COMMISSION OF THE EUROPEAN COMMUNITIES

A STUDY OF THE EVOLUTION OF CONCENTRATION IN THE FOOD INDUSTRY FOR THE UNITED KINGDOM

Product market structure

VOLUME II

October 1975

The following report is the second volume of Part 2 of a study of concentration in the United Kingdom food processing industry.

Part 1 of the study, entitled "Industry Structure and Concentration 1969-72", which was published in January 1975, dealt with trends in the food industry, structural changes and various indices for assessing concentration in the industry as a whole.

Part 2 deals with the structure and level of concentration in a number of product markets and submarkets.

Part 2 is itself divided into two volumes, the first dealing above all with markets and submarkets in manufactured milk products, infant foods, ice-cream, grain milling products and biscuits. This, the second volume, deals with the markets and submarkets in margarine, sugar, canned, frozen an dehydrated foods, and dietetic and health foods. It also presents the conclusions to be drawn from the two volumes devoted to product markets and submarkets.

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P R E F A C E

The present volume is part of a series of sectoral studies on the evolution of concentration in the member states of the European Community.

These reports were compiled by the different national Institutes and experts, engaged by the Commission to effect the study programme in question.

Regarding the specific and general interest of these reports and the responsibility taken by the Commission with regard to the European Parliament, they are published wholly in the original version.

The Commission refrains from commenting, only stating that the responsibility for the data and opinions appearing in the reports, rests solely with the Institute or the expert who is the author.

Other reports on the sectoral programme will be published by the Commission as soon as they are received.

The Commission will also publish a series of documents and tables of syntheses, allowing for international comparisons on the evolution of concentration in the different member states of the Community.

This report commissioned by the Directorate-General for Competition of the Commission of the European Communities has been carried out by Development Analysts Ltd., under the direction of R.W. Evely, B.Sc. (Econ), in consultation with Professor P.E. Hart, B.Sc. (Econ), of the University of Reading, and Professor S.J. Prais, M.Com., Ph.D., Sc.D (Cantab) of the City University, London and the National Institute of Economic and Social Research. Thanks are also due to the staff of Development Analysts Ltd., more particularly to Mrs. J.A. Carter, B.Sc. (Econ), Miss B.A. Playll, B.A., and Mr. A.J. MacNeary, B.A., who contributed greatly to the study.

CONTENTS

CHAPTER 7

THE MARGARINE INDUSTRY

1: INTRODUCTION

1.1: Margarine and compound cooking fats have broadly similar methods of production, being basically a mixture of oils and fats which, after purification and hardening, are emulsified with water (plus milk products for some margarines), to which vitamins and other minor ingredients have been added. Both products are made for the retail market, and are generally marketed under well-advertised brand names, although an increasing amount is being sold through supermarkets as "own-label" products. They are also made for the non-domestic market, which includes the industrial trade. In the United Kingdom the margarine industry corresponds to minimum list heading 219 (1) of the 1968 Standard Industrial Classification, and includes compound cooking fats in addition to margarine.

1.2: Margarine is one of a related chain of edible fat-products which compete with one another and affect one another's prices. Most margarine in the United Kingdom is sold to the retail market and is largely a substitute for butter. Together butter and margarine form a "yellow fats" market and it is in relation to this "yellow fats" market that the position of the margarine trade needs to be assessed. On the other hand, compound cooking fats, the majority of which goes to trade usage as raw materials in other food manufacturing, need to be seen in relation to the total "white fats" market, including lard, and in relation to other cooking oils. As Charles Wilson says in "The History of Unilever", "the prosperity of the edible fats industries was closely bound up with, one might say dictated by, the price of natural fats, especially butter and lard, which competed with the substitutes and largely controlled their price." *

1.3: The trade is highly concentrated in the United Kingdom, consisting of only 14 enterprises in 1970 according to the Census of Production. The National Board for Prices and Incomes state in their report on margarine and compound cooking fats in 1970 that the industry consisted of 22 companies and the four major firms together produced about three-quarters of all margarine and compound cooking fats. But if the narrower market for margarine alone is considered, concentration is very much higher. The largest firm, Van den Berghs and Jurgens Ltd., a wholly owned subsidiary of Unilever Ltd., produced about 70 per cent. of the total annual output of margarine and about 35 per cent. of compound cooking fats.

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* Charles Wilson "The History of Unilever" Cassell & Co. Ltd. 1954.

1.4: The evolution of the margarine trade in the United Kingdom into one of high concentration occurred many decades ago largely as a result of amalgamation of large firms rather than internal growth. Prior to the first world war the home market was served primarily by imports from Dutch concerns, most notably Anton Jurgens and Van den Berghs. The only British producer of any size was the Maypole Dairy Company. During that war Lever Bros., with government support, entered the trade with Planter's Margarine Company, whilst the two Dutch firms established factories in Great Britain. A period of rising demand ensued and, following the acquisition of the Maypole Dairy Company by Jurgens, in 1927 the Margarine Union was formed by the merger of the two Dutch companies. Broadly speaking the efforts of the Margarine Union were concentrated on edible fats, whilst those of Lever Bros. were concentrated on soap. However there was a certain amount of overlap and negotiations began in late 1928 to try and separate the activities of soap and edible fats manufacturing more perfectly between the two firms. Attempts at separation proved fruitless, with the result that in September 1929 full amalgamation, one of the largest in European history, was agreed, and Unilever came into being with English and Dutch parent companies.

1.5: Since then Unilever, through its subsidiary Van den Berghs and Jurgens, which has control of the margarine output of the parent company, has maintained its strong market position. Nevertheless, further horizontal and commercial groupings have developed, such as J. Bibby & Sons Ltd. who entered the field of manufacturing having originally been raw material suppliers, and no monopoly has developed, with Unilever having "to pursue an extremely cautious price policy in order to maintain its share of the market" (J.H. van Stuyvenberg). *

1.6: The margarine and compound fats industry is highly concentrated, both in terms of vertical integration, and geographical location. It is a highly capital intensive industry, with relatively low value-added. Raw materials, primarily vegetable oils and animal fats, account for between 60 and 70 per cent. of costs, and are of great importance to manufacturers in that their prices tend to fluctuate widely. Also of importance is the structure of marketing in the industry, particularly in terms of advertising and of pricing policies, and these will be looked at after the structure of the industry has been considered.

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* J.H. van Stuyvenberg "Margarine: An Economic, Social and Scientific History, 1869-1969" Liverpool University Press (1969).

2. THE STRUCTURE OF THE INDUSTRY

2.1: The margarine and compound cooking fats industry corresponds to minimum list heading 219 (1) of the 1968 Standard Industrial Classification, and the definition of the industry has remain unchanged during the period under consideration.

2.2: The overall size of the industry in the United Kingdom between 1958 and 1972 is shown in Table 2.1. The trade is small, consisting of only 25 enterprises in 1958. By 1972 this had contracted to only 14 enterprises, who controlled 15 establishments; that is to say that each firm had concentrated its production in one large centralised plant, rather than in a number of smaller establishments. Total sales and work done fell in the ten year period from 1958 by nearly one-fifth to a level of £48.3 millions in 1968. Between 1968 and 1970 there was a dramatic increase in sales of over 50 per cent. to £73.2 millions and in the following year the growth in sales continued, although at a slower rate, to a level of £84.8 millions in 1971. However, between 1971 and 1972, sales fell by 2 per cent. to £83.1 millions. Net output which represents the value added to the materials by the process of production, increased even faster, more than doubling between 1968 and 1972 and increasing by nearly one-third between 1971 and 1972 alone. Employment, on the other hand, remained remarkably constant, hovering above 4,000 between 1963 and 1972, having been at a level of over 5,000 in 1958.

2.3: This tremendous increase in the value of sales and output is partly the result of rising prices. According to the Report on Household Food Consumption and Expenditure (produced by the Ministry of Agriculture, Fisheries and Food) the retail price of margarine (excluding compound cooking fats) rose by about $17\frac{1}{2}$ per cent. between 1968 and 1970, and by a further 17.7 per cent. in the following two years. Although these price increases, referring as they do to retail prices, cannot be applied directly to figures of sales and output, they give some indication that price-rises probably account for somewhere around half of the rise in sales. The increase in quantities sold must also be attributable, in part, to improved quality of margarine offered by manufacturers to consumers. Particularly there has been a growth in demand for soft, "spread straight from the fridge" margarines, which have been introduced and heavily advertised in recent years.

2.4: Net output per head exhibits much the same pattern of growth, falling between 1958 and 1968, and then increasing at a very fast rate in the following years, to £3,818 per head in 1972. If net output per head is considered a measure of labour productivity then compared with the total food processing industry in the United Kingdom (see Part 1, page 11, Tables 2.3 & 2.4), the margarine trade has a high level of productivity for all years, except 1968.

Size-distribution of enterprises in the margarine industry, 1963, 1968, 1970 and 1972.

2.5: Census of Production breakdowns of enterprises by employment size categories are given in Table 2.2. In fact the 1970 and 1972 figures are by establishment size but this does not lead to any incompatibilities, since there is only one enterprise controlling two establishments and both these establishments are in the largest employment size category.

2.6: In 1963 there were 8 enterprises, out of a total of 20, employing more than 25 persons, and they accounted for 98 per cent. of employment and 96 per cent. of net output. In 1968, four enterprises with more than 200 employees i.e. 28.6 per cent. of all enterprises, controlled 93 per cent. of employment and 94 per cent. of net output. By 1970 the proportion of employment controlled by the largest four enterprises with over 200 persons employed had risen slightly to 95 per cent. and similarly the proportion of net output had risen to 95 per cent. However, in 1972 the Census of Production distinguished 5 enterprises (36 per cent. of the total) employing one hundred or more people. The proportion of employment these enterprises accounted for was only 93 per cent. and net output was again 95 per cent.

2.7: Thus, while the margarine trade was highly concentrated in 1963, the extent to which net output and employment were controlled by the largest firms seems to have marginally increased in 1968 and 1970, although fallen somewhat in 1972. The increasing importance of the larger firms in terms of employment between 1968 and 1970 can be seen when average employment per enterprise is considered:

Enterprise size:	1968	1970
Under 200 persons	31	20
Over 200 persons	960	980
	293	294

Although average employment per enterprise for the whole industry did not alter, the average number of employed in larger enterprises has increased, whereas in smaller enterprises it has decreased. The same increasing disparity between larger firms and smaller firms can be seen in terms of net output per enterprise during 1968-70. In contrast, between 1970 and 1972 the difference between larger and smaller firms narrowed in terms of employment and to a lesser extent in terms of net output.

Sales of Principal Products in the Margarine Industry

2.8: Sales of the principal products of the margarine industry by larger establishments are available in respect of value and volume, from the Census of Production and from the Business Monitor Quarterly Statistics, and are shown in Tables 2.3 and 2.4. The volume of sales of the whole industry in 1973 was 529,700 tons, compared with 492,100 tons in 1963 and only 426,200 tons in 1968. About two-thirds of the volume in each year was margarine manufacturing, and between three-quarters and four-fifths of this was for domestic use. In contrast, about three-quarters of the volume of compound fats were for trade use, primarily in manufacturing such things as buns, pie crusts, cakes, biscuits, pastries and other confectioneries. It is interesting to note that the decrease in total volume of sales between 1963 and 1968 occurred primarily as a result of a fall in sales of margarine for domestic use of over 50,000 tons, although margarine for trade use showed a small increase. Between 1968 and 1973 however, the total increase in tonnage of 103,500 tons consisted of 53 per cent. compound fat and 47 per cent. margarine.

2.9: Table 2.4 shows the corresponding sales in value terms, from which it will be seen that in 1973 total sales of principal products of the margarine industry were £107.3 millions, sales of principal products by establishments in the industry were £77.7 millions, and total sales and work done by establishments classified to the margarine industry were £96.6 millions. The index of specialisation which is the ratio of total sales of principal products by the industry to total sales of good produced and work done (excluding merchanted goods and canteen takings) was, not surprisingly, fairly high at approximately 85 per cent. in 1973, 1968 and 1963.

2.10: Confining attention to total sales of principal products of the margarine industry, there was an overall decrease between 1963 and 1968 of some £6½ millions, whereas between 1968 and 1973 there was an increase of over 120 per cent. Once again sales of margarine for domestic use tended to dominate the pattern for the whole industry, accounting for 55 per cent. of sales in 1963, although a faster increase in prices for this section of the industry, resulted in sales of domestic margarine accounting for 51 per cent. of sales in 1973, compared with only 47 per cent. of volume.

Relative Importance of the Margarine Industry

2.11: The relationship between margarine and compound fats, and total "yellow fats" and "white fats" in terms of sales of principal products by establishments employing 25 or more persons for the years 1963 and 1968 is shown in Table 2.5. In 1963 the total margarine industry, including compound fats, accounted for over three-fifths of the total tonnage of sales of fats, and approximately two-fifths of sales in value terms; in 1968 its relative importance was much the same.

2.12: Within the total yellow fats sector, the importance of margarine has fallen. In 1963 sales of margarine were 68 per cent. of total yellow fats tonnage and 42 per cent. of value, but by 1968 these percentages had dropped to 63 and 37 respectively. In fact, in the context of an overall decline in sales of fats, only butter has shown any increase in sales in either volume or value terms. Within the total "white fats" sector, however, sales of compound fats fell only slightly, compared with a dramatic decrease of nearly 50 per cent. in sales of lard. Thus in the context of a falling overall sales for fats between 1963 and 1968 the margarine industry has done no more than maintain its relative position, while butter sales have increased and lard sales fallen. Nevertheless, it is important to bear in mind that these statistics relate to United Kingdom production and make no allowance for imports. As discussed below, international trade in margarine is insignificant. However, in contrast imports of butter are very important, amounting to 440,400 tons in1968 (see Manufactured Milk Products, Chapter 2, Section 4).

International Trade

2.13: The amount of international trade in the margarine industry is very small. Figures collected by H.M. Customs and Excise, and published in the Business Monitor Quarterly Statistics show that in 1973 imports (c.i.f.) into the United Kingdom of margarine (excluding compound fats) were 730 tons, valued at £161,200. This represents such a minute proportion of United Kingdom output (approximately one-fifth of one per cent.), that any effects of imports upon the degree of competition in the margarine industry can be discounted. Exports (f.o.b.) of margarine in 1973 were ten times the amount of imports, at 7,256 tons valued at £1,611,100, three-fifths of which was exported to Commonwealth countries, and nearly one-fifth to EEC countries. However, in total, exports account for only about 2 per cent. of total output. The limited amount of international trade is probably a result of several factors. One factor is the difficulty encountered in catering for the distinct preferences held by individual countries regarding taste and other characteristics. Of more importance is the fact that generally margarine can be manufactured overseas as cheaply as in the United Kingdom and the international trade in margarine is in certain specialised varieties such as vegetarian margarines. There are tariffs which provide some degree of protection to the margarine industry in the United Kingdom. The Prices and Incomes Board report in 1970 estimated that tariffs then current provided effective protection to the United Kingdom producers at a rate of about 12 per cent., but it seems most likely that tariffs play a less important role in restricting international trade than the factors already mentioned.

2.14: Also of some importance in the context of international trade is the number of foreign-owned enterprises. Unfortunately, such figures for the margarine trade are not published, owing to the risk of disclosing information about individual firms. There is only one major foreign-owned enterprise in the margarine industry, namely Kraft Foods Ltd., a subsidiary of the US Kraftco Corporation which operates two plants in the United Kingdom. Figures for compound fat (including shortening) show that in 1963 22 per cent. of total sales of larger establishments were made by foreign-owned enterprises, compared with 21 per cent. in 1968, the major foreign-owned enterprise being Kraft Foods Ltd. In 1973, the Italian company, Buitoni Ltd. entered the industry, by its acquisition of the grocery products division of J. Bibby and Sons Ltd., which includes the Trex brand.

TABLE 2.1

The Size of the Margarine Industry in the United Kingdom, 1958-1972

	1958	1963	1968	1970	1971	1972
No. of Enterprises	25	20	14	14	14	14
No. of Establishments	27	21	15	15	15	15
Sales & Work Done (£Ms)	59.7	54.4	48.3	73.2	84.8	83.1
Gross Output (£Ms)	...	54.5	48.2	73.4	85.0	82.9
Net Output (£Ms)	9.2	7.4	7.1	10.1	11.6	15.3
Employment (000s)	5.2	4.2	4.1	4.1	4.0	4.0
Net Output per head (£000s)	1.766	1.748	1.716	2.458	2.934	3.818

Source: Censuses of Production

TABLE 2.2

Size-Distributions of Enterprises in the Margarine Industry, 1963, 1968, 1970 and 1972

Size of Enterprise by Employment	No. of Enterprises	No. of Establish-ments	Employment	Net Output	Net Output per Head
			(000s)	£Ms)	(£)
1963					
1-24	10	10	0.1	...	...
25 and over	8	9	4.1	7.1	1,748
Unsatisfactory returns	2	2	-	...	...
Total	20	21	4.2	7.4 (a)	1,748
			(No.)	(£000s)	(£)
1968					
1-24	5	5	54	...	...
25-199	3	3	196	309	1,575
200 and over	4	5	3,838	6,616	1,724
Unsatisfactory returns	2	2	20	...	...
Total	14	15	4,108	7,051 (a)	1,716 (a)
			(No.)	(£000s)	(£)
1970					
1-99	10	10	196	499	2,548
200 and over	4	5	3,918	9,613	2,454
Total	14	15	4,114	10,113	2,458
			(No.)	(£000s)	(£)
1972					
1-24	6	6	) 294	) 785	) 2,671
25-99	3	3	)	)	)
100 and over	5	6	3,720	14,540	3,908
Total	14	15	4,014	15,325	3,818

Sources: Censuses of Production

(a) Includes estimates for establishments employing less than 25 persons and for establishments not making satisfactory returns.

TABLE 2.3

UK: Sales Volume of Margarine and Compound Fats by all larger Establishments, 1963, 1968 and 1973.

(Establishments employing more than 25 persons)

	1963	1968	1973
		Thousand tons	
Margarine:			
For domestic use	272.6	219.2	248.6
For trade use	57.0	66.6	85.7
	329.6	285.8	334.3
Compound fat (including shortening):			
For domestic use	42.6	40.8	) 195.4
For trade use	119.9	99.6	)
	162.5	140.4	195.4
Total	492.1	426.2	529.7
		Index: (1963 = 100)	
Margarine:			
For domestic use	100	80.4	91.2
For trade use	100	116.8	150.4
	100	86.7	101.4
Compound fat (including shortening):			
For domestic use	100	95.8	...
For trade use	100	83.1	...
	100	86.4	120.2
Total	100	86.6	107.6

Sources: 1968 Census of Production
Business Monitor Quarterly Statistics

TABLE 2.4

UK: Sales of Principal Products by larger Establishments, 1963, 1968 and 1973

(Establishments employing more than 25 persons)

	1963	1968	1973
		£ Thousands	
Margarine:			
For domestic use	30,509	24,812	55,034
For trade use	5,642	6,972	14,261
Compound fat (including shortening):			
For domestic use	5,135	4,771	37,578
For trade use	13,100	11,727	
Waste products, work done and unclassified sales:	777	275	416
Total Sales of Principal Products of Margarine Industry	55,163	48,558	107,289
Sales in other industries	11,360	13,875	29,631
Principal products of margarine industry sold by establishments in the industry	43,803	34,683	77,658
Sales of goods other than principal products (including services rendered):	7,648	6,284	18,943
Total value of goods sold without being subjected to any manufacturing process (merchanted or factored), and canteen takings:	887	6,437	
Total Sales & Work Done by Establishments Classified to Margarine Industry:	52,338	47,404	96,601

Sources: 1968 Census of Production
Business Monitor Quarterly Statistics

TABLE 2.5

The Relative Importance of the Margarine Industry, 1963 and 1968

(Establishments employing 25 or more persons)

	Sales of Principal Products			
	1963		1968	
	Quantity (000s tons)	Value (£Ms)	Quantity (000s tons)	Value (£Ms)
Margarine	329.6	36.151	285.8	31.784
Butter	154.3	50.892	170.1	54.114
Total "yellow fats":	483.9	87.043	455.9	85.898
Compound fats	162.5	18.235	140.4	16.498
Lard	146.2	12.799	79.0	6.987
Total "white fats":	308.7	31.034	219.4	23.485
Total Fats:	792.6	118.077	675.3	109.383

Source: 1968 Census of Production

3: CONCENTRATION IN THE MARGARINE INDUSTRY

Concentration-ratios

3.1: It has already been established that the margarine industry has a high level of concentration, and further evidence of this is available from the concentration ratios, published in the Census of Production, which express the sales of the largest five enterprises as a percentage of the total sales by large establishments (Table 3.1). Between 1963 and 1968 the sales concentration ratio for margarine alone increased slightly to 93.8 per cent. in 1968, despite having been at a high level of 92.8 per cent. already in 1963. Even bearing in mind that the more closely a product is defined the higher its concentration ratio is likely to be, there were only three product-groups listed in the 1968 Census of Production that exhibited higher sales concentration-ratios in 1968 (namely sugar, quick-frozen vegetables, and condensed, including evaporated milk). However, the concentration ratios for compound fats declined during the same period, from 84.8 per cent. in 1963 to 82.6 per cent. in 1968, still a high level of concentration.

Other Concentration Measures

3.2: Any attempt to calculate other summary measures of concentration encounters great difficulties, primarily in obtaining information. The major companies in the margarine trade are listed in Table 3.2 and the establishments are estimated to account for 94 per cent. of total sales of principal products. Of these, the largest are Van den Berghs and Jurgens, who are estimated (by the National Board for Prices and Incomes) to produce about 70 per cent. of the total output of margarine and about 35 per cent. of compound cooking fats; J. Bibby & Sons (Food Products) Ltd., which has a large share of the market for compound cooking fats; Kraft Foods Ltd. and the Co-operative Wholesale Society Ltd., each of which has substantial shares of both the margarine and compound cooking fats market. Most of the other companies are relatively small, and tend to cater for non-domestic markets, "own-label" markets, or local domestic markets where costs of advertising and distribution are relatively low.

3.3: Unfortunately, information solely relating to the manufacture of margarine by these largest companies is not available in disaggregated form and any summary measures of concentration must provide misleading results.

Spread of activities of larger establishments

3.4: Also shown in Table 3.2 are the other food manufacturing activities of establishments which are engaged in the margarine trade. The majority of the companies are engaged in manufacturing vegetable and animal oils and fats in addition to margarine, and many also have interests in the bacon curing, meat and fish products category, in which lard manufacture is classified. Since these products rely on primarily the same raw materials, which historically were imported, it is not surprising that the industry tends to be concentrated in the area of the ports - Liverpool/ Manchester and London.

3.5: Many of the establishments also have interests in non-food product categories. Van den Berghs and Jurgens, British Bakers and Kraft Foods (Edible Oils and Fats Division), are engaged in the product group General Chemicals (Other than Organic), because many of such chemicals are used in the margarine manufacturing process. Similarly principal products of the soap and detergents industry are sold by Liverpool Central Oil Company, London Oil Corporation and Peerless Refining (Liverpool) Ltd. In fact the Manchester establishment of Proctor and Gamble Ltd. is classified to Soap and Detergents with margarine as a subsidiary activity.

3.6: The interests of the major manufacturers in distribution vary considerably. In the case of Van den Berghs and Jurgens, the parent company acquired the Thomas Lipton retail group as early as 1927 primarily and deliberately to promote the distribution of margarine. In 1972, however, the whole of the Allied Suppliers Group, which included Thomas Lipton, was sold to Cavenham Ltd. This was presumably a response to the changing structure and pattern of retail distribution, with the development of large chain supermarkets. Margarine produced by Van den Berghs and Jurgens is still distributed by a fellow subsidiary company, SPD Ltd.

3.7: Of the other major manufacturers, the CWS retails margarine only through its own retail outlets, whilst Kraft and J. Bibby and Sons have no significant interest in distribution since the UK grocery interests of the latter have recently been taken over by the Italian company, Buitoni Ltd. Fitch Lovell, who have recently entered the margarine market in partnership with the American company Standard Brands Ltd., have a significant interest in retail distribution through their ownership of Keymarkets, including the David Greig supermarkets, and this may have considerably influenced the decision to start manufacturing margarine.

3.8: Total sales, net assets and gross income of the dominant Van den Berghs and Jurgens Ltd. in recent years have been as follows:

				£ Millions	
	1968	1969	1970	1971	1972
Sales	82.6	89.0	100.6	111.5	106.5
Net Assets	24.5	26.7	31.8	31.5	30.6
Gross Income	11.0	9.4	7.2	9.2	10.3

The company, as a wholly-owned subsidiary of Unilever Ltd. produces a complete range of margarines, including the brands Flora, Blue Band, Summer County, Tomor (Kosher), Echo and Stork. Additionally the Spry, Cookeen and White Cap brands of cooking fats are manufactured. The product range, however, as Table 3.2 has shown, is not restricted to margarine and compound cooking fats.

3.9: Kraft Foods Ltd. is a subsidiary of the Kraftco Corporation of the United States with a turnover of £28½ millions in 1969 and £48½ millions in 1972. Kraft Foods Ltd. has experienced a much faster rate of growth of sales than Van den Berghs and Jurgens Ltd. Nevertheless, Van den Berghs and Jurgens has sales figures more than twice as large as Kraft Foods, and figures for the latter include sales of a range of processed cheese and other dairy products.

3.10: J. Bibby and Sons Ltd. is a long-established United Kingdom company, founded in 1875, which turned public in 1951. Its principal activities in the United Kingdom are the manufacture and sale of animal feeds and seeds, farm products, edible oils, paper, and until recently grocery products. In 1973 the grocery products division, comprising "Princes" Foods Ltd. was sold to the Italian company Buitoni Ltd. The 'Trex' brand is owned by "Princes" Foods. Although the brand name has been sold, J. Bibby and Sons Ltd., through its edible oils division, continues to provide the actual product sold under the Trex name, in addition to providing cooking fats for sale under retailers' own-labels. Total sales and net assets of J. Bibby and Sons Ltd. in recent years have been:

					£ Millions	
	1968	1969	1970	1971	1972	1973
Sales	52.1	69.2	88.5	97.3	103.7	146.0
Net Assets	15.3	24.2	23.3	25.5	28.4	31.8

In terms of sales, the company is much the same size as Van den Berghs and Jurgens, but again the range of activities covered is wide.

3.11: The Cooperative Wholesale Society is an important manufacturer of margarine. In 1973 total sales of food under the Co-op label amounted to approximately £122 millions. Margarine is manufactured at one establishment, which employs between 350 and 400 people and had an output in 1972 of about £7½ millions.

3.12: In contrast with these four major enterprises, the remaining companies engaged in the manufacture of margarine are of far less significance.

TABLE 3.1

Sales Concentration-Ratios for Margarine and Compound Fats, 1963 and 1968

	1963	1968
Margarine		
Total sales (£Ms)	36.151	31.784
Sales by largest five enterprises (£Ms)	33.554	29.811
Concentration-ratios	92.8%	93.8%
No. of enterprises in 1963 with same concentration-ratio as 1968	5	
Compound Fat (including shortening)		
Total sales (£Ms)	18.235	16.498
Sales by largest five enterprises (£Ms)	15.459	13.630
Concentration ratios	84.8%	82.6%
No. of enterprises in 1963 with same concentration-ratio as 1968	Under 5	

TABLE 3.2

Other food processing activities of establishments engaged in margarine manufacture, 1968

	Location	Grain Milling	Bacon, Meat & Fish Products	Milk & Milk Products	Sugar	Cocoa, Chocol. & Sugar Confy.	Fruit & Veget. Products	Veget. & Animal Oils & Fats	Margarine	Starch & Misc. Foods
Establishments Classified to Margarine										
C.W.S.	Manchester		0					0	X	
Crimony Co. Ltd.	Middlesex					0			X	0
Merseyside Food Products Ltd.	Liverpool		0					0	X	
Percy & Halden (Edible Prods)	Glasgow		0						X	0
S.C.W.S.	Wigtownshire							0	X	
Van den Berghs & Jurgens	London		0	0			0		X	0
Establishments Classified Elsewhere, also selling Margarine										
J. Bibby & Sons (Food Products)	Liverpool		0					X	0	
British Bakers Ltd.	Slough								0	X
William Forrest & Sons (Paisley)	Renfrewshire		0					X	0	
Kraft Foods Ltd.	Liverpool			X			0	0	0	
Kraft Foods (Edible Oils & Fats) Ltd.	Manchester			0				X	0	0
Liverpool Central Oil Co. Ltd.	Liverpool (4)		0					X	0	
London Oil Corp. Ltd.	London		0					X	0	
Mapletons Foods Ltd.	Liverpool	0			0	0	0		0	X
Marfleet Refining Ltd.	Hull (2)/Grimsby							X	0	
Peerless Refining (Liverpool)	Liverpool		0					X	0	0
Proctor & Gamble Ltd.	Manchester							0		
Sydney Webster Ltd.	Leeds							X	0	

Source: 1968 Census of Production, Directory of Businesses

N.B. X represents industry to which establishment is classified - Proctor & Gamble Ltd. is classified to Soap & Detergents.

0 represents other industries whose principal products are also sold by the establishment.

4: MARKETING AND PRICES IN THE MARGARINE INDUSTRY

4.1: The growth of the margarine industry has been linked with rising standards of living, resulting in improved diets and an increasing demand for fats. The influence of income levels on margarine consumption is now small, and not only is the price of margarine relative to that of butter of considerable importance, but also such marketing factors as brand-image, packaging and advertising are becoming increasingly important. In terms of concentration and competition within the industry advertising, quality of product and pricing are probably the most significant factors.

Advertising

4.2: Advertising may be indicative of competition, in that a company seeking to improve its market share tends to increase expenditure. On the other hand advertising may reflect the dominance of a single firm. Where a commodity is of low unit value and is frequently bought by the majority of housewives, as is the case for margarine, large scale advertising appears to be the most economical method of selling; the need for advertising tends to protect the position of the large established firms, making it more difficult for new firms to compete unless they can allocate large resources for advertising.

4.3: It is interesting for this reason to examine what changes have occurred in the relative shares of different brands of margarine in recent years, bearing in mind that the data shown in Table 4.1, for reasons explained in the Introduction (Chapter 1) of this Study, reflect only relative and not absolute positions in the market. In both 1969 and 1972 Unilever was estimated to hold four-fifths of the retail market, but in 1973, (according to The Grocer) its share fell to two-thirds. The brand-leader, marketed by Van den Berghs, was Stork in each year. In the late 1960s Van den Berghs launched Britain's first soft tub margarine, Blue Band, which was promoted as a "luxury" margarine and no longer depended on being a cheap substitute for butter, having its own advantage of being easy to spread. (Soft, or whipped butter, which is also easy to spread, is not marketed in the United Kingdom). Subsequently, other brands followed, with the result that more traditional margarines such as Echo and Stork suffered a fall in their market shares. In fact, The Grocer has estimated that in 1973 soft margarine represented 65 per cent. of volume, and 70 per cent. of the value of sales - a reversal of the position vis-a-vis ordinary margarine two years earlier.

4.4: Own-label margarines have increased their share of the market since 1969, although their importance is still small. Further competition for the major manufacturers has come from Lovell and Christmas/Standard Brands, which entered the market in 1972 and put Fresh Fields margarine on an almost national basis in 1973. They claimed a 4 per cent. share of the market, and are aiming at a 10 per cent. share. Thus, there are strong indications of increasing competition in the margarine industry.

4.5: Advertising expenditure on press and TV is shown in Table 4.2 for the principal advertisers and brands for the period 1968-73. Total expenditure on advertising margarine products was remarkably high: in 1968-69, it averaged slightly over £3 millions compared with £4$\frac{3}{4}$ millions in 1972-73, an increase of 53 per cent. The major part of the increase was related to growth in soft tub margarines.

4.6: Unilever, through Van den Berghs and Jurgens, of course dominated advertising expenditure. In 1968-69, nine-tenths of total estimated advertising expenditure was made by this company. Stork was the most heavily advertising single brand. However, by 1972 and 1973, although traditional Stork and Stork Soft were both heavily advertised, the single brand with the greatest advertising was soft Blue Band. Nevertheless increasing competition becomes evident, particularly by 1973, when the advertising expenditure on Kraft brands, including the introduction of Carousel margarine represented 12 per cent. of total advertising expenditure, as compared with 80 per cent. shared among the Van den Berghs' brands. In addition, Fresh Fields margarine was being advertised at a cost of nearly £300,000 in 1973.

4.7: Thus advertising and promotional expenses are a significant cost item for the large domestic brands, varying according to company and brand from 2 to as much as 22 per cent. of total manufacturing costs (as estimated by the National Board for Prices and Incomes). Such high levels of advertising expenditure reflect the general view of manufacturers that the trade is dependent upon advertising for maintaining the volume of domestic sales and keeping down unit costs of production, in the face of strong competition from other fats. Nevertheless this is not always the case. For example Mr. Hugh Darby, the managing director of Van den Berghs, is reported to have expressed the opinion that in times of great difficulty for the margarine industry, with the introduction of government subsidies on butter, any possible sales increase resulting from increased advertising would not cover the extra expense (Sunday Times, February 1975).

Prices

4.8: Through product development and extensive advertising, the industry has partially succeeded in marketing margarine as a product in its own right rather than as an inferior substitute for butter. Nevertheless price is of great importance. This is particularly so when the increased price of margarine, because of higher raw material costs, makes margarine little cheaper than butter in the United Kingdom today. For example, following the introduction of government subsidies on butter in 1973, the share of the yellow fats market held by margarine fell to around 31 per cent. in 1974, compared with 50 per cent. in 1972. The importance of price is further illustrated by the ability of Echo margarine to more or less maintain its share of the market, despite increasing competition from soft tub margarines, by keeping its price low. Two aspects of price need, therefore, to be considered: the average price of margarine relative to that of butter, in that this affects total sales of margarine; and the relative prices of different types and brands of margarine, and their relationship to concentration and competition in the industry. The margarine manufacturers production and marketing policies are however probably well-geared to the long term future price ratios which will obtain when Britain is fully integrated into the Common Market, where butter sells at double the price of margarine.

4.9: The main elements of the producers' costs of manufacture, distribution to retailers and marketing vary between companies and brands. However, the National Board for Prices and Incomes have estimated that a fair average breakdown of costs for branded products in 1970 was as shown in Table 4.3. Oils and ingredients amount to less than half of total manufacturing costs, but around two-thirds of the costs of production. Consequently manufacturers' prices and profits are closely linked with the cost of raw materials, of which oils form the bulk. It is therefore instructive to look at the increase in price of vegetable and seed and fish oils.

4.10: In Table 4.4 are shown the quantities and prices of vegetable and fish oils in 1969, from which it will be seen that marine oil was the major single type of oil used by the UK margarine and compound fat industry in 1969. Between 1969 and 1970 not only was there a significant increase in the prices of all types of oils, but also the range of price differences narrowed. The ability of manufacturers' to obtain a "least-cost mix" of oils and fats by substituting cheaper oils for dearer ones and thereby to hold down the cost of the finished goods, would tend to be limited by this narrowing of price differentials.

4.11: In Table 4.5 are shown the movements in the wholesale price index of vegetable and seed oils, imported and home-produced, prepared by the Ministry of Agriculture, Fisheries and Food for 1968-1974. Between 1968 and 1971, both indices show a rise in the wholesale prices paid, and after a fall in 1972, a rapid increase to a level in 1974 nearly three times higher than in 1970.

4.12: The corresponding changes in the wholesale prices paid by manufacturers for margarine and compound fats are also shown in Table 4.5. Between 1968 and 1971, these prices rose by nearly 64 per cent., and despite a fall in 1972, were 175 per cent. higher in 1974 than in 1968.

4.13: Data are also available since 1970 which distinguish between the wholesale prices of margarine and compound fats, and by domestic or trade use. From Table 4.6 it will be seen that between 1970 and 1971 the wholesale price of margarine for domestic use rose less than for compound fats for domestic use, whereas for trade uses the wholesale price of margarine rose more than that of compound fats. However, between 1970 and 1973 the wholesale price of margarine rose more than for compound fats as far as both trade and domestic use was concerned. By 1974 the increase for trade use was more than for domestic use for both margarine and compound fats and the rise for domestic use was higher in the case of compound fats than for margarine.

4.14: The changes that have occurred between 1968 and 1974 in the average retail prices paid for both standard-quality and lower-priced margarine are shown in Table 4.7, together with those for New Zealand and Danish butter. In 1968 and 1969, the retail prices of the two types of margarine were relatively stable, but they rose sharply during 1970 to an end-year level 20-30 per cent. higher than a year earlier. The increase continued but at a lower rate in 1971, followed by a fall in 1972, only to rise again slightly in the first half of 1973. Thereafter the increase in retail prices was much more rapid. Standard quality margarines rose by one-third in the year to June 1974 and by a further one-third in the next six months. The price- increases for lower-priced margarines were even greater: in the 18 months to end-1974, their prices more than doubled as compared with a rise of four-fifths in the price of standard-quality margarine. The result was that the price-differential between standard and lower-priced margarines which amounted to 2.5 pence per lb. in December 1968 and was still as much as 2.0 pence per lb. in December 1973, virtually disappeared by June 1974 and at the end of 1974 was only 1.2 pence per lb.

4.15: The movements in the average retail prices paid for New Zealand and Danish butter followed a course quite different from that of margarine. Prices were fairly stable in 1968 and 1969, and up to June 1970, but in the next eighteen months the New Zealand butter price rose by three-quarters and that of Danish butter by nearly three-fifths. Even so, at the end of 1971, butter prices were $1\frac{1}{2}$ times higher than those of margarine. Butter prices fell substantially in the next eighteen months to mid-1973, and at that time were only 80-90 per cent. higher than margarine prices. Although butter prices rose in the next 18 months to end-1974 by about one-fifth, the far greater price-increases for margarine meant that the price-difference between the two products was one-fifth or less.

4.16: The range of manufacturers' trade prices for different brands and qualities of margarine, as quoted for minimum quantities, in June 1975 are shown in Table 4.8, with their corresponding prices in December 1969 as given in the report of the Prices & Incomes Board. For the soft margarines produced by Van den Berghs and Jurgens, the trade prices ranged in June 1975 from 23.63 pence per lb. for <u>Stork SB</u> to 30.75 pence per lb. for <u>Flora</u>, and among the packet margarines from 19.79 pence per lb. for <u>Echo</u> to 27.83 pence per lb. for <u>Tomor</u>. Compared with $5\frac{1}{2}$ years earlier, the prices of the soft margarines had risen by around 130 per cent., but the price of the cheapest packet margarine, <u>Echo</u>, had risen by nearly 230 per cent., considerably more than the <u>Stork</u> and <u>Tomor</u> packet margarines. The price of Kraft's <u>Superfine Soft</u> had more than doubled during the same period, but for its <u>Family</u> brand the rise was as high as 167 per cent.

4.17: The changes in the levels of consumption per head of butter and margarine, using National Food Survey data, during the 1968-73 period, and the income-and-price-elasticities of expenditure on the two commodities have already been discussed in Chapter 2, Section 4 of this Study. The introduction of a subsidy on butter in 1973 has kept down retail prices by substantial amounts: in June 1974, the subsidy was equivalent to $5\frac{1}{2}$ pence per lb. and by the end of year, 9 pence per lb.

4.18: In these circumstances, the outlook for the margarine industry is not without its difficulties. In the early 1970s, Van den Berghs and Jurgens drew up a 5-year investment plan at a time when it was anticipated that the United Kingdom's accession to the EEC would accentuate the price-gap between butter and margarine. The escalation in the price of margarine's raw materials, and the subsidy arrangements, have changed the industry's prospects. In 1975, Van den Berghs is revising its investment programme, reducing its factory labour-force of 4,000 by natural wastage, and has announced that it has no intention to launch any new brands of margarine in the near future.

