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Buyer Power and Competition in Food Retailing in the UK*

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1. Introduction

There has been considerable interest in the growth of supermarket chains in recent years and the effect this is having on competition in the food retail sector. Whilst, only a few years ago, the market was relatively fragmented, with large numbers of small independent grocers supplying the bulk of the market, in the last twenty years there has been a tremendous growth in concentration in the industry, both in the UK and elsewhere. Evidence cited below suggests that the five largest retailers in the UK (Tesco, Sainsbury, Asda, Safeway and Somerfield) now account for well over 50 per cent of all food retail sales and that the largest suppliers (Tesco and Sainsbury) together account for nearly a third of all food retail sales. These figures, especially the last, are

quite high internationally (see further below) and this has given cause for concern.¹

A number of areas of concern have been identified. First, it is argued that supermarket chains have market power in the downstream market (i.e. at retail level) and that they use this power to increase their prices, and earn monopoly profits. Second, it is also argued that they have market power in the upstream market (i.e. in dealing with suppliers) and this allows them to earn monopsony profits (i.e. profits arising from their buying power). In particular, it is alleged that they use their market power against small suppliers who are not, therefore, able to make a fair return.

¹ The material in this paper draws on research undertaken by Dobson et al. (1999). The views expressed, however, are those of the current author and not of the other authors of this report.

Finally, it is also alleged that they engage in various forms of anti-competitive practice which also arise from their monopoly/monopsony power. In what follows, I consider these arguments and whether any policy action is required.

The rest of the paper is organised as follows. Section 2 examines the theoretical analysis underlying the *monopoly* and *monopsony power* arguments and considers the counter-argument that supermarkets use their countervailing power in the consumers' interest. Section 3 considers some of the empirical evidence on these issues whilst section 4 looks, more briefly, at the anti-competitive practice arguments. Finally, section 5 draws some conclusions. The main theme of the paper is that there are grounds for concern but it is not clear whether stronger policy action is required at this time.²

2. Theoretical Analysis

A standard argument in economic analysis is that monopoly (and monopsony) power can lead to a misallocation of economic resources (i.e. an allocation in which it is possible to make at least one person better off without making another person worse off). On the other hand, in a first best world, competitive markets lead to an efficient allocation of resources. In practice, various sectors of the economy are not competitive (at least in the

traditional sense of 'perfect competition') and this can give rise to policy concern.

In the present context, supermarket chains are both 'big sellers' of products and 'big buyers' and this gives possible scope for the misallocation of resources in both the retail and the upstream market for supplies, and these arguments are described below.³

(a) *The Monopoly Power Argument*

In the retail market, if the leading supermarket chains possess monopoly power, they can raise their prices, restrict output and earn a monopoly return. In fact, several arguments are usually used in this context. First, by exercising monopoly power, the supermarket chains can restrict output creating a deadweight loss in economic welfare. Second, firms generate profits by raising prices, making consumers worse off. And third, firms may become inefficient and provide a 'poor quality' service. In practice, it is the first two of these arguments that are usually discussed in the supermarket context, although the third cannot necessarily be ruled out.

Figure 1 illustrates the analysis. Suppose, for simplicity, that there is just one good, 'food', and it is produced with constant marginal cost, MC . Assume also that D is the market demand curve and that MR is the corresponding marginal revenue curve for a monopoly producer. If food retailing is competitive,

² At the time of writing this paper the leading supermarket chains were subject to a monopoly investigation by the Monopolies and Mergers (now Competition) Commission. The Commission published its report on 11th October 2000 and this report is mentioned briefly in section 5 below.

³ A more advanced treatment of the theoretical issues raised in this section can be found in Dobson, Waterson and Chu (1998), Scherer and Ross (1990) and Carlton and Perloff (1994).

competition will force price down to p_c such that price equals marginal cost and the competitive market output will be Q_c . If there is monopoly power, however, firms will restrict output and earn a monopoly return. Assume, for simplicity, that supermarket chains operate together and behave as a single monopolist. Then, they will restrict their output to Q_m where marginal revenue equals marginal cost and increase their price to the monopoly price p_m . Clearly, consumers will be worse off since they lose an area of consumer surplus $p_m a c p_c$ whilst producers gain monopoly profits $p_m a b p_c$. In addition, however, there is also an area of deadweight welfare loss abc . By exploiting their monopoly power, therefore, the supermarket chains could distort competition and create a welfare loss.

