local level.²⁴ 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 turnover in the UK grocery market.²⁵ Parties such as Costcutter, CGL and Somerfield each explained that they set their store prices according to the level of local competition, among other factors. The major grocery 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.
52. In the next stage of our inquiry we will be looking further at the extent to which grocery retailers vary prices, or their retail offers, systematically between different stores.

²²Supermarkets, paragraph 2.406.

²³Supermarkets, paragraph 2.407.

²⁴See the working paper on market definition.

²⁵Source: IGD.

Reasons for price flexing

53. The observation that prices differ in different stores could be explained by a number of factors. We would expect prices to differ between stores if they have different costs (all else being equal).
54. Differences in store prices may also reflect differences in the type of consumers that the stores serve. This is because different types of consumers may have different price sensitivities. For example, two stores in the same chain, of exactly the same size and format, may have different prices if one of those stores is located in an area where consumers have lower incomes, and may therefore be more price sensitive.
55. However, differences in store prices may also reflect differences in local competitive conditions. Demand may be more price sensitive at stores that face more competitors than stores that face fewer competitors. So, all else being equal, prices may be higher at stores that face fewer competitors.
56. When two similar products with the same marginal costs are sold by a firm at different prices, price discrimination exists.²⁶ So, if we observe differences in prices at a grocery retailer's stores that are not explained by cost differences, then this could be evidence of price discrimination. If we observe price discrimination, then this could be the result of different competitive conditions in different local areas.²⁷ As discussed below, price discrimination practised by firms with market power may, in certain circumstances, result in consumer harm.

²⁶This broad definition encompasses different forms of price discrimination. For example, charging different consumers different prices for the same good (third degree price discrimination), making the marginal price depend on the number of units purchased (non-linear pricing), making the marginal price depend on whether other products are also purchased from the firm (bundling), or making the price depend on whether this is the first time a customer has purchased from the firm (introductory offers). For further reading, see *Recent developments in the economics of price discrimination*, University College London Working Paper, Mark Armstrong (2006).

²⁷This is equivalent to third degree price discrimination, where different consumers are charged different prices for the same good.

Assessment

57. We have heard a number of concerns regarding the discriminatory pricing practices of the major grocery retailers. Professor Dobson on behalf of the Association of Convenience Stores (ACS) argues that there is evidence that major grocery retailers discriminate in price and non-price factors, exploiting differences in local conditions (which relate either to demand patterns or the extent of competition in the relevant area).^{28,29} He contends that under certain conditions, economic theory shows that price discrimination harms consumer welfare compared with the counterfactual of non-discrimination. Professor Dobson submits that at a more general level significant price discrimination across local markets is evidence of a lack of overall effective competition and that consumers would be better off if competition were intense across all local markets.³⁰
58. There is an extensive economic literature exploring the effects on consumer welfare of price discrimination compared with charging the same price for similar products with the same marginal costs (ie uniform pricing). The consumer welfare effects are a priori ambiguous.³¹ Price discrimination could result in consumer harm under certain circumstances, but not under others.³²

²⁸*Micro-Marketing and Discriminatory Practices in UK Grocery Retailing*, Professor Paul Dobson, December 2006, prepared on behalf of the ACS.

²⁹Professor Dobson refers to these practices as 'micro-marketing', which he defines as 'the retail practice of customising the marketing mix variables to the store level instead of following the same policy for every store in the chain of stores controlled by an integrated, multiple-outlet retailer'.

³⁰Professor Dobson suggests that there are many different ways in which grocery retailers can vary the offer to consumers at the store level, in addition to below-cost selling and geographic price discrimination. For example, Professor Dobson says that other discriminatory practices might include varying elements such as local advertising, promotions, coupons, product range, category depth, store layout, customer amenities, sales service levels, openings hours, store ambience, store size, format and location. As discussed in the working paper on market definition, we refer to the sum of these many differentiating factors between grocery retailers from a consumer's viewpoint as the retail offer, which is essentially the product sold by retailers to consumers. Price discrimination refers to the practice of varying the price of similar products (such variation not related to cost), but in what follows we recognize that discriminatory practices by supermarkets may include variations of the retail offer more broadly.

³¹Professor Dobson recognizes this in his submission on behalf of the ACS: 'For given market configurations, economic theory demonstrates that different forms of price discrimination compared to non-discrimination can make consumers as a whole better off in some instances, and worse off in others. Much depends on the precise circumstances and form of discrimination being applied', *Micro-Marketing and Discriminatory Practices in UK Grocery Retailing*, Professor Paul Dobson on behalf of the ACS, December 2006.

³²Although the consumer welfare effects of third degree price discrimination are ambiguous, relative to uniform pricing total welfare always increases.

59. This can be illustrated with the following hypothetical example. Suppose a firm operates in two local areas that are physically separate from one another. Suppose also that in one of these areas the firm is the sole grocery retailer and in the other it faces many competitors. If the grocery retailer can separately identify the consumers in the first (monopoly) market from those in the second (competitive) market, and if it can prevent them from reselling to one another, then it would prefer to charge a higher price in the monopoly market than the competitive market. The ability to price discriminate may allow the grocery retailer to exploit its market power in the monopoly market, and when considered against a benchmark of uniform prices across markets as a result of a single average price, consumers in some markets will pay more and some will pay less.
60. Therefore, when practised by a firm with market power, price discrimination can be a direct exploitation of market power. As such, evidence that grocery retailers vary price (or, more generally, the retail offer) according to the competitive conditions would be of concern insofar as it resulted from less effective competition in some markets. In the next stage of our inquiry, we will assess the extent of price discrimination and, rather than addressing the ambiguous consumer welfare consequences of individual pricing practices, we will use empirical techniques to identify local areas where there is evidence of a lack of effective competition. If there is such evidence, we will consider what features of the market (such as entry barriers) might be present.

Grocery retailer price monitoring

1. In developing our understanding of the scope of price competition among grocery retailers, we are assessing how grocery retailers compete on price, in order to understand whether they may focus competition on specific products or KVIs or whether they compete on average price. In the following paragraphs, we describe how Asda, Morrisons, Sainsbury's and Tesco monitor prices of other grocery retailers.
2. Asda told us that its main price/value index monitored [redacted] lines at [redacted], [redacted] and [redacted], and also includes [redacted] at [redacted]. These lines represented some [redacted] per cent of Asda's grocery sales, and were chosen so as to be broadly representative of:
 - (a) the sales mix across the different product categories;
 - (b) Asda's mix of own-label and manufacturer branded products; and
 - (c) (within own label) the mix of different own-label brands.³³
3. Asda also surveys a much smaller basket of [redacted] products against [redacted].
4. Morrisons told us that it uses a data provider, NetVide, to compare the price of about 9,000 products with prices of its competitors and conducts detailed analysis on both the top 500 and the top 3,500 products (by volume).
5. Sainsbury's [redacted].
6. Tesco told us that it compared prices with competitors using the 'National Basket' of products. This basket aims to cover all products with sales above a minimum

³³Asda response to the MPQ, 43.3.

threshold. Each week, Tesco compares around 23,000 lines in this basket (accounting for around [X] 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 (Tesco referred to this [X] as the 'not be beaten' rule). [X] 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]. Comparable products are checked on a weekly basis against these competitors and must comply with the 'not be beaten' rule within two weeks unless authorized by a commercial director. Tesco also carries out weekly price checks against [X], monthly checks against [X] and periodic or quarterly checks against [X], among others.