TABLE 4.1

Indication of Brand Shares in the Margarine Trade, 1969, 1972, and 1973

	1969	1972	1973
	%	%	%
Van den Bergh's and Jurgens: Total	80	80	67
Stork	22	24	17
Stork Soft	...	...	11
Blue Band	13	23	22
Summer County	9	5	4
Echo	8	7	6
Flora	...	3	3
Kraft			
Kraft Superfine	5	3	4
Kraft Soft Superfine	...	8	6
CWS			
Co-op	4	5	5
Sainsbury			
Sainsbury	...	4	2
Lovell & Christmas/Standard Brands			
Fresh Fields	-	-	4

Source: IPC Marketing Manuals

TABLE 4.2

Press and TV Advertising Expenditure on Margarine, 1968-73.

£ Thousands

	1968	1969	1970	1971	1972	1973
TOTAL	3,043	3,149	3,076	3,577	4,612	4,880
Van den Berghs						
Stork	1,067	1,011	906	896	896	717
Stork Soft	...	...	69	261	708	784
Blue Band	616	840	871	1,319	1,338	1,259
Summer County	600	586	323	265	263	469
Flora	311	202	238	257	330	278
Outline	112	98	92	203	364	306
Echo	114	45	99	114	125	92
Kraft						
Kraft Superfine	57	273	359	221	48	...
Kraft Soft Superfine	-	-	-	-	399	289
Carousel	-	-	-	-	-	287
Lovell & Christmas/Standard Brands						
Fresh Fields	-	-	-	-	129	280
CWS	3	364	50	39	-	...

TABLE 4.3

Approximate Allocation of Manufacturers' Costs, 1970

Per Cent

	Margarine	Compound Cooking Fats
Oils and Ingredients	43	44
Packing costs	12	5
Factory costs	12	16
Total production costs	67	65
Distribution	7	7
Advertising and promotion	11	11
Total direct expenses	85	83
Allocation of central overheads	15	17
Total Manufacturing Costs	100	100

Source: National Board for Prices and Incomes

TABLE 4.4

Trends in Prices of Oils, 1969 and 1972-74

Type of Oil	1969 Margarine & Compound Fat Usage ('000s Tonnes)	Prices (£/tonne) July 1969	March 1970
Groundnut	11	137	150
Soya	29	86	131
Sunflower	39	94	146
Rapeseed	19	85	-
Coconut	3	140	172
Palm	50	69	110
Fish (Herring)	220*	55	94

* Total for marine oils.

Source: National Board for Prices & Incomes

TABLE 4.5

Wholesale price indices: Prices paid for vegetable and seed oils and for margarine and cooking fats by manufacturers

1970 = 100

	Wholesale prices paid for Vegetable & Seed Oils		Wholesale prices paid for Margarine and Cooking Fats
	Imported	Home-produced	
1968	77.7	79.3	70.5
1969	81.1	84.7	73.7
1970	100.0	100.0	100.0
1971	107.4	105.9	115.6
1972	91.4	96.0	103.8
1973	136.5	145.0	115.1
1974	273.6	286.7	193.6

Source: Ministry of Agriculture, Fisheries & Food.

TABLE 4.6

Wholesale price indices: Domestic and trade use of margarine and compound fats

1970 = 100

	Margarine		Compound Fats	
	Domestic Use	Trade Use	Domestic Use	Trade Use
1971	109.3	116.8	111.4	115.0
1972	111.0	105.7	108.5	102.9
1973	119.3	119.4	116.7	113.0
1974	178.1	196.1	185.4	192.3

TABLE 4.7

Retail prices paid for margarine and butter, 1968-74

	Retail prices				Price indices (Dec.1970 = 100)			
	Margarine		Butter		Margarine		Butter	
	Standard Quality	Lower-priced	New Zealand	Danish	Standard Quality	Lower-priced	New Zealand	Danish
	pence/lb.							
1968								
June	9.5	6.9	16.7	19.2	82	70	92	90
December	9.3	6.8	16.6	19.0	80	69	91	89
1969								
June	9.3	7.3	16.8	19.0	80	74	92	89
December	9.4	7.5	16.8	20.0	81	77	92	94
1970								
June	10.6	8.6	16.8	20.0	91	88	92	94
December	11.6	9.8	18.2	21.3	100	100	100	100
1971								
June	12.8	10.8	24.2	27.6	110	110	133	130
December	12.4	11.0	29.3	31.5	107	112	161	148
1972								
June	12.4	10.6	27.6	28.7	107	108	152	135
December	12.2	10.4	23.7	25.2	105	106	130	118
1973								
June	13.0	10.8	10.4	23.9	112	110	112	112
December	14.8	12.8	21.2	24.3	128	131	116	114
1974								
June	17.4	16.8	22.3	24.9	150	171	123	117
December	23.2	22.0	25.3	29.4	200	224	134	138

Source: Department of Employment.

TABLE 4.8

Trade prices for margarine, December 1969 and June 1975

	Pence per lb. December 1969	Pence per lb. June 1975	Percent. increase Dec. 1969 to June 1975
Van den Berghs & Jurgens			
Soft:			
Flora	12.91	30.75	+ 138
Blue Band	11.66	27.71	+ 138
Summer County	10.20	24.88	+ 144
Stork SB	...	23.63	...
Packet:			
Tomor	9.17	27.83	+ 203
Stork	7.50	21.75	+ 190
Echo	6.04	19.79	+ 228
Kraft			
Superfine	10.83	24.42	+ 125
Superfine Soft	13.54	27.75	+ 105
Family	8.33	22.25	+ 167
Carousel	...	26.50	...
Lovell & Christmas			
Fresh Fields Supersoft	...	26.67	...
Fresh Fields Softy	...	23.83	...

5: CONCLUSION

5.1 The National Board for Prices and Incomes in its 1970 report stated that "as the combined demand for butter and margarine appears to be static, the relatively low price of butter in this country is an important determinant of the level of margarine consumption." Despite the increases in butter prices since 1970, and not solely because of the introduction of a subsidy which has limited those increases in the last few years, butter prices remain relatively low, and indeed the prices of the higher quality margarines are now higher than some butters.

5.2 The level of concentration among margarine producers is very high, with Van den Bergh and Jurgens occupying a dominant position. The level of profits enjoyed by Van den Berghs was described by the PIB as "clearly high", but added that they are, however, "very sensitive to oil prices". Notwithstanding the high level of concentration and high profits at the manufacturing level, the PIB neverthless found that "with no fixed and few recommended prices, and retailers free to charge what they like ... (and) with the large number of different types of retail outlets we are satisfied that there is competition in setting the retail prices for these products."

CHAPTER 8

SUGAR

1: INTRODUCTION

1.1: Any major industry which has been established for over 100 years and is still in existence today, will be expected to have undergone many changes. This is particularly true for the sugar industry in the United Kingdom but what differentiates it, perhaps, from many other industries of comparable scale, (setting aside the Nationalised industries) is the degree of government intervention which the industry has experienced. The role of government and its relationship with the sugar industry was formalised by Act of Parliament in 1936 which provided the basis for the development of the sugar industry as it is today. Besides directly affecting the structure of the industry as between cane-sugar refiners and beet-sugar refiners legislation has also expressly allowed the development of market sharing arrangements, increases in concentration and control over pricing. For this reason, therefore, this Chapter has not confined itself solely to the period from 1968 to 1972 but has included details of the institutional arrangements which have come increasingly to bear upon the industry since the 1930s.

1.2: The UK has also been the beneficiary of a commodity trade agreement; namely, the Commonwealth Sugar Agreement (CSA), which secured supplies of raw cane-sugar, and through the pricing system in operation relatively cheap and stable prices for refined sugar came to prevail up to 1972. The state of the market, in terms of consumption, at this date may be described as static, with domestic consumption having fallen at about 6 per cent. per annum during the ten years prior to 1972, offset by an almost equal rise in sugar used by industry and in the manufacture of food.

1.3: Future developments within the sugar industry are far less certain today since the United Kingdom's membership of the European Economic Community came into being on 1st January 1973. Nevertheless, with the ending of the CSA in 1973 and an EEC policy which favours sugar-beet production, some change in structure and perhaps concentration should be contemplated.

2: INSTITUTIONAL BACKGROUND AND DEVELOPMENTS IN THE UK SUGAR INDUSTRY

2.1: The sugar industry in the United Kingdom has evolved around the development of two distinctly separate sources of supply; namely, that based upon domestic sugar-beet production, and that requiring inputs of imported raw sugar-cane. The development paths of these two sectors of the industry have not been without friction, particularly prior to the Sugar Industry (Reorganisation) Act of 1936 and the establishment of the British Sugar Corporation Ltd.

2.2: The sugar-beet industry in the UK has been characterised by Government assistance virtually since its inception during the early 1920s, the promotion and development of the industry having been formalised by Act of Parliament. Prior to 1925 the industry had been struggling to establish itself in the face of competition from the refiners of imported raw cane-sugar and the first case of help given to the industry by the British Government is stated by Harris and Smith * to have been in 1922, as a means of reducing dependence on imported supplies. In 1926 a subsidy was granted for a period of ten years along the lines of fostering an infant industry, the intention being that after such time the industry would be firmly established. Indeed, the effect of the subsidy was to encourage growers and new enterprises to enter the industry; between 1925 and 1927 some thirteen new beet factories were established, with the result that home produced raw sugar increased from 24,000 tons in 1924-25 to 615,000 tons by 1934-35.

2.3: Whilst the 1926 subsidy was intended to be temporary, this was not to be the case. Between 1924 and 1934 world sugar prices became depressed below production costs and cane-sugar came to be produced at prices with which no beet-sugar industry could compete. The subsidy during its first ten years of operation cost the Exchequer some £10m. in payments to factories and a further £10m. in differences between excise and customs duties[+]. Thus, the question arose as to whether the cost of maintaining a home sugar-beet industry was desirable, and a committee of inquiry was set up in 1934.[Ø]

2.4: The decision to continue with the investment of public funds in the UK beet industry was perhaps related to more far ranging issues of the day; namely, maintenance of employment during the depression years of the 1930s, together with diversification of regional employment opportunities. The agricultural employment offered by the beet industry was important in depressed rural areas and the location of the beet factories in the UK came to be strategically sited so as to give maximum unemployment relief rather than to minimise the costs of getting

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* S. Harris and I. Smith. "World Sugar Markets in a State of Flux". Trade Policy Research Centre. Agricultural Trade Paper No. 4. February 1973.

\+ R.W. Evely "The British Sugar Corporation - Private or Public Monopoly". Cartel. Vol. II. July 1951 - April 1952.

Ø Report of the UK Sugar Industry Inquiry Committee, 1935. HMSO Cmnd. 4871.

beet to the factories. Thus it was that the Sugar Industry (Reorganisation) Act, 1936, established the British Sugar Corporation Ltd. (B.S.C.) and formalised the Government's control over the continuing operations and subsidy payments to the beet industry.

2.5: The price of continued Government assistance to the beet industry was the amalgamation of the 15 beet companies and 18 beet factories (at that time) into the British Sugar Corporation Ltd. This allowed a greater degree of control to be exercised over the administration of the subsidy which was to be kept to a minimum. Prior to the 1936 Act the subsidy had been paid to beet factories in relation to their production, but after the Act B.S.C. became the monopoly buyer of beet and it was to the B.S.C. that Exchequer payments were made in respect of raw sugar produced each year. To prevent the claim on public funds becoming excessive the maximum annual quantity of raw sugar B.S.C. Ltd. could produce was limited to the equivalent of 560,000 tons of white sugar.

2.6: The 1936 Act also provided for the establishment of the Sugar Commission to oversee the growing, production and marketing of home produced sugar in the UK. It was the Sugar Commission's annual task to decide the contract price to be paid to beet growers and the subsidy to be paid to the B.S.C.s factories, after consultations with both parties.

2.7: One of the first instances of friction between the two sectors of the UK sugar industry arose over the engagement of the beet factories in refining their own output of raw beet-sugar. This led the refiners of imported raw cane-sugar to complain of competition and in 1928 they received an adjustment of duties which increased the tariffs on imported refined sugar and favoured the refining of cane-sugar whilst making it less economic to refine beet. The result was that beet factories turned to the refining of imported raw cane-sugar and the competition between cane refiners and beet factories became increasingly acute. Severe price cutting followed, led by the cane refiners who lowered the price of refined sugar as an inducement for the beet factories to limit their operations to producing only raw sugar beet. By 1932, price reductions had so narrowed the refining margin that some of the beet factories were in danger of not being able to continue operation without further assistance.

2.8: To avoid further confrontation between the two sides of the sugar industry and the risk of beet factory closures the Ministry of Agriculture in 1933 succeeded in persuading the two sides to sign an Industrial Agreement. This Agreement allotted to the beet factories an annual production quota of 500,000 tons of refined white sugar, representing at that time just over one-quarter of refined sugar consumed in Britain. With the market for refined sugar effectively shared out between the beet factories and the cane refiners, the adjustment to duties obtained by the latter in 1928 placed them in a relatively favourable position. This was recognised by the 1936 Act which also provided that the cane refiners should pay B.S.C. what was in effect a subsidy, in respect of limitations imposed on B.S.C.'s refining operations. Thus, part of the subsidy to the beet industry was borne by the cane refiners themselves, reducing the total to be paid out by the Treasury.

2.9: The division of the refining trade in the proportions laid down by the 1933 Agreement were confirmed by the Sugar Refining Agreement of 1937. These proportions allocated fourteen-nineteenths of annual refined sugar output to the cane-sugar refiners and the balance to the British Sugar Corporation Limited. Where the B.S.C.'s production of raw sugar would produce more than its refined sugar quota such excess was to be transferred for refining to the cane-sugar refiners. In fact, this transfer amounts to between 200,000 and 250,000 tons of B.S.C.'s raw sugar, per annum. The refining quotas were devised so that the B.S.C. should have an assured and orderly market for its sugar production from the acreage authorised each year at the Farm Price Review. In addition, the Agreement directs that the B.S.C. should sell its refined sugar ex-factory at the same price charged by the cane refiners ex-factory, so that although consumers in different part of the UK will be in the distribution areas of either B.S.C. or the refiners, the retail prices will roughly be the same in all areas. These limitations on the B.S.C.'s activities were maintained by the Sugar Act 1956 and continued until the UK's entry to the European Economic Community.

2.10: At the outbreak of the First World War some 53 per cent. of the UK's sugar supplies were provided by Germany and Austria. As part of the UK government's policy to reduce dependence on foreign (i.e. non-Commonwealth) sugar, Commonwealth producers of sugar-cane were granted tariff preferences in 1919. During the Second World War, sugar was bought from the Commonwealth countries on long-term contracts which provided the formal basis for the Commonwealth Sugar Agreement (C.S.A.) of 1951*.

2.11: Besides securing long-term supplies of sugar for the UK industry the Commonwealth Sugar Agreement also has the twin objectives of encouraging development of the sugar industries in the Commonwealth producer countries as well as an orderly marketing system for the commodity. The C.S.A. allows the UK to buy a set quota of raw cane-sugar each year from the member countries at fixed prices, which are determined triennially and known as 'negotiated price quotas' (N.P.Q 's). Basically, the price consists of two elements of which the

* Signatories to the Agreement are:- Australia, the West Indies and Guyana, Mauritius, Fiji, East Africa, British Honduras, India and Swaziland. The Southern Rhodesian quota and membership has been suspended since 1965.

first is common to all territories. The second element is a special payment, calculated annually, which specifically recognises the dependence of the less developed economies on exports and the consequences for them when the world price* is depressed. In addition, the UK cane-refiners maintain an undertaking first given in 1919 to accept Commonwealth sugar when it is offered to them even when this exceeds the set quota tonnage. The difference between total UK requirements and supplies obtained from the Commonwealth countries is made up by purchases on the world market, at world prices.

2.12: The sugar refining quotas established under the 1937 Agreement, which legally provided for the division of the retail sugar market between the B.S.C. and the cane refiners, were maintained by the Sugar Act of 1956. This Act replaced the Sugar Commission with the Sugar Board to implement the British government's responsibilities to sugar producers, both cane and beet. The main functions of the Sugar Board are threefold; namely

"(a) to pay the B.S.C. the amount necessary to cover the deficit (or to receive a surplus, if any) occasioned by the Corporation having to buy domestic beet at the government set price, yet having to sell the sugar refined from the beet at an equivalent price ex-refinery to the cane refiners;

(b) to act as the agent of the British government in the discharge of its contracted obligations to buy Commonwealth sugar at the negotiated price and then resell the sugar world prices;

and (c) to fund the deficits involved in the Board's purchase of C.S.A. sugar and the B.S.C.'s deficits, through a surcharge on all sugar for human consumption entering the British market (including the B.S.C.'s production) sufficient for it to balance its revenue account."+

The Board therefore acts as a quasi-government agency buying beet and cane sugar at negotiated contract prices and selling to refiners at world prices. Thus, when the contract prices are above world prices the Sugar Board incurs a deficit and in consequence places surcharges upon the refiners to compensate. This has been the situation during most of the ten years from 1963. If, however, the world sugar price moves above the contracted prices, the Board receives a surplus, then it makes distribution paymentson all sugar sold in the United Kingdom. The rates of surcharge and distribution payments vary inversely according to movements between the world sugar price and UK contract prices.

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* The world price is the London Daily Price (LDP) and "is a 'spot' price, published at 11 a.m. on each market day by a Committee of the United Terminal Sugar Market Association, for raw sugar of 96^{o} polarisation, c.i.f., UK, bulk basis, free out, for shipment over a period extending between six and ten weeks ahead." Sugar Board, 16th Annual Report.

\+ S. Harris and I. Smith op.cit. Page 20.

2.13: Having now outlined the institutional arrangements which have influenced the development of the UK sugar industry the remainder of this section documents the firms engaged in the trade and how their numbers have changed over time.

2.14: Mention has already been made of the formation of the B.S.C. in 1936. Prior to this, however, the first beet-sugar factory was set up in England at Cantley in Norfolk in 1912 by Dutch interest, but it was not a commercial success. A second factory was constructed in 1921 and after the government subsidy scheme was announced in 1926 a further 16 factories were established, mostly located in the producing areas of eastern England. Thus, when B.S.C. was established there were eighteen factories and these were still operating in 1971.

2.15: The principal sugar refining company in the United Kingdom today is Tate & Lyle Ltd., and it has held this position since at least 1935. Tate & Lyle were formed in 1921 by the merger of the family businesses of Henry Tate and Sons and Abraham Lyle and Sons. In 1929 they went on to acquire Farrie and Company as well as a controlling interest in the Greenock (Scotland) firm of John Walker and Company. Setting aside the British Sugar Corporation, there were seven other firms that were independent sugar refiners in 1935, namely, Westburn Sugar Refiners, Macfie and Sons, Sankey Sugar Company, the Glebe Sugar Refining Company, Martineaus, the Merton Grove Company, and Manbre and Garton Ltd.

2.16: From 1938 onwards a series of mergers and acquisitions ensued, which began in that year with Tate & Lyle's purchase and subsequent closure of the Macfie and Sons' refinery at Liverpool. In that same year, Manbre and Garton obtained control of the Sankey Sugar Company, whilst Tate & Lyle and Westburn Sugar Refiners together took joint control of the Glebe Sugar Refining Company. By 1952, Glebe Sugar was fully under the control of Tate & Lyle. The last recorded merger in the sugar refining trade was in 1965 when Manbre and Garton acquired Westburn Sugar Refineries, their previous acquisition being that of Martineaus in 1959. Thus, the UK sugar refining trade has passed into the control of three companies; that is, Tate & Lyle Ltd., the British Sugar Corporation Ltd., and Manbre and Garton Ltd.

3: STRUCTURE AND CONCENTRATION

3.1: The previous section of this report has made it clear that the role of government has played a significantly active part in the development of the United Kingdom sugar industry. This role has been embodied in two Acts of Parliament which have had a direct effect on both structure and concentration in the industry since 1935; namely, the Sugar Industry (Reorganisation) Act, 1936, and the Sugar Act of 1956. For this reason, therefore, information on the industry for both 1935 and 1951 has been included providing a suitable background for considering more recent developments, und for this purpose we are able to draw upon the researches of Evely and Little * undertaken on the sugar industry between 1935 and 1951.

3.2: The sugar industry in the United Kingdom corresponds to minimum list heading 216 of the 1968 Standard Industrial Classification. The definition of the industry has remained unchanged since 1963 and relates to establishments engaged wholly or mainly in the manufacture or refining of sugar, syrup and treacle, molasses and invert sugar. However, the industry in 1935 and 1951 also included the manufacture of glucose (since 1958 statistics on this industry have been included in the Starch industry) and this distinction must be borne in mind when making comparisons with data from 1963 onwards.

3.3: Trends in the structure of the industry for selected years between 1935 and 1972 are shown in Table 3.1. Whilst it is apparent that a number of new enterprises and establishments entered the trade between 1935 and 1951 the trend since 1963 has been for a decline in the number of both these units and plants. The number of enterprises classified to the industry fell from 19 in 1963 to 15 in 1972, or by 21 per cent. During this same period, the number of establishments declined by 41 per cent., or from 44 in 1963, to 26 in 1972. There are, however, marked differences between the rates of decline in the number of enterprises as compared with establishments. The number of enterprises in 1963 at 19, was only 3 less than that recorded for the Sugar and Glucose industry in 1935, and a steady reduction by a further 4 enterprises was achieved over the 10 years to 1972. The number of establishments, on the other hand, experienced a dramatic decline in numbers, in particular after 1970 when their number fell from 41 to only 27 two years later. This trend exemplifies the rationalisation which the industry has undergone as well as having implications for the ownership and control of establishments by enterprises.

3.4: During the twenty-one years between 1951 and 1972 the value of gross output (at current prices) increased two-and-a quarter times compared with net output which increased by almost three

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* R.W. Evely and I.M.D. Little. Concentration in British Industry. Cambridge University Press, 1960.

and three-quarter times. However, during the ten years from 1963 gross output and net output increased by 30.7 per cent. and 84.2 per cent.,respectively. Whilst for most industries the magnitude of difference between the values of gross and net output is comprised primarily by the cost of purchases, there is a special factor to be taken account of in the sugar industry; namely, the annual value of the sugar Board surcharges or distribution repayments. The incidence of these vary according to the relationship between the world price for raw sugar and the contracted price being paid by UK refiners and beet producers. Thus, in both 1963 and 1972, with the world price exceeding the UK contract price arrangements with both cane and beet sugar producers the industry received payment from the Sugar Board. This may perhaps explain the fluctuations in both the differences between gross and net output, and in net output itself. Even so, the cost of purchases betweeen 1963 and 1968 rose by some 26.5 per cent. whilst they increased by 43.4 per cent. between 1971 and 1972 alone.

3.5: The increase in the number of establishments and enterprises in the industry between 1935 and 1951 brought with it a commensurate increase in employment, in the order of 2,250 persons. Since this time, however, a considerable reduction in employment has been achieved even when allowing for the removal of the glucose trade from the post-1963 Census industry definition. During the thirteen years between 1951 and 1963 employment declined by 2,850 and as rationalisation continued within the industry during the next five years the labour force was reduced by a further 900 persons. For the four years between 1968 and 1971 the annual rate of decline in employment in the sugar industry was equivalent to some 575 jobs per annum, bringing the number of persons in employment in the industry in 1971 to 12,700, a level at which it remained in 1972.

3.6: In line with the reductions of manpower achieved by the industry have been increases in labour productivitiy as measured by the value (at current prices) of net output per head. The significant increases in net output and reductions in the labour force have combined to raise net output per head in 1963 from £2,350 to £3,984 in 1971 and to £5,406 in 1972. These figures compare with that of £984 per head derived from Evely and Little's study for 1951.

3.7: The British Sugar Corporation Ltd. was legally constituted by the Sugar Industry (Reorganisation) Act of 1936 to be responsible for the production and marketing of refined sugar from indigenous sugar beet sources. It is fortunate that the 18 establishments which comprise this one enterprise may be separately identified within the Census of Production statistics for both 1963 and 1968. Thus in Table 3.2, is presented data on the larger establishments (employing more than 25 persons) producing beet sugar on the one hand, and engaged in "other sugar" production, on the other. The most salient feature to note from this table is the degree to which the performance of the beet industry is at variance with that for larger establishments in the industry as a whole, as well as with "other sugar" manufacturing. The figures for 1951 are, again, derived from Evely and Little's study and demonstrate how in that year the value of net output per head for both the "other sugar" sector and all larger establishments exceeded the value of that factor for the beet sugar industry. However, in both 1963 and 1968 net output per head in the beet industry exceeded the average values for all larger establishments as well as being greater than the values recorded for the "other sugar" sector. The value of gross output declined between 1963 and 1968 for both sectors of the industry, yet the fall was only 0.9 per cent. for beet sugar, compared with 5.0 per cent. and 3.8 per cent. for "other sugar" and all larger establishments, respectively. In terms of net output, the 1963-68 increase was 20.9 per cent. for all larger establishments, 11.6 per cent. for "other sugar", and a little under 40 per cent. for beet sugar. These differences in the pattern of structural development of the two sectors of the sugar industry are no less well defined when looking at employment. Here, employment in the whole industry was reduced by around 900 jobs between 1963 and 1968 being the net result of a decrease in the "other sugar" sector of 1,200 jobs, as against an increase in employment in the beet sugar industry of 300 jobs. There are, therefore, notable differences between the two sectors of the sugar industry, and what Table 3.2 exemplifies, perhaps, is that increases in productivity between 1963 and 1968 were attained through rationalisation of establishments and enterprises in the private sector whilst in the quasi-public sector such increases were achieved through more efficient utilization of plant and capital.

Plant and Enterprise Size

3.8: An inverse relationship between average plant size (measured as the average number of employees per establishment) and average size of enterprise (measured as the average number of establishments per enterprise) can be discerned for the 1935 to 1972 period. This pattern is set out in Table 3.3 and shows that between 1935 and 1968 average plant size declined from 384 persons to 357, whilst the average size of enterprises increased from 1.95 to a peak of 2.6 in 1968. Indeed, this pattern was identified by Evely and Little * for the Sugar and Glucose trade between 1935 and 1951 and they commented that, "a rise in plants per unit has, in other words, more than offset the fall in average plant size. Thus, despite an influx of new concerns operating on a small scale, the largest concerns have been able to increase their share of the trade by increasing the number of plants they

* Evely and Little op. cit. Page 170.

operate." It appears reasonable, therefore, to apply this interpretation for the duration of the period up to 1968. After 1968 however, the industry experienced considerable rationalisation in the number of establishments which declined at a much faster rate than the decline in total employment. The effect of this most recently recorded development is reflected in the average number of establishments per enterprise having fallen to a factor of 1.7 in 1972, whilst average plant size increased to 490 persons in that same year.

3.9: The average size of enterprises, as measured in terms of employment, is also shown in Table 3.3, and increased to a peak of 938 persons in 1968. This is what one would expect to see given that the average number of establishments per enterprise rose during the same period and is indicative of merger activity during this period. By 1970 the number of employees per enterprise had fallen considerably but subsequently revived to 846 in 1972.

Employment-size Distribution

3.10: The Census of Production also provides information on structure on the basis of employment size groupings for both establishments and enterprises, and this analysis for establishments is set out in Table 3.4 for 1968, 1970 and 1972. It is evident from each of the selected years presented in Table 3.4 that in excess of 95.0 per cent. of total employment and gross and net output is concentrated within establishments employing in excess of 100 persons. With the notable exception of 1970, net output per head in establishments employing more than 100 persons has exceeded other sectors of the industry as well as the value for the industry as a whole. In 1970, net output per head was greater amongst establishments in which up to 99 persons were employed. The employment size group analysis for enterprises in 1963 and 1968 is provided in Table 3.5 which shows that the larger enterprises (employing more than 25 persons) accounted for the bulk of employment and net output. Net output per head in larger establishments was equivalent to £3,000 per head in 1968, compared with £2,345 per head in 1963.

3.11: It was noted in paragraphs 3.8 and 3.9 how the decline in the number of establishments since 1968 had raised the average number of persons employed per establishment by 1972. In Table 3.6 is presented an analysis of this trend in relation to the employment size groupings of establishments, which demonstrates furthermore that the reduction in establishments has taken place within establishments where more than 100 persons are employed, thus raising the average numbers employed in such establishments from 573 in 1968 to 1,729 in 1972.

Sales of Principal Products

3.12: After allowing for a small (less than 1 per cent.) proportion of sugar industry sales made by establishments classified to other industries, the value of sales of principal products declined from £220.8 m in 1963 to £216.4m in 1968, but recovered to £309.7m in 1973. All these sales values are at current prices and a detailed breakdown is provided in Table 3.7. Of total sales of principal products made by the larger establishments classified to the industry in 1963, some 88.4 per cent. of the value is accounted for by sales of either raw or refined sugar. By 1968, this proportion had declined to 86.6 per cent. and compares with the findings of Evely and Little for the Sugar and Glucose trade in 1935 and 1951 of 85.0 per cent. and 80.0 per cent., respectively.

Concentration

3.13: Whilst the immediate effect of sugar legislation in 1936 was to formalise the structure of the industry as between cane sugar refiners, on the one hand, and beet sugar producers on the other, the concomitant effect was an immediate increase in the level of concentration. This rise in concentration was the inevitable result of the government sponsored horizontal mergers which reduced the 15 beet sugar enterprises into the single British Sugar Corporation Ltd. Furthermore, in allocating the refining quotas between B.S.C. and the cane-sugar refiners, the foundations were laid for the encouragement of acquisitions as a method of expansion and a consequent rise in concentration.

3.14: A convenient point at which to begin a study of the evolution of concentration in the sugar industry is with the refining quotas established by the 1936 Act, which enables the relative importance of firms in the trade at that year to be assessed. As can be seen from Table 3.8, the British Sugar Corporation was allocated 26.3 per cent. of the annual production of refined white sugar. Tate & Lyle's quota , taken together with Walker's which it took over in 1929 totalled 58.6 per cent. and is indicative of that company's dominance in the trade as early as 1936. However, if one sets aside the beet industry, then Tate & Lyle's (including Walker's) share of the cane-sugar based refining industry becomes 79.7 per cent., with the balance shared mainly by five other companies. The next most important quota was that allocated to Westburn Sugar Refineries, being 4.2 per cent.

3.15: Using the simplifying assumption that the B.S.C. Ltd. was formed one year earlier than it in fact was, Evely and Little * derived a three-firm concentration ratio for 1935 based on the value of gross output. The ratio they determined was around 80 per cent., of which B.S.C. comprised 24.5 per cent., Tate & Lyle 50-55 per cent. and Westburn 4.0 per cent. Increases in concentration after 1936 were achieved through merger and take-over activity which allowed acquisition of the purchased company's sugar refining quota. By 1952, Tate & Lyle had acquired Macfie, Walkers and Glebe together with their combined refining quotas of 9.3 per cent. taking Tate & Lyle's aggregate share of the basic tonnage to 64.5 per cent. Evely and Little's * estimate of the three-firm gross output concentration ratio for 1951 is 88 per cent. with B.S.C.'s share at 22.5 per cent., Tate & Lyle 62 per cent. and Westburn 3.5 per cent.

3.16: Other measures of concentration derived by Evely and Little for the Sugar and Glucose industry between 1935 and 1951 were, that on a three-firm basis, net output and employment increased from 62 to 82 per cent. and 71 to 84 per cent., respectively. These same measures of concentration may be determined from the Enterprise Tables of the 1968 Census of Production. The three firms to which they relate may confidently be identified as Tate & Lyle, B.S.C. Ltd., and Manbre and Garton, and they were responsible for 97.8 per cent. of net output and 90.6 per cent. of total employment in 1968. Comparison of movements in these two factors since 1935 indicates the increase in the relative productivity of the three largest units.

3.17: Mergers and take-overs continued in the sugar industry beyond 1951, when Manbre and Garton Ltd. added Martineaus (1959) and Westburn Sugar (1965), to their acquisition of Sankey Sugar achieved in 1938. Hart, Utton, and Walshe + list the top five firms in the sugar industry in 1958 as being Tate & Lyle, B.S.C., Manbre and Garton, Westburn and Martineaus, and "probably in that order." This same source indicates the five firm sales concentration ratio for 1958 to have been 97.5 per cent. increasing to 98.6 per cent. in 1963 after the Martineau take-over, and to 99.3 per cent. in 1968, after the Westburn take-over. The take-over of Westburn in 1965 allowed a fifth firm to enter the denominator of the concentration ratio, which Hart, Utton and Walshe have determined as being engaged in the production of icing sugar and only accounting for some 1.1. per cent. of industry sales.

3.18: Thus, the various measures described show the sugar industry to be highly concentrated.

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* <u>Evely and Little</u> op. cit. Page 246

\+ <u>Hart, Utton and Walshe,</u> "Mergers and Concentration in British Industry."

4: PRODUCTION, TRADE AND CONSUMPTION

4.1: Annual production and disposals of sugar refined in the UK are set out in Table 4.1, for the period 1962 to 1973. As with all agricultural commodities, annual supplies for consumption are subject to adverse conditions at the producer end of the market. This is perhaps no better exemplified than by the UK beet crop which declined from a peak production level of 1.017m tons of sugar (refined white equivalent) in 1972 to only 0.823m tons one year later. Nevertheless, production of refined sugar from the domestic beet crop has since 1962, at least, been on an upward, though fluctuating, trend. On the other hand, production of refined sugar from imported raw cane sugar has, since a peak output was achieved in 1963 of 2.398m tons, been on a downward fluctuating trend. The net effect upon total output of refined sugar in the UK has been one of fairly minor oscillations in annual output, with total volume in 1973 being only some 150,000 tons less than the peak output attained in 1963.

4.2: Table 4.1 also shows that of total annual refined sugar supplies available for the UK market the proportion being consumed either directly as sugar or in the manufacture of food products has varied between 85 per cent. and 93 per cent. with the balance going for industrial uses.

4.3: The increasing relative importance of domestic beet sugar production in total supplies of UK refined sugar is also apparent from Table 4.1. In 1962, some 74.8 per cent. of sugar refined in the UK was derived from imported cane-sugar supplies, leaving 25.2 per cent. to come from domestic beet refining. By 1972, however, the beet crop contributed 34.5 per cent. of domestically refined sugar. Not unreasonably, this situation coincided with a 'bumper' year for the home beet crop, for beet's share the following year fell back to 27.8 per cent.

4.4: Supplies of raw sugar reaching the refining industry are in the main provided under contractual arrangements; namely, the British Sugar Corporation's annual contracts with beet farmers in the United Kingdom, and with the producer countries of raw cane-sugar, under the trienially negotiated Commonwealth Sugar Agreement. Whilst these two contracts may not provide for total UK requirements in any one year, (the balance being found on the "free market") the situation had been reached in 1972 whereby these contracts provided 97 per cent. of raw sugar supplies. This situation is clearly demonstrated in Table 4.2 which shows that 'contracted' raw sugar for the UK grew from 89 per cent. of total requirements in 1962 to the level of 97 per cent. in 1972, the balance of 11 per cent. and 3 per cent. being found on the "free market" in 1962 and 1972, respectively. Table 4.2 further indicates the emergence, since 1962, of home grown sugar beet in providing an increasing share of raw sugar requirements.

4.5: Notwithstanding the emergence of the refined beet sugar contribution to total production, around 70 per cent. of refined output is dependent upon imports of raw cane-sugar. The volume of these imports is set out in Table 4.3 for the years 1962 to 1973. Although the annual volume of these imports has not varied too widely, year by year, the overall trend during the period has been downwards since having peaked at 2.4m tons (raw value) in 1963. Nevertheless, 1973's imports were only 45,000 tons less than the tonnage imported in 1962.

4.6: Data on United Kingdom exports of refined sugar are set out in Table 4.4. The pattern here is that in 1972 and 1973 the tonnage exported began to increase after having declined in each year since reaching a peak of 437,000 tons in 1964. During this peak year the amount exported represented 14.6 per cent. of all sugar refined in the UK, falling to 6.5 per cent. in 1970, and recovering to 11.5 per cent. in 1973. The destination of these exports has primarily been to Switzerland, Nigeria, Tunisia, and Norway.

4.7: Imports of refined sugar, also set out in Table 4.4, do not constitute a particularly significant part of total refined sugar supplies (i.e. domestically produced plus the imports themselves). In 1966 they amounted to 1.7 per cent. of all UK supplies and grew in both absolute and relative terms to 2.9 per cent. by 1972. In the main, these are comprised of speciality sugars, such as demerara.

4.8: Consumption of domestically refined sugar is set out in Table 4.5 by end-use for the period 1962 to 1973. Purchases of sugar through retail shops for domestic use have declined in volume terms by 20.7 per cent. since 1963. Similarly, sugar consumed for industrial purposes has, over the long term since 1963 declined by 16.7 per cent. in volume, although a revival in absolute terms has been experienced since 1971. On the other hand, consumption of refined sugar for use in food manufacturing increased by 16.1 per cent. between 1963 and 1973. It should be noted that Table 4.5 excludes imports of refined sugar, the level of which represents a very minor proportion of total consumption. However, the final consumption pattern for sugar from all sources together with imported refined sugar and sugar content of imported food stuffs is summarised in Table 4.6 and compared to sugar purchased as such. Thus, sugar consumption from all sources, but excluding imports, has declined from 134.9 lbs. per head in 1963 to 118.6 lbs. per head in 1973, or by 12 per cent.

4.9: Information presented within the National Food Survey * on domestic consumption, expenditure and prices paid for sugar exemplifies the underlying downward trend in consumption at this point of use, and are produced here as Table 4.6. Thus, annual per capita consumption of retail sales of sugar has declined from 60.1 lbs. in 1963 to 44.5 lbs. in 1973. During this same period, average prices paid per lb. rose from 3.79p. to 4.87p., with annual per capita expenditure having declined from £2.28 in 1963 to £2.17 by 1973. Against the changing pattern of per capita consumption and prices paid, average annual household expenditure on sugar, as indicated in Table 4.7 was less in absolute terms in 1973 than it was in 1963; that is £6.24 compared to £6.50.

4.10: Changes in the real value of sugar purchases are shown by the series of indices on prices and expenditure set out in Table 4.8. Thus, against a base year of 1963, the price index for sugar in 1973 was 128.4 compared with that for expenditure of 96.7, pointing to the real value of sugar purchases being only 75.3 in 1973. From the various annual reports of the National Food Survey the long term trend in the real price of sugar may be discerned. In real terms, the average price of sugar increased between 1962 and 1963 by 8 per cent. Over the longer term, 1963-67, the average price in real terms declined by 17 per cent. and this was maintained during the 1966-70 period with a fall of 12 per cent. The 1967 report of the National Food Survey concluded that the price elasticity for sugar "is virtually zero over a range of prices encountered during the last few years", and this was further substantiated from evidence over the 1966-72 period with the decrease in purchases in 1972 being mainly a continuation of a downward trend in underlying demand. The zero price-elasticity for sugar may be gauged from recent experience when the average price between December 1971 and February 1972 rose from 4.6 pence per lb. to 5.4 pence per lb. During March 1972 the government introduced a consumer subsidy on the product bringing the price down to 4.5 pence per lb., remaining at this price in real terms during the rest of the year. However, during the first two months of 1972 when the price was rising, purchases also increased, only to fall in March when the price was lowered. The weakening in the underlying demand for sugar can also be implied from data on income elasticity of demand for sugar, for though this factor is slightly negative, the decline in purchases between 1963 and 1967 was much greater than would have resulted from the growth in real incomes. Data on price and income elasticities for domestic sugar purchases are contained here in Table 4.9.