Note also that if the supermarkets are inefficient, costs could rise and this would increase the welfare loss (although, for simplicity, this is not shown in Figure 1).

(b) The Monopsony Power Argument

Now consider the upstream market. In this case, supermarket chains can be seen as ‘big buyers’ and this may enable them to extract low prices from their suppliers. This arises because they can restrict demand for goods at the upstream stage, pay suppliers less than the competitive price and earn a monopsony return. In addition, suppliers will be worse off because they now get below the competitive price, and their loss will not be fully off-set by the monopsony return. Monopsony also gives buyers power to boycott some suppliers or

switch to new suppliers at very short notice (e.g. if they find a cheaper source of supply). Many complaints along these lines have been made against the supermarket chains.

The monopsony power argument is illustrated in Figure 2. Assume that the supply-side of the market is competitive and that there is either competition or, for simplicity, just one buyer on the demand-side of the market. The market might be for some agricultural good, for example, where the suppliers are farmers and the buyers are supermarket chains.. In this case, D is the market demand curve and S is the market supply curve. If the market is competitive, price will be set where supply equals demand and price will be p_c and quantity Q_c . If the buyers, however, were to behave as a single monopsonist they would restrict demand to the point where the value of the last unit bought (simply shown by the demand curve) equals the marginal factor cost, MFC where the latter must lie above the supply curve.⁴ The monopsonist, therefore, restricts demand to Q_m which it buys at price p_m (i.e. at below the competitive price). This implies that the monopsonist gains area $p_c d b p_m$ on quantity Q_m although it must sacrifice area adc to do this.⁵ Suppliers lose

⁴ The supply curve shows the price at which a given quantity is bought and so can be seen as the average factor cost curve. The marginal factor cost curve lies above this curve because to purchase one extra unit, the price of all units must be increased.

⁵ Area adc is the difference between what the monopsonist would be willing to pay for units $Q_m Q_c$ and what it would have paid at the competitive price. Hence, it represents a loss

income equal to area $p_c dbp_m$ and there is a *deadweight loss* of area abc .

(c) How important are these arguments?

Clearly both the monopoly and monopsony power arguments indicate that welfare losses can be made in the presence of market power. Whether they will, however, depends on whether these arguments apply to the supermarket sector and several key points can be made here.

First, it is clear that supermarket chains do not act as single monopolists or single monopsonists as assumed in Figures 1 and 2. Only if the leading supermarket chains were to act as a cartel would it be reasonable to assume that they set the full monopoly/monopsony price. Nevertheless, whilst they may not act as a pure monopolist/monopsonist and clearly do compete, it is still the case that they might earn oligopoly/oligopsony profits stemming from the fact that competition is limited in these markets. If this is the case, as is often claimed in the UK, it should show up in higher prices and higher profits than in some other European countries and some evidence on this is presented in section 3.

Second, the monopsony model relates to the case where a single buyer faces a large number of competitive suppliers. In many upstream food markets, however, prices are determined by bilateral bargaining between large suppliers and supermarket chains, and a bilateral bargaining model is more likely to apply.

Standard examples of this are in soft drinks and colas (where Coca Cola and Pepsi are, of course, the dominant suppliers), washing powders (where Procter and Gamble and Unilever are dominant suppliers) and ice creams and frozen products (where Unilever, again, dominates the market). In this context, supermarket chains may be able to use their countervailing power⁶ to obtain discounts from suppliers *and*, if competition is strong at the downstream stage, these will be passed on to consumers. Similarly, in terms of deadweight losses, supermarket chains may reduce the welfare loss associated with large monopolist suppliers and hence reduce the overall welfare loss.

Clearly, therefore, there are potential benefits of the existence of buying power where large supermarket chains face large food producers. In the case where supermarket chains face competitive suppliers, however, buying power may be of considerable concern. In particular, as discussed in section 4, small suppliers are particularly at risk of anti-competitive practices used by supermarket chains and they may also not be able to earn a competitive return.