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* Household Food Consumption and Expenditure. A Report of the National Food Survey Committee. M.A.F.F. HMSO (published annually).

5: MARKETING, DISTRIBUTION AND PRICES

5 1: The provisions of the sugar legislation that has been made since 1936 also relate to aspects of marketing, distribution and price and for this reason it is convenient to consider these topics under one heading.

5.2: As with production, the marketing system for refined sugar in the UK is effectively determined by Government under the auspices of the Sugar Board, and it is the refining quotas confirmed by the 1956 Act in particular which have enabled the market in retail sugar to be legally divided between the cane refiners, on the one hand, and the beet-refiners, on the other To the extent that merger activity has taken place within the industry this market sharing arrangement "which expressly disallows the operation of the law on the restraint of trade",* has resulted in the emergence of regional monopolies within the UK which primarily reflect the location of individual company's refining capacity, with particular regions being dominated by one or other of the three major producers. In general terms, the regional markets are demarcated by a line drawn from Colchester to Birmingham, Leeds and Edinburgh. South and west of this line is Tate & Lyle territory; to the east and north is that of the British Sugar Corporation Ltd., whilst Manbre and Garton (under the brand name of Sankey in England and Westburn in Scotland) operate in north-west England and Scotland. From the point of view of competition, the 1956 Act has meant that in England and Wales, Tate & Lyle and B.S.C. Ltd. compete with Manbre and Garton but not with each other, whereas, in Scotland, Tate & Lyle competes with Manbre and Garton but neither competes with B.S.C. Ltd.

5.3: The national pattern of shares in the retail sugar market is set out for selected years in Table 5.1, and indicate the dominance of Tate & Lyle in this market. The increasing share of the market attained by Manbre and Garton over recent years may be attributable to their entry into the "own-branding" business as they supply the Sainsbury and Safeway own-brands of sugar in their respective chains of supermarkets. However, the regional pattern of market shares outlined in Table 5.2 presents a somewhat different picture. The dominance of Tate & Lyle which operates in all regional markets is evident and is in contrast with the other two refiners whose operations are confined in the main to particular regions. It may not be too irrelevant to point out that perhaps the sheer weight of sugar, which must figure as a significant factor in distribution costs, serves to reinforce this regional monopoly situation, particularly when the location of refining capacity is borne in mind.

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* S. Harris and I. Smith. op. cit.

5.4: Some 93 per cent. of retail sales of sugar are of the granulated type (and of these 98 per cent. are sold in traditional 2 lb. packs) with the balance being comprised of sales of speciality sugars; that is, caster, demerara, icing, and cube. According to Mintel * sales of speciality sugars average around 80,000 tons per annum, with the market divided as follows: caster, 40 per cent., icing 25 per cent., demerara, 20 per cent., cube, 10 per cent., and others 5 per cent . Sales of speciality sugars are buoyant in the South of England and particularly in London where granulated sales are relatively lower. Both caster and icing sugars are used in home baking and for cake fillings and topping. Demerara sugars comprise a large proportion of imports and are marketed in the UK by Whitworths and Berisford under the latter's "Haven" brand. Cube sugars, which one source indicates to be a French invention, are regularly bought by 10 per cent. of households for use in sweetening tea and coffee. Other types of speciality sugars are coloured coffee crystals and preserving sugar.

5.5: Whilst white refined granulated sugar for domestic consumption is an homogenous commodity lending itself to product differention, through heavy competitive advertising expenditure, this has not been the case. This is primarily the result of the market sharing arrangements, which to a large extent have provided guaranteed markets, as well as the fact that there has been little point in promoting granulated sugar when there has been at best adequate supply and at worst severe shortage. What advertising there is tends to be concentrated on speciality sugars for these offer higher margins to both refiner and retailer. Levels of advertising are therefore relatively low by comparison with other fast moving packaged consumer goods; for example, Tate & Lyle spent £68,000 in 1968 and Retail Business+ commented in 1970 that apart from this there appears to be no other advertising of sugar. A considerable proportion of Tate & Lyle's advertising expenditure is on the promotion of its corporate image rather than just sugar and is allied to the Mr. Cube anti-nationalisation campaign.

5.6: It should be noted that levels of advertising of retail sugar revived in 1973 and coincided with the United Kingdom's entry into the EEC. Briefly, the effect of EEC entry on the UK sugar industry was to end the regional monopoly situation and to promote competition. Thus it was, that B.S.C. Ltd. began to promote its "Silver Spoon" brand of sugar, not only in its traditional marketing areas but elsewhere as well, and during 1973 they spent some £150,000 on advertisements, followed by £100,000 in 1974. Tate & Lyle's reaction was to step-up its successful on-pack promotions begun in 1971, offering gifts in exchange for tokens.

5.7: The distribution of refined sugar is undertaken by sugar brokers, who buy in bulk from the refiners and sell to retailers, sugar

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* Mintel, April 1975.

\+ Retail Business. No 144 February 1970.

millers and food manufacturers The documentation and administration of orders is handled by the brokers but sugar is actually delivered by the refiners themselves, who operate large transport fleets, either in bulk to industrial users or in multiples of one-hundredweight sacks of standard 2 lb retail packs. The main sugar dealer is S. & W. Berisford, who recently merged with its main competitor, Sinclair, Kemp and Lee, and these two between them distribute 50-60 per cent. of retail sugar sold. Edward Billington and James Budgett are the next most important dealers handling about 20 per cent. of retail sugar with the balance being dealt with by five other brokers. The one notable exception to this method of distribution is the Co-operative Wholesale Society (CWS), to whom the refiners sell direct.

5.8: The relationship between the average annual cost per ton of sugar negotiated for under the Negotiated Price Quotas of the Commonwealth Sugar Agreement, the price actually paid by the Sugar Board for C.S.A. sugar, the final price of all UK raw cane sugar imports and the world sugar price, is shown in Table 5.3 for the period 1963 to 1972. The difference between the basic price of the N.P.Q.s and the price paid by the UK Sugar Board under the C.S.A. is comprised of two elements. The first is the "special payment" made to developing country producers (that is, all C.S.A. signatories except Australia) which is not standardised but is on a scale which differentiates between countries and groups of countries. The second element relates to sugar purchased from Commonwealth countries in excess of the quota tonnage and is paid for at world prices plus a Commonwealth preference margin. The final price paid for all UK imports of raw cane-sugar includes all Commonwealth imports plus additional requirements purchased from non-Commonwealth countries at world prices.

5.9: The price per ton paid to UK producers of raw sugar beet is negotiated through the government's Annual Review of Agricultural Prices, and is set out in Table 5.4 for the years 1963 to 1972. This is a guaranteed price though the actual price paid is likely to vary according to a quality differential applied to individual producers' crops.

5.10: The ex-refinery price of white refined sugar (for human consumption) is the same for cane and beet and has been since the Industrial Agreement between the beet factories and cane refineries in 1937. The level of ex-refinery prices is set each year in relation to a narrow range within which the price is held. Variations during the year within the set range are dependent upon movements in the level of world prices and the rate of Sugar Board surcharges or distribution payments which themselves vary inversely with world sugar prices. The ex-refinery sugar prices for the period 1966 to 1971 are set out in Table 5.5, together with movements in the (implied) refining margin - that is, the difference between the world price of raw sugar and the ex-refinery price. Given the equivalence between the ex-refinery prices of the beet and cane sugar refiners, retail prices in Britain are basically the world raw sugar price, plus the refining margin (including Sugar Board surcharge) plus distribution and retailing margins. A breakdown of the average UK refined sugar price for 1971 has been presented by Harris and Smith * and is reproduced here as Table 5.6.

5.11: The historical relationship between the world sugar price and that arranged for supplies under the C.S.A. has been that the latter have "generally enjoyed a premium in the price they received over that obtained on the free market"+ (see Table 5.3), and only twice, according to the International Sugar Organisation, has this been reversed; once in 1956-57 and again in 1963-64. In consequence, the Sugar Board has been involved in making surcharges on the refiner to cover its deficit incurred by purchasing C.S.A. sugar at a price above the world level. However, as Table 5.3 also shows, the C.S.A. sugar price moved below that of the world price during 1972 so for the first time since 1963-64 the Sugar Board received a surplus on Commonwealth sugar which it bought at the C.S.A. price and sold to refiners at the world price. By the same token, the Board received payment from the British Sugar Corporation Ltd., instead of as normally, making a deficiency payment on home produced beet-sugar.

5.12: The end result of this system has been, until recently (1974, in particular), that UK retail sugar prices have been amongst the lowest (if not the lowest) and most stable of all developed countries, while per capita consumption is amongst the lowest in the world. Furthermore, the balancing or juggling act between the C.S.A. and world sugar price, on the one hand, and level of surcharge, on the other has allowed not only relative stability in retail prices, but also those paid by refiners and manufacturers.

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* S. Harris and I. Smith op. cit.

\+ I.S.O. Annual Report, 1973. Page 20.

6: COMPANY PROFILES

TATE AND LYLE LTD.

6.1: The principal activities of the Tate and Lyle Group are according to the 1974 annual report and accounts, "the production and marketing of refined sugar; raw sugar production; molasses, sugar and other commodity trading; shipping, storage and road transport; the manufacture of machinery and consultancy services for the sugar and agriculture industries and the manufacture of plastic and aluminium products for the construction industry."

6.2: Whilst Tate and Lyle in the UK is a household name synonymous with sugar the Company has undergone significant diversification and growth during the last decade and has engaged in an advertising and public relations campaign to that effect. The company has its origins in the UK sugar refining trade which date back to the nineteenth century refining businesses of Abram Lyle at Greenock in Scotland and Henry Tate at Liverpool. In 1881 Tate's established a refinery at Silvertown, on the Thames in east London. This was followed in 1883 by Lyle's also establishing a Thamesside refinery only a few miles from Silvertown, at Plaistow, and the stage was set for the merger of the two companies in 1921. Up to the end of the 1930's Tate and Lyle Ltd. became involved in merger activity * with the result that it emerged as the UK's principal sugar refiner. With the setting up of the British Sugar Corporation Ltd. in 1936 Tate and Lyle's beet sugar interests in the UK were taken over, and the company were excluded from this market. Consequent upon this, they turned their attention to raw sugar production overseas, developing estates and factories in Trinidad, Jamaica, Rhodesia, South Africa and Zambia.

6.3: In 1953 Tate and Lyle Technical Services Ltd. were formed to sell the company's expertise in the mechanics of sugar production and this coincided with the acquisition of A. and W. Smith Ltd., a specialist sugar machinery engineering company. Further expansion took place in 1959 when Tate and Lyle acquired a controlling interest in the Canada and Dominion Sugar Company, which has subsequently been renamed Redpath Industries. Whilst remaining the major supplier of refined sugar to the Canadian market, Redpath Industries has diversified into plastic and aluminium extensions, mouldings for the construction industry, pipes and fittings, agricultural drainage materials and flexible packaging materials.

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* documented in section Two of this chapter.

6.4: The link between the sugar estates overseas, the factories and refineries in the UK, and the retail store is a distribution system with which Tate and Lyle is also actively involved. In 1951, Tate and Lyle became shipowners through the formation of Sugar Line Ltd., a joint venture with United Molasses Company for the shipment of sugar and molasses. In 1961, Sugar Line became a wholly owned subsidiary, to which was added the Athel Line in 1966 when United Molasses joined the growing group of Tate and Lyle companies. In 1973, the Tate and Lyle Group bought a third shipping line, Anco Tanker Services Ltd., which specialises in the parcels tanker trade. Today by far the greater proportion of work done by these shipping services is for third parties outside the Group, in products and commodities other than sugar and molasses.

6.5: In the UK Tate and Lyle's transport and physical distribution system is not confined solely to the sugar and molasses trade. Sugar is delivered, ex-factory by a fleet of vehicles operated by Tate and Lyle Transport Ltd. Tate and Lyle have recently developed a regular business with high retailers through T.L.T. Distribution which offers them a national distribution system, together with storage and break-bulk services for onward delivery. Through its subsidiary, Silver Roadways Ltd., the Group are involved in transport broking, particularly in arranging long haul road transport.

6.6: The chief by-product of sugar processing is molasses and the Group considered it a natural progression to become involved in world-wide trading of oils, fats, alcohols, solvents, seeds and beans. In this respect, the Group's principal companies are United Molasses Company in the UK, and its subsidiary Pacific Molasses Company which operates in the USA. Molasses, besides being an important animal feed supplement is also used as a major raw material in fermenting alcohol, manufacturing yeast, monosodium glutomate and citric acid and this has encouraged Tate and Lyle to take a direct stake in such user companies; for example, in the solvents and alcohols industry under the "Unalco" name. In the USA,Pacific Molasses recently (1972) took over Berger and Plate Inc., a company handling seeds and beans for agricultural markets.

6.7: In addition to trading in these commodities, the Group also deals in their bulk storage at port and other international termini, as well as a range of other commodities. In 1963, United Molasses formed a joint company with the Dutch firm Pakhoed N.V., called Paktank Storage Company which extended the Group's bulk storage facilities into the field of mineral oils, sulphur, petroleum and petro-chemicals.

6.8: As well as having become involved in sugar consultancy (Tate and Lyle Enterprises Ltd. and Tate and Lyle Technical Services Ltd.) and sugar engineering (A. & W. Smith & Co. Ltd. and Mirrlees Watson

Ltd.), the Group is also active in other engineering fields; namely, in the construction of coastal tankers (Richards (Shipbuilders) Ltd.) and in providing road vehicle workshops for itself and third parties (Transport Engineering Services Ltd.). In Canada, Redpath Industries has diversified into engineering through its subsidiaries Daymond Ltd. and Multi Fittings Ltd., which specialise in the design and manufacture of plastic pipes and fittings for the liquid transmission and sewerage industries.

6.9: Selected financial data for Tate and Lyle Ltd. and all its subsidiary and associated companies (i.e. the Group) are given in Table 6.1. The relative contributions to turnover and profit for 1973 and 1974 are also shown in this table and indicate that in 1974 UK sugar refining contributed just under 5 per cent. to profit, compared with 16 per cent. in 1973. Whilst this may be in part due to unprecedented circumstances on the world and UK sugar market in 1974, it no doubt also reflects the continuing shift in emphasis of Tate and Lyle's business into other, more diversified fields, in particular, storage, distribution and trading. An indication of the spread of these activities is given by the list of subsidiary and associated companies, both in the United Kingdom and abroad, shown in Table 6.2.

MANBRE AND GARTON LTD.

6.10: Manbre and Garton Ltd. was first registered in 1919 as Manbre Sugar and Malt Co. Ltd. The company is principally engaged in the refining of raw sugar and the wet milling of maize for the manufacture of starch products. Thus, the company's subsidiaries may conveniently be considered under two main divisions; Starch Products and Sugar Refining and Distribution.

Starch Products

In the UK the companies are:-

Garton, Sons and Company Ltd. - manufacture glucose, starch, speciality starches, maize germ oil and cattle foods from the UK's second largest maize milling plant.

Valentin, Ord and Nagle Ltd. - produce glucose and sugar products for industrial use.

Hay-Lambert Ltd. - is the largest UK manufacturer of caramel colourings in liquid and powder form for use in beverages and a wide variety of food products.

A.B.M.G. (Syrups) Ltd. - this company is jointly owned with Associated British Maltsters Ltd. and is mainly engaged in the production and marketing of syrups derived from the conversion of flour, starch and cereals.

Laing-National Ltd. - owned equally with National Starch and Chemical Corporation of the USA and markets a full range of speciality starches, modified and unmodified starches, dextrose and gums.

Overseas:

African Products Manufacturing Company - this company is registered in the Republic of South Africa and Manbre and Garton Ltd. own 52.44 per cent. of the issued equity capital. Wholly owned subsidiaries of A.P.M.C. are Maize Products Ltd. and Glucose and Starch Products Ltd., all three being engaged in the production of glucose, starch and modified starches from locally grown maize.

Fielders Ltd. - this company operates in Australia and has five main divisions; namely, flour milling, starch and glucose, bakeries, food packaging and stock feed.

Sugar Refining and Distribution

The following companies supply refined sugars, liquid sugars, and syrups for industrial uses from the three refineries at London, Earlestown and Greenock. Retail packet sugars are sold under the names of 'Sankey' in England and 'Westburn' in Scotland. Fowler Ltd. produces treacle and syrups at its Blackwall, London factory, and McIntyre Ltd. in Scotland is a transport company.

Manbre Sugars Ltd.	-	London
Duttson and Knight Ltd.	-	London
Martineau's Ltd.	-	London
The Sankey Sugar Co. Ltd.	-	Earlestown, Lancashire.
The Westburn Sugar Refiners Ltd.	-	Greenock, Scotland.
Fowler Ltd.	-	London
McIntyre Ltd.	-	Greenock, Scotland.

All these companies are, unless it has been stated to the contrary, wholly owned subsidiaries of the holding company, Manbre and Garton Ltd.

6.11: Selected financial statistics for Manbre and Garton Ltd. (including all subsidiaries) for the five years ended September 1970 to 1974 are presented in Table 6.3, together with a separate analysis of turnover and profit for 1973 and 1974. The analysis of turnover and profit exemplifies the unprecedented conditions on the world and UK sugar market experienced in 1974. As a result of both reduced supply and exceptionally high prices (£650 per ton November 1974) for raw sugar the company's profit on sugar refining and distribution was significantly reduced by comparison with 1973. Furthermore, in view of the shortage of sugar during 1974 the company turned to importing refined sugar from Europe, and this is shown separately as "Merchanting". All in all, there would appear to have been a notable shift in emphasis of the company's business, at least in terms of profit, that is, that starch products accounted for 49.8 per cent. of 1973 profits as compared with 69.1 per cent. in 1974.

BRITISH SUGAR CORPORATION LTD.

6.12: The British Sugar Corporation Ltd. was constituted under the Sugar Industry (Reorganisation) Act, 1936 as the monopoly buyer of sugar-beet produced in the United Kingdom and for the production and marketing of refined sugar thereof. The authorised, issued and fully paid up share capital of the Corporation is comprised of 10m shares with a nominal value of £1 each. The UK government holds a substantial proportion of these shares; first of all, in the name of The Solicitor for the Affairs of H.M. Treasury who is credited with 1.125m. shares (11.25 per cent.) and secondly in the name of the Sugar Board, 2.5m. shares (25.0 per cent.). The Corporation has one wholly owned subsidiary, British Sugar Allied Products Ltd., incorporated on 1st October 1974 to market selected non-sugar products, concentrating initially on the marketing of molasses, and to conduct market research on such new products.

6.13: The Corporation's principal activities are the manufacture of white and raw sugar, dried molassed beet-pulp and molasses from sugar-beet. The Corporation's latest Report and Accounts (1974) indicates these activities to have been carried out at 17 factories. Reference to an earlier years Report and Accounts (1972) shows the factory at Cupar, Fife (Scotland) to have been closed at the end of 1971. Of the 17 factories operating today (1975) all but four (Shropshire (1), Nottingham (2), Worcestershire (1)) are located in the eastern counties of England, between Essex and York. Production data for the three main activities are presented in Table 6.4.

6.14: When looking at the BSC's financial statistics, presented in Table 6.4 for the years ending September 1969 to 1974, a particularly important qualification should be noted; namely, that a new sugar regime began on the 1st February 1973 when the Common Agricultural Policy of the EEC came to apply to the United Kingdom. As far as these data are concerned this affects the turnover figures in as much as the system of surcharges and distribution payments operated by the Sugar Board * ceased to apply, and that for the first time in 1973 the BSC began to export sugar under EEC rules.

* Consequent upon the European Communities Act, 1972, the role of the UK Sugar Board was changed to conform with Protocol 17 of the Treaty of Accession to the EEC such that the provisions of the 1956 Sugar Act as they applied to BSC Ltd., were repealed.

7: CONCLUSION

7.1: The evolutionary path which has led to high concentration in the sugar industry has been achieved through what Evely and Little, and Hart, Utton and Walshe* refer to as the "external expansion" of many firms, that is, large numbers of firms merged as if it were, overnight. That such mergers occurred "overnight" is exemplified by the creation of the British Sugar Corporation, itself a government sponsored merger. However, government influenced merger activity in the cane sugar refining industry has not been lacking, albeit inadvertently through the establishment of refining quotas which provided the basis and incentive for firms' acquisitive policies. Furthermore, the refining quotas promoted the establishment of regional monopolies in the market for retail sugar such that the form and degree of competition and advertising was uncharacteristic of a fast-moving consumer product. On the other hand, the role of government has represented a large element of countervailing power even to an industry where 99.3 per cent. of sales (1968) are in the hands of five concerns, mainly through its control of the refining margin and ex-refinery sugar price.

7.2: The last recorded merger in the sugar industry was in 1965, ending a process which "took-off" in the 1930's, since which time no new entrants to the refining business have been recorded. Thus, as far as refining is concerned no new firms have presented themselves as competition and neither has competition from imports (refined), which comprise a negligible proportion of total UK requirements. The barriers to entry which have been identified are, of course, formidable - namely, scale economies, capital costs, technical know-how and the state production quotas. However, part of the output of the major firms in refining is comprised of glucose and starch products and in this sector there was some merger activity during the early 1960's. For example, Manbre and Garton acquired Valentin Ord and Nagle, a small glucose concern in the early 1960's. In 1964, Tate and Lyle acquired George Clark and Son, manufacturers of brewing sugar, from Brown and Polson. Brown and Polson (now C.P.C. (UK) Ltd.) a US firm took over five firms in glucose, brewing sugars and caramel between 1959 and 1964.

7.3: At the present time, any consideration of changes in industry structure, concentration and competition in the sugar industry must be made in the light of the United Kingdom's recent entry to the European Economic Community, and even then this must remain largely conjecture for the sugar trade itself is somewhat uncertain about likely future developments. Nevertheless, it is possible to base this conjecture on certain facts; that is, how EEC policy has changed the institutional structure of the UK sugar industry. The industry is now subject to the

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* Evely and Little op. cit.
Hart, Utton and Walshe op. cit.

Common Agricultural Policy of the EEC which has required the Commonwealth Sugar Agreement to be terminated as from the end of 1973. Secondly, the Sugar Act 1956 has been repealed in so far as it relates to the activities of the British Sugar Corporation.

7.4: Although the CSA has been terminated, agreement has been reached with the EEC which assures (at least for the present) access to the UK market for 1.4m. tons per annum of raw cane sugar from some of the less developed Commonwealth countries. However, Australian supplies, which have in the past been imported under the CSA at a rate of 300,000 tons per annum are to be completely phased out by the end of 1976. Whilst it is known that the EEC favours a sugar industry based upon beet-sugar the loss of Australian sugar augurs for a significant shift in the input base of the UK industry. The likelihood of this development is all the more important when consideration is given to the repeal of the 1956 Sugar Act which removes from the BSC the constraint on it refining all its own production. Under EEC rules, BSC's beet production quota (acreage and refined output) has been increased considerably although it is also required to export some of its output.

7.5: A possible shift in the structure of the industry must therefore be contemplated, and two quotations, one from each side of the industry, may lend support to this. First of all, in an article on Tate and Lyle Ltd. published in May 1973*, and bearing in mind the loss of Australian sugar, the author wrote that "cane will continue to play a part in Tate and Lyle's production but eventually will only be responsible for about 25 per cent. of its supplies against the current 90 per cent." To complement this, the 1974 Annual Report of the BSC states that "it would be possible for the domestic beet sugar industry to plan to produce half the UK total sugar requirements by the end of the decade." Ø

7.6: The removal of quota restrictions previously imposed upon BSC has effectively meant the ending of the market sharing arrangements and regional monopoly situation in the supply of sugar to the retail market. (As well as being contrary to section 85 of the Rome Treaty). This in itself is likely to lead to an increase in competition for all refiners can now sell sugar wherever they can find a market.

7.7: The assessment of future mergers or take-overs is more difficult to determine with any great accuracy. The section in this Chapter on company profiles has indicated the extent to which the refiners have shifted their interests away from solely refining sugar. Should these interest be built up to any strength in the glucose and starch

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* The Director May 1973. "How Mr. Lyle is grappling with a packet of problems."

Ø British Sugar Corporation Ltd. 1974 Annual Report. Page 8.

products fields (for example) then the question arises as to whether this side of the sugar firms' business presents itself for take-over by concerns such as C.P.C. (U.K.) Ltd., or whether this would occur the other way round. Even so, the degree of concentration in either sugar or starch could be effected.

7.8: It is impossible to say whether any new firms are likely to enter the industry. Tate and Lyle Ltd. has since EEC rules, the opportunity to get back into the sugar beet industry. Its beet interests were merged into the BSC in 1936 and consequently it lacks the know-how, marketing and contacts essential if it is to compete in the EEC. However, the UK government may play its role once again, for "although Tate and Lyle will not admit it, it is fairly common knowledge that one suggestion put to the government is that the company might be allowed to buy some of the Corporation's (BSC's) beet plants. This proposal has been put forward because the company believes that creating its own beet capacity from scratch would be too expensive." * So, the barriers to entry are even too costly for Tate and Lyle.

7.9: All in all, therefore, it may not be too unreasonable to suggest that the sugar industry may well undergo a significant structural shift from a cane-sugar based industry, on the one hand, to a beet base on the other; increased competition, both internally and from refined imports from the EEC and possibly some change in the degree of concentration.

* The Director op. cit.

TABLE 3.1

Structure of the Sugar Industry, 1935-1972

(all establishments)

	1935*	1951*	1963	1968	1970	1971	1972
No. of Enterprises	22	25	19	16	17	18	15
No. of Establishments	43	50	44	42	41	27	26
Gross Output £000)	...	131,403	230,151	221,482	239,424	249,500	301,361
Net Output (£000)	...	18,444	37,362	45,193	39,763	50,765	68,831
Employment	16,500	18,750	15,900	15,000	13,400	12,700	12,700
Net Output per head (£)	...	984	2,350	3,014	2,961	3,984	5,406

Source: Census of Production

* Figures for these years derived from Evely and Little and relate to the Sugar and Glucose industry.

TABLE 3.2

Structure of the Beet and "Other Sugar" Industries, 1951-1968

(larger establishments)

	BEET			OTHER SUGAR			TOTAL		
	1951*	1963	1968	1951*	1963	1968	1951*	1963	1968
No. of Enterprises	1	1	1	24	12	9	25	13	10
No. of Establishments	18	18	18	32	20	17	50	38	35
Gross Output (£000)	39,767	67,750	67,137	91,636	161,448	153,248	131,403	229,198	220,386
Net Output (£000)	5,030	12,678	17,600	13,414	24,539	27,398	18,444	37,217	44,997
Employment (000)	5,910	5,373	5,705	12,840	10,497	9,224	18,750	15,870	14,929
Net Output per head (£)	851	2,360	3,085	1,045	2,338	2,970	984	2,345	3,014
Average Employment per Establishment	328	298	317	401	525	542	375	418	426
Average Employment per Enterprise	5,910	5,373	5,705	535	874	1,025	750	1,220	1,493

Source: Census of Production, 1968.

* 1951 Evely and Little. op.cit.

TABLE 3.3

Changes in Average Size of Establishments and Enterprises analysed by Employment

	1935	1951	1963	1968	1970	1971	1972
No. of Enterprises	22	25	19	16	17	18	15
No. of Establishments	43	50	44	42	41	27	26
Average number per Enterprise	750	752	836	938	788	705	846
Average number per Establishment	384	376	361	357	327	470	490
Average number Establishments per Enterprise	1.95	2.0	2.3	2.6	2.4	1.5	1.7

Source: 1935 and 1951, Evely and Little. op.cit.
1963-72, Census of Production.

TABLE 3.4

Analysis by employment size group of establishments within the industry, 1968, 1970, 1972.

Size Group *	No. Establish-ments	No. Enter-prises +	Average No. Employed (000s)	Gross Output (£000)	Net Output (£000)	Net Output per head (£)
						1968
1-24	7	7	66	...	...	...
25-99	10	9	610	7,466	1,460	2,393
100 +	25	3	14,319	212,919	43,537	3,041
TOTAL	42	16	14,995	221,482	45,193	3,014
						1970
1-24	7	7	81)	8,787	1,984	3,076
25-99	10	8	564)			
100 +	24	4	12,785	230,638	37,780	2,954
TOTAL	41	17	13,430	239,424	39,763	2,961
						1972
1-10	7	7	36)			
11-24	3	3	45)	12,345	2,748	4,355
25-49	4	3	189)			
50-99	5	4	361)			
100 +	7	7	12,101	289,017	66,083	5,461
TOTAL	26	15	12,732	301,361	68,831	5,406

Source: Census of Production, 1968, 1970 and 1972.

* Average numbers employed during the year.

\+ The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

TABLE 3.5

Analysis by employment size group of enterprises within the industry, 1963 and 1968.

Size Group*	No. Enterprises	No. Establishments	Average No. Employed (000s)	Net Output (£000)	Net Output per head (£)
					1963
1-24	5	5	-	-	-
25-99) 1000 +)	13	38	15.9	37.2	2,345
Unsatisfactory returns	1	1	-	-	-
TOTAL	19	44	15.9	37.4	2,345
					1968
1-24	6	7	-	...	...
25-99	7	7	0.4	0.8	1,842
1000 +	3	28	14.5	44.2	3,049
Unsatisfactory returns	-	-	-	-	-
TOTAL	16	42	15.0	45.2	3,014

Source: Census of Production, 1968. Enterprise Tables.

* Average numbers employed during the year.

TABLE 3.6

Average number of employees per establishment, analysed by employment size group, 1968, 1970 and 1972

Employment Size Group	Average Annual Numbers Employed	Number of Establishments	Average number employees per Establishment
			1968
1-24	66	7	9
25-99	610	10	6
100 +	14,319	25	573
	14,995	42	357
			1970
1-24	81	7	12
25-99	564	10	56
100 +	12,785	24	533
	13,430	41	327
			1972
1-24	81	10	8
25-99	550	9	61
100 +	12,101	7	1,729
	12,732	26	490

Source: derived from Census of Production, 1968, 1970 and 1972.

TABLE 3.7

Sales of Principal Products of the industry by larger establishments, 1963, 1968 & 1970 (including sales by establishments classified to other industries)

£000

	1963	1968	1973
Sugar, unrefined	13,008	5,988	...
Sugar, refined	182,222	182,715	...
Sugar, ground, prepared for icing, fondants etc.	5,464	4,065	...
Syrup and Treacle	4,622	6,868	...
Invert sugar	3,362	2,995	...
Molasses	2,465	1,996	...
Caramel	1,010	833	...
Beet pulp	8,965	11,872	...
Other products, including waste	1,567	477	...
Work done	-	37	...
TOTAL	222,685	217,846	312,674
Less: Sales in other industries	1,935	1,490	2,937
Sales of Principal Products by establishments in this industry	220,750	216,356	309,737
Sales of Raw and Refined Sugar, as percentage of Total Sales of Principal Products of this industry	88.4%	86.6%	...

Source: Census of Production 1968, and Business Monitor, PQ 216, 2nd Quarter 1975.
Census not available.

TABLE 3.8

Refined Sugar Quotas established by Sugar Industry (Reorganisation) Act, 1936

per cent.

	All Refiners	Cane Refiners
British Sugar Corporation	26.3	-
Tate & Lyle	55.2	75.0
Walker	3.4	4.7
Westburn	4.2	5.7
Macfie	4.1	5.5
Sankey	4.0	5.5
Glebe	1.8	2.4
Martineaus	0.9	1.2

Source: Evely and Little. op.cit. Page 245.

TABLE 3.9

Selected Concentration Ratios for the Sugar Industry

A. 3-firm Gross Output Concentration Ratio

				Per Cent.
+	1935	Tate & Lyle		50-55
		B.S.C. Ltd.		24.5
		Westburn		4.0
			say,	80
+	1951	Tate & Lyle		62.0
		B.S.C. Ltd.		22.5
		Westburn		3.5
				88.0

B. 5-firm Sales Concentration Ratio

		Total Sales (£000)	Per Cent.
++	1958	...	97.5
++	1963	197,910	98.6
++	1968	191,375	99.3

C. 3-firm Net Output Concentration Ratio

		Total Net Output (£m)	Per Cent.
+	1935	...	62.0
+	1951	...	82.0
++	1968	45.2	97.8

D. 3-firm Employment Concentration Ratio

		Total Employment (m)	Per Cent.
+	1935	...	71.0
+	1951	...	84.0
++	1968	15.0	90.6

Source: + Evely and Little
++ Census of Production

TABLE 4.1

UK Production and Disposals of Refined Sugar

000 Tons

Year	Refined Sugar			
	Produced From:-		Disposals	
	Home-grown Beet Sugar	Imported Cane Sugar	Total	for Food
1962	734	2,180	2,914	2,620
63	710	2,398	3,108	2,696
64	805	2,177	2,982	2,540
65	880	2,076	2,956	2,664
66	848	2,090	2,938	2,636
67	884	2,034	2,918	2,604
68	849	1,967	2,816	2,614
69	911	1,942	2,853	2,653
70	838	2,013	2,851	2,661
71	955	1,916	2,871	2,634
72	1,017	1,930	2,947	2,649
73	823	2,135	2,958	2,615

Source: Annual Abstract of Statistics (based on MAFF)

TABLE 4.2

Relative Contributions to UK Sugar Requirements by Source

per cent. based upon raw value

	1962	1965	1968	1972
Domestic Consumption	100	100	100	100
from UK Beet Production	28	33	32	36
from C.S.A. Imports	61	62	63	61
	89	95	95	97
"Free Market" Imports	11	5	5	3

Source: S. Harris and I. Smith - op. cit.

- derived from Table 8, page 22, after conversion from metric tons.

TABLE 4.3

UK Imports of Raw Sugar

Year	000 tons
1962	2042
63	2369
64	2209
65	2093
66	2119
67	2104
68	1958
69	2056
70	1800
71	1911
72	2025
73	1997

Source: Annual Abstract of Statistics

TABLE 4.4

UK Imports and Exports of Refined Sugar

Year	IMPORTS ++		EXPORTS +	
	Tons	as per cent. of all refined sugars	000 Tons	as per cent. of domestically refined sugars
1962	..	..	313	10.7
63	..	..	402	12.9
64	..	..	437	14.6
65	..	..	298	10.0
66	51,536	1.7	298	10.1
67	47,854	1.6	322	11.0
68	53,095	1.8	203	7.2
69	51,785	1.7	200	7.0
70	* 262,038	8.4	186	6.5
71	85,563	2.9	235	8.2
72	86,950	2.9	299	10.1
73	..	..	342	11.5

Source:

+ EXPORTS — Annual Abstract of Statistics

++ IMPORTS — International Sugar Organisation Year Book, 1972.

* includes certain white sugars for further refining in UK previously included under "raw sugar".

TABLE 4.5

UK Consumption of Domestically Refined Sugar

000 Tons, refined

Year	Domestic	Food Manuf.	Industrial Uses	Total Consumption
1962	1385	1235	294	2914
63	1400	1296	412	3108
64	1325	1215	442	2982
65	1348	1316	292	2956
66	1318	1318	302	2938
68	1276	1338	202	2816
70	1360	1301	190	2851
71	1270	1364	237	2871
72	1220	1429	298	2947
73	1110	1505	343	2958

TABLE 4.6

Per Capita Sugar Consumption

lbs. per head

Year	Purchases for Domestic Consumption *	Sugar Consumption from all Sources	MAFF +
1963	60.1	134.9	..
68	53.3	117.6	..
70	55.0	115.3	116.7) ++
71	51.4	116.2	115.0) ++
72	48.8	117.9	117.3) ++
73	44.5	118.6	116.4) ++

Source

* as per Row 1 of Table 4.7

\+ Estimates of Food Supplies Moving into Consumption. MAFF.

++ these figures include the sugar content of imported foods.

TABLE 4.7

Domestic Consumption, Expenditure and Average Prices Paid

	1963	1967	1968	1970	1971	1972	1973
Consumption, lbs. per head per annum	60.1	55.9	53.3	55.0	51.4	48.8	44.5
Average Prices Paid new pence per lb.	3.79	3.58	3.62	3.85	4.16	4.74	4.87
Expenditure £ per head per annum	2.28	2.00	1.93	2.12	2.14	2.31	2.17

Source: National Food Survey. Relates to sugar consumed as such, and does not include sugar content of manufactured foods etc.

TABLE 4.8

Average Annual Household Expenditure

Year	£ per household per annum
1963	6.50
65	6.21
67	5.54
68	5.54
69	5.75
70	5.67
71	5.72
72	6.24
73	6.24

Source: Family Expenditure Survey.

TABLE 4.9

Indices of price, expenditure, and real value of sugar purchases

1963 = 100

Year	Price	Expenditure	Real Value of Purchases
1963	100	100	100
64	106.1	99.5	93.8
65	100.4	95.1	94.7
66	94.6	87.2	92.1
67	94.5	88.1	93.2
68	95.9	84.7	88.4
69	100.2	87.6	87.4
70	101.4	92.9	91.6
71	109.6	93.5	85.3
72	124.8	103.2	82.5
73	128.4	96.7	75.3

Source: National Food Survey.

TABLE 4.10

Price and Income Elasticities for Domestic Sugar Purchases

Year	Price Elasticity of Demand	Income Elasticity of Demand	Income Elasticity of Quantity Purchased
1963	- 0.03	- 0.04	- 0.05
1967	- 0.09	- 0.10	- 0.04
1971	- 0.05	- 0.09	..
1973	- 0.13	- 0.17	

Source: National Food Survey.

TABLE 5.1

Market Shares based on Brand Name

per cent.

	+ Second Quarter 1966	+ Second Quarter 1968	++ 1972	∅ 1973
Tate & Lyle				
Tate & Lyle	62	63	) 59	) 54
Walkers	3	2	)	)
British Sugar Corporation	26	26	26	26
Manbre and Garton				
Westburn	2	2	) 15	) 16
Sankey	4	4	)	)
Other + D.K.	3	3	-	4 *
	100	100	100	100

Sources:

+ IPC Branded Foods Surveys, Second Quarter's 1966 and 1968.

++ The Grocer 12th December 1972.

∅ Retail Business. No. 199. September 1974.

* Imported refined.

TABLE 5.2

Regional Variation in Brand Shares

per cent.

Brand \ Region	London & S.E.	S. West & Wales	Midland	North West	N. East & North	Scotland
Tate & Lyle	88	97	23	70	26	27
B.S.C. Ltd.	9	-	72	(a)	61	13
Sankey	-	-	(a)	23	11	-
Westburn	-	-	-	(a)	-	33
Walkers	(a)	-	-	-	-	21
Other	2	1	2	6	1	4
D.K.	-	2	3	1	1	2

(a) less than 1%

Source: IPC Branded Foods Survey, 2nd Quarter 1968.

TABLE 5.3

Comparative Raw Sugar Cane Prices

Annual averages. £ per ton

Year	(1) World Sugar Price (L.D.P.)	(2) Commonwealth Sugar Agreement: Basic cost of N.P.Q.s	(3) Commonwealth Sugar Agreement: Price paid by Sugar Board	(4) Final price paid for all UK raw cane imports
1963	71.70	46.04	..	65.50
64	51.11	46.04	..	59.30
65	21.51	46.04	..	44.60
66	17.87	43.50	47.21	45.40
67	19.36	43.50	47.21	43.80
68	21.83	43.50	47.22	47.30
69	33.83	43.50	47.03	48.70
70	40.40	43.50	46.72	52.80
71	46.10	43.50	46.16	52.60
72	72.53	50.00	57.32	62.20
73	99.32	50.00	..	74.60
74	305.13	140.00	..	142.40

Sources: Column (1) Sugar Board, 15th and 16th Annual Reports.
" (2) I.S.O. Annual Reports, (various)
" (3) Sugar Board, Annual Reports (various).
" (4) Derived from Annual Abstract of Statistics (various) HMSO.

TABLE 5.4

Guaranteed Price to UK Sugar-beet producers

YEAR	£/ton
1963	6.24
64	6.24
65	6.53
66	6.53
67	6.65
68	6.83
69	6.83
70	6.83
71	7.60
72	8.00

Source: Sugar Board. Annual Reports and Personal communication with British Sugar Corporation Ltd.

TABLE 5.5

Ex-refinery sugar prices and the refining margins

£ per ton

Year	Ex-refinery Price Range *	Actual ex-refinery price (annual average) *	Implied Refining Margin (including surcharge)
1966	..	68.80	50.93
67	..	70.60	51.24
68	69-74	72.60	50.77
69	73-78	75.00	41.17
70	70-76	73.41	33.01
71	79-87	83.61	37.51

Source: Sugar Board, Annual Reports.

TABLE 5.6

Breakdown of UK Refined Sugar Price, 1971

	£ per ton
Imported Raw	46.10
Refined Equivalent	50.11
Refining Margin (including surcharge)	30.74
Ex-refinery price (net of discounts)	80.85
Margins and Distribution	12.11
Retail Price	92.96
Ex-refinery price (net of discounts) and excluding surcharge	69.65

	pence per lb.
Retail Price	4.15

Source: S. Harris and I. Smith op. cit. Page 19. Table 6.

TABLE 6.1

TATE AND LYLE LTD. - Selected Financial Statistics, and Analysis of Turnover and Profit

Selected Financial Statistics

£m

	1970	1971	1972	1973	1974
Turnover	262.4	342.8	419.3	465.7	660.0
Trading Profit	..	..	..	20.3	44.8
Net Assets	136.4	153.3	155.3	145.1	163.7
Profit before Tax	9.1	12.7	16.2	17.9	31.1
Exports	..	..	..	37.1	62.3
* Employees	..	..	..	..	6,500

* sugar refining only.

Analysis of turnover and profit, 1973 and 1974

Per cent.

	1973		1974	
	Profit before tax	Turnover	Profit before tax	Turnover
Sugar Refining				
UK	15.8	32.7	4.6	28.5
Overseas	19.6	12.2	10.4	14.8
Storage, distribution and trading	17.2	41.9	37.8	42.2
Shipping	32.5	4.9	29.4	5.4
Engineering and Construction Materials	6.7	5.0	4.0	4.9
Production of raw sugar (incl. local refining)	1.5	3.3	10.0	4.2
Group share of associated Company profits	6.7	-	3.8	-
	100.0	100.0	100.0	100.0

TABLE 6.2

TATE AND LYLE LTD. PRINCIPAL SUBSIDIARY AND ASSOCIATED COMPANIES

UNITED KINGDOM

Sugar refining

Tate and Lyle Refineries Ltd.
Huskisson Transit Company Ltd.
Greenock Bulk Handling Company Ltd.
Tate and Lyle (Ulster) Ltd.

Trading storage and distribution

United Molasses Company Ltd.
United Molasses Trading Company Ltd.
The Molassine Company Ltd.
Unalco Ltd.
Tate and Lyle International Ltd.
Tate and Lyle Transport Ltd.
Silver Roadways Ltd.

Shipping

Tate and Lyle Shipping Ltd.
Athel Line Ltd.
Sugar Line Ltd.

Engineering & Miscellaneous

British Charcoals & Macdonalds Ltd.
Tate and Lyle Enterprises Ltd.
Tate and Lyle Technical Services Ltd.
Farrow Irrigation Ltd.
Richards (Shipbuilders) Ltd.
Silvertown Services Lighterage Ltd.
A. & W. Smith & Company Ltd.
The Mirrlees Watson Company Ltd.
Tecomatic Ltd.
Tylin C.A.E. Ltd.
Tylin Management Systems Ltd.

Finance and administration

Tate and Lyle Investments Ltd.

All of the above are either directly or indirectly wholly owned.

OVERSEAS

	Country of incorporation and registration	Proportion of share capital held per cent.	
Production of raw sugar			
Belize Sugar Industries Ltd.	Belize	99.99	
The West Indies Sugar Company Ltd.- Jamaica	England	100	
Sugar refining			
Redpath Industries Ltd.	Canada	55.84	
Redpath Sugars Ltd.	Canada	100	(55.84
Tate and Lyle (Nigeria) Ltd.	Nigeria	60.91	
Tate and Lyle Norge A/S	Norway	100	
C.H. Isachsen & Company A/S	Norway	100	
Rhodesia Sugar Refineries Ltd.	Rhodesia	50.13	
Trading storage and distribution			
Tankinstallation de Mèlasse Continentale S.A.	Belgium	100	
Canada West Indies Molasses Company Ltd.	Canada	100	
Societe Europeenne des Melasses S.A.	France	100	
Hansa Melasse Handelsgesellschaft m.b.H.	West Germany	100	
Caribbean Molasses Company Ltd.	Guyana	100	
The Indian Molasses Company Private Ltd.	India	100	
P.T. Java Transport & Trading Company	Indonesia	100	
Caribbean Molasses Company (Jamaica) Ltd.	Jamaica	100	
The Mauritius Molasses Company Ltd.	Mauritius	66.66	
Companhia Exportadora de Melacos Limitada	Mozambique	100	
Nederlandsche Melasse Handel Maatschappij N.V.	Netherlands	100	
The Pure Cane Molasses Co. (Durban)(Pty.) Ltd.	South Africa	100	
Compagnie des Melasses S.A.	Switzerland	51	
Caribbean Molasses Company (Trinidad) Ltd.	Trinidad	100	
Pacific Molasses Company	USA	100	
Berger & Plate Company	USA	100	
Construction materials and miscellaneous			
Multi Fittings Ltd.	Canada	100	(55.84
CB Packaging Ltd.	Canada	100	(55.84
Daymond Ltd.	Canada	100	(55.84
Redpath Home Improvements Ltd.	Canada	100	(55.84
Gienow Ltd.	Canada	100	(55.84
London Plastics Machinery Ltd.	Canada	70	(39.09
Spraycool Systems Ltd.	Canada	75	(41.88
Acucar Embalagem E Exportacao SARL	Portugal	60	
Certain - teed/Daymond Co.	USA	50	(27.92

* figures in brackets is the direct interest of Tate and Lyle Ltd.

Associated Companies

	% owned by Tate and Lyle Group
Paktank Storage Company Ltd.	50.00
The Zambia Sugar Company Ltd.	22.86
Illovo Sugar Estates Ltd.	49.25

Other Investments

Caroni Ltd. (Trinidad)	32.25
European Sugar (France) S.A.	13.86
The Nigerian Sugar Company Ltd.	10.00
Hippo Valley Estates Ltd. (Rhodesia)	10.00

TABLE 6.3

MANBRE AND GARTON LTD. - Selected financial statistics and Analysis of Profit and Turnover (including subsidiaries)

Selected financial statistics

				£m	
	1970	1971	1972	1973	1974
Turnover	43.035	48.486	53.560	57.867	80.928
Trading Profit	2.516	2.842	3.509	4.001	5.740
Net Assets	17.720	18.369	19.453	29.088	33.657
Profit before Tax	2.185	2.511	3.183	4.228	5.415
Employees	...	...	...	...	2,155

Analysis of turnover and profit, 1973 and 1974

				£m
	1973		1974	
	Turnover	Profit	Turnover	Profit
derived from:				
Starch Products	20.895	2.377	29.729	4.123
Sugar Refining and Distribution	41.075	2.389	46.782	1.642
	61.970	4.766	76.511	5.765
Merchanting	-	-	4.417	0.205
	61.970	4.766	80.928	5.970

TABLE 6.4

BRITISH SUGAR CORPORATION LTD. Selected Production and Financial Statistics

Production Statistics

Beet Campaign	Beets Bought m.tons	Sugar Production (White refined) m.tons	Dried Molassed Beet Pulp m.tons	Molasses m.tons
1969/70	5.939	0.847	0.512	0.085
70/71	6.311	0.892	0.582	0.091
71/72	7.745	1.070	0.669	0.125
72/73	6.118	0.872	0.564	0.091
73/74	7.310	0.948	0.653	0.141

Financial Statistics

£m

	1969	1970	1971	1972	1973	1974
Turnover	64.525	67.275	78.677	95.814	96.134	140.661
(inc. Surcharge)	(14.492)	(10.052)	(6.142)	(2.469)	(-)	(N.a)
(exc. Distribution payment)	(-)	(-)	(-)	(5.205)	(10.646)	(N.a)
Trading Profit	4.323	3.321	7.723	9.190	9.424	16.674
Net Assets	26.948	28.227	39.577	45.210	51.469	64.631
Profit before Tax	3.781	2.597	6.671	7.757	7.074	14.361
Exports	-	-	-	-	0.619	14.175
Average Employees (000)	5,411	5,485	...	5,611	5,278	5,456
Maximum Employees during Beet Campaign (000)	7,000	7,000	...	6,000	...	6,418

CHAPTER 9

CANNED, FROZEN AND DEHYDRATED FOODS

1: INTRODUCTION

1.1: As originally envisaged by the Directorate-General for Competition, the canned, frozen and dehydrated food processing industries should constitute the subject matter of two reports; on the one hand food canning, with more detailed information on canned fruit and vegetables, canned meat and canned fish; on the other hand, frozen and dehydrated foods. However, for two major reasons it was felt that the two reports would more satisfactorily be combined into one chapter dealing with all three methods of food processing

1.2: Canned, frozen and dehydrated foods are all competitors in the convenience foods market, a market which is growing as the rise in female activity rates makes convenience as important a factor in some food purchases as price vis-a-vis fresh foods. Each method of processing has its own advantages to the consumer, so that competition between products is not related exclusively to price, but factors such as ease of storage, ease and speed of preparation, taste etc. are also important. So that in addition to competition in individual products between manufacturers, there is also competition between the canned, frozen and dehydrated equivalents. For this reason the three industries have been included together.

1.3: Data regarding the structure of the canned, frozen and dehydrated foods industries are not as comprehensive as those for most of the other product markets and industries. The Census of Production uses as its basis the Standard Industrial Classification, which tends to distinguish between types of food rather than methods of processing. In consequence, canned, frozen and dehydrated products are to be found among the principal products of three census trades, namely Fruit and Vegetable Products, Bacon Curing, Meat and Fish Products, and Starch and Miscellaneous Foods. Information on the structure of the industries is available for 1963 and 1968 for larger establishments, but for later years there is no information yet published regarding principal products. The structure of the industries in 1963 and 1968 is considered in Section 3, after the changing pattern of consumption has been assessed.

1.4: Since concentration after 1968 in the canned, frozen and dehydrated industries cannot be measured in terms of industrial structure owing to lack of data, it is necessary to look at the changing structure of the market in terms of brand shares. In section 4 the frozen foods market is considered, in section 5 canned foods and in section 6 dehydrated foods with each market broken down according to types of food. It is important to subdivide the markets in this way because in many cases, with the notable exception of frozen foods, the identity of the manufacturers varies according to the product For example, the companies who are the market leaders in canned potatoes are not the same firms as those who are brand leaders in the canned baked beans market.

1.5: Canning was one of the first successful methods of food preservation carried out on a large scale, having been an industry of considerable importance throughout this century. In contrast frozen food technology was not put into operation in the United Kingdom until immediately post-war with the industry developing rapidly in the 1950s and 1960s. Similarly the technology of dehydrated foods as distinct from the more traditional dried foods, was not developed until the post-war period, and dehydrated foods only started to be marketed on any scale in the 1960s. Associated with their different ages, the canned, frozen and dehydrated foods industries exhibit different characteristics.

1.6: The frozen food industry is highly concentrated. The market shares of the major manufacturers were estimated to be:

		1967	1972	1973
Unilever -	Birds Eye	59	60	61
	Tempo	3		
Nestle -	Findus	5	18	18
	Eskimo/Frood	6		
Imperial -	Ross	2	8	8
	Smedleys	1		

In 1967 the three major manufacturers, namely Unilever with Birds Eye, Eskimo/Frood and Findus, had seven-tenths of the market. By 1972/73 several significant mergers had taken place, and the three major enterprises were Unilever, Nestle and the Imperial Group, accounting together for over 85 per cent. of the market. As well as bearing in mind the general qualifications which attach to any brand share estimates, it is also necessary to realise that these estimates of the division of the market for frozen foods exclude sales through freezer centres. As sales through this type of outlet have increased the market shares may have altered, because own-labels are particularly strong in freezer centres, as are some brands, especially Ross which is now represented in over 80 per cent. of freezer centres.

1.7: In all types of frozen products, with the exception of frozen poultry and ice-cream, Birds Eye is the clear dominant brand leader, although the absolute share the brand holds may vary in particular markets. Next in importance is Findus, followed by Ross. Even in the ice-cream market Unilever, through Wall's, is joint market leader with Lyons Maid, each having around two-fifths of the market. Frozen poultry is the only sector which Unilever does not dominate; here Imperial through the Buxted and Ross brands, are market leaders.

1.8: It is surprising that so few of the major food "giants" in the United Kingdom have attempted to enter the frozen food market, especially since frozen foods have been one of the most rapidly expanding sectors of the food manufacturing industry. Probably the industry is not an easy one to enter. Birds Eye had a considerable initial advantage when it acquired the UK patent rights in frosted foods. The company made full use of this advantage and is largely responsible for the development of the market for frozen foods in the United Kingdom. For a company to enter the market now requires heavy expenditure on advertising and promotion to the consumer, plus heavy capital expenditure, not only on manufacturing plant, but also in establishing distributive linkages, all requiring refrigeration. Further, cabinet space in retail outlets is severely limited and fierce competition for this space takes place between manufacturers. Consequently, few of the major UK food 'giants' have entered the market, and competition to the frozen food manufacturers has tended to come from smaller speciality manufacturers, from own-label products and from increasing freezer outlets.

1.9: The food canning industry, in marked contrast to the high concentration of the frozen foods trade, is highly fragmented. In fact the market is so sub-divided as to make it in some ways meaningless to consider it as one market; rather, the distinct sections within which different manufacturers are engaged need to be considered.

1.10: As Table 1.1 demonstrates, the number of important food canning concerns is large, and generally enterprises tend to manufacture a limited range of products. The majority of companies engaged in vegetable canning in the United Kingdom also undertake some fruit canning and in recent years some canning of fruit-pie fillings (classified here as cold desserts). However the identity of these companies is rarely the same as the identity of those who process snack vegetables (i.e. baked beans, spaghetti etc), although some of the traditional vegetable canners may do a limited amount of snack vegetable canning for own-label sale in order to keep productive capacity fully utilised during out-of-season periods. It is also clear from the table that the principle canned food importers import a wide range of products, usually canned fruit, canned fish and canned cold meats, and are rarely important in just one product market. Also worthy of note is the fact that the more important hot meat canning concerns tend to be subsidiaries of food companies whose main interests lie elsewhere. Any estimate of the market shares of enterprises for the whole canned foods industry would be very difficult to interpret, even if it were possible to make such an estimate.

1.11: For many of the canned products, the market is highly fragmentary, and no dominant brand leaders have emerged. This is particularly the case for traditional canned vegetables, where the market is divided up between four or five leading national manufacturers, such as Batchelors, Smedleys, Hartleys, Lockwoods etc, local manufacturers and brands, and own-label sales. Similarly there are no dominant brand leaders in the market for canned fruit or for canned meats in general. However brand leadership has been established in the snack vegetable market (by Heinz, Crosse and Blackwell and H.P.), in the market for soup (by Heinz, Crosse and Blackwell and Campbells), and to a lesser extent in the canned fish sector which consists of a few strong and increasingly dominant brands (notably John West and Princes). In the canned desserts market the pattern is tending to be for a particular manufacturer to be important in one type of desserts, and less important in the other types.

1.12: The reasons for the overall low level of concentration in the food canning industry and the explanations of the fact that manufacturers do not generally process a wide range of commodities are difficult to ascertain. Where brand leadership has been established, advertising expenditure has been heavy, whilst in the other sectors spending on advertising and promotional activities has been at a much lower level. Referring to vegetable canning during the initial development of the industry one of the more important considerations was location near the growing areas, so that in the early years a large number of small firms were in operation. For a long time the industry developed with each company tending to take its share of growth, so that no high degree of brand leadership and concentration emerged. Neither did subsequent amalgamations and mergers produce the few giant enterprises to dominate the industry, as happened in many other trades. Later the smaller companies tended to be taken-over by 'giant' food processing companies wishing to diversify away from too high a reliance on their primary interests into an area of comparative stability rather than being taken-over by other vegetable canning firms. This led to the resources being available for the development of a strongly branded market.
By this time such was the stage reached in the life-cycle of canned vegetables that it was in doubt whether the returns from any exercise to establish brand leadership would justify the expenditure. In 1968 the

top five firms sales concentration ratio for vegetables preserved in airtight containers was 66.7 per cent. compared with 97.1 per cent. for quick-frozen vegetables, which is one of the most highly concentrated sectors in the UK food processing industry.

1.13: The dehydrated foods industry is of even more recent origin than frozen food processing. The method by which most dehydrated foods today are produced is accelerated freeze-drying (AFD). Initial freeze-drying tests on food were carried out by the Government at the research laboratory established in Aberdeen in 1950. The basic principle of the method is the sublimation of any water in the product, that is the water freezes then changes into a vapour without passing through the liquid stage. The advantage of this method over more traditional methods of food drying is that it allows the food to retain its shape, flavour and texture as the tissues are not changed or broken. Also AFD foods are amongst the most nutritious of all processed foods, they need little space for storage, can be safely stored for long periods, and are of almost negligible weight, approximately one third of their original weight. On the other hand, the disadvantages of AFD are the expenses involved in production, for example, the high capital outlay needed for the actual freeze-drying plant and the heavy costs of running the plant.

1.14: The main dehydrated foods are vegetables, ready-meals and soups, the latter including powdered as well as dehydrated soups. The major part of the dehydrated vegetable market is dehydrated potatoes, in which Cadbury's Smash is the brand leader, followed by Wondermash produced by a subsidiary company of Mars. For the other dehydrated vegetables, the Unilever subsidiary Batchelors is the market leader with the Surprise brand. Similarly Batchelors are the leading company in the ready-meals market, with the Vesta brand, and in the packet soup market. The main competition in the latter market comes from CPC and Nestle, and additionally in the dehydrated ready-meals market from Reckitt and Colman.

1.15: Some of the major companies active in the food canning, freezing and dehydrating industries are considered in section 7. There are two major enterprises which are of importance in all three industries, namely, Unilever Ltd. and Nestle Ltd. and another enterprise, the Imperial Group Ltd., which is important in all except the dehydrated foods industry. Of these, the Imperial Group is not primarily a food processing concern, and Nestle is foreign-owned.

1.16: No attempt has been made to calculate the statistical indices of concentration for canned, frozen and dehydrated foods. Financial data relating solely to a company's activities in these industries are not available for many of the larger companies, and to calculate the indices on incomplete or inaccurate information would provide misleading results. Consequently attention has been less heavily focused on concentration at the production level, and more on competition in the market.

TABLE 1.1

The Range of Canned Food Production by the major manufacturers

Manufacturers	Vegetables		Fruit	Fish	Meat		Soups	Desserts	
	Tradit.	Snack			'Hot'	'Cold'		'Hot'	'Cold'
Unilever:									
Batchelors	✓		✓						
John West			(✓)	(✓)		(✓)			(✓)
Wall's					✓	(✓)			✓
Nestle:									✓
Crosse &									
Blackwell		✓		✓			✓	✓	
Imperial Group:									
H.P.		✓							
Smedleys	✓		✓						✓
Heinz:		✓			✓		✓		✓
Pickerings			✓						✓
Cadbury-Schweppes:									
Hartleys	✓		✓						
Lockwoods	✓		✓		✓			✓	✓
Mortons (Beechams)	✓		✓						✓
Morrells	✓		✓						
Robertsons	✓		✓						✓
Yeoman (Mars)	✓								
Armour	✓	✓	(✓)						
Chesswood (RHM)	✓								
Fitch Lovell:									
Newforge	✓		✓		✓				
Harveys					✓				
Spam						(✓)			
Del Monte	✓		(✓)						
Green Giant	(✓)								
Libby McNeil									
& Libby	(✓)		(✓)	(✓)	✓	(✓)		✓	
Princes			(✓)	(✓)					
Glenryck				(✓)					
Campbell's					✓		✓		
Fray Bentos (BBL)					✓	(✓)			
Tyne Brand (Spillers)					✓				
Baxters							✓		
Coopers (CPC)			✓				✓		

(✓) = primarily imported goods.

2: CONSUMPTION AND EXPENDITURE

2.1: Average household spending (at current prices) on all types of food has been rising steadily during the period from 1966 to 1973, increasing by about one-sixth between 1966 and 1970 and by nearer one-third from 1970 to 1973. In real terms, household purchases of all types of food has changed very little during the same period: during the first four years, it rose by about 2 per cent., only to fall by about 3 per cent. in the next three years.

2.2: The National Food Survey distinguishes three broad categories of food: seasonal foods, convenience foods, and all other foods, and in Table 2.1 are shown data on total spending, average prices paid, and real value of purchases for each category for the 1966-73 period. In the first place, it will be noted that there was very little difference in the growth of spending (at current prices) between the three categories for the 1970-73 period, although in the 1966-70 period, spending on convenience foods of all kinds rose by 26½ per cent. as compared with 11 per cent. for seasonal foods and 15 per cent. for the all other category. But in terms of the real value of purchases the differences between the three categories were more marked for both periods.

2.3: Between 1966 and 1970, the volume of spending per household on convenience foods rose by 12 per cent., whereas it remained static for "all other foods" and fell by 3 per cent. for seasonal foods. From 1970 to 1973, household spending on convenience foods continued to increase although the rise was limited to 2 per cent., but this was in marked contrast to the fall of 5 per cent. or more in the other two categories.

2.4: There was comparatively little difference in the price-increases for each of three categories of spending between 1966 and 1970, although the rise between 1970 and 1973 was limited to 30 per cent. in the case of convenience foods as compared with nearly 40 per cent. for seasonal and all other foods.

2.5: The definition of convenience foods used by the National Food Survey is those processed foods for which the degree of preparation has been carried to an advanced stage by the manufacturer and which may be used as labour-saving alternatives to less highly-processed products. Included within that definition but separately distinguished are canned, frozen and dehydrated and all other convenience foods, the latter covering cakes and pastries, biscuits, breakfast cereals, cereal products, instant coffee and coffee essences as well as other less important products.

2.6: From Table 2.1, it will be seen that the three sub-groups of convenience foods have performed in different ways. As far as household expenditure at current prices is concerned, purchases of frozen foods increased by one-half between 1966 and 1970, and by close on two-thirds in the next three years to a 1973 level nearly 150 per cent. higher than in 1966. This compares with rises of 55 per cent. for canned foods and 67 per cent. for other types of convenience foods during the same period.

2.7: Price-increases for frozen foods during the 1966-73 period amounted to less than 30 per cent. as against nearly 40 per cent. for canned foods and over 50 per cent. for other types of convenience foods. The result is that the real purchases of frozen foods have risen by 90 per cent. between 1966 and 1973, whereas for canned foods and other convenience foods the increase is only 10 per cent.

2.8: For all its growth since 1966, the relative importance of the frozen foods sector is still small, amounting in 1973 to only $2\frac{1}{2}$ per cent. of total household food spending, and only 10 per cent. of spending on convenience foods of all kinds. But in relation to the total spending on frozen and canned foods combined, the share of frozen foods has risen from 18 per cent. in 1966 to $21\frac{1}{2}$ per cent. in 1970 and still more to 26 per cent. in 1973.

2.9: Put another way, the situation is that in real terms average household spending on frozen and canned foods combined rose by about 3.3 per cent. a year between 1966 and 1973, but whereas for canned foods the increase was under $1\frac{1}{2}$ per cent. a year, it was as high as $9\frac{1}{2}$ per cent. a year for frozen foods.

2.10: Within the category of frozen food products, there has been a wide variation in the growth of consumption between 1966 and 1973. In Table 2.2 are shown the average household consumption per head - in terms of lbs. weight a year - for the main categories of frozen food products. The most heavily consumed product is frozen peas, still accounting for 27 per cent. of total frozen foods consumption (by weight) in 1973 although its relative importance has fallen from 37 per cent. in 1966. There was little to choose between the relative importance of frozen convenience meats and meat products on the one hand, and frozen convenience fish products (which include fish fingers) on the other in 1973, but consumption of the former had doubled since 1966 whereas for the latter the increase was under one-half. Consumption of frozen white uncooked fish also rose by nearly four-fifths during the same period, while that of beans more than doubled.

2.11: The higher levels of consumption of these five groups of products account for just under three-fifths of the overall rise in consumption per head of the frozen foods listed in Table 2.2. The remaining two-fifths is attributable to many different types of frozen food products, of which consumption per head together amounted to around 0.9 lbs. in 1966, had doubled to 1.8 lbs. by 1970, and in 1973 amounted to 4.1 lbs.

2.12: The movement in average prices paid for different types of frozen foods is shown in Table 2.3. Between 1966 and 1970, prices of frozen foods rose, on average, by $7\frac{1}{2}$ per cent. but the prices of peas and beans were no higher in 1970 than in 1966, while the increases for other types ranged from $7\frac{1}{2}$ per cent. for white uncooked fish to 15 per cent. for the miscellaneous group. Between 1970 and 1973, when prices of frozen foods rose on average by 20 per cent., there was a fall in the price of peas and frozen potato products, the price of frozen beans remained unchanged, but there were very substantial rises in the prices of meat, fish and miscellaneous products.

2.13: Turning next to canned foods, Table 2.4 shows household consumption per head for the 1966-73 period for the most important categories distinguished in the National Food Survey. Consumption of corned beef reached a peak in 1970, but in 1972/73 was no higher than in 1966/67. A similar peak consumption occurred for other canned meats and meat products in 1970, but despite a subsequent fall, the 1972/73 consumption was one-fifth higher than in 1966/67. There has been a marked decline during the period in the consumption of canned salmon, but no significant change for other canned or bottled fish. Consumption of canned and bottled tomatoes was over one-quarter higher in 1972/73 than in 1966/67, that of canned beans one-eighth higher, and other canned vegetables nearly one-half higher, but consumption of canned peas, on the other hand, was slightly lower.

2.14: There was a fall of nearly one-fifth in consumption of canned peaches, pears and pineapples, with little change in the consumption of other types of canned or bottled fruit. Consumption of canned soups was over one-tenth higher in 1972/73 than in 1966/67, and there was a comparable rise in consumption of canned milk puddings.

2.15: The price-changes that have occurred during the 1966-73 period are shown in Table 2.5. For all types of canned food, the 1966-70 price-change was about $8\frac{1}{2}$ per cent., and rises of around this average applied in the case of canned peas, other canned vegetables, other canned or bottled fruit, and canned milk puddings. Below-average price-increases occurred for other canned meats etc., canned or bottled tomatoes, canned beans and canned soups. But price-rises of 20 per cent. or more were sustained by corned beef (28 per cent.), canned salmon (26 per cent.), and other canned or bottled fish (22 per cent.).

2.16: Similarly, the overall increase in average prices paid for canned foods was 27 per cent. between 1970 and 1973, and similar price-rises occurred for the majority of the products listed in Table 2.5. But the price of corned beef rose by 63 per cent. during this period, and other canned meats etc. by nearly 40 per cent., although other canned and bottled fish showed a much lower-than-average price increase.

2.17: The National Food Survey introduced in 1972 two categories of dehydrated foods. Consumption of dehydrated and powdered soups amounted to 6.24 ounces per head in both 1972 and 1973, despite an increase of 9 per cent. in prices paid between the two years. Consumption of instant potato rose by more than one-fifth between 1972 and 1973 to 5.72 ounces per head in 1973, with prices increasing by 7 per cent. Another category - accelerated freeze-dried foods (excluding coffee) - had an average consumption per head in 1972 of 15 ounces, but unfortunately no consumption figures are available for 1973.

TABLE 2.1

Household Expenditure on foods, average prices paid, and real value of purchases, 1966-73

	Seasonal Foods	Convenience Foods: Canned	Frozen	Other	All	All other foods	ALL FOODS
Expenditure at current prices (1970 = 100)							
1966	90	83	67	78	79	87	86
7	90	88	68	83	83	88	88
8	92	89	78	89	87	90	90
9	98	93	95	94	93	94	95
1970	100	100	100	100	100	100	100
1	108	99	110	107	105	112	110
2	107	111	131	117	116	119	116
3	131	129	164	130	133	132	132
Average prices paid (1970 = 100)							
1966	87	92	93	86	89	86	87
7	89	92	94	88	89	88	89
8	90	93	94	90	92	91	91
9	96	96	99	95	95	95	95
1970	100	100	100	100	100	100	100
1	106	109	107	111	110	112	111
2	113	116	109	118	117	122	119
3	139	127	120	132	129	139	137
Real value of purchases (1970 = 100)							
1966	103	91	72	90	89	100	98
7	102	96	72	94	93	101	99
8	102	95	83	98	96	99	99
9	102	97	96	99	98	99	99
1970	100	100	100	100	100	100	100
1	101	91	103	97	96	100	99
2	95	96	120	99	100	97	97
3	94	101	137	99	102	95	97

Source: National Food Survey

TABLE 2.2

Household consumption per head of frozen foods, 1966-73

	1966	1967	1968	1969	1970	1971	1972	1973
							lbs. per head	
Meats or meat products, convenience	1.19	1.29	1.35	1.64	1.77	1.77	2.08	2.37
Fish, white uncooked	0.77	0.71	0.93	0.97	1.03	0.83	1.12	1.38
Fish products, convenience	1.60	1.67	1.67	2.05	2.15	2.09	2.34	2.31
Vegetables								
- peas	3.02	2.99	3.28	3.54	3.28	3.60	3.90	4.36
- beans	0.65	0.58	0.94	0.90	1.00	1.00	1.30	1.50
- chips & other convenience potato products	0.64	0.58	0.84	1.16	1.32	1.35	0.91	1.66
- all other							0.94	1.53
Fruit							0.20	0.26
Cereal foods	0.25	0.22	0.32	0.45	0.51	0.58	0.49	0.62
Other convenience foods							...	0.03
Total	8.12	8.04	9.33	10.71	11.06	11.22	13.28	16.02

Source: National Food Survey.

TABLE 2.3

Frozen food products: Index-numbers of average prices paid, 1966-73

1970 = 100

	1966	1967	1968	1969	1970	1971	1972	1973
Meats or meat products, convenience	91	93	94	98	100	108	113	132
Fish, white uncooked	93	94	93	96	100	120	128	155
Fish products, convenience	89	88	90	94	100	114	126	142
Vegetables								
- peas	99	93	94	102	100	104	96	96
- beans	100	101	98	106	100	102	95	100
- chips & other convenience potato products) - all other)	105	106	105	107	100	100	95	94
Miscellaneous	87	88	94	96	100	108	112	119

Source: National Food Survey.

TABLE 2.4

Household consumption per head of canned foods, 1966-73

						lbs. per head		
	1966	1967	1968	1969	1970	1971	1972	1973
Corned meat	1.54	1.73	1.70	1.86	2.28	1.25	1.46	1.76
Other canned meat and meat products	4.95	5.46	5.62	5.94	6.36	5.94	6.34	6.21
Canned salmon	1.70	1.77	1.73	1.48	1.22	1.22	1.24	0.94
Other canned or bottled fish	1.10	1.06	1.03	1.06	1.00	0.80	0.94	1.27
Tomatoes, canned or bottled	2.34	2.50	2.44	2.44	2.63	2.73	3.19	2.96
Canned peas	9.36	9.65	9.81	9.98	10.28	9.12	9.59	8.97
Canned beans	10.40	11.20	11.17	11.49	12.39	11.56	12.09	12.29
Other canned vegetables	2.92	2.85	3.14	3.72	3.72	3.40	3.90	4.45
Canned peaches, pears and pineapples	8.35	8.70	8.51	7.93	7.45	7.23	6.96	7.18
Other canned or bottled fruit	7.12	6.93	7.00	7.93	7.35	7.16	7.15	7.47
Canned milk puddings	4.66	4.88	5.33	4.88	5.43	5.39	4.94	5.59
Canned soups	9.95	9.95	9.89	10.24	11.37	9.92	10.50	11.64

Source: National Food Survey.

TABLE 2.5

Canned food products: Index-numbers of average prices paid, 1966-73

1970 = 100

	1966	1967	1968	1969	1970	1971	1972	1973
Corned meat	78	85	95	98	100	128	147	163
Other canned meats and meat products	95	94	95	97	100	108	116	139
Canned salmon	79	79	79	85	100	102	111	130
Other canned or bottled fish	82	87	84	88	100	113	110	108
Tomatoes, canned or bottled	95	94	92	100	100	99	97	125
Canned peas	92	92	93	96	100	112	118	122
Canned beans	97	98	98	97	100	112	123	124
Other canned vegetables	89	91	95	98	100	113	116	128
Canned peaches, pears and pineapples	88	87	88	93	100	107	109	124
Other canned or bottled fruit	90	96	95	96	100	105	109	125
Canned milk puddings	89	90	91	96	100	108	123	128
Canned soups	95	94	96	99	100	108	114	123

Source: Based on National Food Survey.

3: THE STRUCTURE OF THE CANNED, FROZEN AND DEHYDRATED FOODS INDUSTRIES

3.1: In the United Kingdom the most important source of data regarding industrial structure is the Census of Production. The trades of canned, frozen and dehydrated foods do not correspond directly with any of the minimum list headings of the 1968 Standard Industrial Classification which is the classification basis employed by the Census of Production. The minimum list headings for food processing industries tend to be based on products rather than the form of processing, and data on the specified industries are to be found under three categories, namely:

(a) Minimum list heading 214, The Bacon Curing, Meat and Fish Products Industry, which comprises "the quick freezing of meat and meat products including poultry, and fish and fish products; curing bacon and ham, canning and otherwise preserving meat, poultry and fish, preparation of oven ready poultry, and making sausages, meat pasties, pies and puddings, meat extracts and essences, meat and fish pastes and lard. Production at distributive establishments is excluded."

(b) Minimum list heading 218, The Fruit and Vegetable Products Industry, which consists of "manufacturing jam, marmalade, mincemeat, jellies, fruit curd, fruit pulp, crystallised fruit, candied peel, potato crisps, pickles, sauces and other relishes, salad cream, vinegar, soups and homogenised baby food; the quick freezing of fruit and vegetables, the preserving of fruit and vegetables by canning, bottling, pickling, drying (except field drying) dehydrating and the processing of fruit and vegetables by heat treatment. The canning of spaghetti etc. and the processing of honey are also included.

(c) Minimum list heading 229 (2), The Starch and Miscellaneous Foods Industry, which includes canned puddings and pickles in addition to the main products of starch, vegetable extracts, tea, coffee, etc.

Consequently, analysis of the canned, frozen and dehydrated foods industries is fraught with difficulties.

3.2: The structure of the total fruit and vegetable products, and bacon curing, meat and fish products trades are shown in Table 3.1, for the years 1963 to 1973.

3.3: In 1963 there were 315 enterprises, controlling 407 establishments, classified to the total fruit and vegetable products trade. By 1968, the number of enterprises had fallen to 261 although it rose again to 288 in 1971, by which time the number of establishments had dropped to 353. Between 1963 and 1973 total sales and work done more than doubled from £260 millions in 1963 to a level of £601 millions in 1973, with over three-quarters of the increase occurring between 1968 and 1973. Similarly, gross output grew from £264 million in 1963 to £615 million in 1973, whilst net output increased even more rapidly, growing by more than one-third between 1963 and 1968, but more than doubling in the next five years. In the 1971-73 period alone net output more than doubled, to £247 million in 1973. Total employment in the fruit and vegetable products industry fell by about three per cent. during the decade, with a large decrease between 1963 and 1968, followed by a gradual increase to 63,600 in 1973.

3.4: The changes in structure of the total bacon curing, meat and fish products trade during the 1963-73 decade were even more dramatic. The number of enterprises increased from 667 in 1963 to 864 in 1970, although it fell slightly in the following year to 848. The number of establishments which these enterprises controlled grew consistently. During the decade sales, gross output and net output all increased to levels which were in 1973 over $3\frac{1}{2}$ times as large as in 1963, and over three-quarters of the increases occurred between 1968 and 1973. Between 1972 and 1973 alone, sales increased by one-third to £1,238 million, and net output by over one-quarter to £330 million. Employment in the bacon curing, meat and fish products industry also increased throughout the period, from 74,600 in 1963 to 112,500 in 1973.

3.5: These rates of growth are much larger than those experienced by the total UK food processing sector. Of course much of the increase in sales and output was the result of price rises, and although it is not possible to say what the rise in ex-factory prices has been, some indication of the rapid rate of increases in average prices paid has already been given.

3.6: For 1963 and 1968 only, a more refined breakdown of sales, output and employment is available in relation to the method of processing. (Tables 3.2 and 3.3). The figures relate only to larger establishments, i.e. those employing 25 or more people. In both the fruit and vegetable products and the bacon curing, meat and fish products industries, the number of larger establishments declined between

1963 and 1968, (although for the latter industry the number of enterprises controlling the establishments increased slightly), whilst sales and work done, and net output increased. Employment in larger establishments in the bacon curing, meat and fish products trade increased, whereas in the fruit and vegetable products industry employment fell.

3.7: Against this background, there have occurred significant structural changes. In 1963 sales of quick-frozen products (and including dressed poultry other than quick-frozen) accounted for 12 per cent. of the total sales and work done in the two industries combined, 15 per cent. of net output and 14 per cent. of employment. By 1968 the corresponding figures were 24 per cent. of sales, 22 per cent. of net output and 21 per cent. of employment. In other words the relative importance of frozen products had increased markedly between 1963 and 1968, and this was particularly so for frozen meat and fish products etc. where sales increased $3\frac{1}{2}$-fold in the five years to a level of £158 million by 1968, which was nearly one-third of the sales by larger establishments in the whole bacon curing, meat and fish products industry. Commensurate with this was an increase in the number of establishments engaged in manufacturing frozen meat and fish products etc. from 37 in 1963 to 100 in 1968, controlled by 19 and 69 enterprises respectively, so that although sales per establishment increased by 28 per cent., net output per establishment declined by approximately 6 per cent. between 1963 and 1968. For quick-frozen fruit and vegetables the increase in the number of establishments, from 12 in 1963 to 16 in 1968, was less than the 117 per cent. increase in sales, and the four-fifths increase in net output, so that sales per establishment and net output per establishment both showed an increase during the 1963-68 period.

3.8: The pattern for the canned and bottled foods shown in Table 3.2 and 3.3 is somewhat different; the number of establishments engaged in canning or bottling fell between 1963 and 1968 in each of the three product groups, although overall sales, net output and employment all increased. The relative importance of canned or bottled fruit and vegetables and vegetable products, soups etc. declined from over 50 per cent. of total sales of the fruit and vegetable products industry in 1963, to only 44 per cent. in 1968, and canned or bottled meat or fish etc. maintained its relative importance in the bacon curing, meat and fish products industry in terms of sales, although not in terms of net output.

3.9: Table 3.4 gives a detailed breakdown by principal products of sales of larger establishments, including sales by establishments classified to other industries. The figures cover both volume and value, and for 1968 only the number of larger enterprises. Several points of interest emerge from the data. The number of enterprises engaged in quick-frozen fruit and vegetable processing is very low compared with the number involved with freezing meat, poultry and fish products. Although it would appear that those companies engaged in freezing vegetables also process frozen fruit, sales of the latter are at a low level and in volume terms decreased between 1963 and 1968. Peas are the most important individual frozen vegetable, although sales of frozen vegetables other than peas or green beans increased dramatically between 1963 and 1968. Amongst the canned and bottled vegetables also, sales of peas are important, but the canned vegetable with the highest sales in 1968 was beans in sauce. Sales, in volume terms, of canned or bottled fruit decreased between 1963 and 1968, although the number of enterprises active in fruit canning or bottling was as high as 51 in 1968.