3. Evidence on Monopoly and Monopsony Power

This section considers some of the evidence on the possible monopoly and monopsony power of leading supermarket chains. Part of the argument centres on the alleged monopoly position of the leading supermarket chains

in net revenue which the monopsonist incurs in order to generate higher monopsony profits.

⁶ This terminology was first introduced by Galbraith (1963).

(especially, Tesco and Sainsbury) in the UK. Evidence on this is provided in Table 1 which shows the market shares of the five leading supermarket chains in four European countries: France, Germany, Spain and the UK as given in Dobson Consulting (1999). The table shows that of the four countries included, five firm concentration was 56.2% in the UK in 1996 compared to 50.8% in France, 45.5% in Germany and 32.6% in Spain. Looking at the largest two firms, moreover, the largest two UK firms (Tesco and Sainsbury) accounted for 32.7% of food retail sales in 1996 compared to much lower proportions in the other European markets: 22.0% in France, 21.4% in Germany and 16.8% in Spain. These figures show that the UK has a duopoly market structure compared to the more oligopolistic structure of the other countries in the table and this might be indicative that competition is stronger in these latter than in the UK.⁷

It has also been argued (especially in the press) that large supermarkets set higher prices and earn higher profits in the UK. As far as prices are concerned, one study⁸ argues that food prices are as much as 40 per cent higher in the UK compared to Europe and the US. Specifically, setting UK prices at 100, it found that prices were 61 in Holland, 62 in Belgium, 65 in Germany and 69 in the US. This

comparison is distorted to some extent by the high value of the UK pound, although it seems likely that prices are considerably higher in the UK. The evidence supports the view that UK supermarket chains are not competing as strongly as they might.⁹

Table 2 provides evidence on profit margins (after tax) for a number of leading supermarket chains in both the UK and France. This table shows that margins were on average 4.9% in the UK in 1994 amongst these firms whilst in France the average was 1.0% amongst the firms listed and this difference is also found in other European countries (Dobson Consulting, 1999).¹⁰ It can be argued that margins are higher in the UK because UK supermarket chains tend to invest more in their stores and, typically, the price of land is higher in the UK; hence, higher margins are required to cover these costs. Again, however, the evidence seems to suggest a lower degree of competition in the UK compared to other European countries.

Table 3 also considers rates of return in leading supermarket chains with similar figures for six leading producers of food, drink and household products. In this case, the leading supermarket chains earned a rate of return of 16.2% on average in 1996 compared to 34.9% on

⁷ The argument is not clear cut because even two duopolistic firms could compete strongly (e.g. if they offer closely substitutable goods). Other things the same, however, more equally-sized firms might be expected to compete more strongly than just two equally-sized firms.

⁸ Sunday Times, 30/8/98.

⁹ In its report, the Competition Commission (2000) suggested that UK prices were on average 12 to 16 per cent higher than those in France, Germany and Holland although strangely it did not conclude that supermarkets were competing less strongly in the UK.

¹⁰ Evidence for Germany also shows that retail margins are very low (of the order of 1-2%): see Dobson Consulting (1999) for details.

average for the six food, drink and household firms. Undoubtedly, these latter firms are very efficient and this is reflected in their returns but nevertheless the figures indicate that considerable scope must still exist for supermarket chains to use their buying power to reduce prices further. Nevertheless, the supermarket chains are making moderately high returns (the industrial average is about 11 per cent in the UK), especially given the low risk nature of their business, and this suggests again that there is scope for more competition in the retail sector too.

The evidence, in sum, seems to suggest that there may be cause for concern about the market structure of the UK and, in particular, the market shares of the two leading firms. In addition, various indicators of market performance provide support for the view that competition could be stronger in the UK (albeit that some producers also appear to make much higher returns).

4. Anti-Competitive Practices

Supermarket chains also impose a number of fees and other charges on suppliers which can give rise to policy concern. It is normal practice, for example, for supermarket chains to charge a *listing fee* to suppliers simply to stock their products. They also often require suppliers to pay *slotting fees* linked to the position of the good in-store (e.g. position on a row, shelf height, etc.). They sometimes require extra payments for supporting a special promotion and so on and, in some cases, suppliers are required to pay *end-of-year rebates* ("over-riders") dependent on sales

achieved.¹¹ All these practices are a further way in which supermarket chains can exert their market power.