3.10: Between 1963 and 1968 sales, in both volume and value terms, of frozen white fish jumped, but there was a switch between the uncooked product whose sales in volume terms increased $2\frac{1}{2}$-fold, and cooked white fish where sales fell by nearly half. The other frozen food showing a large increase in sales was pre-cooked food specialities containing meat and poultry, other than complete meals.

3.11: Also shown in the table are sales of canned desserts, a market where new product developments have led to sales increases. In 1968, 11 enterprises owned establishments manufacturing canned rice puddings, with sales of £$8\frac{3}{4}$ millions, compared with £$6\frac{1}{2}$ millions in 1963. Also there were 22 enterprises producing other canned sweet puddings, with sales in 1968 amounting to £4 millions, $2\frac{1}{2}$ times the 1963 level. By 1974, concentration had increased dramatically. Only 6 enterprises were engaged in producing canned rice puddings and sales were £$16\frac{1}{2}$ millions, and whilst sales of other canned puddings had increased to £14.4 millions, the number of active enterprises had dropped to only 5.

3.12: Concentration ratios, that is, the proportion of the total sales of larger establishments made by the five largest enterprises, are available for the years 1963 and 1968, but only for the products and product groups shown in Table 3.5. No clear pattern stands out. Dressed poultry, frozen, fresh or chilled and quick-frozen carcase meat and poultry had a low concentration ratio of under 40 per cent. in 1968, but no comparative figures for 1963 are available. The only other product group with such a low level of concentration was preserved fruit other than marmalade and jams, where concentration increased from under 38 per cent. in 1963 to nearly 46 per cent. in 1968. It should be borne in mind however that, in general, the more closely defined a product-group, the higher the concentration ratio becomes and the preserved fruit category so defined includes, in addition to canned or bottled fruit, mincemeat, crystallised, glace or Metz fruit, drained fruit and candied or drained peel. For vegetables and vegetable products preserved in airtight containers the level of concentration altered only marginally between 1963 and 1968, increasing from 65.3 per cent. to 66.7 per cent.

3.13: Three product-groups, of which two were quick-frozen, had very high levels of concentration, of over 90 per cent. Quick-frozen vegetables were highest with a concentration ratio of 93 per cent. in 1963 rising to 97 per cent. in 1968. In comparison, the concentration ratio for quick-frozen fish and fish products was 92 per cent. in 1963, but fell very marginally to 91 per cent. by 1968. For soups the level of concentration declined from 92½ per cent. in 1963 to 90½ per cent. by 1968, which may reflect relative changes between canned or bottled soups, and soup-squares and powder.

3.14: Unfortunately, data on the structure of the frozen, canned and dehydrated foods industries are not available for years later than 1968, with the exception of the canned dessert statistics given earlier. In consequence, it is necessary to turn to alternative sources and attempt to assess the structure of concentration in terms of market shares.

TABLE 3.1

Structure of the Fruit and Vegetable Products, and Bacon Curing, Meat and Fish Products Industries, 1963-73

	1963	1968	1970	1971	1972	1973P
Fruit and Vegetables Products						
No. of Enterprises	315	261	275	288	...	...
No. of Establishments	407	347	358	353	...	...
Sales and Work done (£M)	260.0	343.9	417.4	450.4	538.6	600.9
Gross Output (£M)	264.3	347.5	427.5	452.5	532.8	615.1
Net Output (£M)	92.1	121.6	152.9	161.6	194.8	247.4
Employment (000s)	65.4	60.6	62.6	61.2	61.7	63.6
Bacon Curing, Meat and Fish Products						
No. of Enterprises	667	734	864	848	...	...
No. of Establishments	864	936	1,058	1,058	...	...
Sales & Work done (£M)	339.2	546.9	777.7	881.0	928.3	1237.8
Gross Output (£M)	340.7	549.8	784.7	884.2	935.6	1253.3
Net Output (£M)	91.6	150.7	210.2	244.8	261.5	330.1
Employment (000s)	74.6	90.1	104.5	106.5	112.0	112.5

Source: Census of Production, 1968, 1971 and 1973 Provisional Results.

P = Provisional

TABLE 3.2

Structure of the Fruit and Vegetable Products and Bacon Curing, Meat and Fish Products Industries, 1963

(Larger Establishments)

1963	No. of Enter-prises	No. of Establish-ments	Sales & Work Done (£M)	Net Output (£M)	Employ-ment (000s)
Fruit & Vegetable Products	131	223	248.7	88.1	62.6
Quick-frozen fruit and vegetables	7	12	20.9	10.1	6.1
Canned or bottled fruit and vegetables	35	49	55.3	17.7	5.0
Canned or bottled vegetable products, soups etc.	9	16	72.5	25.7	7.9
Bacon Curing, Meat & Fish Products	247	422	315.0	85.0	69.3
Quick-frozen meat and fish products; dressed poultry other than quick-frozen	19	37	45.6	15.4	12.2
Preserved meat or fish in cans, glasses etc., meat extracts, fish cured, smoked or salted, fish cakes etc.	50	74	43.8	17.5	10.6

Source: Census of Production

TABLE 3.3

Structure of the Fruit and Vegetable Products and Bacon Curing, Meat and Fish Products Industries, 1968

(Larger establishments)

1968	No. of Enterprises	No. of Establishments	Sales & Work Done (£M)	Net Output (£M)	Employment (000s)
Fruit & Vegetable Products	119	201	333.8	118.1	58.8
Quick-frozen fruit & vegetables	9	16	45.4	18.4	8.3
Canned or bottled fruit and vegetables	32	45	64.7	18.3	5.1
Canned or bottled vegetable products, soups etc.	8	13	83.2	32.0	9.6
Bacon Curing, Meat and Fish Products	249	396	508.4	140.1	83.8
Quick-frozen meat and fish products, dressed poultry other than quick-frozen	69	100	158.3	39.3	22.3
Preserved meat or fish in cans, glasses etc., meat extracts, fish cured, smoked or salted, fish cakes etc.	43	65	69.5	25.3	13.3

Source: Census of Production

TABLE 3.4

Sales of Principal Products by Larger Establishments, including sales by establishments classified to other industries, 1963 and 1968

(Larger Establishments)

	1963		1968		
	Quantity (Th.Cwt.)	Value (£000s)	Quantity (Th.Cwt.)	Value (£000s)	Enter-prises
Quick-frozen fruit & vegetables					
Fruit	38.6	475	37.4	511	6
Vegetables - peas	1,258	13,259	1,697	19,685	6
- green beans)	637	8,089	382	6,173	6
- other)			739	10,053	11
Fruit & vegetables, canned or bottled etc.					
Fruit (including rhubarb, but not fruit pulp)	2,018	13,287	1,694	17,558	51
Vegetables in airtight containers:					
Peas - fresh "garden"	1,564	8,355	...	8,999	20
- processed	3,516	11,394	...	11,899	22
Others (a)	1,993	10,317	2,374	16,358	29
Vegetable products, soups etc. canned or bottled					
Beans in sauce (with or without added meat)	4,465	21,232	5,829	29,263	22
Macaroni, spaghetti, vermicelli, noodles etc. canned in tomato, cheese sauce etc.	869	4,552	1,238	7,279	9
Soups - ready to serve)	4,786	24,673	691	5,749	*
- condensed)					
Other (including squares & powders)	339	8,887	490	9,969	10
Vegetables, including olives, prepared in salt or brine; heat treated, and dried or dehydrated vegetables including dried herbs (other than peas, beans etc. air-dried and cleaned) (b)	501	4,241	(409	6,203)	30
			(...	5,142)	

* Not shown owing to risk of disclosing information about individual enterprises.

continued ...

TABLE 3.4 (continued)

Sales of Principal Products by larger establishments, including sales by establishments classified to other industries, 1963 and 1968

(Larger Establishments)

	1963 Quantity (Th.Cwt.)	1963 Value (£000s)	1968 Quantity (Th.Cwt.)	1968 Value (£000s)	Enter-prises
Quick-frozen meat & fish products, etc.					
Dressed poultry, frozen, fresh or chilled & carcase meat & poultry quick-frozen	301	4,848 (c)	6,255	94,937	78
Fish and fish products, quick-frozen:					
White fish - uncooked	569	8,181	1,360	26,359	14
- cooked (consumer packs)	606	10,978	332	3,776	*
Other	216	3,084	174	5,240	15
Pre-cooked foods & specialities, quick-frozen, not elsewhere specified, containing meat, poultry etc.					
Complete meats)	414	9,324	57	1,317	*
Other than complete meals)			1,009	24,817	23
Preserved meat or fish in cans, glasses, etc.					
Meat (including ready prepared meats)	1,274	21,087	1,727	36,994	40
Meat & fish pastes:					
Poultry &/or meat	174	4,039	120	4,444	23
Fish	102	3,353	65.8	3,856	16
Fish	108	1,707	26.6	2,826	11
Miscellaneous					
Rice puddings, canned	1,625	6,439	2,372	8,746	11
Other puddings & trifles, canned (excluding meat & fish puddings)	193	1,528	454	4,042	22

Source: Census of Production

(a) Vegetables preserved in airtight containers other than homogenised baby foo[d] beans in sauce, peas, pasta.
(b) Heat treated vegetables were not specifically included for 1963.
(c) Excluding for 1963 sales by firms mainly engaged in the preparation of oven-re[ady] poultry ... Not available

TABLE 3.5

Sales Concentration Ratios for Selected Products, 1963 and 1968

	Sales concentration ratios for largest five enterprises 1963	1968	No. of enterprises in 1963 with same concentration ratio as 1968
Preserved fruit other than marmalade and jam	37.7	45.7	7
Vegetables, quick-frozen	93.3	97.1	6
Vegetables etc. preserved in airtight containers (other than homogenised baby foods)	65.3	66.7	5
Soups	92.5	90.4	Under 5
Dressed poultry, frozen, fresh or chilled and carcase meat and poultry, quick-frozen	...	39.2	...
Fish and fish products, quick-frozen	91.7	91.1	5

Source: Census of Production

4: THE FROZEN FOODS INDUSTRY

Introduction

4.1: The frozen foods market is one of rapid growth, despite recent minor setbacks, with growth occurring not only in expenditure and volume, but also in the range of products. Being a relatively new market, based on technical innovation, it is of particular interest, with the additional factor that it has developed more or less simultaneously in many countries.

4.2: In the United Kingdom, growth in the frozen food market has happened without widespread refrigeration, and it is only in recent years, as the data in Table 4.1 demonstrate, that ownership of refrigerators and home freezers has become common; by 1973, 76 per cent. of homes owned a refrigerator, and during that year 850,000 home-freezers were sold. This augurs well for the future of the frozen foods industry, as the consumption figures in Table 4.2 indicate. In 1973 consumption of frozen foods by deep-freezer owning households was treble that by households with no means of refrigeration, and consumption by the latter was only half that by households owning a refrigerator but not a deep-freezer. Similarly, in 1973 expenditure on the frozen foods listed in Table 4.2 was 10.88 pence per person per week by those owning a deep-freezer, 7.24 pence among households owning only a refrigerator, and 4.21 pence by all other households.

4.3: On the other hand, with increasing ownership of home-freezers has come the development of freezer-centres, that is retail shops catering for the bulk purchasing of frozen foods, much of which is own label produce. The growth in the number of freezer-centres has been remarkable. The Co-op now has well over one hundred Freezer Food Centres and Bejam's nearly one hundred. Between 1969 and 1973 total sales by Bejams increased from £268,000 to nearly £17 millions and in 1972 alone Bejams opened 20 freezer food centres, built a 300,000 cu.ft. cold store at Hendon, doubled its butchery capacity at Stanmore, Middlesex, and began building a meat processing and slaughtery plant at Aberdeen. Sainsbury's plan to open 40 freezer centres, and Fine Fare already have four centres, with more planned. Such freezer centres are offering increasing competition to the major established companies in the frozen foods industry.

4.4: Nevertheless the industry is dominated by a few major firms, most notable being the Unilever subsidiary Birds Eye Foods Ltd., Findus (UK) Ltd. owned by Nestle and the Imperial Group's subsidiary Ross Foods Ltd. It has been estimated by the Economist Intelligence Unit that the total retail market for frozen foods in 1972 was divided between these three companies as follows:

Birds Eye	60%
Findus	18%
Ross	8%
Private-label	6%
Other	8%

A similar breakdown for 1967 by Oldhams Press Branded Food Survey shows that Unilever had about 62 per cent. of the market, with three brands, i.e. Birds Eye, Tempo and Smethursts. Amongst the leading enterprises there has been a slight tendency towards product specialisation. Birds Eye has the most comprehensive coverage, ranging from peas to fishfingers, beefburgers and mousse. Findus has tended to specialise in fish products, whilst Ross is well-known for its frozen poultry through its links with Buxted, and has also tended to concentrate more on the bulk market. However, a change of emphasis has been occurring with the major companies introducing many new products - in 1973 for example Birds Eye introduced five new retail vegetable products, eight new retail meat products, four fish products, and four dessert items - and it is estimated that since 1960 about two-thirds of new frozen food sales have come from new products.

4.5: These new products have been introduced largely in the face of competition from a large number of smaller producers, who tend to concentrate on speciality and gourmet foods and on production for private-labels. For example, Alveston Kitchens Ltd. is a small but growing independent company based near Stratford-upon-Avon, whose range in 1973 included 20 products, of which 12 were retail lines and whose turnover increased from £48,000 in 1968 to £1.4 millions in 1973. Stowbec Ltd. of Bidford-on-Avon manufacture a range of frozen classical sauces in 32 ounce catering packs to serve 9-10 people; Chef Foods Ltd. and King Henry both specialise in frozen pizzas; Exotic Frozen Foods produce frozen Indian foods; a wide range of cakes and sponges is produced under the Sara Lee brand. The list is long, but in terms of the total industry such companies are of relatively minor importance.

4.6: Amongst the major food manufacturing companies in the United Kingdom, few have attempted to enter the frozen foods market. There are some exceptions; for example, Ranks Hovis McDougall through their subsidiary Baughans Foods Ltd., of Braintree, have started to manufacture a new Kitchen Guild range of meals for two; Brooke Bond Liebig undertake some activities in the frozen food sector through the subsidiaries Square Meal Foods Ltd. and Brooke Bond Oxo Frozen Foods Ltd.; Kraft Ltd., manufacture a range of frozen pies and meats, through the Brains (Food Products) Ltd. and recently Lockwoods Foods has diversified into frozen food. In general the high rate of capital investment required, and the expense and difficulty of obtaining space in the limited refrigerated cabinet capacity in retail outlets has deterred many companies from entering the frozen foods market.

4.7: In the United Kingdom, the frozen foods industry developed in the post-war period. Unilever acquired the patent rights in frosted foods from the joint owners, the General Foods Corporation of the United States and Chivers and Sons in the United Kingdom, and after earlier experiments, built its first frozen food "Birdseye" factory at Great Yarmouth. Operations started there in 1946, a second factory was opened at Lowestoft in 1949, a third at Kirkby in 1953 and a fourth in 1956 at Grimsby. Although other firms entered the industry, Unilever through its subsidiary Birds Eye Foods Ltd. soon attained a position of dominance. In 1958 Unilever was responsible for about four-fifths of industry sales, a position of dominance which had been achieved by internal growth.

4.8: After the late 1950s the intensity of competition increased as a result of significant new entry into the industry. The reaction of the established companies was to expand by merger and acquisition. Unilever acquired Tempo Frozen Foods and Smethursts Foods Ltd. More significant was the string of mergers which led to the formation of the present day second largest concern in the United Kingdom frozen foods processing sector, namely Findus (UK) Ltd. In 1956, the Swedish concern Findus began operating in the UK and in 1962 Nestle, a subsidiary of Nestle Alimentana S.A., Switzerland, entered the industry by acquiring a controlling interest in Findus. The pressure of competition forced the merger in the following year of the frozen foods interests of three major companies. J. Lyons' Frood label which had commenced trading just after the war merged with Union International's Fropax in early 1963 and later in the same year this joint concern bought Associated Fisheries' "Eskimo" frozen food interests to form Fropax Eskimo Frood Ltd. In 1968 this company merged with Nestle's Findus and after rationalisation of management, distribution and product lines (all brand names except Findus were discontinued) the group achieved its 18 per cent. share of the frozen foods market. Basically the constitution of the company has remained unaltered since 1968 although further changes in ownership have occurred. Union International sold its interest to Lyons, so that in 1973 Findus (UK) Ltd. was jointly owned by Nestle and J. Lyons; in 1973/74 J. Lyons agreed to sell their 50 per cent. holding to their partners, so that Nestle is now the holding company of Findus (UK) Ltd.

4.9: A third important concern developed as the result of mergers. Imperial Tobacco, as part of its programme of diversification acquired Ross Foods Ltd. in 1969, and also bought Smedley's and Youngs Seafoods, the latter being primarily concerned with speciality fish, crustacea and other seafoods, plus manufacturing dairy cream products. So by 1969 three concerns dominated the frozen foods industry in the United Kingdom and these three companies comprised at least eight firms which had been independent five years earlier. Unilever's lead in the market developed as a result of internal growth, and although to an extent it had been whittled away by mergers among competitiors, these mergers have themselves contributed to the maintenance of very high concentration in the frozen foods industry in the United Kingdom.

4.10: Both Unilever and Nestle are leading frozen food processors in Europe, in practically all countries except Norway, notably Germany, Holland, Belgium, Italy, Sweden and Austria, Unilever through the brands of Birds Eye and Igloo, and Nestle with the Findus brand. By 1969, Unilever and Nestle together accounted for about 70 per cent. of the total retail market in Western Europe. Both companies are following a policy of expansion in Europe. In Italy, Germany and Austria during 1968-69 the two companies merged their respective frozen food businesses under the Findus label, with 75 per cent. of the capital being held by Unilever and the remainder by Nestle. This was in order that the firms could concentrate on building and developing the frozen food market, rather than competing between themselves for limited brand shares.

4.11: Unilever and Nestle both have frozen food activities in countries outside Europe. For example, in the early 1950s Birds Eye was set up in New Zealand, merged with a local company in 1957 and expanded further by the acquisition of Fropax (New Zealand) in 1966. More recently, Nestle have been expanding their activities in the United State of America by the takeover in 1973 of the Stouffer Group, which operates in the frozen food sector, in addition to owning a number of hotels and restaurants. The acquisition is currently the subject of proceedings by the US Federal Trade Commission, although it is not yet clear whether the Commission wants Nestle to divest itself of the whole of the Stouffer groups activities, or only the frozen food operations.

The Total Market for Frozen Foods

4.12: The total size of the market for frozen foods is estimated to be £345 millions in 1973, of which £100 millions were sales in the catering market to hotels, pubs, restaurants, canteens and hospitals and £245 millions were sales in the retail market, the latter including sales of £60 million to home-freezer owners. As shown in Table 4.3, sales in the retail market, excluding freezer-centres, of £185 millions in 1973 represent a 200 per cent. increase over 1963, and a 60 per cent. growth over 1968, whereas sales in the catering market increased by over 150 per cent. between 1968 and 1973.

4.13: Approximate division of the retail market between different brands of frozen foods in 1967, 1972 and 1973 is shown in Table 4.4. The obtaining of market share data presents many practical difficulties and consequently the figures should be interpreted with care, with greater emphasis placed on the relative position of different brands, rather than the absolute percentages. Nevertheless, it is clear that in 1967, Birds Eye were dominant in the market, and Unilever with both Birds Eye and Tempo had slightly under two-thirds of the market. The remainder was highly fragmented with Eskimo/Frood having an estimated 6 per cent. share, and Findus a share of about 5 per cent. By 1972 and 1973 an increase in concentration of market shares had occurred, with Birds Eye still holding around three-fifths of the market, and Findus, which now included Eskimo/Frood, increasing its share to some 18 per cent., and Ross also increasing to just under one-tenth. Private labels were also becoming significant by 1972/73, having between 6 and 7 per cent. of the market. With the expansion of the market for catering and home-freezer products in recent years, it is possible that these figures, whilst reflecting brand shares in the grocery trade, may be over-estimates of the relative position in the total frozen food sector.

4.14: Advertising expenditure in the total frozen food industry was about £3,700,000 in 1973, compared with around £2,500,000 in 1967/68. In 1972, Birds Eye accounted for four-fifths of this total expenditure, Findus one-tenth, the Imperial Group for six per cent., Jus-rol (a Findus subsidiary) for about 2 per cent. and Brains for 1 per cent. Birds Eye and Findus advertised mainly on television, whereas the others tended to concentrate on the press. In 1967/68, only three-fifths of the total frozen foods advertising expenditure was made by Birds Eye, another 6 per cent. by Fropax Eskimo Frood, 4 per cent. by Findus and 4 per cent. by Ross and Smedley's together. Three-quarters of total advertising expenditure went on television advertising (i.e. £1.87 millions) and of this seven-tenths was made by Birds Eye.

Frozen Vegetables and Fruit

4.15: United Kingdom production of quick frozen vegetables in 1968 was 136,300 tons, compared with a relatively insignificant production of frozen fruit of 800 tons, according to Ministry of Agriculture, Fisheries and Food data shown in Table 4.5 . Of this total production of vegetables in 1968, 57 per cent. was peas, 19 per cent. potatoes and potato products, 13 per cent. green beans and 6 per cent. brussels sprouts. By 1973 production of vegetables had more than doubled to 321,200 tons, with the largest rates of growth occurring between 1968 and 1969 (41 per cent.) and 1972 to 1973 (37 per cent.), and a slight fall in production taking place in 1971. In that year production of peas and green beans declined, although for all other products, most notably potatoes, growth continued. Of total potato production in 1971, 27,000 tons were for fish and chip shops, 33,000 tons for catering packs, a market in which Ross is particularly strong, 4,000 tons for bulk purchase, and the remaining 20,000 tons for retail, where Birds Eye are of major importance. The relative importance of different kinds of vegetables had changed by 1973, when production of potatoes and potato products accounted for 44 per cent. of total vegetable tonnage, and had replaced green peas as the major frozen vegetable produced. Together production of green peas and potatoes and potato products was 254,000 tons in 1973.

4.16: Imports of quick-frozen vegetables have fluctuated during the 1968-73 period. From a level of 54,000 tons in 1968, equivalent to nearly 40 per cent. of UK production, imports gradually decreased during 1969 and 1970, but plummeted to 21,000 tons (10 per cent. of UK production) in 1971. Thereafter a steady increase occurred so that by 1973 imports were running at a level of nearly 39,000 tons, which represented about 12 per cent. of UK production. On the other hand, exports of frozen vegetables increased rapidly between 1970 and 1973 although exports of 19,000 tons in 1973 represented only 6 per cent. of UK production and were only half as much as imports. The two major countries to receive UK exports of frozen vegetables were Ireland and Italy.

4.17: The source countries from which the United Kingdom imports frozen vegetable are shown in Table 4.6, for the years 1968, 1971 and 1973. For the whole 1968-73 period imports totalled 237,700 tons, 38 per cent. coming from present EEC member states and another 36 per cent. from Commonwealth countries. The most important source countries were Canada (18 per cent.), South Africa (12 per cent.), Netherlands (11 per cent.), Sweden (11 per cent.) and Eire (11 per cent.) Significant fluctuations occurred on an annual basis. Imports from EEC countries have increased from nearly one-fifth of the total in 1968 to approximately half in 1973, largely at the expense of imports from Canada. The greatest tonnages in 1973 were imported from New Zealand, France, Netherlands and South Africa, compared with 1968 when Canada and Sweden together provided slightly over half of UK imports of frozen vegetables. When the level of imports dropped suddenly in 1971, following difficulties in the UK market in the previous year, imports from EEC countries were least severely hit. In fact imports from France and Eire were higher than in the previous year, with the Netherlands showing only a small fall in volume. Amongst other sources, only South African imports maintained anything like the level of previous years.

4.18: Quick-frozen fruit production in the United Kingdom fluctuated during the period averaging only about 1,500 tons per annum. Imports were of little significance, and exports, particularly in 1972, appeared to be at a high level relative to total production.

4.19: The market for frozen vegetables, estimated using National Food Survey data, was about £43 million at retail selling prices in 1968, around £60 millions in 1972, and may be as high as £78 millions by 1973. The market for specific frozen vegetables is estimated as:

Market Values (£M at Retail Sale Prices)

	Peas	Beans	Potatoes & Products	Other	Total
1968	26	9	——— 8 ———		43
1969	30	10	——— 11 ———		51
1970	28	10	——— 12 ———		50
1971	31	11	——— 12 ———		54
1972	31	13	6	10	60
1973	35	16	10	17	78

Frozen peas are clearly the most important vegetable, but the market for vegetables other than peas and beans, is increasing rapidly, particularly so for potatoes and potato products. In 1973 other vegetables, inclusive of potatoes and potato products comprised one-third of the total market, compared with under one-fifth six years earlier.

4.20: Birds Eye dominate the market for frozen vegetables. In 1968 it is estimated that their share of the market was about 64 per cent. for peas and 66 per cent. for vegetables and by 1972 this proportion may have increased somewhat. The major changes that have occurred in terms of brand shares between 1968 and 1972 are that Findus has increased in importance from about 15 per cent. in 1968 to nearly one-fifth in 1972; Ross has nearly doubled its proportion to about 8 per cent. in 1972, whilst the importance of Smedley has declined considerably and the share of the market claimed by own-label products, particularly Sainsbury's, has increased to just under one-tenth in 1972. Thus the leading brands dominated and controlled the market in both 1968 and 1972, and if anything this dominance had increased by 1972, despite the growth of own-label products.

Frozen Fish and Fish Products

4.21: In 1968, according to the Census of Production, sales of quick-frozen fish and fish products by larger establishments amounted to more than 93,000 tons or £35.4 millions. Of this, white fish sales accounted for 85 per cent. in value terms and about the same proportion of tonnage, with sales of uncooked white fish at 68,000 tons and sales of cooked (consumer packs) white fish at 16,600 tons.

4.22: Production of quick-frozen white fish in the United Kingdom was, in 1968, according to the White Fish Authority, some 88,000 tons (Table 4.7). The proportion of total UK white fish supplies used for quick-freezing has been increasing, from 23 per cent. in 1968 to 28 per cent. in 1973, and this compares with ten years earlier when only 16 per cent. was used for freezing. Quick-frozen white fish production grew between 1968 and 1970 by over one-fifth, but this was followed by the 1970-72 period of practically no growth, and an actual decline in production in 1970-71. By 1973 production had picked up to 119,000 tons, an increase over 1968 of more than one-third.

4.23: The White Fish Authority figures of sales of quick-frozen white fish for 1968-73 are also shown in Table 4.7. Total home market sales in 1968 were 114,000 tons increasing each year to 142,300 tons in 1972, followed by a slight fall in 1973 to 141,800 tons. Sales in retail packs represented between 41 and 48 per cent. of the total home market, and retail sales have tended to increase, despite fluctuations. Sales of white fish have been considerably higher than production, with the balance being explained by stocks, imports and exports.

4.24: Imports and exports for the 1968 to 1973 period are shown in Table 4.8, while the sources of imports are given in Table 4.6. These statistics relate to all types of fish and fish products, not just white fish. Imports of quick-frozen fish have fluctuated around 62,000 tons per annum, ranging from 66,700 tons in 1968, to 55,300 tons in 1971 and increasing again to 65,300 tons by 1973. Exports, on the other hand, have been increasing dramatically from a mere 16,000 tons in 1968 to over 76,300 tons by 1973. Between 1971 and 1972 alone exports of quick-frozen fish products increased by over 90 per cent. and by 1973 exports of all quick-frozen fish products exceeded imports of quick-frozen fish.

4.25: Most of the exports go to Australia, Ireland and the USA, whilst imports into the United Kingdom come mainly from Norway (Table 4.6). Over the whole period 1968-73, on average one-fifth of UK frozen fish imports came from EEC member states, nearly half from the Scandinavian countries, Norway and Sweden, over one-tenth from the USA and Canada, and nearly 6 per cent. from Iceland. Changes have occurred during the period, with the EEC member states increasing their exports of quick-frozen fish to the UK, Norway and Sweden both growing in importance, and Canada and Iceland, to a lower degree, becoming of less importance as suppliers of UK imports. Nevertheless Norway is still dominant, providing 43 per cent. of UK imports in 1968 and 46 per cent. in 1973.

4.26: The size of the retail market for frozen fish, estimated using National Food Survey data, more than doubled between 1968 and 1973 from £36 millions to nearly £80 millions (Table 4.8). Frozen fish and fish products, other than white, uncooked fish, accounted for between three-fifths and two-thirds of this total market, and trade estimates suggest that two-thirds of the total market was fish fingers alone.

4.27: Brand shares in the frozen fish market are similar to the overall frozen foods market, with Birds Eye the clear brand leader, followed by Findus and then Ross. Market shares by manufacturers were estimated to be:

	1968	1969	1973
Unilever	71	70	63
Nestle	16	18	18
Imperial	5	6	7
Other	8	6	12
	100	100	100

Unlike the market for frozen foods in general, and for frozen vegetables in particular, the share of the frozen fish market held by Unilever has declined considerably from over seven-tenths in 1968 to under two-thirds in 1973. Correspondingly, both Nestle and the Imperial Group (through Ross and Young's Seafoods) have improved their market share slightly, although 'other' including own-label sales, have shown the largest increase, representing 7 per cent. of the retail market in 1968/69 compared with 12 per cent. in 1973. In the future these brand shares are likely to undergo substantial revision as the importance of retail sales of branded products declines, whilst bulk sales, own-label products and catering sales increase. Ross is heavily committed to own-label activity, Findus is extending its interest, and even Birds Eye, for long a dedicated opponent of own-label production is nevertheless entering the field in the face of this competition.

4.28: Advertising expenditure on fresh and fresh-frozen fish (Table 4.9) is extensive. In 1968 expenditure amounted to slightly over £1 million - £874,000 on TV and £130,000 in the press - and by 1972 had increased to nearly £1.4 millions. Birds Eye is the major advertiser, accounting for over half of the total expenditure in 1972. During this year Findus mounted a heavy campaign and the company's expenditure rose to £403,000. However, in the following year Birds Eye retaliated, allocating over £¾ million to advertising, whilst Findus' expenditure more than halved. There were no other significant advertisers on frozen fish although the White Fish Authority spent about £200,000 per annum promoting fish consumption in general.

Frozen ready-to-eat meals

4.29: Vegetables and fish are the most important frozen commodities in terms of retail sales. However in recent years, sales of ready-meals have shown rapid increases. As is the case with canned and dehydrated meats and meat products, difficulties of definition are encountered which makes estimation of the size of the market extremely hazardous. The market for frozen convenience meats and frozen convenience meat products, according to the definition of the National Food Survey was over £20 millions in 1968, had risen to nearly £40 millions by 1972 and jumped to over £50 millions in 1973.

4.30: Once again the market is dominated by the three leading companies, particularly Birds Eye, although increasingly competition is coming from the smaller companies. Most notable are Alveston Kitchen, Brains (Food Products) Ltd., a subsidiary of the United States Kraftco Corp, and Primecut Foods. Advertising on frozen ready-to-eat meats was £668,000 in 1968, jumped to over £1 million in the following year and has fluctuated thereafter between £825,000 and £1 million. Birds Eye has again been the major advertiser, spending over £900,000 in 1973 on advertising 14 different products. The most heavily promoted product was Birds Eye beefburgers which has been backed by heavy advertising every year since 1968. The relative importance of different products varied from year to year. In 1973 Birds Eye roast beef and chicken and mushroom casserole were the other most heavily advertised products, whereas in 1968 Birds Eye rissoles and chicken pies were the most heavily backed products.

Frozen Confectionery

4.31: The frozen confectionery market covers a wide range of products from mousse and trifle to pies and pastry, sponges and cakes. In the context of the overall frozen food industry sales are not of major significance. The manufacturers involved in the market are the same as for the other sectors of the frozen foods industry. In particular, Birds Eye dominate the market for frozen mousse, having developed the market, whereas Findus through the Jus-Rol label are clear brand leaders in the frozen pastry market. However in the market for sponges and cakes, where Birds Eye and Ross are active, the main competition comes from the Sara Lee range. Also the major ice-cream manufacturers, Wall's and Lyons Maid produce certain products more readily classified as frozen confectionery than ice-cream.

4.32: Total advertising on frozen confectionery products was only £200,000 in 1968, reached a peak of £449,000 in 1970 and subsequently declined steadily to £285,000 by 1973. The main product to be promoted was Birds Eye Supermousse on which £254,000 was spent in 1970, and £279,000 in 1973.

Frozen Poultry

4.33: In a number of ways the frozen poultry industry differs significantly from the other frozen food trades considered previously. Production techniques and requirements have more in common with the large-scale frozen meat industry, and the manufacturers engaged in the industry are not the same three major companies which dominate the other sectors of frozen food processing. Further, the frozen poultry sold to the consumer, in general, still has to be cooked for as long as the unfrozen equivalent; the amount of factory processing is limited.

4.34: Nevertheless, output of frozen poultry, the most important type being chickens, with turkeys and ducks much less significant and showing a marked seasonal sales pattern, is large enough to be significant. According to the National Association of Poultry Packers, United Kingdom production of table chickens, not all of which are frozen, increased $2\frac{1}{2}$ times in the decade 1963 to 1973. In 1963 production was 130 million table chickens, by 1968 had increased by over three-quarters, or 12 per cent. a year on average to 230 millions, and in the following five years increased by nearly one-half to 330 millions in 1973. Much of this growth has occurred as a result of the favourable price differential between chickens and other fresh meats.

4.35: The major producing company is Ross Poultry, the Imperial Group's subsidiary, which markets under the brand names Buxted and Ross. In 1971/72, Ross Poultry were estimated to have sold about 66 million broiler chickens, representing approximately a 24 per cent. share of the broiler chicken market. In the same period, sales of the Chubby brand, produced by W. & J.B. Eastwood, amounted to 33 millions, a 12 per cent. market share, and the Sun Valley brand, owned by Union International had an 11 per cent. share with sales of just over 30 million birds. Other important brands in 1971/72 were D.B. Marshall's "Chunky", with around 8 per cent. of the market; Fitch Lovell's "Golden Produce" and J.F. Wood and Sons' "Chunkie" each with a market share of some 5 per cent; and G.W. Padley, which had sales of about 11 million birds, representing a 4 per cent. market share.

4.36: Thus it is estimated that the three largest companies engaged in the production of broiler chickens, 90 per cent. of which are frozen, account for nearly half the total market, and the largest five companies account for three-fifths of the market. This level of concentration is much lower than for all the other frozen products previously discussed. This is partially a result of limited expenditure on advertising. Advertising is, basically, only used when supplies appear to be outstripping demand and there is little long-term image-building, in marked contrast to other frozen food products.

TABLE 4.1

Ownership of Refrigerators and Home Freezers, 1965-73

	Percentage of Home with Refrigerators	Sales of Home Freezers
1965	44	29,000
1966	47	35,000
1967	50	36,000
1968	53	57,000
1969	56	100,000
1970	66	215,000
1971	67	350,000
1972	71	530,000
1973	76	850,000

Source: Birds Eye

TABLE 4.2

Consumption of frozen foods by home-freezer and refrigerator owners, 1973

oz/person/week

	All Households Owning a Deep-Freezer	Households owning a refrigerator but not a deep-freezer	All other households
Frozen convenience meat or meat products	1.17	0.68	0.45
Total meat	36.30	37.06	34.19
Frozen fish or fish product	1.50	1.02	0.83
Total fish	4.77	4.61	4.74
Frozen vegetables and vegetable products	5.15	2.54	1.04
Total vegetables	80.79	87.13	91.65
Frozen fruit & fruit products	0.25	0.05	0.01
Total fruit	28.38	25.31	18.54
Frozen convenience cereal foods	0.50	0.15	0.05
Total cereals (other than bread)	22.90	24.45	26.87
Total frozen foods above	8.57	4.44	2.38

Source: National Food Survey

TABLE 4.3

UK Frozen Foods Expenditure, 1963-73

£ millions

	Retail	Home Freezer Owners	Catering	Total
1963	62		18	80
1964	66		20	86
1965	74		22	96
1966	90		26	116
1967	101		31	132
1968	117		39	156
1969	130		49	179
1970	140	5	62	207
1971	149	16	71	236
1972	157	33	83	273
1973	185	60	100	345

Source: Birds Eye

TABLE 4.4

Estimated market shares by value in frozen foods industry, 1967, 1972 and 1973

(Percentages)

Brand	1967	1972	1973
Birds Eye	59	60	61
Tempo	3		
Eskimo/Frood	6	18	18
Findus	5		
Ross	2	8	8
Smedley's	1	8	6
Other	24		
Private label		6	7
	100	100	100

TABLE 4.5

Production, Imports & Exports of Quick-frozen Vegetables and Fruit, 1968-73

(Thousand Tons)

	1968	1969	1970	1971	1972	1973
UK production of quick-frozen vegetables:	136.3	192.8	212.4	206.9	235.1	321.2
Of which:						
Green peas	77.8	88.4	89.4	77.7	94.8	111.9
Green beans	17.8	32.9	28.9	23.9	19.9	35.4
Brussels sprouts	8.5	15.2	11.0	12.4	16.7	18.0
Potatoes & products	25.5	50.9	75.5	83.6	93.4	142.0
Other	6.7	5.3	7.6	9.3	10.3	13.9
UK Imports of quick-frozen vegetables	54.2	47.3	40.4	20.9	32.2	38.7
UK Exports of quick-frozen vegetables	2.4	3.2	4.2	7.6	13.7	18.9
UK production of quick-frozen fruit	0.8	1.5	2.3	1.3	1.7	1.4
UK exports of quick-frozen fruit	...	...	...	0.9	3.3	1.2

Sources: Ministry of Agriculture Fisheries & Food
HM Customs and Excise

TABLE 4.6

Imports of quick-frozen vegetables and quick-frozen fish

		Quick-frozen vegetables			Quick-frozen fish	
	1968	1971	1973	1968	1971	1973
Total - tons	54,167	20,929	38,746	66,673	55,289	65,318
Of which:	%	%	%	%	%	%
EEC - Belgium	1	1	5	1	<1	1
Denmark	2	<1	2	14	17	16
Eire	*	25	8	...	2	3
France	<1	10	14	1	<1	1
Italy	7	6	8	...	<1	1
Netherlands	8	17	12	1	3	5
West Germany	<1	1	<1	3	1	2
Sub-Total	(18)	(59)	(49)	(18)	(24)	(26)
Other - Norway	*	*	*	43	44	46
Sweden	16	2	2	<1	<1	3
USA	8	2	2	3	4	4
Canada	35	7	2	14	6	5
New Zealand	5	1	15	-	-	-
South Africa	6	15	11	6	2	3
Iceland	*	*	*	7	8	2
Japan	*	*	*	4	3	2
Other countries	12	14	19	5	9	8
Sub-Total	(82)	(41)	(51)	(82)	(76)	(73)
Total	100	100	100	100	100	100

Source: Derived from HM Customs and Excise

* Included in 'other countries'

TABLE 4.7

Production, Sales, Import and Exports of Quick-frozen Fish and Fish Products, 1968-73

(Thousand Tons)

	1968	1969	1970	1971	1972	1973
Total UK white fish supplies	929.6	905.1	911.0	891.8	860.1	918.1
Used for quick-freezing	195.5	206.4	239.0	223.5	241.8	253.3
Quick-frozen production	88.1	97.5	107.3	100.7	109.8	119.1
Sales of quick-frozen white fish:						
Retail packs	48.7	56.3	62.0	58.5	58.1	62.2
Bulk/catering packs	65.3	62.5	67.8	73.1	84.2	79.6
Total Home Market	114.0	118.8	129.8	131.6	142.3	141.8
Imports of all quick-frozen fish	66.7	61.1	64.2	55.3	59.9	65.3
Exports of all quick-frozen fish products	16.0	23.3	18.4	23.0	44.0	76.3

Sources: White Fish Authority
HM Customs & Excise

TABLE 4.8

The retail market for frozen fish, 1968-73

	Quick-frozen white uncooked fish	Quick-frozen fish and fish products n.e.s.	Total
	£Million at retail selling price		
1968	14	22	36
1969	14	28	42
1970	17	31	48
1971	16	35	51
1972	21	43	63
1973	28	48	76

TABLE 4.9

UK: Press and TV Advertising Expenditure on Fresh and Fresh Frozen Fish, 1970-73.

£ Thousands

	1970	1971	1972	1973
Total Advertising	1,114	1,111	1,359	1,199
TV	897	888	1,189	920
Press	217	220	170	279
Birds Eye:	634	533	715	761
Fish Fingers	311	344	254	428
Findus	181	220	403	188
Ross Group	68	12	-	7
Youngs Seafoods	1	14	25	32
White Fish Authority	177	224	185	205

Source: MEAL Monthly Digest

TABLE 4.10

UK: Press and TV Advertising Expenditure on Frozen Ready-to-eat Meals

£ Thousand

	1968	1969	1970	1971	1972	1973
Total	668	1013	899	826	1153	1159
TV	660	914	855	794	1031	878
Press	8	99	44	32	122	281
Birds Eye:						
Beefburgers	124	200	270	271	268	395

Source: MEAL Monthly Digest

5: THE CANNED FOOD INDUSTRY

5.1: Canning has long been one of the most popular methods of food preservation, and apart from the improved design of tins and the efficient machinery for filling and sealing them, canning methods have not changed greatly since the first experiments some 150 years ago. In terms of consumption, canned foods are still the most popular type of convenience food, although competition is increasingly coming from frozen convenience foods, and to a lesser extent, dried and dehydrated foods.

5.2: Food canning is a highly fragmented market and, unlike frozen food processors, the major manufacturers do not process all types of food, but tend to concentrate on particular products. United Kingdom production of canned food in 1968 was about 1,220,000 tons, rising to about 1,300,000 tons by 1973. As shown in Table 5.1, vegetables were the most important home-produced canned product, with production averaging 774,000 tons per annum during the 1968-73 period; next most important were canned soups, production of which averaged 288,000 tons per annum, during the same period. These were followed by canned meat (135,000 tons per annum average), and canned and bottled fruit (85,000 tons per annum average). United Kingdom production of canned fish amounted to less than 9,000 tons per annum, but the vast majority of canned fish sold in the UK is imported, as is much of the canned fruit.

5.3: Between 1968 and 1969 home production of canned produce increased, but thereafter to 1973 there is little evidence of growth, except in the case of canned meat. Rather the pattern is one of fluctuating, but steady production.

Canned Vegetables

5.4: The size of the market for canned vegetables was £92 millions at retail selling prices in 1968, and £138 millions in 1973, based on data from the National Food Survey. Beans were the most important vegetable, although included in this category are not only green beans etc., but also baked beans. In fact, baked beans are probably the most important canned vegetables, with a retail market slightly larger than that for canned peas. The market for canned, including bottled, tomatoes was some £17 millions in 1973, compared with £37 millions for peas and about the same for baked beans. The market for other vegetables has increased considerably between 1968 and 1973, particularly important in terms of growth being sweet corn and asparagus. According to estimates based on the National Food Survey the market for canned potatoes in 1973 was nearly £5 million, compared with £2 millions in the previous year. Although these estimates are far lower than the £6 millions in 1971 suggested by the Economist Intelligence Unit, they do demonstrate the buoyancy of canned potatoes in terms of market-growth, a growth which is expected to be a continuing trend.

5.5: Exports of canned vegetables are generally unimportant, running at a level of some 20,000 tons in 1970 compared with total UK production in the same year of over 800,000 tons. The canned vegetable industry is basically home produced with imports only being of great importance for tomatoes and tomato puree, which together in 1970 accounted for imports of 156,300 tons or nearly four-fifths of all canned vegetable imports. In fact, all UK supplies of tomatoes are imported, chiefly from Italy and Spain, although not all supplies are sold retail, with more than half being used by domestic manufacturers for reprocessing into other products. The only other imported vegetables of any importance are sweet corn, coming mainly from Canada and the United States, and potatoes.

5.6: Owing to the extremely fragmented nature of the industry, it is very difficult to establish brand shares. Shares vary from product to product and some manufacturers tend to concentrate on processing for own-label, so that production shares and brand shares may vary significantly. The two companies producing primarily for own-label sales are the Samor Pure Foods Ltd., a subsidiary of H. J. Heinz and Goldhanger Fruit Farms, owned until 1972 by Cadbury-Schweppes. Nevertheless, several of the branded product manufacturers also make own-label goods. With the exception of baked beans, and to a lesser extent processed peas, there are no dominant brand leaders, and regional differences may be significant. For example in many vegetables, Morrell's are important in the North of England, whereas in the Midlands the same position is held by Morton's. Overall the most important company and brand is the Unilever subsidiary, Batchelor's, which is estimated to account for under two-fifths of sales of canned vegetables in 1971, and the other leading national companies are Smedley's, Hartley's and Lockwoods, although their relative importance varies according to individual products. It is a strong characteristic of the canned vegetable market, that the small manufacturers tend to limit their production to a small group of vegetables and only the large national companies cover a wide range.

5.7: Estimated brand shares for selected canned vegetables for 1971/72 are shown in Table 5.4. For all products own-label sales are significant; particularly is this the case for processed peas, where own-label products are estimated to be half the market, with Batchelor's, as brand leader taking one-third. This contrasts with the situation existing in 1966, when Batchelors had around two-fifths of the processed peas market and own-labels less than one-third. For garden peas, own-label sales accounted for slightly under half the market, the most important, but by no means dominant brands being Hartley's and Smedley's, and here again, Batchelor's relative importance appears to have been eroded, although the brand was never dominant in the same way as occurred in the canned processed pea market. Regional differences were very large in this product where Hartley's had about 35 per cent. of the market in Lancashire, where the company is situated, compared with a mere 10 per cent. in the south. Other vegetables exhibited similar patterns, with own-labels accounting for between one-quarter and one-third of the market, and no dominant brand, except for broad beans where Batchelors were taking nearly half the market in 1971/72.

5.8: Generally, market shares have not changed to any great extent during the 1968-73 period. The major exception is canned potatoes, a comparatively new product and a market which is growing because of the popularity of new potatoes out-of-season. As with any product, own-label sales were quite low until rapid development occurred in the canned potato market, at which time fierce competition, with intensive promotional activity, occurred amongst major manufacturers as well as from own-label. In 1971/72 the own-label share of the market was less than one-tenth, and there was no particularly important brand. Yet by 1973, over one-third of the market was own-label sales, whilst Yeoman (one-fifth of the market) and Hartley's (15 per cent.) had become the most important brands.

5.9: In the growing market for sweet corn, different enterprises have a stake. Initially the major concerns were Libby's, Smedley's and Del Monte's, but the arrival of the American Green Giant company re-invigorated the market, causing total sales to increase from less than £1 million in 1965 to over £3½ millions in 1972. By the latter year, Green Giant had achieved a three-quarters share of the market, and this in spite of a heavy price premium over Del Monte of 43 per cent., and 11 per cent. over Libby's, which had previously been the premium brand.

5.10: Another market of growing importance is that of canned mushrooms, where the Ranks Hovis McDougall subsidiary Chesswoods is clearly dominant, with at least three-quarters of the market.

5.11: Canned baked beans and canned pasta are vegetables with characteristics different from the more classical vegetables already mentioned. Both are, to a certain degree, complete meals rather than vegetables, often being served as snacks for children etc. In neither case is the market fragmented, and there are clear brand-leaders, although these manufacturers are different companies from those engaged in the canning of "classical" vegetables.

5.12: The Heinz company has long been the brand-leader in the canned baked beans market, as the following market-share estimates indicate:

	Share of the Market (at Retail Selling Price)	
	1965/66	1971/72
Heinz	62	55
Crosse & Blackwell	13	10
H.P.	13	8
Own-label and other	12	27
	100	100

The only other brands of any significance were Crosse and Blackwell, owned by Nestle, and HP, part of the Imperial Group. The share of own-labels has been increasing between 1965/66 and 1971/72 to about one-quarter in the later year, primarily at the expense of the lesser brands, Crosse and Blackwell and HP. Again regional differences are significant with, for example, HP much stronger in the Midlands and comparatively weak in the south.

5.13: Canned spaghetti and allied products are produced by the same manufacturers as baked beans, with Heinz having about two-thirds of the market in 1971/72 and the remaining share belonging to Crosse and Blackwell. In 1967/68, Heinz had about three-quarters of the market, and Crosse and Blackwell only one-tenth, with no significant competitors. However, when Crosse and Blackwell entered the market, no attempt was made to compete in the traditional spaghetti shapes. Instead, the company has introduced new shapes, such as Alphabetti, which has given a fillip to the canned pasta market.

5.14: Advertising expenditure figures further demonstrate how fragmented is the market for traditional vegetables, except in a few select, closely defined markets, in contrast with the high concentration in the canned baked beans and pasta trade. For the total sector, advertising expenditure was £1.6 millions in 1968, rising every year except 1970 to a level of £2¼ millions in 1973. Of these total allocations, about nine-tenths every year was spent on television advertising, as Table 5.5. shows.

5.15: Tables 5.6 and 5.7 show how total advertising expenditure during the years 1968 to 1973 was divided between the leading manufacturers and brands. Clearly the majority of expenditure went on advertising canned pasta and baked beans. In 1973 for example, three-quarters of the total expenditure of £2¼ millions was on canned baked beans and pasta products, and of the remaining expenditure on traditional canned vegetables, nearly three-fifths was on three specific branded products.

5.16: The heaviest advertising in the traditional vegetable market was by Chesswood, whose expenditure on canned mushrooms increased from £37,000 in 1968 to £138,000 in 1973, reaching a peak of £182,000 in 1971. In that year expenditure on canned creamed mushrooms was over £100,000 and in 1972 was nearer £200,000. Only two other products were heavily promoted throughout the period. These were Batchelors processed peas, for which advertising expenditure varied from £9,000 in 1968 to £120,000 in 1970, and the Green Giant range of sweet corns which was promoted to the tune of £90,000 in 1973. By the early 1970s Morrell's was promoting its range of canned mushrooms, spending £22,000 in 1972 and £31,400 in 1973 on advertising, whilst Chesswoods had expanded its range of canned vegetables to include four products such as onions in cheese sauce, leeks in white sauce etc with advertising expenditure on each amounting to over £18,000 in 1973.

5.17: Advertising expenditure on canned pasta and baked beans was dominated by Heinz who spent over £3 millions throughout the period 1968-73 on advertising baked beans alone. In contrast the expenditure of Crosse and Blackwell and HP was more limited. Recently, several new products have been launched, particularly by the market leader, Heinz. For example, in 1973 Heinz spent £151,000 and £104,000 promoting baked beans with pork sausages and baked beans with bacon-burgers, respectively. In the same year the company also spent £219,000 promoting canned ravioli. In this very small market, the brand-leader, whose position Heinz was challenging, is Buitoni an Italian company who in 1973 spent about £74,000 advertising its canned ravioli.

5.18: Thus the traditional vegetables market is highly fragmented, with the importance of the major manufacturers in the market place varying slightly, but rarely significantly, from product to product and from year to year. The market is a stable one, and very few changes have occurred between 1968 and 1973, the only exceptions being the introduction of canned mushrooms, and of canned potatoes, which were initially imported (Morrell and Country Kitchen) but are now largely home produced. The lack of product specialisation within the canned vegetables field is largely a result of the seasonal nature of the products, and the need to fill in capacity. For this, three main products are used, namely butter beans, baked beans, produced mainly for own-label, and processed peas. By far the most important are processed peas, which are imported dry, particularly from Canada, and can be easily stored until needed.

5.19: The fairly low overall concentration found in the traditional vegetables market is difficult to explain, particularly when, in contrast, the canned beans and pasta market is so highly concentrated. The importance of the major manufacturers is closely aligned to their advertising expenditure and in the traditional canned vegetable industry the level of advertising expenditure is low. Whilst many of the small manufacturers have limited resources, several of the larger United Kingdom combines, such as Unilever, Cadbury-Schweppes, Imperial Group etc., have interests in food canning, so the low level of spending on advertising at present is unlikely to be the result of lack of resources. Although Unilever, through Batchelors, has always been important, the other major food-giants have only entered the vegetables canning industry relatively recently, primarily in order to diversify their range of activities, particularly into industries of relative stability such as vegetable canning. Prior to their entry it may be that resources were too limited amongst the major canners for heavy advertising, and that once the vegetable industry had become established as one of low margins, it was no longer profitable for any one company to attempt to dominate the market by increased advertising expenditure. However, in the case of canned fish, John West succeeded in becoming the dominant brand primarily by means of advertising, and if this can be done by one Unilever subsidiary in one market, why not by another subsidiary, say Batchelors, in a related market, canned vegetables? It has been suggested that the relatively low concentration may be a function of the seasonality of the products, and of the necessity to locate manufacturing plant near to the vegetable growing areas, but if this were so then a similar argument should apply to frozen vegetables, but this product is one of high concentration.

Canned Fruit

5.20: Fruit canning is an old, established market which, in the face of competition from newer, more exciting types of desserts, is gradually declining. Regarding the fruit which is canned in the United Kingdom, the same manufacturers as are engaged in vegetable canning are involved, and the same difficulties of seasonal production, necessity to locate near the growing area etc. are encountered. However, the home produced fruit canning sector is very small in comparison to the level of imports, as Table 5.8 shows, and consists principally of strawberries, raspberries, rhubarb and gooseberries.

5.21: Imports into the United Kingdom of canned or bottled fruit in 1968 were 368,000 tons, which represented 79 per cent. of gross consumption, with production of United Kingdom canned fruit amounting to only 101,000 tons. By 1972, total supplies had fallen by one-fifth to 376,000 tons, but the decline in home-production of two-fifths was much more rapid than the fall in imports so that in 1972 imports were 84 per cent. of gross consumption.

5.22: Since imports are of such importance it is interesting to assess their structure. The most important canned fruits imported were peaches, pears and pineapples, followed by mixed fruit, and these four together accounted for three-quarters of canned fruit imports between

1968 and 1972, with very little annual variation. (Table 5.9). The only other imported canned fruits of any significance were grapefruit, oranges and apricots, which combined accounted for one-fifth of imports in 1968 and 1972.

5.23: Canned fruit imports to the United Kingdom come chiefly from the Republic of South Africa and from Australia (Table 5.10), these two countries alone providing between one-half and two-thirds of the imports. During the 1968 to 1972 period imports from EEC member states increased from 3 per cent. of the total to 6 per cent., largely at the expense of imports from South Africa and Australia and also of growing importance as a source country was Spain. Whilst differences in volume and value terms were not pronounced, it is interesting to note that Japan and Australia provided a slightly higher proportion of UK imports in value terms than in volume terms.

5.24: Obviously, the relative importance of different countries varies according to the type of fruit. In 1973, for example, whilst two-thirds of peaches, two-fifths of apricots and one-third of pineapples came from South Africa, over half of the canned pears were imported from Australia. Grapefruits came mainly from Israel (two-fifths) and Jamaica (one-fifth) whilst Japan supplied nearly nine-tenths of the mandarins.

5.25: Actual consumption is very difficult to gauge from production and import figures, since the levels of stock-holding tend to fluctuate widely from year to year. However, the size of the retail market can be estimated using National Food Survey data (Table 5.11). In 1968 at retail selling prices, the market for canned or bottled fruit was £75 millions, of which one-half was just canned peaches, pears and pineapples. By 1973 the total market had increased to £98 millions, of which 45 per cent. was canned peaches, pears and pineapples.

5.26: Estimates of brand shares within this retail market vary widely. Although it is agreed that Del Monte and Libby's are the most important brands, any division of the market between these companies and other imported brands is somewhat arbitrary. Amongst the companies who carry out fruit canning in the United Kingdom, and this includes certain companies whose major concern is importing e.g. Del Monte, the most significant are, not in order Baxter's, Donald Cook's, Del Monte, Goldhanger Fruit Farms, Hartley's, Libby's, Lockwood, Pickering's, Prince's, Smedley's, John West.

5.27: Thus the canned fruit market is similar to that of canned vegetables in that the same manufacturers are operating in both fragmented markets, but in the latter home production is all important whereas for fruit imports are dominant. Canned fruit is one of the least advertised of products. In 1972 advertising expenditure amounted to a mere £175,000, a paltry amount in terms of a market value of over £80 millions. Advertising was mainly in the press, except when John West entered the market in 1971, they advertised entirely on television.

5.28: In the canned fruit market competition is coming increasingly from two sources. Those fruits such as rhubarb etc. which are produced in the United Kingdom, are used primarily in pies and tarts and are being challenged by especially prepared canned pie-fillings. Further competition arises from vacuum packed fruits in foil polylaminate packs, of which the most important producer is the Brooke Bond Liebig Group, under the brand name Brooke Farm. These products were launched in 1970 and proved to be twice as expensive as the standard canned fruits, as the following data show:

	Brooke Farm Retail Selling Price of 12 ounce size	Canned Price of 16 ounce can	Brooke Farm price % premium
Apples	18p	$12\frac{1}{2}$p	92
Gooseberries	15p	10p	100
Rhubarb	10p	6p	125

Nevertheless the Brooke Farm products have certain advantages, in that they contain no juice and have a higher quality and fruit content than the canned equivalents. Consequently these products are providing competition to the canned fruit market.

Canned Fish

5.29: The canned fish industry is similar to that of fruit canning in as much as imports represent a very high proportion of the home market in both trades, so that to analyse concentration solely in terms of United Kingdom production is meaningless. However, in contrast to the canned fruit trade, brand leadership has been established, primarily by means of heavy and extensive advertising.

5.30: Production, import and export statistics given in Table 5.13 show how small is UK production in relation to total consumption. In 1968 production of canned fish was about 6,000 tons, increasing to a maximum of 10,200 tons by 1971 and falling away again to 7,400 tons by 1973. Practically all the home production was herring canning, although in addition, some canned herrings are imported. In contrast to the level of home production of canned fish, imports, which relate to fish in airtight containers and fish preparations whether or not in airtight containers, were 80,500 tons in 1973. In 1968 imports were 83,3000 tons, and they had fallen by 1970 to 61,700 tons, and then increased steadily to the 1973 level. Exports of fish in airtight containers were the same order of magnitude as home production, except in 1973 when exports of 11,400 tons were the highest annual figure for the whole 1968-73 period.

5.31: Thus, gross consumption of canned or bottled fish was about 83,000 tons in 1968 and 76,500 tons in 1973 of which retail sales amounted to 83 per cent. and 72 per cent. respectively, the remainder being catering sales, build-up of stocks etc.

5.32: The structure of imports is shown in Tables 5.14 and 5.15. Canned salmon was the most important imported type of fish, accounting for over half the imports in volume terms and nearly seven-tenths in value terms in 1968, although in 1972 salmon was not quite so dominant but represented two-fifths of volume and three-fifths of value. The only other fish imported in any great quantity was pilchards, although in value terms their importance was far less.

5.33: The source from which the United Kingdom derived imports of canned fish are shown in Table 5.15, for the period 1970 to 1973. The relative importance of each country has tended to fluctuate from year to year, but two clear changes are evident. Imports from Commonwealth countries, particularly from Canada and Malaysia, have increased not only in absolute tonnages, but also in relative importance vis-vis imports from other sources. On the other hand a commensurate fall occurred in the importance of Japanese imports.

5.34: Of course imports from each country vary according to the fish type. For example, in 1974, of canned salmon imports, 41 per cent. came from Canada, 30 per cent. from Japan and 26 per cent. from USA. In contrast South Africa provided 84 per cent. of UK imports of pilchards, Japan supplied 90 per cent. of canned tuna imports, 45 per cent. of sardine imports came from Morocco, and 52 per cent. of both shrimps and prawns were imported from India.

5.35: The distribution of exports for the same period is shown in Table 5.16. Exports of crustacea, molluscs etc. were very small and the majority went to EEC member states. Exports of other prepared or preserved fish in airtight containers were more important, although at between 8,000 and 10,700 tons they represented only between 11 and 15 per cent. of the level of imports. Commonwealth countries received almost half of these exports, Australia alone taking almost one-quarter, and in 1973 member states of the enlarged EEC were taking another quarter.

5.36: The size of the market, at retail selling prices, between 1968 and 1973 has fluctuated, from nearly £54 millions in 1968 to £52 millions in 1971, and £58½ millions in 1973. (Table 5.17). In volume terms there has been little, if any, increase in the market, since price increases account for most of the growth between 1971 and 1973. The balance between canned salmon and other canned or bottled fish has been changing. In 1968 canned salmon constituted three-quarters of the market, whereas in 1973 it was less than two-thirds of the market - but salmon is clearly still the most important canned fish. Pilchards and sardines represent about nine per cent. each of the market, but with the discrimination against Portugal arising as a result of EEC membership, it is likely that their relative importance will decline, whilst brisling is likely to increase.

5.37: Since a large proportion of canned fish is imported, it is necessary to look at competition in the market place in terms of brand shares. As Table 5.18 shows the John West brand owned by Unilever dominates the market, with between one-third and two-fifths of retail sales, and as much as a 43½ per cent. share of the market in 1974. The only other brand of any significance is Prince's, with a market share varying between 14 per cent. in 1971 and 21 per cent. in 1973. Following these two, there is a multiplicity of small brands such as Libby's, Glenryck, Cucumber, Marie Elisabeth etc. each of whom have no more than a 5 per cent. share of the market. Own-label shares are also limited to about 5 per cent. Whilst it is dangerous to attach too much reliance to brand share estimates, it would appear that the two major brands have slightly strenthened their positions during the period at the expense of the many small brands whilst Libby's has declined from 7 per cent. to only 2 per cent. The jump in John West's market share from 37½ per cent. in 1973 to 43½ per cent. in the following year may well be due to the immense world buying power the company enjoys, particularly for salmon, of which it used to buy approximately half the world exported catch. During 1973/74 this gave the company a distinct advantage over smaller brands who were not always able to obtain sufficient supplies.

5.38: The share of the salmon market controlled by John West in 1974 was over 50 per cent., compared with 39 per cent. in the preceding year. (Table 5.19). Princes accounted for another one-fifth of the market, leaving the small brands between one-third and two-fifths between them. In fact it is thought that Cucumber with about a 10 per cent. share, and own-label with a further 10 per cent., provide the only competition for the major brands. Libby's used to have a share of about one-tenth, but by 1974 they had dropped out of the market completely.

5.39: The same sort of pattern emerges for the tuna fish market. In this £7½ million market John West and Princes face no significant competitors having increased their joint market share from 57 per cent. in 1970 to 73 per cent. only four years later.

5.40: In the canned prawn and shrimps market the roles are reversed. Princes is the brand leader with nearly half the market compared with John West's one-quarter in 1974. In 1970, however, Princes and John West controlled about half the market between them, with the split slightly in John West's favour. Prince's success in the sector has been related to their development of supplies from India and Pakistan rather than to the traditional sources in the United States.

5.41: Only in sardines and pilchards do the two major brand leaders face any severe competition. In the pilchards market, Glenryck, from Guthrie Foods, is the strongest brand, with slightly under one-third of the market followed by Prince's whose brand share is slightly larger than that of John West. The strongest competitor to John West in the sardine trade is Marie Elisabeth, and there are a very large number of smaller brands such as Fleur de Lys, Armour, Maid Marion etc.

5.42: Amongst the smaller markets, the dominance of the major companies is felt even more severely. For example, John West controlled more than 90 per cent. of the £1¼ million brisling market in 1974, and was also strong, although not quite so strong, in herrings, kippers and sild. Princes dominate the canned mackerel market, accounting for about three-quarters of sales in volume terms. It is interesting to note that the Nestle subsidiary Crosse and Blackwell is represented in herring canning, but not in any imported fish canning.

5.43: In summary the canned fish market in the United Kingdom consists of a few strong and increasingly dominant brands, with a small fairly stable own-label share, and a large number of minor brands, some of whom are being, or are likely to be, squeezed out of the market. Analysis of advertising expenditure on canned fish partially explains the dominant position held by John West. In proportion to the size of the market advertising expenditure is low, the highest and lowest expenditures during the 1968 to 1973 period being £331,000 in 1969 and £108,000 in 1971. (Table 5.20). The role of John West as the leading advertiser is very clear; in 1970 and 1971 the brand accounted for 97 per cent. of total advertising expenditure on canned fish, although this proportion had declined to 50 per cent. by 1973. The company has tended to concentrate advertising on particular products, rather than on the whole range of canned fish. In 1972, for example, efforts were directed towards salmon, and in 1973 towards sardines.

5.44: Advertising by other brands has been very low. Glenryck spent £32,500 in 1968 and £49,600 in 1973 advertising Glenryck pilchards, but next to nothing in the intervening years. The only brand regularly advertised throughout the period was Carnation, whose spending amounted to only £3,000 per annum. One the one hand, therefore, John West have built up their brand leadership by extensive advertising, whereas Princes, the second brand in the canned fish market have not undertaken any press or TV advertising.

Canned Meats

5.45: The United Kingdom canned meats market can be considered on the one hand in terms of a 'cold' meats market, consisting primarily of imported produce, and on the other hand 'hot' meats and complete meals that are generally manufactured in the United Kingdom. The companies engaged in the two markets are generally speaking not the same.

5.46: The size of the United Kingdom market for canned meats is difficult to gauge, primarily because of difficulties and confusion created by differing definitions. Home production of all canned meats has been increasing slightly between 1968 and 1972 from 128,000 tons to 135,000 tons, but in 1973 production increased by nearly 12 per cent. to 151,000 tons. As Table 5.21 shows, imports in 1968 were 183,000 tons, over two-fifths higher than home production. In the following year imports fell to 161,000 tons and thereafter increased each year to 191,000 tons in 1973, which was about one-quarter higher than home production. The level of exports was fairly insignificant at around 4,000 tons per annum during the period. However, it should be borne in mind that these consumption figures do not give a true indication of the size of the retail market, since canned meat is used in other foods, including pet foods.

5.47: Estimates of the market size for canned meats, excluding bacon, ham and corned meats are also shown in Table 5.21, based on National Food Survey data. The market has increased from nearly £60 millions at retail selling prices in 1968 to £99 millions in 1973. The way in which this is split between the different types of hot and cold meats is far from clear.

Canned 'cold' meats

5.48: In 1973 trade estimates suggest that the market for cold canned meats was £120 millions of which three-fifths was consumer retail packs, the remainder being slicing packs. The relative importance of different types of cold meat was:

	Consumer Packs (£ millions)	Slicing Packs (£ millions)
Corned Beef	28.3	20.5
Chopped ham & pork	20.1	5.0
Pork luncheon meat	6.9	5.8
Ham/shoulder	8.5	9.6
Tongue	3.6	5.0
Other	3.5	3.0
Total	70.9	48.9

Corned beef was clearly the most important, with 41 per cent. of the total market, followed closely in the consumer packs section by chopped ham and pork, although this product was of less importance in the slicing pack market.

5.49: Brand share estimates are given in Table 5.22, and show how widely segmented are the markets, with the exception of corned beef. For the latter between three-quarters and four-fifths of the market is controlled by the two leading brands, Fray Bentos (Brooke Bond Liebig) and Libby's. The relative importance of these two has changed between 1970 and 1973 primarily because of the greater international purchasing power of Libby's during a period of canned beef shortage.

5.50: In the chopped ham and pork market brands are more fragmented, with Plumrose and Spam each with about one-quarter of the market, engaging in fairly fierce competition to maintain their relative positions. After Plumrose, a Danish brand and Spam, the brand of the Fitch Lovell subsidiary Lovell and Christmas, the next most important brands are Zwan, Walls and Unox. Zwan is a Dutch brand which merged with Unox B.V., and the UK agency was taken over by John West from Whiteley Muir and Zwanenberg (who do Tom Piper) in January 1973. However, with the exception of Wall's who have maintained their three per cent. market share, the other four brands have shown a decline in market share between 1970 and 1973. This loss has been largely to own-label products, price differentials between own-labels and branded goods having widened.

5.51: Three brands, namely Plumrose, Wall's and Unox, account for one-third of the canned pork luncheon meat market. Of these, Plumrose is the most important, marginally increasing its share from 13 per cent. in 1970 to 15 per cent. in 1973. Wall's and Unox both have around one-tenth, with Unox showing a decline during the period whilst Wall's have been increasing.

5.52: In the ham and shoulder market, the only brand of any importance is 'Ye Olde Oak' by Rowland Smith and Son, with about one-third of the market, and the rest is very fragmented. In the tongue market, the fragmentation is even greater, for no single brand has more than one-tenth of the market. Other brands in the cold canned meat markets are Dana, Danoxa, De Haan owned by Fitch Lovell, Gaiety, C & T Harris, an FMC Ltd. subsidiary, Harvey's, Lyric, Maid Marion, Morrell, Pecks, Trevor Hammon and Tulip. It is interesting to note how few of the major brands are also active in the 'hot' canned meat market; only Fray Bentos, Libby's and Wall's are of significance.

Canned 'Hot' Meats

5.53: The canned 'hot' meats market is even more diverse than that for 'cold' meats, ranging from stewed steak to pie fillings, pies and puddings. The retail value of the market for canned beef products has been estimated to be:

	£ Million at Retail Selling Price:			
	1970	1971	1972	1973
Stewed steak	10.9	10.9	11.7	12.7
Pie Fillings	0.8	2.6	4.5	6.5
Minced Beef	7.5	8.0	9.1	11.2
Pies	5.0	5.4	6.0	7.5
Puddings	3.1	2.9	3.3	3.9
Other	3.2	3.1	3.0	3.8
Total	30.5	32.9	37.6	45.6

This excludes beefburgers, a fairly new and expanding market, involving different manufacturers.

5.54: Most 'hot' canned meats are highly fragmented between brands. The total market leaders are thought to be Fray Bentos (the Brooke Bond Liebig brand) with 27 per cent. of the grocery trade (excluding non-grocery and own-label only outlets of which the most important is Marks and Spencer), and the Spillers label, Tyne Brand, with a 22 per cent. market share in 1973. These shares vary between types of product:

	Percentage of market by Volume			
	1972		1973	
	Tyne Brand	Fray Bentos	Tyne Brand	Fray Bentos
Stewed Steak	-	12	-	10
Pie Fillings	57	$12\frac{1}{2}$	$53\frac{1}{2}$	21
Minced Steak	$20\frac{1}{2}$	13	$20\frac{1}{2}$	$11\frac{1}{2}$
Pies	-	$77\frac{1}{2}$	10	$72\frac{1}{2}$
Puddings	-	61	-	57
	$22\frac{1}{2}$	28	$21\frac{1}{2}$	27

Fray Bentos has been particularly successful with pies and puddings, although between 1972 and 1973 its market share decreased slightly, whereas Tyne Brand has tended to concentrate on minced beef and pie fillings. Apart from these, there is a host of other brands including Casserole, Armour, Danoxa, Harvey's, Hunters, Libby's, Newforge, Sutherland, Tom Piper and Wall's.

5.55: The leading brands of canned beefburgers have changed recently. With the introduction by Heinz of a 'dry' canned beefburger i.e. without gravy, in September 1972, the position of the strongest brand in the 'wet' beefburger market, namely Goblin, was challenged. By 1973/74 Heinz had achieved about two-fifths of the market by value, and around 35 per cent. in volume terms, compared with 25 per cent. of volume held by Goblin. The only other brand to have established itself in competition, was Tyne Brand, with about 7 per cent. of the market in volume terms.

5.56: Further developments in the canned meat sector have been the increasing importance of canned ready-meals. These have been mainly in response to the Vesta packet ready-meal range of Batchelors, which was launched nationally in 1962 and really developed the whole market for ready-meals. By the end of 1967 Vesta still had 95 per cent. of the market, but by mid-1969 this had fallen to 85 per cent. in the face of competition. The first company to enter the canned ready-meal market was Harvey's of Belgravia, at one time part of Cadbury-Schweppes, and now owned by Fitch Lovell, who launched the duo-can in 1968, followed by Plumrose in 1969 who introduced canned curries, casseroles and Chinese meals. Subsequently, the range of meals and manufacturers has expanded considerably to include Batchelors, Crosse and Blackwell, Campbell's,Fray Bentos, Goblin, Heinz, Libby's, Tyne Brand etc. The distinction between ready-meals and 'hot' meats is necessarily arbitrary and makes estimating brand shares too precarious to be meaningful.

5.57: Table 5.23 shows advertising expenditure on canned meat and poultry to have been £900,000 in 1970 rising to over £1,500,000 by 1973. This covers hot and cold meats, and some of the major advertisers have been Campbell's, Fray Bentos, Heinz, Plumrose, Spam, Tyne Brand and Ye Olde Oak. However, excluded are the canned ready-meals. Expenditure on these has not been so high, with certain exceptions such as Harvey's, who spent £275,000 in 1971, Tyne Brand who spent £97,000 advertising their Ready Meals in 1971, and Plumrose whose expenditure on bacon grill in 1973 was £116,000.

Canned Soups

5.58: The retail market for all soups in 1973 was nearly £70 millions, according to National Food Survey based estimates, and the market for canned soups alone was at least £57 millions. This represented a growth of over 50 per cent. compared with the size of the market in 1968, of approximately £38 millions. However, in volume terms, UK production of canned soups was 273,000 tons in 1968 and 294,000 tons in 1973, an increase of only 9 per cent. These figures are in ready-to-serve equivalent, thereby making allowance for condensed soups, which were estimated to account for 12 per cent. of the market in 1973 compared with a peak of about 20 per cent. in the early 1960s. Overseas trade is of little importance; in 1973 imports were £1.6 millions and exports £4.5 millions.

5.59: The three major manufacturers of canned soups are Heinz, Crosse and Blackwell and Campbell's. Other manufacturers include Baxters, Bender and Cassel, Chesswoods, Coopers, CWS, Lusty's and Jean McGregor most of whom manufacture speciality soups. Heinz dominate the market with over 60 per cent. in 1973, followed by Campbell's with 12 per cent., Crosse and Blackwell with 8 per cent., and own-label with about 10 per cent. The market share of Heinz has not changed in recent years, despite a growth in own-label sales, largely at the expense of Crosse and Blackwell and to a lesser extent Campbell's.

5.60: In the traditional soup market, excluding condensed soups, Heinz hold an even stronger position with Crosse and Blackwell second, closely followed by own-label products. Heinz, having achieved the position of brand leader by pioneering the market in the 1930s, have maintained leadership by extensive advertising. Crosse and Blackwell have been unable to erode this position, despite innovations such as ring-pull cans, and Nestle have tended to direct more attention to powdered and dehydrated soups at the expense of the Crosse and Blackwell canned product.

5.61: In the condensed soup market only Campbells is now active. Crosse and Blackwell withdrew in 1964, only four years after they introduced a condensed soup, and much more recently Heinz have withdrawn from a market which they originally entered in 1959 probably only to contest the entry of the US company Campbell's into the UK soup market and in which poor results have been achieved. Campbell's is a powerful company in the United States but it has not achieved the expected growth in the United Kingdom, largely because condensed soups have not proved so popular. Also, Campbell's were disappointed with sales of main meal soups which did not fulfil expectations based on US experience.

5.62: The canned speciality soups field is probably one of the most buoyant sectors in the total soup market, with an estimated retail value of around £5 millions. Baxters with Tartan and Candlelight brands had in 1973 about 45 per cent. of this market, Chesswoods (the Ranks Hovis McDougall subsidiary) about 30 per cent., and the 'Oxford' brand by Coopers, a subsidiary of CPC (UK) Ltd., another one-tenth.

5.63: Soup is one of the more heavily advertised canned products, with expenditure fluctuating between £977,000 in 1970 and £1,686,000 in 1972 (Table 5.24). About half the total expenditure was made by Heinz, who spent £1 million in 1972. The level of expenditure by Campbell's was lower, rising from £247,000 in 1968 to £359,000 in 1973, whilst Crosse and Blackwell's expenditure declined to £134,000 in 1973. Between them the three brand leaders accounted for over nine-tenths of total canned soup advertising in 1973. In the speciality soups field, Baxters spent £63,000 in 1973 and Chesswoods spent £47,000 in the same year, although when 'launching' their range in 1971/72 they spent £190,000 in two years.

5.64: Concentration in the canned soups market is at a very high level, and whilst the importance of the major manufacturers may be declining marginally under the pressure from own labels and from the speciality soup manufacturers it is unlikely that the dominance of the major companies will be seriously threatened; the major competition is likely to come from other types of soup.

Canned Convenience Desserts

5.65: The convenience dessert market has been one of growth in recent years, and whilst canned goods have taken much of the growth, the developments in powdered instant desserts have been even greater. The most important canned convenience desserts are milk puddings, particularly rice, sponge puddings, fruit pie fillings and canned custards and dairy desserts.

5.66: The size of the market is difficult to determine. In 1970 the retail market for canned milk puddings was probably of the order £11-12 millions. This market experienced very rapid growth in the early 1960s, under the impetus of the Ambrosia brand, then owned by Bovril, which became a subsidiary of Cavenham in 1971. More recently competition from instant desserts has slowed the growth rate, and efforts are being made to upgrade the product. For example, Ambrosia introduced a new creamed rice with Devon cream, which was designed to compete on quality rather than price. Sales of canned rice are easily the most important, with sago, tapioca etc. much less significant. New brands have been entering the market; for example in 1970 Heinz, who already had a small portion of the market through their ownership of Pickerings, which they acquired in 1969 were test marketing Premium Rice Pudding with cream. Estimates of market shares indicate that in 1970 Ambrosia were dominant in the canned milk puddings, with over 50 per cent., followed by CWS with one-tenth, Libby McNeil and Libby with a declining 4 per cent., Pickerings 3 per cent. and Unigate 2 per cent. The remaining three-tenths of the market divided between many smaller brands, and more importantly own-labels. The latter have been growing steadily in quantity during the period 1968-73, although differentiation in terms of quality between own-labels and branded goods has become more marked.

5.67: The major advertisers of creamed rice, as Table 5.25 shows, were Ambrosia and Heinz. During the 1970-73 period, Ambrosia spent an average of £250,000 per annum promoting creamed rice, spending in 1973 alone £383,000 on creamed rice and another £4,000 each on sago, tapioca, macaroni and semolina. Heinz spent £300,000 promoting their brand of creamed rice in 1971, and about £150,000 per annum thereafter. The only other advertisers of canned rice pudding were CWS (£6,200 in 1972) and Unigate on their Cow and Gate brand (£2,500 in 1972).

5.68: The prepackaged sponge pudding market, the majority of which is canned, is dominated by Heinz. In 1970 approximate market shares were:

			Percentage
Canned	-	Heinz	71
		Hunters (Lockwoods)	5
		Crosse and Blackwell	4
Foil wrapped	-	Mr. Kipling (Allied Bakeries)	7
		Lyons	4
Canned and foil	-	Other, including own-label	9
			100

Despite competition from foil-wrapped puddings, and from own-label products it is difficult to see the dominant position Heinz have established being seriously threatened. The company's advertising expenditure on sponge puddings was about £180,000 per annum on average between 1970 and 1973, and there were no other significant advertisers.