Small suppliers, in particular, are vulnerable to anti-competitive practices of large supermarket chains. Supermarket buyers are able to exploit their market position to obtain low prices from suppliers with the threat to *de-list* their products if their demands are not met. Smaller suppliers are clearly at an important disadvantage in that supermarkets can always shop elsewhere. Also, supermarket chains do not always offer written contracts to small suppliers, especially when they demand end-of-year rebates. Clearly, the existence of supermarket buying power creates the potential for abuse of such power and, again, policy action may be required.

Finally, there is also the possibility of predatory behaviour by supermarket chains. Given their market position, they can set prices for individual products at levels which do not necessarily cover their costs, cross-subsidising these prices from higher prices elsewhere. In theory, at least, whilst this might benefit consumers in the short run, if targeted against small retailers to induce them to leave the market, this could damage competition in the longer term. Evidence on predatory behaviour is often difficult to collect but a number of countries in Europe have outlawed the practice in recent years (see Dobson Consulting, 1999).

¹¹ In some cases, rebates are required retrospectively; a practice which has been outlawed in a number of EU countries.

5. Conclusions

The analysis presented above suggests that there are some grounds for concern over the growth of supermarket chains in the UK. Concentration is quite high in the two leading firms and prices and profits also seem to be quite high. At the same time, however, supermarket chains can use their buying power against large suppliers to reduce prices for consumers and this is clearly a benefit to the consumer, and there is no doubt that the average consumer has a much wider choice of products available to him/her than only 20 or so years ago. Nevertheless, there is inevitably some concern when firms gain sufficient market power that they can dominate a particular market (especially one as politically sensitive as the one considered here) and use of anti-competitive practices also gives cause for concern.

The UK Competition Commission investigated this sector in 1999-2000 and produced its report in October 2000. In the event it took a more sanguine view. Specifically, it took note of the benefits noted above and did not find that supermarket chains were, as a whole, operating against the public interest. It did, however, argue that in some local markets concentration was too high and recommended that approval of the Office of Fair Trading should be required if leading firms sought to develop or acquire new stores in these areas (especially in the South-East). It also suggested that a new code of conduct be introduced to deal with abuse of buying power against small suppliers which will be monitored by the Office of Fair Trading. Clearly these are relatively modest requirements and it remains to be seen whether they are sufficient to

increase competition in this sector. If not, further action may be required.

Table 1. Market Structure and Food Retail Distribution

France	
Group	1996 (%)
Intermarche	11.9
Promodes	10.1
Leclerc	9.7
Carrefour	9.7
Auchan	9.4
<i>Five Firm Concentration</i>	50.8
Germany	
Group	1996 (%)
Rewe	10.9
Edeka/AVA	10.5
Aldi	9.0
Metro	8.4
Tengelmann	6.7
<i>Five Firm Concentration</i>	45.5
Spain	
Group	1996 (%)
Promodes	9.7
Pryca (Carrefour)	7.1
Eroski	6.3
Alcampo (Auchan)	5.1
Hiperacor	4.4
<i>Five Firm Concentration</i>	32.6
UK	
Group	1996 (%)
Tesco	18.5
Sainsbury	14.2
Asda	9.7
Safeway	9.3
Somerfield	4.5
<i>Five Firm Concentration</i>	56.2

Source: Dobson Consulting (1999).

Table 2. Profit Margins (after tax), 1994

Supermarket Group	Profit Margin (after tax) %
Sainsbury	5.2
Tesco	4.8
Safeway	4.8
Carrefour	1.3
Promodes	0.8
Casino	0.8

Source: Keynote, 1996.

Table 3. Rates of Return of Supermarket Chains and Leading Food Suppliers

Company	Rate of Return, 1996 (%) ¹
<i>Supermarkets</i>	
Tesco plc	16.0
Sainsbury plc	16.8
Asda plc	13.5
Safeway plc	18.7
<i>Suppliers</i>	
Coca-Cola Holdings (UK) Ltd.	47.1
Nestle UK Ltd.	39.0
Unilever plc	23.9
Kraft Jacobs Suchard Ltd.	39.3
Procter and Gamble Ltd.	36.7
Mars UK Ltd.	23.7

Source: Fame.