5.69: In the fruit pie fillings market, valued at around £4 millions in 1970, Heinz through the subsidiary Pickerings were again brand leaders, with about one-third of the market, followed by the Beecham's subsidiary Mortons with 15 per cent., Robertsons and Aylmers with 12 per cent. each and CWS at 8 per cent. The remaining one-fifth of the market was divided between own-labels and such firms as Lockwoods, Smedleys etc. Since 1970 the share of these others including own-label has been increasing at the expense of the top few brands. Expenditure on advertising fruit pie fillings is more limited than for other convenience desserts. In 1968 Pickerings spent £97,000 and Robertsons spent £58,100 compared with £76,500 and £29,100 respectively in 1970. For later years the only significant advertiser was Batchelors with an expenditure of £13,300 in 1973.

5.70: In the convenience dessert market new products have been introduced recently. One of the most successful has been asceptically canned custard, originally introduced by Bovril in 1969 with Ambrosia Devon Custard, followed by Heinz in 1970. By 1973 Heinz had achieved a share of slightly under two-thirds of the market in volume terms, compared with one-quarter for Ambrosia, the remaining one-tenth being divided between all other manufacturers. In 1974/75 Birds, the General Foods brand, which has long been the brand leader in the traditional custard powder market, launched its own brand of canned custard in response to competitive pressure from canned custards on custard powder. In 1970 Ambrosia spent £45,300 and Heinz spent £30,900 promoting canned custard, while in the following year Ambrosia's expenditure had fallen slightly whilst that of Heinz had climbed to £248,500. In 1973 Ambrosia did not promote canned custard and Heinz spent a paltry £800. By this time competition was increasingly arising from other canned desserts, such as Nestle Sweetheart with an advertising budget of over £625,000 for 1972 and 1973, and in 1973 Heinz began promoting Dairy Dessert. Further competition is coming from Bird's Angel Delight, the success of which has been remarkable, aided by advertising of over £1½ millions in four years.

5.71: The canned convenience dessert market is dominated by a few major firms but the market itself is in a state of flux, following a period of extremely rapid growth and rapid product innovation.

TABLE 5.1

Production of Canned Foods, 1968-73

	1968	1969	1970	1971	1972	1973
	Thousand Tons, net can content					
Canned vegetables	713	788	805	777	787	775
Canned & bottled fruit	101	103	93	78	62	74
Canned soups (1)	273	286	293	290	292	294
Canned meat	128	130	132	132	135	151
Canned fish	6	9	9	10	9	7

Source: Ministry of Agriculture, Fisheries & Food

(1) Figures relate to ready-to-serve equivalent

TABLE 5.2

The Market for Canned Vegetables, 1968-73

(£ Millions)

	1968	1969	1970	1971	1972	1973
Canned peas	30.3	31.9	34.3	34.4	38.0	36.6
Canned beans	38.3	39.4	43.8	46.0	52.5	53.8
Canned potatoes	...	...	...	...	2.0	4.9
Canned or bottled tomatoes	9.9	10.9	11.8	12.1	13.3	16.6
Other canned vegetables	13.6	16.4	17.0	17.4	20.6	25.9
	92.1	98.6	106.9	109.9	126.4	137.8

TABLE 5.3

Imports and Exports of Canned Vegetables

(Thousand Tons)

	1968	1969	1970
Exports			
Peas & baked beans	9.6	9.0	11.6
Other	7.4	8.6	10.9
Imports			
Asparagus	2.1	1.7	1.5
Beans	8.6	8.7	8.0
Corn	6.3	6.5	9.8
Peas	0.9	0.8	0.9
Potatoes	10.1	10.0	11.2
Tomato Puree	65.5	52.2	62.8
Tomatoes	88.5	93.4	93.5
Other	8.4	8.5	10.0
	190.4	181.8	197.7

Source: HM Customs and Excise

TABLE 5.4

Estimated brand shares for selected canned vegetables, 1971/72

Processed Peas

Own-label	50
Batchelor's	32
Morton's	11
Other	7
	100

Carrots

Own-label	35
Smedleys	15
Lockwoods	10
Harleys	8
Others	32
	100

Runner/French Beans

Own-label	25
Smedleys	25
Imported	12
Other	38
	100

Butter Beans

Own-label	25
Batchelors	48
Other	27
	100

Garden Peas

Own-label	45
Hartleys	15
Smedleys	12
Mortons	5
Morrell's	5
Batchelors	4
Other	14
	100

Potatoes

Own-label	8
Yeoman	10
Hartley's	10
Smedley's	10
Other	62
	100

Broad Beans

Own-label	30
Lin-can	25
Smedley's	14
Other	31
	100

TABLE 5.5

Press and Television Advertising Expenditure on Canned Vegetables, 1968-73

£ Thousand

	Canned Vegetables and Pasta		
	T.V.	Press	Total
1968	1,471	130	1,601
1969	1,651	81	1,732
1970	1,218	72	1,290
1971	1,804	191	1,995
1972	1,975	168	2,143
1973	1,960	263	2,223

Source: MEAL Monthly Digest

TABLE 5.6

UK: Press and TV Advertising Expenditure on Significant Brands of Canned Vegetables, 1968-73.

£ Thousands

	1968	1969	1970	1971	1972	1973
Batchelors:						
Processed peas	8.6	39.3	119.8	80.1	15.3	94.5
Chesswood:						
Mushrooms	36.9	124.7	125.4	181.8	165.0	137.7
Creamed Mushrooms	-	-	-	108.2	191.5	83.5
Cirio: tomatoes	-	4.8	-	-	5.7	5.9
Del Monte: vegetables	19.1	11.4	8.0	2.7	-	-
Green Giant:						
Mexicorn	19.0	16.9	13.2	24.3	27.5	43.0
Niblets	25.5	23.0	11.6	30.6	27.4	43.0
Corn Products	-	2.8	-	5.7	14.6	4.3
Hartleys:						
Vegetables	41.9 (b)	16.9 (b)	-	10.7 (a)	-	-
Smedleys:						
Vegetables	18.5	4.9 (b)	8.9	72.6	58.0	-
Yeoman:						
Potatoes	28.8	89.6	57.9	-	-	-

Source: MEAL Monthly Digest

(a) All canned goods.
(b) Canned peas only.

TABLE 5.7

UK: Press and TV Advertising Expenditure on Major Brands of Canned Baked Beans and Pasta, 1968-73.

£ Thousand

	1968	1969	1970	1971	1972	1973
Heinz:						
Baked Beans	369	439	447	622	582	589
Spaghetti in Sauce	263	273	211	408	337	289
Spaghetti Hoops	271	205	80	32	-	-
Crosse and Blackwell:						
Baked Beans	-	11	-	35	30	-
Alphabetti Spaghetti	-	-	-	144	54	-
Spaghetti Rings	225	92	99	70	50	-
H.P.:						
Baked Beans	165	129	4	-	84	91

Source: MEAL Monthly Digest

TABLE 5.8

Production, Imports and Consumption of Canned Fruit, 1968-72

Thousand Tons

	Production	Imports	Gross Consumption	% Imports to Total
1968	101	368	469	79
1969	103	350	453	77
1970	93	357	450	79
1971	78	316	383	82
1972	62	314	376	84

Source: Ministry of Agriculture, Fisheries & Food.
Dept. of Trade & Industry

TABLE 5.9

United Kingdom Tonnage Imports of Canned or Bottled Fruit by type of fruit, 1968-72

(Percentages)

	1968	1969	1970	1971	1972
Peaches	28	26	28	26	25
Pineapples	15	15	19	16	17
Pears	18	18	17	17	17
Mixed Fruit	12	13	13	14	16
Other	27	28	23	27	25
Total	100	100	100	100	100

Source: H.M. Customs and Excise

TABLE 5.10

Source of United Kingdom Canned Fruit Imports by volume and value, 1968-72

(Percentages)

	1968	1969	1970	1971	1972
Proportion by tonnage:					
Commonwealth	39.9	34.1	34.4	34.4	31.2
EEC	3.0	4.9	6.6	6.1	6.4
Other	57.1	61.0	59.0	59.5	62.4
	100.0	100.0	100.0	100.0	100.0
South Africa	36.0	37.2	30.8	31.0	34.3
Australia	27.8	20.6	20.8	21.8	18.8
Spain	4.9	6.3	9.1	11.1	12.5
Japan	4.5	5.6	4.5	4.8	3.5
Malaysia	3.3	2.2	2.8	2.6	1.9
Singapore	2.9	4.1	3.4	3.1	4.2
Italy	1.8	3.2	5.1	5.0	5.7
Israel	n.a.	n.a.	5.6	5.3	5.3
Proportion by value:					
Commonwealth	39.6	34.4	36.4	36.7	34.1
EEC	3.1	4.4	5.6	5.0	5.6
Other	57.3	61.2	58.0	58.3	60.3
	100.0	100.0	100.0	100.0	100.0
South Africa	34.4	36.5	30.3	30.2	32.3
Australia	28.2	21.7	23.2	24.7	22.3
Spain	4.4	5.6	7.3	9.0	10.8
Japan	6.6	7.9	6.8	7.2	5.6
Malaysia	2.9	1.9	2.6	2.2	1.6
Singapore	2.5	3.5	3.1	2.8	3.7
Italy	2.1	3.3	4.5	4.1	4.9
Israel	n.a.	n.a.	5.0	4.8	4.7

Source: Department of Trade & Industry

Figures after 1969 relate to total sector: "Fruit and nuts, prepared or preserved, not elsewhere specified (including fruit in airtight containers)."

TABLE 5.11

Market Sizes, at retail selling prices, of Canned Fruit, 1968-73

(£ Millions)

	Canned peaches, pears and pineapples	Other canned or bottled fruit	All canned or bottled fruit
1968	37.33	37.81	75.14
1969	36.78	42.82	79.60
1970	37.17	41.21	78.38
1971	37.30	41.36	78.66
1972	37.72	44.68	82.40
1973	44.50	53.52	98.02

TABLE 5.12

UK: Press and TV Advertising on Canned Fruit, 1968-73.

£ Thousand

	T.V.	Press	Total	John West
1968	215.1	150.0	365.1	-
1969	71.0	174.0	245.0	-
1970	203.5	190.0	393.5	-
1971	162.6	194.8	357.4	103.3
1972	86.9	87.7	174.6	86.8
1973	67.1	120.7	187.8	67.0

Source: Meal Monthly Digest

TABLE 5.13

Production, Imports and Exports of Canned Fish, 1968-73

Thousand Tons

	Production	Imports	Exports	Gross Consumption	Retail
1968	6.0	83 3	6.3	83.0	68.7
1969	9.0	70.0	7.2	71.8	63.3
1970	9.1	61.7	9.7	61.1	55.5
1971	10.2	65.9	10.2	65.9	50.8
1972	8.7	77.7	8.4	78.0	54.2
1973	7.4	80.5	11.4	76.5	55.2

Sources: H.M. Customs & Excise
Ministry of Agriculture,
Fisheries and Food.

TABLE 5.14

United Kingdom Imports of Canned Fish, 1968 and 1972

	1968		1972	
	Volume (000 tons)	Value (£M)	Volume (000 tons)	Value (£M)
Pilchards	14.7	2.5	16.7	4.4
Salmon (canned)	43.8	32.8	33.0	31.4
Sardines	7.6	2.4	7.0	3.1
Tuna (canned)	4.2	1.5	3.3	1.9
Other	13.0	8.4	17.7	11.4
All Prepared and Preserved Fish in airtight containers	83.3	47.6	77.7	52.2

TABLE 5.15

United Kingdom Imports of Canned Fish, 1970-73

	1970	1971	1972	1973
Total Prepared & Preserved Fish (Thousand Tons)	61.7	65.9	77.7	80.5
Crustacea & Molluscs, n.e.s., prepared or preserved - 000 tons	8.1	7.7	7.8	12.5
	%	%	%	%
Commonwealth	33.3	40.3	45.2	51.5
EEC	2.5	2.5	2.5	12.9
EFTA	8.3	15.0	19.0	15.4
Japan	20.7	11.5	7.7	1.6
USA	17.6	17.3	14.4	10.4
India	10.0	8.3	6.2	13.6
Denmark	5.8	8.1	8.5	10.1
Malaysia	n.a.	19.0	26.3	30.3
Prepared or Preserved Fish in air-tight containers n.e.s. (including caviar and caviar substitutes) - 000 tons	53.6	58.2	69.9	68.0
	%	%	%	%
Commonwealth	8.1	13.4	13.7	17.2
EEC	2.4	1.9	0.5	4.6
EFTA	15.9	14.2	13.4	14.1
Japan	35.3	44.8	31.4	22.7
S.W. Africa Ter.	16.3	6.2	16.4	15.6
Portugal	8.2	7.2	6.8	8.9
USA	7.8	6.2	9.2	7.0
Canada	7.5	13.3	13.3	16.5
Norway	5.3	4.3	3.4	4.1
Soviet Union	3.5	5.3	3.2	2.3
Republic of South Africa	3.2	2.4	7.3	8.0

TABLE 5.16

United Kingdom Exports of Canned Fish, 1970-73

	1970	1971	1972	1973
Total Prepared & Preserved Fish Thousand Tons	9.7	10.2	8.4	11.4
Crustacea & Molluscs, n.e.s., prepared or preserved - 000 tons	0.6	0.4	0.4	0.7
	%	%	%	%
Commonwealth	9.6	19.5	12.4	8.0
EEC	34.8	36.1	41.3	55.0
EFTA	17.6	5.6	7.3	9.2
Prepared or Preserved Fish in airtight containers, n.e.s., (including caviar and caviar substitutes) - 000 tons	9.1	9.8	8.0	10.7
	%	%	%	%
Commonwealth	52.8	54.9	47.5	48.2
EEC	5.1	7.5	6.3	25.7
EFTA	3.3	0.4	1.2	0.7
Australia	20.2	17.9	22.3	25.5
USA	12.3	15.7	20.3	14.4
Republic of South Africa	10.3	9.7	3.8	3.2
Irish Republic	7.8	4.4	8.6	10.9

TABLE 5.17

Retail Market for Canned Fish 1968-73.

£ Million

	Canned Salmon	Other canned or bottled Fish	Total canned or bottled Fish
1968	39.5	14.1	53.6
1969	37.1	15.2	52.3
1970	36.0	16.1	52.1
1971	37.3	14.7	52.0
1972	40.0	16.8	56.8
1973	36.6	21.8	58.4

TABLE 5.18

Estimated brand shares by value in the canned fish market, 1970-74

Percentages

	1970	1971	1972	1973	1974
John West	37½	38	34½	37½	43½
Princes	17	14	15	21	19
Glenryck	4½	5	5	4	4
Cucumber	5½	5½	6	5	5
Marie Elisabeth	4	3½	4	3	3
Libby	7	7	5½	4	2
Other	22	22	25	20	18½
Own labels	4½	5	5	5½	5
	100	100	100	100	100

TABLE 5.19

Estimated brand shares by fish type, 1970-74

Percentages

	1970	1971	1972	1973	1974
Salmon					
John West	44	43	39	39	51
Princes	21	15	16	20	18
Other	35	42	45	41	31
Tuna					
John West	39	48	44	51	46
Princes	18	17	21	18	27
Other	43	35	35	31	22
Pilchards					
John West	15	10	4	10	15
Princes	18	11	6	16	24
Other	67	79	90	74	61
Sardines					
John West	28	30	32	38	44
Princes	-	-	1	1	4
Other	72	70	67	61	52
Prawns/Shrimps					
John West	27	30	22	22	23
Princes	21	37	28	43	45
Other	52	33	50	35	32

Source: John West and Princes.

TABLE 5.20

Advertising Expenditure on canned fish, 1968-73

	Press	T.V. £ Thousand	Total	Proportion by John West %
1968	22	253	275	51
1969	86	245	331	67
1970	7	257	264	98
1971	5	104	108	97
1972	15	133	148	85
1973	22	153	175	50

Source: IPC Marketing Manual.

TABLE 5.21

Imports, Production and the Retail Market for Canned Meat, 1968-73

	Imports	Production (Thousand Tons)	Consumption	Retail Market[a] (£M)
1968	183	128	308	59.5
1969	161	130	288	64.7
1970	167	132	295	71.8
1971	178	132	306	72.6
1972	182	135	312	82.1
1973	191	151	342	98.6

(a) Relates to canned meat and canned meat products, excluding canned bacon, ham and corned meat.

TABLE 5.22

Brand shares in selected canned 'cold' meat markets, 1970-73

Percentages

	1970	1971	1972	1973
Corned Beef				
Fray Bentos	61½	48	37	45½
Libby's	19	27	32½	28½
Chopped Ham and Pork				
Plumrose	26½	25½	23½	23½
Spam	22½	24	24½	23
Zwan	7½	6	4½	4
Walls	3	2	2½	3
Unox	4½	2½	2	2
Pork Luncheon Meat				
Plumrose	13	14	14½	15
Walls	6½	8½	9½	10½
Unox	11½	10½	10½	9½

TABLE 5.23

UK Press and TV Advertising Expenditure on Selected Canned Meat Brands 1970-73.

£ Thousand

	1970	1971	1972	1973
Total canned meat and poultry	896	893	1431	1570
T.V.	585	481	1245	1337
Press	311	412	186	233
Campbells: Meat Balls	95	102	71	105
Fray Bentos: Hot and Cold	210	139	75	142
Heinz: Beefburgers	-	29	212	192
Plumrose: Cold Meats	165	178	364	190
Spam	-	125	127	94
Tyne Brand: Hot and Cold	34	45	194	238
Ye Olde Oak: Cold	91	81	96	178

Source: MEAL Monthly Digest

TABLE 5.24

UK Press and TV Advertising Expenditure on Canned Soups, 1968-73.

£ Thousand

	1968	1969	1970	1971	1972	1973
All Canned Soups	1354	1351	977	1263	1686	1540
T.V.	1056	1046	874	962	1539	1296
Press	298		103	301	147	244
Heinz	719	305	476	675	1000	928
Campbell's	247	697	210	241	279	359
Crosse & Blackwell	310	271	202	199	188	134
Baxters	71	282	77	68	77	63
Chesswood	-	32	-	52	138	47

Source: MEAL Monthly Digest

TABLE 5.25

UK Press and TV Advertising Expenditure on Canned Desserts, 1970-73.

£ Thousand

	1970	1971	1972	1973
Ambrosia				
Creamed Rice	253.1	191.5	179.6	383.2
Devon Dairy Custard	45.3	40.2	18.4	-
Other	-	-	-	16.0
Heinz				
Creamed Rice	47.3	300.4	136.9	172.2
Dairy Custard	30.9	248.5	168.8	0.8
Dairy Dessert	-	-	-	30.1
Canned Puddings	149.1	151.3	226.6	190.3
Nestle				
Sweetheart	-	-	336.6	288.5
Sweetheart Make-a-Mousse	-	-	-	85.8
CWS				
Rice Pudding	-	-	6.2	-
Cow & Gate				
Rice Pudding	-	-	2.5	-

Source: MEAL Monthly Digest

DEHYDRATED FOODS

6.1: Dehydrated foods are generally considered to be those foods from which all the water content has been removed and which are reconstituted by the addition of water, as distinct from dried foods where most but not all of the moisture content has been removed. Following this definition the main types of dehydrated foods to be considered are:

(a) Dehydrated vegetables, particularly potatoes
(b) Dehydrated and powdered soups
(c) Dehydrated ready meals

Dehydrated milk powders have been omitted since they constitute the subject matter of part of the chapter on Manufactured Milk Products. Additionally, some foods, such as instant sauce mixes, have not been included as their major ingredient is not dehydrated.

Dehydrated Vegetables

6.2: The market for dehydrated vegetables has developed recently with technological innovations largely at the expense of the traditional dried pulses. The market for air-dried vegetables was nearly £7 millions in 1973 as against £3¼ - 4 millions in 1970/71 and the market for instant potatoes was at least £6½ millions in 1973 at retail selling prices, whereas in the mid-1960s it was negligible.

6.3: The instant potato market was revived after the Second World War by Dornay Foods Ltd. with the Yeoman brand. Subsequently the company introduced a new brand Dine, and this was followed by the entry of Cadbury into the market under the brand name, Smash. This proved to be a resounding success in terms of sales, if not profits, and by 1970 Cadbury were estimated to have nearly 55 per cent. of the market. Brand leadership was achieved by the introduction of the product in granular rather than powdered form, and by extensive advertising. In 1968 advertising on Smash was £267,000, in 1969 £409,000 and between 1970 and 1973 £548,000 per annum on average. In contrast advertising expenditure by Dornay on Yeoman was £397,000 in 1969, dropping to only £76,000 in the following year and thereafter falling away to nothing in 1973. On Dine a similar pattern occurred, with expenditure high at £390,000 in 1968, but falling to only £62,000 by 1970. However in October 1970 Dornay Foods launched a new product, Wondermash, which backed by advertising expenditure of nearly £700,000 in 1971, achieved in 1971 a market share of about 22 per cent., and caused the share held by Cadbury's to decline to some 44 per cent.

6.4: The remainder of the market in 1971 divided between Yeoman, 5 per cent., others 8 per cent., and own-label 21 per cent. During the late-1960s several new brands were launched, such as Petito introduced nationally by Dornay in March 1970, McDougall's Buttery, backed by £320,000 of advertising in 1967, and Quip instant potato. However by 1973 they had been squeezed out of the market by Cadbury and Mars, the ultimate owner of Dornay Foods Ltd., and by increasing competition from own-label products.

6.5: The major manufacturer of dehydrated vegetables is the Unilever subsidiary Batchelors. This company manufactures not only dehydrated peas and beans under the Surprise label, but also a range of dehydrated cooking aids, particularly onions and mixed vegetables. Competition from different brands of dehydrated vegetables is very limited; probably the only competitive brands of any significance were Erin peas, now jointly owned by Heinz and the Irish Sugar Co., and Swel mixed vegetables and sliced onions. Estimates of advertising expenditure, given in Table 6.2, show how limited is direct competition. Instead competition tends to come from the canned and frozen equivalent products, which are generally cheaper although not always so convenient. However, the range of vegetables which are available in dehydrated form is constantly being extended and several new companies are entering the field, most notably McCormicks with a wide range of vegetables and herbs in glass jars, but also Pearce Duff, Rakusen, Sharwood and Whitworths.

Dehydrated and Powdered Soups

6.6: The size of the market for dehydrated and powdered soups in 1973 was around £11 millions at retail selling prices, compared with £6½ millions in 1968, which represented a 61 per cent. increase during the period. Although this rate of growth was greater than that experienced by canned soups, nevertheless packet soups represented only 16 per cent. of the total soup market in value terms in 1973.

6.7: Three manufacturers dominate the market. The most important is Batchelors, the Unilever subsidiary who provided a big stimulus to packet soup sales in 1968 when they reduced the necessary cooking time from 20 minutes to only 5 minutes. By 1970 Batchelors had around half of the packet soup market, although this share had fallen to about four-tenths in 1973/74.

6.8: The second major brand of packet soup in 1970 was Knorr, manufactured by CPC (UK) Ltd. a subsidiary of the American-owned CPC International Inc. The brand was started in the 1950s, faced severe competition from Batchelors in the 1960s but recovered in the 1970s, through consistently heavy advertising. Regional differences in not only soup consumption, but also in brand popularity, are very marked, and Knorr is particularly strong in northern areas, especially Scotland. By 1970 Knorr had 18 per cent. of the packet soup market, and had increased to 20 per cent. by 1973.

6.9: In 1970 Maggi was the brand name under which Nestle marketed packet soups in the United Kingdom, and their market share was about 12-13 per cent. However, Maggi had never been the success that the company hoped for, so in 1971 they introduced a new dehydrated soup in an economical box shape packaging under the brand name Chef. Maggi was allowed to decline and Chef climbed rapidly to take a substantial share of the packet soup sector; by 1973 its share was over 15 per cent., compared with 5 per cent. for Maggi. Much of the gain by the Chef brand was at the expense of own-label sales which declined in relative terms between 1970 and 1973.

6.10: In 1974 both Batchelors and Cadbury, a newcomer to the soup market, introduced a snack cup soup, which was aimed at a market mid-way between the traditional soup and the hot savoury drinks markets. Both products appear to have been reasonably successful, but surprisingly enough it appears that they are not providing competition to the traditional soup market in terms of being substitutes, but they are additive, in that they are serving a completely new market.

6.11: The role of Batchelors as brand leader becomes more apparent upon consideration of advertising expenditure (Table 6.3). In 1973 total spending on advertising packet soups was £706,000, of which nearly 50 per cent. was spent by Batchelors, the remainder being equally divided between Knorr and Chef. In 1972, when Chef was trying to establish itself in the market, expenditure by the other manufacturers increased in retaliation, so that total advertising expenditure was at the higher level of £869,000.

Dehydrated Ready Meals

6.12: In January 1962 the market for dehydrated ready-meals was started by Batchelors, the Unilever subsidiary, when they launched the Vesta range nationally after an initial test market in London. Initially three varieties were introduced - Beef Curry with Rice, Vegetable Curry with Rice and Spaghetti Bolognaise. These first varieties, all high priced, high profit lines, were air dried, but in subsequent additions to the range, accelerated freeze dried ingredients were introduced, with a consequent increase in retail selling prices.

6.13: The Vesta range faced its first competition from the Erin Foods products. Erin Foods, then a subsidiary of the Irish Sugar Company, launched a wide range of dehydrated foods in North West England to caterers and other bulk buyers. The declared intention was to establish a bulk market, securing high volume sales and low prices, thereby providing a base for entry into the consumer market in competition with Vesta. In 1964 attempts to market several packet meals were started, and the range initially achieved fairly good distribution in supermarkets etc. in the more affluent areas of the large conurbations. Outside these areas distribution was relatively poor, and Vesta was able to counter the competition for the limited market, primarily because of the high margins it could afford to offer to the retail trade, and the strong advertising support the company was able to provide for the brand.

6.14: By the end of 1967 estimates suggest that Vesta had 95 per cent. of the market, having successfully countered all opposition not only from other dehydrated but also from canned ready-meal manufacturers. The advantages to the consumer of dehydrated ready-meals are easy storage and convenience, plus quick reconstitution of the products to their normal states. Counterbalancing this, processing and packaging costs are high, leading in conjunction with high margins, to expensive products. To help absorb these high costs, expensive materials have generally been used, leading to premium-priced, 'luxury' products.

6.15: One of the major problems for would-be entrants into the market was the reluctance of the UK consumer to experiment with eating, and it was not until the late 1960s that this attitude began to change. By mid-1969 Vesta was facing more competition and its share of the market had been reduced to a still dominant 80 per cent. Erin Foods, renamed Heinz-Erin and jointly owned by Heinz and the Irish Sugar Company relaunched a range of 6 dehydrated ready-meals in July 1969 and rapidly became the major competitor to Vesta. Other manufacturers entering the market were Brown and Polson (now CPC (UK) Ltd.) who introduced several rice and pasta dishes under the Knorr brand name, and Reckitt and Colman who also entered the market in 1969.

6.16: Subsequently the market has remained dominated by the Vesta brand, a fact which advertising expenditure figures support. In 1970 Batchelors spent £421,500 promoting Vesta, compared with £110,000 spent on the Heinz packet Dinner for one, and £95,000 on Knorr Ready Meals. By 1972 only Vesta was being promoted at all, to the tune of £469,000.

6.17: In 1973, the market for dehydrated meals was given added stimulus by the introduction, by Reckitt and Colman, of a dehydrated meal to which the consumer had to add meat. Launched by Reckitts late in 1973 these dry 'Fifty-Fifty Dinners' were supposed to complement Colman's Make-a-Meal wet 'add-meat' product which was sold nationally in 1973.

6.18: It is likely that although the market for dehydrated meals, with or without meat included, has potential for significant growth, the limiting factor of cost vis-a-vis the canned and frozen equivalents, will outweight the products' natural advantages in terms of storage life and convenience.

TABLE 6.1

UK: Press and TV Advertising Expenditure on Instant Potato, 1968-73.

£ Thousand

	1968	1969	1970	1971	1972	1973
Cadbury: Smash	267	409	588	516	527	561
Dornay:						
Wondermash	-	-	187	679	382	320
Wondermash with onions	-	-	-	-	68	139
Yeoman	397	76	62	30	5	-
Dine Creamed	390	295	62	-	-	-
McDougall:						
Instant Potato	11	-	-	-	-	-
Buttery	-	318	151	-	-	-
Quip:						
Instant Potato	6	-	-	-	-	-

Source: MEAL

TABLE 6.2

UK: Press & TV Advertising Expenditure on Dehydrated Vegetables, 1970 - 1973

£ Thousand

	1970	1971	1972	1973
Batchelors:				
Surprise peas	93	-	186	124
Surprise beans	-	-	-	-
Cooking aids	-	-	4	41
Onions	2	9	15	12
Mixed vegetables	2	13	21	22
Erin peas	13	17	-	-
Swel - mixed vegetables	5	9	15	18
sliced onion	-	6	6	14

Source: Meal Monthly Digest

TABLE 6.3

UK: Press and TV Advertising Expenditure on Packet Soups, 1968-73.

£ Thousand

	1968	1969	1970	1971	1972	1973
Total Packet Soups	452	562	462	622	869	706
TV	440	450	458	591	851	706
Press	12	12	4	31	18	-
Batchelor's	254	308	338	309	372	349
Knorr	130	252	56	122	264	184
Maggi	62	-	-	3	-	-
Chef	-	-	-	55	227	173

Source: MEAL Monthly Digest

7: THE MAJOR CONCERNS ENGAGED IN FROZEN, CANNED, AND DEHYDRATED FOODS MANUFACTURING

7.1: In the preceding sections dealing with the individual frozen, canned and dehydrated foods, mention has been made of a number of leading producers. It is convenient to consider here in somewhat greater detail several of these leading companies in terms of their size and range of interests.

7.2: In the frozen food trade the number of major enterprises engaged in processing is limited to Unilever, Nestle and the Imperial Group, all of whom also have subsidiaries engaged in the processing of canned and dehydrated foodstuffs. In food canning the types of enterprises are more diverse. Many of the United Kingdom food giants, whose primary interest lie in other types of food, also have subsidiaries engaged in food canning particularly and to a lesser degree in processing dehydrated foods. In fact, the extent to which diversifification into food canning has occurred in the United Kingdom is notable and may be a function of the relative stability of the canning industry. Again there are the non-food "giants" who have diversified into food canning, such as the Imperial Group and Beechams. In addition to the large enterprises whose main activity is food canning and who have grown as a result of this activity, most notable amongst which is, of course, H. J. Heinz & Co. Ltd., there is a wide range of smaller companies engaged exclusively in canning activities.

Unilever Ltd.

7.3: Unilever Ltd. has subsidiaries engaged in all three trades, and in many cases is the brand leader. It has already been noted how Birds Eye became brand leaders in the frozen foods industry when they acquired the relevant patents immediately post-war, and has maintained brand leadership ever since. The growth in Birds Eye Foods Ltd.'s total turnover and net assets between 1968 and 1972 has been as follows:

	Turnover £ Million	Net Assets £ Million
1968	68.1	31.4
1969	76.0	36.5
1970	84.1	39.8
1971	87.4	37.1
1972	91.8	33.9

and the range of frozen products manufactured by them and marketed under the Birds Eye brand extends from vegetables, fruit, fruit juices, and confectionery to fish, meat, prepared dishes and complete meals.

7.4: The interest of Unilever Ltd. in food canning are represented primarily by two subsidiary companies, namely Batchelors Foods Ltd. and John West Foods Ltd., although T. Wall and Sons Ltd. are fairly important in the canned meats market. Turnover and net assets for the 1968 to 1972 period of Batchelors and John West were:

	Batchelors Foods Ltd.		John West Foods Ltd.	
	Turnover £ Million	Net Assets £ Million	Turnover £ Million	Net Assets £ Million
1968	20.3	9.5	23.3	1.4
1969	22.6	11.0	23.6	1.5
1970	22.3	11.9	24.1	1.4
1971	24.4	11.1	26.4	1.7
1972	27.5	10.4	32.1	2.0

7.5: In 1972 total sales by T. Wall and Sons Ltd. amounted to around £70 millions, but included in this are sales of many products, such as pies, sausages, ice cream etc, additional to the sales of the Walls range of canned meats and meat products. The relevant John West Foods markets are canned fish, fruits (a market which they only really entered in 1971), fruit juices and vegetables, and the Unox and Zwan ranges of canned meat products. The Zwan brand is imported from the Netherlands, and John West acquired the UK agency in early 1973. The markets in which Batchelors are active are more varied, since the company manufactures dehydrated as well as canned foods, and few of its goods are imported. The canned products are mainly vegetables - processed peas, butter beans and garden peas - marketed under the Batchelors or Farrows brand name, plus Pack-a-Pie fillings for fruit pies. In terms of dehydrated foods the company is even more important having long been the unchallenged brand leader in the dehydrated meals market with the Vesta range introduced in 1962. The company has an important share of the powdered and dehydrated soups market as well as being one of only two major manufacturers marketing snack soups. The dehydrated Surprise peas and Surprise beans, which Batchelors manufacture, face practically no competition from similar products made by other manufacturers, the only effective competition coming from the price of substitutes, and Batchelors have developed the market for dehydrated vegetable "cooking-aids." In 1968, according to the Census of Production, Batchelors Foods had three establishments. Two of these located at Sheffield and Worksop were classified to the fruit and vegetable products industry although they also manufactured products which were classified to a wide range of alternative industries, whilst the third establishment in Kent was mainly involved in the manufacture of foods classified to the bacon, meat and fish products industry. It is interesting to note that the same source does not list any establishments owned by John West Foods Ltd. in 1968.

7.6: These three major subsidiary companies give Unilever Ltd. a very strong position in the canned, frozen and dehydrated foods industries. This position is supported by the activities of other smaller companies owned by Unilever, such as Smethursts Foods and Midland Poultry Holdings which is active in the frozen poultry market, and further enhanced by the wide spread of activities engaged in by other subsidiaries. For example, the system of distribution that Unilever controls through a variety of subsidiaries gives the company a distinct advantage in the frozen foods industry and may well provide a barrier to entry for new firms in the market.

Nestle Ltd.

7.7: The Nestle Co. Ltd., itself a subsidiary of the Swiss Company, Nestle Alimentana S.A., numbers among its subsidiaries Findus (UK) Ltd. and Crosse and Blackwell Ltd. thereby giving the enterprise an important position in canned, frozen and dehydrated food manufacturing. The development of Findus into the second largest United Kingdom frozen foods manufacturer by means of mergers and acquisitions, and its subsequent take-over by Nestle has already been discussed. The size of Findus (UK) Ltd. group in terms of turnover, net assets and employment is:

	Turnover £ Million	Net Assets £ Million	Employment in UK
1968	21.0	6.4	...
1969	23.7	6.4	4220
1970	26.8	11.2	4216
1971	29.0	14.5	4588
1972	32.5	14.6	4180

Of course, such data include associated activities as well as the manufacture and sale of frozen food carried out by the company. The increase in turnover of Findus was over 50 per cent. between 1968 and 1972 to a level of £32½ millions in 1972, compared with an increase in turnover of Birds Eye foods during the same period of one-third to £92 millions in 1972.

7.8: Crosse and Blackwell is an old established firm, registered in 1892, which Nestle acquired in 1960. According to the company accounts the firm is engaged primarily in "the manufacture and sale of food products and in associated activities." Turnover has increased by one-third between 1968 and 1972, as shown overleaf:

	Turnover £ Million	Net Assets £ Million
1968	20.6	10.0
1969	20.1	8.8
1970	23.1	7.4
1971	25.5	9.6
1972	27.4	8.9

The range of products manufactured by the company includes dehydrated foods particularly soups (Chef and Maggi), as well as canned goods, such as baked beans, spaghetti, soups, meats. The only interest in fish canning the company has is very limited and restricted to herring canning. The firm's production is concentrated in three main factories. One in London produces a range of pickles and sauces etc, whilst the plant located in Peterhead near Aberdeen is the centre of Crosse and Blackwell's soup production, although a wide range of other foods for home consumption and export is also manufactured there. A fairly new plant at Staverton in Wiltshire concentrates on making baked beans and the newer products of Spaghetti Rings and Alphabetti.

The Imperial Group

7.9: Sales of the Imperial Group Ltd. and its subsidiaries in 1973 amounted to £1584 millions. The group has been following a policy of diversification, as have many of the tobacco companies over fairly recent years. The food division interests of the group are held by Imperial Foods Ltd. and extend from potato crisp manufacturing through cold store operators to margarine and vegetable oil processing.

7.10: The frozen food activities of the group are held by Ross Foods Ltd., based in Grimsby who were acquired in 1969 and were involved in all types of frozen foods and Youngs Seafoods Ltd., whose principal activity lies in the processing, packing, freezing and distribution of crustacea and other food products including dairy cream products. The total turnover of each of the companies was as follows:

	Turnover £ Millions	
	Ross Foods Ltd.	Youngs Seafoods Ltd.
1968	...	5.4
1969	18.4	6.6
1970	36.6	9.5
1971	45.6	14.8
1972	57.7	18.2

Both sets of figures are inclusive of sales by the subsidiaries of the respective companies. The Group also has interests in the poultry trade through Ross Poultry Ltd., breeders, producers and processors of poultry.

7.11: Through the subsidiary Smedley - H.P. Foods Ltd., the Imperial Group also have an interest in the food canning industry. In 1925 Wisbech Produce Canners Ltd. was registered, and in 1947 changed its name to Smedley's Ltd. In 1968 this company was a wholly-owned subsidiary of National Canning Co. Ltd. which in turn became a subsidiary of Imperial Tobacco in April 1968. The name was changed again in 1972 to Smedley - H.P. Foods Ltd. which by this time was a direct subsidiary of Imperial Foods Ltd. The activities of the company involve a wide range of canned, frozen and bottled products including sauces, pickles, vinegar etc. By 1972 the turnover of Smedley - H.P. Foods Ltd. and direct subsidiaries was £21.8 millions, the most important subsidiary being the United States company Lea and Perrins.

7.12: The foods division of the Imperial Group Ltd. has substantial interests in both frozen and canned foods. However, it has no activities in the dehydrated foods market.

H.J. Heinz Co. Ltd.

7.13: H.J. Heinz Co. Ltd. are an American owned company, a subsidiary of the American company H.J. Heinz Co., Pittsburgh. The company was registered as a private company in 1917 and converted into a public company in 1948. Since then it has become one of the larger food manufacturing companies in the United Kingdom with turnover in 1969 amounting to over £70 millions and over £112 millions in 1973, net assets of £37½ millions in 1969 and £46 millions in 1972, and employment in the United Kingdom of somewhat under 10,000. The company is engaged in branded sales either under the Heinz or Pickering labels, in practically all the canned foods fields, with the exception of "cold" meats and traditional canned vegetables. However, one of its subsidiaries, the Samor Pure Foods Ltd. which itself owns Montrose Canned Foods Ltd. and Thames Valley Canneries Ltd. is one of only two major manufacturers of own-label canned vegetables. Generally all the producers who manufacture branded goods also produce vegetables for own-label sale, and the only two important exclusively own-label manufacturers are the Samor Pure Foods Ltd. and Goldhanger Fruit Farms Ltd.

7.14: The majority of the growth of H.J. Heinz has been internal, having been pioneers in the food canning industry in the United Kingdom in the 1930s. In many markets they are the traditional brand leaders, notably in canned soups where it is almost true to say that the company set the standard of what all other brands of canned soup should taste like, and in baked beans. The company is a brand leader in the canned spaghetti market, the canned sponge pudding market and the canned custard market. It is important as a producer of canned hamburgers although in the context of the whole canned meat sector its role is of little importance, and is a market leader in the canned and bottled sector of the infant foods market (See Chapter 3). As well as these products, of course, Heinz is famous for its spreads, sauces and pickles etc.