1. Figures are for rates of return on capital employed for leading supermarkets and largest subsidiaries of suppliers operating in the UK.

Figure 1. Monopoly Welfare Loss

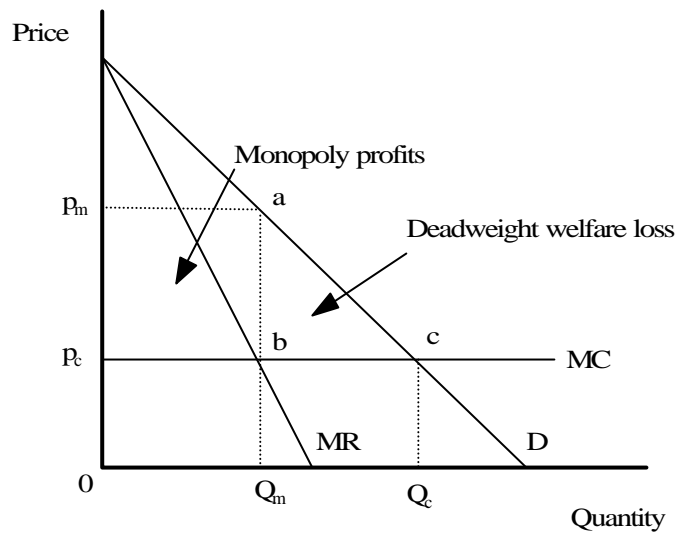
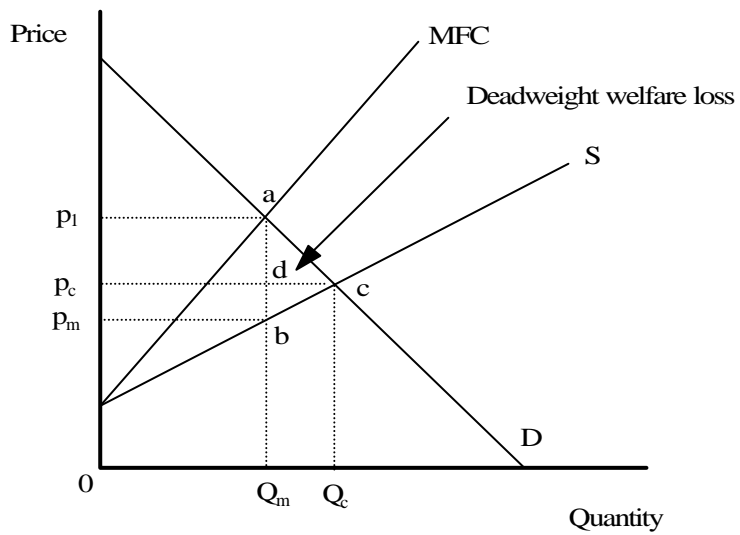


Figure 2. Monopsony Welfare Loss



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♣ *The views expressed here are personal to the author and do not necessarily reflect those of other staff, faculty or students of this or any other institution.*

Book Review:

Klaus Schmidt-Hebbel and Luis Servén (eds.) (1999) The Economics of Saving and Growth: Theory, Evidence, and Implications for Policy. Published by Cambridge University Press for the World Bank. PP 199. ISBN 0 521 63295 1.

Nations with higher savings rates typically enjoy faster economic growth. The exact causal mechanism of the association between growth and saving, however, is still subject of debate among policy makers and development economists. Even more debatable is the complete set of factors that affect national saving levels. This volume, part of the World Bank's research program on the fundamentals

of sustainable growth and development and poverty alleviation, looks at these debates, highlighting in particular some interesting issues surrounding the determination of private savings and growth.

After a brief introduction, Schmidt-Hebbel and Servén present the stylized facts for saving rates in the world. In particular, major trends in national saving over time and across countries are documented. There is then a comprehensive review of variables that may impact upon private saving and consumption. From this discussion a number of key hypotheses on the possible relationship between growth, saving/consumption, and other related variables emerge. Some of these relationships are explored in more detail in subsequent chapters. Chapter 3 by Angus Deaton then uses a range of models, including life-cycle and liquidity constraint models, to explain why a strong relationship between growth and saving may persist over time and across countries. Patrick Honohan's chapter which opens with a discussion of how a country's financial system influences its saving decisions follows this. The discussion then turns to how fiscal incentives, working through tax structures and the social security system, profoundly affect saving. Fundamentally, this chapter appears to be hinting at the importance of the environment and institutions of each country in determining its saving. Of course, the ultimate impact of any variable on saving and growth depends in part on the environment within which the variable operates (for instance, whether there is 'good governance'). This message ought to have been made more forcefully throughout the book.

Chapter 5 by Maurice Obstfeld assesses the importance of foreign resource inflows, particularly foreign aid, on determining the saving, investment, and growth rates of countries. It has long been recognized in the development aid literature that assistance may simply increase the consumption rate at the expense of the domestic saving rate. Although this view is critically debated in this chapter, the relevant issue of fungibility of aid does not receive much attention. Instead, Obstfeld develops a theoretical model to examine the intertemporal impact of foreign aid on saving and growth, creating a number of hypotheses amenable for future econometric testing. Allowing for the possibility that aid, saving, and growth all have a bi-directional relationship with respect to one another would have enhanced the discussion of this chapter. For instance, a recent study of the aid-saving

nexus finds that while a two-way relationship between aid and saving exists in some cases, in other cases there appears to be no significant relationship between the two.

The final chapter written by the editors turns to a less explored topic, namely the saving-inequality relationship. Thus, it examines in detail the link between income distribution and aggregate savings, identifying both the direct and indirect effects of inequality on aggregate saving. Indirect effects, working through investment, growth and public saving, can theoretically have a pernicious impact on aggregate saving. Consumption theory, on the other hand, points out a number of direct channels through which income inequality can have a positive effect on household saving in most cases. Therefore, the overall impact of inequality on saving, at the theoretical level, turns out to be ambiguous. This chapter, using both cross-section and panel data, and using alternative inequality and saving measures, finds evidence in support of this theoretical ambiguity. In other words, there appears to be no strong evidence that income inequality has a systematic overall effect on aggregate saving. Use of expansion methodology à la Casetti to study the relative strength of the direct and indirect effects of inequality on saving would have been useful in this chapter. Overall, the discussion of this part is somewhat of a departure from the rest of this book since the central focus is on treatment of inequality and saving, not the saving-growth nexus per se.

To sum up, this collection provides useful insights into the evolution of saving and growth over the past few decades and into the nature of their relationship. The contributions explain some of the observed patterns of saving and growth for different countries. However, there is still need to explain, at both theoretical and empirical levels, the increasing saving disparity among different regions and countries and in particular the extent to which high savings can guarantee achievement of sustained growth for developing nations and former socialist economies.

Mak Arvin

Public Lectures/Meetings:

November 7, 2001 – 1:00pm: Lord Meghnad Desai ‘*Who rules? The future of global governance*’, Overseas Development Institute, 111 Westminster Bridge Road, London SE1.

November 21, 2001 – 1:00pm: Phillipe Le Billon ‘*Do transnationals aggravate conflict? Can they be regulated*’, Overseas Development Institute, 111 Westminster Bridge Road, London SE1.

Forthcoming Conferences:

November 1-2, 2001: Third international conference on Money, Investment and Risk to be held at Nottingham Trent University in Nottingham, UK. Contact: Dr Leighton Vaughan Williams at NTU’s Department of Economics, Burton Street, Nottingham NG1 4BU. For information visit <http://ess.ntu.ac.uk/economics/conf.htm>

November 29 – December 1, 2001: Fourth international conference of the International Society for Quality of Life Studies (ISQOLS) to be held at Washington D.C., USA. Contact and information from Joe Sirgy (sirgy@vt.edu), or Don Rahtz (Don.Rahtz@business.wm.edu).

December 5-7, 2001: Tenth international conference on Competition, Financial Integration and Risk in the Global Economy to be held in Rome, Italy. Further details from Professor Michele Bagella with the following contact details: fax – 396 2020500, e-mail – bagella@uniroma2.it

Useful web-sites:

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