7.15: In the later half of the 1960s, however, Heinz made several acquisitions of importance. In 1966 J. G. Read (Poultry) Ltd. was acquired, followed in 1967 by the Samor Pure Foods Ltd. and in 1969 Pickerings Ltd., the manufacturers of milk-based puddings and fruit pie fillings was purchased from Fisons Ltd.

7.16: The company has three important plants in the United Kingdom at which food canning is carried out; in Harlesden, London, Standish and Kitt Green, both in Lancashire. Employment in these plants was about 5,600 in 1968 and had risen somewhat by 1973 to 5,800.

Cadbury-Schweppes Ltd.

7.17: The giant UK food and drink enterprise Cadbury-Schweppes Ltd. has diversified into the food canning industry. Cadbury-Schweppes Foods Ltd. is the subsidiary company responsible; this company is principally engaged in manufacture, selling and distribution to the grocery and catering trades under the Cadbury, Chivers, Hartley, Moorhouse and Typhoo labels of chocolate biscuits, tea and beverages, milk and potato products, jams, marmalades, canned fruit and vegetables. Previously Harveys of Belgravia, the manufacturers of hot canned meats and ready-meals in "duo-cans" had been owned by Cadbury-Schweppes but the business including trade marks and plant was sold to Lovell and Christmas in October 1971. Another subsidiary which was sold was Goldhanger Fruit Farms Ltd., one of the main UK producers of own-label canned fruits and vegetables. The company had been rationalised in 1971 and all canning was carried out in two factories, in Malden and Montrose. In 1972 the company was sold to the international finance and investment group Tozer Kemsley and Millbourn (Holdings) Ltd. but Cadbury-Schweppes Foods retained that part of the canning business that related to its branded products together with the factory and production facilities at Montrose. So in 1973 the total turnover of the Cadbury-Schweppes Group was around £440 millions, and the turnover of Cadbury-Schweppes Foods Ltd. was £41$\frac{1}{3}$ millions, divided between sales of Hartley's canned produce, Smash instant mashed potato and "Snacksoup", the latter two products being brand leaders in their fields, as well as biscuits, jams, tea, etc.

Subsidiaries of other major enterprises

7.18: Several other enterprises have interests in canned food production as a sideline to their major activity. Spillers Ltd., the grain milling and baking concern manufactures canned fruit, vegetables and various types of meat under the Tyne Brand label. Similarly, Brooke Bond Liebig markets the Fray Bentos brand of primarily imported canned meats, Ranks Hovis McDougall are concerned with canned vegetables, particularly mushrooms in which they are brand leaders marketed under the Chesswood label, and also own Linfield Canners and Willer and Riley Ltd. in addition to having interests in frozen foods through Bradley Packing and Freezing Ltd. Associated British Foods Ltd. own Anglia Canners, whilst Union International own Donald Cook and Sons Ltd. and County Produce Ltd., both firms partially engaged in fruit and vegetable canning. Fitch Lovell market a range of canned goods, of which Newforge is of particular and growing importance, and also important are Spam, De Haan, Blue Cap and Melody. CPC (UK) Ltd., are involved in the soup market on the one hand through the Frank Cooper canned soups and on the other with Knorr dehydrated soups. Cavenhams through Ambrosia and Unigate have interests in the market for canned sweets and puddings. Beechams is involved in the canned food markets through ownership of the Morton brand, and the Distillers Co. Ltd. have also entered the field through ownership of Stratford upon Avon Canners Ltd. who are canners and packers of fruit, vegetables, jams, preserves and meats.

7.19: Certain other major companies are important in the canning and dehydrating industries. Lockwood Foods, Robertsons Foods and Campbell's soups are holding companies with significant interests in food canning and soup manufacture. Libby McNeill and Libby has not been discussed here since mention is made to the company in the Manufactured Milk Chapter, and the main activities of the company are concerned with importing. This applies to many companies such as "Princes" Foods Ltd. which has long been involved in merchanting one of the leading canned fish brands and which was taken over by the Italian company, Industrie Buitoni Perugini in 1973 from its previous holding company J. Bibby and Sons Ltd.; Deltec Foods who market under the Armour brand goods which are largely imported and whose turnover has increased from £3.9 millions in 1968 to £28.5 millions in 1973; Green Giant, Del Monte etc.

Lockwoods Foods Ltd.

7.20: Another company which was formed in order to carry on the business of fruit and vegetable canners, and which have remained independent, with food canning as their principal activity is Lockwoods Foods Ltd. It was registered as a private company in 1940 as Eastern

Counties Preserves (1940) Ltd., changed its name in 1959 and in the following year became a public company. Its principal factory is in Long Sutton, Lincolnshire. Turnover increased from £15 millions in 1969 to nearly £24 millions in 1973, whilst net assets increased from £2.3 millions to £5½ millions in 1973. The range of products manufactured by the company and its subsidiaries, which include John A. Hunter & Co. Ltd., Lockwoods Fruit Farms Ltd. , and Roberts and Sons (Curers) Ltd. has widened into canned meats, cooked meats and very recently carbonated beverages and frozen foods, although canned fruit and vegetables are still of primary importance.

Robertson Foods Ltd.

7.21: Established in Edinburgh in 1903, as preserve manufacturers, the company did not turn public until 1961. It is now a holding company for a group whose range of interests cover the manufacture of preserves, cake mixes and breakfast cereals as well as canned fruits and vegetables with factories at Paisley, Manchester, Bristol, Branborough, Bridgewater and Hereford. The canned fruits and vegetable activities are carried out by the subsidiaries British Canners Ltd., and James Robertson and Sons Ltd., the latter also manufacturing marmalade, mincemeat, Christmas pudding, fruit squash and ice cream mixes. In 1969, total sales of Robertson Foods Ltd. were £19 millions rising to £32.8 millions by 1974, of which 26.5 per cent. was canned fruit and vegetables. In 1974 the decision was taken to rationalise production facilities in the face of unbridled inflation and it was decided to close down both the British Canners factories at Hereford and Ledbury and the factory at Paisley, reconstruct the Quantock Preserving Co. Ltd.'s factory at Bridgewater and transfer the greater part of the canning production from Hereford. This has the advantage of allowing greater control in production and thereby keeping stocks to an acceptable level in an industry, where, because of the seasonability of production, stock levels are very high.

Campbell's Soups Ltd.

7.22: Campbell's Soups Ltd. is another United States company, owned by Campbell Soup Co. of New Jersey. It is important in the condensed soup market which it dominates and in the ready-meals market. In 1969 total turnover was £6¼ millions and net assets were £2.6 millions. By 1972 turnover had increased very slowly to £6.7 millions, and similarly net assets were £2.8 millions. The company is not significant in any other field of activity in the United Kingdom, and has experienced disappointing results in comparison with the performance of its parent company in the United States.

Mars Ltd.

7.23: The interests of Mars Ltd., the United Kingdom subsidiary of the United States company Mars Inc., in the frozen, canned and dehydrated foods markets, are restricted to potato products, both canned and dehydrated. The brands under which the company retail their products, are in the case of canned potatoes, Yeoman, and for dehydrated potatoes, Yeoman and Wondermash. Of course, these activities are minor in relation to the total turnover of Mars Ltd. in 1972 of £158 millions, yet in the context of the dehydrated potato market then Mars is of great importance.

Swel Foods Ltd.

7.24: Swel Foods Ltd. is a wholly-owned subsidiary of the Farmers Marketing and Supply Co. Ltd. It was registered as a public company in 1940, and had sales of £1.6 millions in 1968, the principal activity being the manufacture of dehydrated human food. By 1973, turnover had increased by three-tenths to slightly over £2 millions. The market in which the company is most significant in terms of brand shares is that of dehydrated vegetables.

APPENDIX A

Frozen Foods

Frozen convenience meats (other than uncooked poultry) or frozen convenience meat products.

e.g. beef slices, steak, chops, beefburgers, porkburgers, steakburgers, cheeseburgers, steaklets, ready-meals, sausages, meat pies, chicken pies etc.

White fish, uncooked, frozen

e.g. cod, haddock, hake, plaice, lemon sole (including ready-breaded, but not fish fingers etc.)

Frozen convenience fish products and frozen fish not specified elsewhere

e.g. herrings, kippers, shellfish, fish fingers etc., fish cakes, 'fish & chips' etc.

Frozen peas

Frozen beans

Frozen chips and other frozen convenience potato products

e.g. Includes puffs

All frozen vegetables and frozen vegetable products, not elsewhere specified

e.g. asparagus, broccoli, brussels sprouts, cauliflower, mixed vegetables, spinach, corn-on-the-cob

Frozen fruit and frozen fruit products

Includes frozen fruit juices

Frozen convenience cereal foods

e.g. sponges (including those with ice-cream), fruit-pies, eclairs, pastry

All frozen convenience foods not specified elsewhere.

APPENDIX A (continued)

Canned Foods

Tomatoes, canned or bottled

Peas, canned

Beans, canned

Includes baked beans, broad beans, butter beans etc.

Canned vegetables (other than pulses, potatoes or tomatoes)

e.g. carrots, beetroot, celery, spinach, runner-beans, kidney beans, mixed vegetables, sweet corn, mushrooms, asparagus tips

Vegetable juices

Includes tomato juice and puree

Canned potato

Canned peaches, pears and pineapples

Other canned or bottled fruit

e.g. fruit salad, fruit cocktail, grapefruit, mandarin oranges, prunes, gooseberries, rhubarb, strawberries, plums, cherries, apricots, black-currants, raspberries, black-berries, loganberries. Includes pie fillings.

Fruit juices

e.g. grapefruit, orange, pineapple, lemon, lime, blackcurrant, rose-hip syrup.

Canned milk puddings

e.g. creamed rice, sago, macaroni, tapioca, semolina, custard (made-up)

Other puddings

e.g. Christmas pudding, fruit pudding, sponge puddings, syrup puddings.

APPENDIX A (continued)

Cereal convenience foods (including canned) not elsewhere specified

e.g. cake & pudding mixes, custard powder, instant puddings, canned pasta, pastry, sauce mixes

Canned soups

Includes broths and canned condensed soup

Cooked bacon and ham, including canned

Cooked poultry, including canned

Includes poultry removed from the can before sale by retailer

Canned meat

Includes all canned meat, whether purchased in cans or slices

Other canned meat and canned meat products

e.g. stewing steak, luncheon meat, mince, meat puddings & pies, pie fillings, meat-with-vegetables, ready-meats, sausages

Canned salmon

Other canned or bottled fish

e.g. sardines, pilchards, mackerel, herrings, brisling, shellfish, roes, anchovies

Dehydrated Foods

Air-dried vegetables

air-dried peas, beans, onion flakes, mixed vegetables etc.

Instant potato

Dehydrated and powdered soups

Accelerated freeze-dried foods (excluding coffee)

Excludes any item part only of which is AFD.

CHAPTER 10

DIETETIC AND HEALTH FOODS

1: GENERAL INTRODUCTION

1.1: The products covered by this study comprise a wide variety of preparations directed towards groups of consumers with differing needs and wants. As a result, it must be stressed at the outset that we are confronted not with one trade or market, but a series of markets which only overlap to a limited degree, and even within a single market there may also be a considerable heterogeneity of products.

1.2: For convenience sake, we have distinguished four groups of products, some of which are reasonably well-defined while others are much less so. The groups of products, listed more in order of their homogeneity and not in terms of market-size, are:

(a) diabetic foods;

(b) slimming foods and aids;

(c) invalid foods and 'food drinks';

(d) health foods of the vegetarian type and those of an organic nature.

1.3: Each of these four categories of products will be examined separately in the following sections of this chapter, but before so doing, it is useful to make a number of general observations. That we are dealing with a number of different product-markets is confirmed by the fact that there are broad distinctions that can be observed between the different types of outlet through which they are sold. Thus, the diabetic foods are sold in the main through chemists' shops, whereas the slimming foods and aids are sold to a greater extent in grocery shops and supermarkets as well. The latter also applies to the invalid foods and food drinks. Health foods, on the other hand, are rarely found on sale in chemists' shops, and can be virtually defined in their scope by the range of products stocked in the specialist health food shops.

1.4: The type of outlet used for the sale of the various kinds of product to the public is also reflected in the type of firms which are prominent in the individual sectors. Thus, part of the slimming foods market is in the hands of pharmaceutical firms whose normal range of products are sold through chemists and who have made use of their distribution network to add these slimming foods to their product-range. But another part of the slimming foods market - the low-calorie products - are variants of established and mass-produced lines produced and marketed by the large food companies, such as Cadbury-Schweppes, Heinz, Ranks Hovis McDougall, Spillers and others.

1.5: It is important to note at this stage that the products marketed by the pharmaceutical firms are not generally manufactured by them but are produced to their specification by other food concerns engaged in the manufacture of those lines. Thus, the slimming biscuits are made by biscuit manufacturers, and slimming chocolate by chocolate makers and so on. Much the same applies to a large proportion of the diabetic foods sector. To that extent, we are not dealing with a manufacturers' market but a marketing market.

1.6: Since the manufacture of the slimming products produced on a contractual basis by manufacturers for sale by others, as well as the low-calorie variants of standard products generally, are not distinguished in any way by the Census of Production, official data on the level of manufacturers' sales are not available. Equally there seems to be little relationship between estimates of the size of the individual product-markets produced by various agencies at different points of time, partly because of the problems of defining their scope. The exception to this general rule is the diabetic foods market, which has been the subject of a recent investigation by the Price Commission.

1.7: The final point to be made by way of introduction is that the slimming foods market is characterised by a high level of product innovation, although not all the new lines introduced survive on the market. Products come and go, and there is no certainty that today's most popular line will retain that position for very long. Thus, we are concerned, at least in that sector, with a constantly varying range of products marketed by a number of firms of different sizes and changing identities.

2: DIABETIC FOODS

2.1: According to the Price Commission's report, the retail sales of diabetic foods in the UK amount to about £3 millions, and of that total market about three-fifths represents the business done by Boots Company Ltd. through its chain of retail chemists' shops. Most of the remaining outlets for diabetic foods are also chemists' shops, although some lines may also be stocked by department stores and some health food shops.

2.2: The range of diabetic foods on sale in the United Kingdom broadly comprises the nine product-groups listed in Table 2.1. From that table, it will be seen that the same names appear as companies producing or marketing the products under several heads. But it is important to mark the distinction between production and marketing. For example, Boots Co. Ltd. only manufacture one diabetic line, namely pastilles. The rest of the diabetic products sold under its name are produced on commission by other manufacturers to the Boots' specifications and standards.

2.3: Possibly the most specialised of the manufacturers of diabetic products in the United Kingdom is Smith Kendon Ltd. whose lines include pastilles, hard-boiled sweets, chocolate, chewing gum, jellies and wafer biscuits sold under the 'Skels' brand-name. The UK subsidiary of CPC International Inc. of New Jersey, CPC (United Kingdom) Ltd. is the main producer of branded diabetic jams and marmalades which are marketed under the Frank Cooper label, a company which was acquired in 1964. Also marketed under the Frank Cooper label are a range of canned dessert fruits and jellies. (Another producer of "low sugar" jams and marmalades suitable for consumption by diabetics is Energen Foods Ltd., whose activities will be more full described in the section dealing with slimming foods).

2.4: Another company producing and marketing a range of diabetic foods is Appleford Ltd., a subsidiary of Allied Breweries Ltd. following the latter's acquisition of Showerings, Vine Products & Whiteways Ltd. in 1969. Marketed under the Dietade label, its products include jellies and desserts, canned fruits and conserves, fruit sugar, and a range of tinned meals, such as chicken fricassee, lamb ragout and turkey Italian style.

2.5: Diabetic chocolate is manufactured and sold under the Cadbury name by Cadbury-Schweppes Ltd., and before it disposed of the company in 1975, it was also involved in the production of diabetic preserves through Mapleton Foods Ltd. From the Cadbury-Schweppes' group also come the diabetic soft drinks under the well-known Rose's label, as well as the low-calorie "Slimline" range of Schweppes' drinks.

2.6: Another producer of diabetic chocolate is Wander Ltd. (again about which more later), whose ultimate holding company is Sandoz A.G. of Switzerland. Other specialised producers are the Nelson Preserving Co. Ltd., manufacturers of the Diajel jelly crystals which is one of the Weston Foods Group, and as such part of Associated British Foods Ltd; Dietary Foods (Bletchley) Ltd., manufacturers of a lower-calorie granulated sweetener, owned by the Cumberland Packing Corporation of New York; and Welfare Foods (Stockport) Ltd. which markets tinned cakes for diabetics.

2.7: According to the Price Commission, well over 60 per cent. of the total sales of diabetic foods comprise marmalade and preserves, chocolate bars, squashes, canned fruit and pastilles. In addition, although not listed in Table 2.1, there is a significant and growing market for alcoholic drinks suitable for consumption by diabetics. Possibly the best-known and most widely available is Diet Pils Lager, brewed and bottled by Holsten-Brauerie of Hamburg and imported into Britain. Others brewed in the UK are Marston's Low 'C' Pale Ale, and under licence, Ayingerbrau Strong Lager (by Alpine Lager Ayinger Brau (UK) Ltd. of Tadcaster, Yorkshire), and Konig Diabetic Lager (by Eldridge, Pope & Co. Ltd. of Dorchester, Dorset).

2.8: Finally, particular importance attaches to sorbitol, described by the Price Commission as "the nearest substitute to sugar as a sweetener", which is a common ingredient in the manufacture of diabetic foods. Manufactured from grain to produce both a syrup and a powder, its cost is an important element determining the prices at which diabetic foods can be sold. Sorbitol is produced in the UK by Laporte Industries Ltd., the bulk of its output being used as a raw material although sorbitol powder is available in retail shops for use as a sweetener by diabetics.

2.9: The report by the Price Commission published in September 1975 was concerned with establishing "the reasons for any differences between the rate of recent increases in and the general level of retail prices" of diabetic foods and comparable foods. Their main conclusion was that in the three years to June 1975 the retail price of diabetic foods had not increased at a rate significantly greater than that of equivalent non-diabetic foods, and in many cases, to a lesser extent. In support of that conclusion, the Commission included a table showing the relative changes in prices for a number of diabetic lines and their standard equivalents, the relevant data on this point being shown here in Table 2.2.

2.10: Changes in the relative prices of diabetic products is, however, only part of the story. What the Price Commission's report also demonstrates is that, notwithstanding the narrowing of the gap in the last three years, the prices of diabetic foods are generally substantially higher than their standard counterparts. So much can be seen from Table 2.3 which is based on the price data given in the Commission's report. In the first column is shown the May 1975 manufacturers' recommended prices for the listed diabetic products, although the Commission notes that Frank Cooper marmalade and Skels pastilles can usually be bought at below the recommended price at Boots' branches. In the second column is shown the equivalent price per ounce (or fluid ounce) of the various brands of diabetic products, and in the third column, the ratio of the recommended price of the diabetic product to that of its standard equivalent, after adjustment for any variation in their size. The ratios in brackets are the same comparison after excluding VAT, where there is any difference arising on that account.

2.11: The first point that emerges from Table 2.3 is the considerable variation in the unit price (i.e. pence per oz.) of the different brands of diabetic products. For plain chocolate, the Skels unit price is 85 per cent. higher than Cadbury's; for milk chocolate, Wander's unit price is 32 per cent. higher than that of Boot's. On the other hand, Frank Cooper's canned peaches have a unit price 14 per cent. lower than that of Boot's and 36 per cent. lower than that of Dietade.

2.12: The second point that can be seen from Table 2.3 is that the unit price of the diabetic product is, apart from soft drinks, generally higher than its comparable standard product, and often by substantial amounts. The Commission adduces a number of reasons why this is so. First, they are "inherently more expensive to produce", partly because of the higher costs of raw materials but also because "the low volume of production, coupled with the extra care and time needed to exclude sugar, do not allow economies of scale, such as are possible with ordinary foods." Secondly, the Commission states "average distribution margins, both wholesale and retail, are higher than on ordinary foodstuffs," because "they are distributed mainly through the chemists' trade, and not through supermarkets and other food outlets." Retailers tend to order diabetic products in individual units (splits) rather than in complete cases (outers), so that the low rate of stock-turn and the need to break bulk involves the wholesalers in extra storage and handling charges; consequently their gross margins have been in the 11-16 per cent. range. Most manufacturers also set their recommended prices on a basis of the usual chemists' margin of about 33.33 per cent., rather than the lower margin of $17\frac{1}{2}$-20 per cent. of the grocery trade.

2.13: While the Commission found that competition "hardly exists in the sale of diabetic foods" and for the manufacturers of such products "the risk of losing customers is not a strong consideration", it is also concluded that accepting the "necessarily subjective allocations of costs, manufacturers' profits on diabetic products are not out of line with those earned on non-diabetic foods." Indeed, their profitability had declined between 1972 and 1975.

TABLE 2.1

Main diabetic products and their producing or marketing companies

Product Group	Companies producing or marketing	Brand-name
PRESERVES	Boots Co. Ltd.	Boots
	CPC (UK) Ltd.	Frank Cooper
	Mapleton Foods Ltd.	Mapleton and Cranleigh
CHOCOLATE & CONFECTIONERY	Boots Co. Ltd.	Boots
	Cadbury-Schweppes Ltd.	Cadbury's
	Wander Ltd.	Wander
	Smith Kendon Ltd.	Skels
	H.F. & I.C. Woolrich Ltd.	Pea Diet (Petzold & Aulham)
PASTILLES & SWEETS	Boots Co. Ltd.	Boots
	Smith Kendon Ltd.	Skels
JELLIES & DESSERTS	CPC (UK) Ltd.	Frank Cooper
	Smith Kendon Ltd.	Skels
	Appleford Ltd.	Dietade
	Nelson Preserving Co. Ltd.	Diajel
CANNED FRUITS	CPC (UK) Ltd.	Frank Cooper
	Boots Co. Ltd.	Boots
	Appleford Ltd.	Dietade
BISCUITS, WAFERS ETC.	Boots Co. Ltd.	Boots
	Smith Kendon Ltd.	
CAKES & CAKE MIXES	Boots Co. Ltd.	Boots
	Welfare Foods (Stockport) Ltd.	Rite-Diet
CANNED MEALS	Appleford Ltd.	Dietade
SUGAR SUBSTITUTES	Laporte Industries Ltd.	Sorbitol
	Appleford Ltd.	Dietade fruit sugar
	Dietary Foods (Bletchley) Ltd.	Sweet 'n Low

TABLE 2.2

Percentage increases in manufacturers' recommended prices for diabetic and non-diabetic foods, September 1972 - March 1975.

Product	Diabetic	%	Non-diabetic	%
Chocolate	Cadbury's Plain, 4 oz.	61	Milk, $4\frac{1}{2}/4\frac{3}{8}$ oz.	78
	Boot's Milk and Plain, 3 oz.	78	Plain, 4 oz.	89
	Wander's Milk, $2\frac{1}{2}$ oz.	65	Milk, 3 oz.	89
	Wander's Plain, $2\frac{1}{2}$ oz.	80	Plain, 3 oz.	89
	Skel's Milk and Plain $1\frac{1}{2}$ oz.	108		
Orange Marmalade	Boots, 15 oz.	18	Fine-cut, 16 oz.	122
	Frank Cooper, 15 oz.	34	Fine-cut, 16 oz.	100
	Energen, 8 oz.	67	Thick-cut, 16 oz.	88
Canned Peaches	Frank Cooper, 8 oz.	14	In sugar syrup, $7\frac{3}{4}$ oz.	69
	Boot's, $7\frac{1}{2}$ oz.	59	In sugar syrup, 8 oz.	88
	Dietade, 7 oz.	69		
Pastilles	Boot's, 4 oz.	126	1 oz.	126
	Skels, 3 oz.	95	$3\frac{1}{2}$ oz.	128
Dilutable Soft Drinks	Rose's orange squash, $25\frac{1}{2}$ fl.ozs.	36	With saccharin, $25\frac{1}{2}$ fl.ozs.	44
	Boot's low-calorie orange, $25\frac{1}{2}$ fl.ozs.	35	With sugar, $25\frac{1}{2}$ fl.oz.	67
			" " " "	74

Source: Price Commission Report on Prices of Diabetic Foods.

TABLE 2.3

Comparative Prices of Diabetic and Non-Diabetic Equivalent Products, May 1975.

Product		Price diabetic product (pence)	Diabetic Equivalent price per oz.	Ratio of price of diabetic product to non-diabetic equivalents
Chocolate	Cadbury's Plain, 4 oz.	23	5.75	1.28
	Boot's Milk, 3 oz.	20	6.67	1.18
	Wander's Milk, 2½ oz.	22	8.80	1.55
	Skel's Plain, 1½ oz.	16	10.67	1.88 (1.57)
Orange Marmalade	Boot's, 15 oz.	25	1.67	1.27
	Frank Cooper, 15 oz.	35	2.33	1.33
	Energen, 8 oz.	25	3.13	1.78
Canned Peaches	Frank Cooper, 8 oz.	16	2.00	1.00
	Boot's, 7½ oz.	17½	2.33	1.17
	Dietade, 7 oz.	22	3.14	1.57
Pastilles	Boot's, 4 oz.	32	8.00	1.40 (1.35)
	Skels, 3 oz.	30	10.00	1.75 (1.69)
Soft Drinks	Rose's Orange squash, 25½ fl. oz.	23	0.90	0.88
	Boot's low-calorie whole orange, 25½ fl. oz.	18	0.71	0.69

Source: Based on Price Commission Report on Prices of Diabetic Foods.

Figures in parentheses are after the exclusion of VAT

3: SLIMMING FOODS AND AIDS

3.1: In recent years there has developed a market for a large range of slimming foods, of which a substantial part comprises products which have been developed since the middle and late 1960s. The more traditional slimming foods - starch-reduced bread, rolls and crispbreads - still constitute in value terms by far the largest segment of the market, but these foods have been joined by the meal replacement products and so-called "slimmers' meals", the muesli breakfast cereals and the low-calorie version of standard products (such as soups, margarine, soft drinks etc).

Starch-reduced bread and rolls and crispbreads

3.2: The market for starch-reduced bread and rolls is reputed to be worth about £20 millions a year, with crispbread sales amounting to another £9-10 millions. The main brand-names of the three types of products and the companies responsible for their manufacture or marketing in this country are shown in Table 3.1.

3.3: The market for starch-reduced (or light) bread is dominated by RHM's Nimble, which outsells the Slimcea and Procea breads produced by Cavenham Ltd. in the order of 2:1. According to Cavenham Ltd.'s annual report for the year to end-March 1975, "the total market for low-calorie breads like Slimcea and Procea fell by 26%" as the result of the sharp increase in "the price differential between speciality and standard bread" brought about by "severe price cutting" of the latter.

3.4: The lion's share of the market for starch-reduced rolls is likewise claimed by RHM through Energen Foods Ltd., a company which it acquired in 1958. The only other producers of any significance are Booker McConnell Ltd., which acquired Allinson Ltd., millers of stone-ground wholewheat flour and manufacturers of specialised food products, in August 1972, and Granose Foods Ltd., which is owned by British Advent Missions Ltd. In 1975, the Boots Company Ltd. began to sell its own brand of high protein starch reduced product but in the form of slices rather than rolls.

3.5: The crispbread market is served by rather more manufacturers than exist for starch-produced bread and rolls, the main brands being shown in Table 3.1, from which it will be seen that biscuit and breakfast cereal manufacturers are active in this field. The brand-leader in this market is Ryvita from Associated British Foods Ltd., which despite the increased competition from new products, has held on to about two-fifths of the total market since 1969. Its main rivals are now RHM's Energen and United Biscuits Ltd.'s Ry-King, the latter being imported from Sweden, but in neither case does the market-share exceed one-fifth. The fourth largest share of the market is probably held by the Kellogg Co. of GB Ltd., which entered with the Scanda lines, imported from Finland, in 1970. United Biscuits Ltd. also markets another home-produced crispbread Macvita, but its share of the market has tended to decline, and is probably lower than that enjoyed by Associated Biscuit Manufacturers Ltd.'s Vita-Weat.

3.6: The level of advertising expenditure on starch-reduced bread and crispbreads is substantial , particularly so for the latter. In 1972-73, an average of more than £1.1 millions went on press and TV advertising of starch-reduced bread virtually all on Nimble and Slimcea and divided between them roughly in the ratio of 55:45. For crispbreads, the average spending in the same two years came to just under £1 million, of which about one-quarter was devoted to Ryvita and one-fifth to Energen.

3.7: Some indication of the relative prices of the main brands of starch-reduced and crispbreads in the most recent past and the levels of distributors' margins (based on the smallest quantities supplied) are shown in Table 3.2. For starch-reduced rolls, the recommended retail price at September 1975 for the given brands and pack-sizes is shown, followed by the unit-price (in this instance, per roll) and the increase in the retail price compared with the same month of the previous year. Thus, in the year to September 1975, the price of a 36-roll pack of Energen rolls increased by 35 per cent. to make their unit price nearly three-quarters higher than for Allinson's rolls. It will also be seen that there is a marked variation in the margin (i.e. the difference between the trade price and the retail price expressed as a percentage of the latter) among the three brands listed.

3.8: The data for crispbreads are based on the recommended retail (and trade) prices ruling at June 1975, with the margins current at that time representing a much smaller range (from 17½ to 21 per cent.), although there were more substantial differences in the unit price (i.e. per ounce), as well as significant variations in the price-increases compared with a year earlier.

Meal replacements and "slimmers' meals"

3.9: In the early 1960s, there appeared on the UK market a number of products promoted as slimming foods to be taken as substitutes for normal meals. One of the earliest to make its appearance was the range of Limmits wholemeal biscuits with a vitamin-enriched filling, either vanilla or savoury flavoured, which were recommended by the manufacturer to be taken with milk three times a day to replace all the usual meals in order to produce a rapid loss of weight. Before that time, there had also existed "meal-in-a-glass" food substitutes, largely consisting of skimmed milk with added protein, sugar and vegetable oils, produced in a powder form to which water was added.

3.10: During the 1960s, meal-replacement products increased both in numbers and in their variety of forms, and in addition, a range of appetite suppressants were marketed, mostly tablets containing methyl cellulose which was supposed to expand in the stomach and reduce hunger. Other types of food products aimed at the slimmer which increased in popularity during this period were mueslis and "slimmers meals" of various kinds.

3.11: There is some considerable difficulty in classifying the diverse range of products into distinct and homogenous groups, with the possible exception of the cereal-based mueslis on the one hand and the appetite suppressants on the other. Since the latter cannot be properly regarded as "foods", it is intended to omit them from further consideration, and to make a two-fold distinction between meal replacements and slimmers' meals on the one hand, and mueslis on the other.

(a) meal replacements and slimmers' meals

3.12: A list of the main companies involved in the meal replacements and slimmers' meals market, together with the nature and brand-names of their products, is given in Table 3.3. The market for chocolate bars and biscuits as meal replacements is largely shared by Unicliffe Ltd. (a subsidiary of Chas. Pfizer & Co. Inc. of the USA) which sells under two brand-names, Limmits and Trimetts, Fisons Ltd. (Pharmaceutical Division) with Bisks as its brand-name, Ashe Laboratories Ltd. (a subsidiary of Ashe Chemicals Ltd. itself controlled by International Telephone and Telegraph Corporation of the USA) marketing the Simbix range, and finally, the Boots Co. Ltd. under its own name.

3.13: According to trade sources, the meal replacement market was worth about £12 millions in 1973, representing a fourfold increase (at current prices) since 1966. Brand-leadership is claimed by Unicliffe Ltd., with 50-60 per cent. of the market accredited to the range of 38 products sold under the Limmits and Trimetts brands, followed by Fisons' Bisks range with 18 per cent. of the market in 1973.

3.14: It will be noted that the four companies mentioned above are all primarily engaged in the manufacture of pharmaceutical and toiletries rather than in food processing, and as indicated earlier, their interests in dietetic foods are confined to marketing rather than manufacturing. Two other companies listed in Table 3.3 are also engaged in similar activities: Smith & Nephew Ltd. market Nutriplan slimmers' meals and Bristol-Myers Co. Ltd. (a subsidiary of the US company of the same name) a liquid meal marketed as Nutrament.

3.15: Among the other companies active in this market are Wander Ltd. which introduced the Contour range of slimmers' meals and soups at the beginning of 1974, Carnation Foods Ltd. which imported from the USA and sold on the UK market its Slender meal-replacement drink during 1975, and Milupa Ltd. marketing Kousa Naturally Light, a cereal-based slimmers' meal.

3.16: While the market for meal replacements and slimmers' meals expanded rapidly during the late 1960s and early 1970s, trade sources have indicated that there has been little or no growth in the last year or so, although certain products, and notably Carnation's Slender have enjoyed high sales. Two reasons are adduced for this change in market conditions: first, the effect of rising prices generally on people's incomes, and secondly, the impact of adverse publicity concerning some of the products themselves.

3.17: The level of recommended retail prices at September 1975 for a selection of the meal replacement products, together with the percentage-change compared with a year earlier and the percentage margin at both dates, is shown in Table 3.4. The increases in retail prices (including VAT where appropriate) have ranged from under 20 per cent. to 40 per cent. and over in the year to September 1975, which while not out of line with the price-increases for crispbreads and starch-reduced rolls still represent very substantial increases.

3.18: The adverse publicity has centred partly on the price-differences between these types of products and the comparable standard foods and partly on their effectiveness as an aid to slimming. The criticisms levelled at the slimming products were, in general terms, that they differed only slightly in their fat, protein and carbohydrates content from their equivalent standard product, and that the addition of vitamins and the instructions on the way they should be consumed did not justify the large price-difference between the slimming and the standard products.

3.19: The reply of the concerns marketing such products was that these criticisms were misleading and invalid. Products sold as slimming foods or dietary aids are required to carry on the pack (and in any advertisement) a statement which makes it clear that they can only be effective when taken in conjunction with, or as part of, a calorie-controlled diet. Furthermore, according to the Marketing Director of Unicliffe Ltd., as quoted in a trade paper:

> "It is a proven fact that if you consume Limmits or Trimetts, or indeed any other brand of our kind, in the way recommended for a period of seven days upwards, you will steadily lose weight. Furthermore, clinical trials have shown that you

can continue to do this over a period as long as 12 months quite safely, i.e. consume nothing but Limmits and milk.... On the score of expense we believe that at an approximate cost of 50p. a day to achieve what, for a woman, is a highly desired goal and what, in terms of her health, may be a very necessary goal i.e. losing several pounds or on some occasions several stone, we really are a very reasonable proposition." *

(b) Mueslis

3.20: The second category of products to be covered under the general heading of meal replacements and slimmers' meals are the mueslis - a mixture of cereals, nuts and dried fruit - have long been imported into the UK but up to the late 1960s enjoyed only a limited market as a breakfast food. According to the Monopolies Commission, the total supplies (including imports) of mueslis amounted to under 800 tons in 1968, but had increased to over 1,450 tons in 1970 before more than doubling to reach 3,400 tons in 1971. The latter increase is attributable in part to Weetabix Ltd.'s introduction of Alpen during 1971, but even so, the sales of mueslis were equivalent (by weight) to only 2 per cent. of that of ready-to-eat breakfast cereals in that year.

3.21: Within the next two years, mueslis' sales more than trebled in volume and value, and despite a setback in 1974 they were more than ten times higher than in 1968. The brand-leader is Alpen, but its market-share has tended to fall as new competition has developed from Kellogg's Country Store and Lyons' 8-1 as well as retailers' own-label products. While these products are marketed primarily as breakfast foods, other mueslis are marketed primarily as slimmers' meals, notably by Smith & Nephew (Nutriplan), Unicliffe (Nourish), and Fisons (Bisks).

Low-calorie products and sweeteners

3.22: There is a range of low-calorie versions of standard products produced or marketed by the major manufacturers which also cater for the slimmer, as well as a variety of sweeteners, some being low-calorie sugar preparations and others sugar substitutes. The main product-groups and the companies manufacturing or marketing the various lines are listed in Table 3.5. It will be seen that the list of companies include major food manufacturers - such as Cadbury-Schweppes Ltd., Van den Berghs & Jurgens Ltd. (a subsidiary of Unilever Ltd.), H.J. Heinz & Co. Ltd., Nestle Co. Ltd., Cavenham Ltd. and Ranks Hovis McDougall Ltd. - as well as pharmaceutical firms like Boots Co. Ltd., Beecham Group Ltd., Ashe Laboratories Ltd. and the Pharmaceutical Division of Fisons Ltd. In addition, as indicated in Table 3.5, Boots market (through Crookes Aneston Ltd.) both Sweetex and the imported Swiss sweetening product, Hermesetas.

* Grocers Gazette and Grocery Management. April 1975.

3.23 The recommended retail prices of a range of sweeteners as at September 1975, and their increases compared with a year earlier, are shown in Table 3.6. In addition, Table 3.6. shows the variation in retail margins among the sweetener products, ranging from around $17\frac{1}{2}$ per cent. for Sucron and Energen non-sugar sweeteners to 33.3 per cent. for Simbix saccharin tablets.

TABLE 3.1

Starch-reduced bread, rolls and crispbreads: leading manufacturing and marketing companies.

	Starch-reduced bread	Starch-reduced rolls	Crispbread
Ranks Hovis McDougall Ltd. (Energen Foods)	Nimble	Energen	Energen
Cavenham Ltd.	Slimcea Procea		
Associated British Foods			Ryvita
Booker McConnell Ltd.		Allinson	
United Biscuits Ltd.			Ry-King Macvita
Kellogg Co. of GB Ltd.			Scanda Crisp Scanda Brod
Associated Biscuit Manufacturers Ltd.			Vita Weat
Kavli Ltd.			Primula
Granose Foods Ltd.		Granose	
Boots Company Ltd.		Boots High-protein slices	

TABLE 3.2

Recommended retail prices, price-changes and margins, for starch-reduced rolls and crispbreads.

	Date	Retail price at stated date	Unit price at stated date	Increase in price over year earlier	Margin at stated date	Margin at one year earlier
		- pence -		%	%	%
Starch-reduced rolls:						
Energen, pack of 36	Sept.75	58	1.61	34.9	16.2	16.5
Allinson's, pack of 28	"	26	0.93	-	7.3	7.3
Granose, pack of 24	"	30	1.25	13.2	20.0	20.1
Crispbreads:						
Energen	June 75	16	...	23.1	17.4	17.0
Ryvita, 6½ oz.	"	10	1.54	17.6	18.8	18.4
Ry-King, Wheat 6½ oz.	"	16	2.46	39.1	19.3	20.3
MacVita, 8 oz.	"	14	1.75	27.3	19.6	20.0
Kavli Primula, 9 oz.	"	14½	1.61	...	20.7	...
Vita-Weat, 5¾ oz.	"	15	2.61	25.0	19.5	22.5
Scanda Crisp, 7 oz.	"	19½	2.79	25.8	...	...

TABLE 3.3

Meal-replacements and slimmers' meals: main marketing or producing companies

Company marketing or producing	Brand-name	Main product lines
Unicliffe Ltd.	Limmits	Chocolate bars; biscuits, plain savoury, chocolate.
	Trimetts	Chocolate bars; biscuits, plain savoury, chocolate.
	Nourish	Slimmers' meals and soups.
Fisons Ltd. Pharmaceutical Division	Bisks	Chocolate bars; biscuits, plain, savoury, chocolate.
Ashe Laboratories Ltd.	Simbix	Biscuits, plain, savoury, chocolate.
Carnation Foods Ltd.	Slender	High-protein skimmed milk solids drink.
Wander Ltd.	Contour	Slimmers' meals and soups.
Smith & Nephew Ltd.	Nutriplan	Soups and omelette mixes.
Milupa Ltd.	Kousa	Low-calorie meal: wheat, fruit, yoghurt.
Boots Co. Ltd.	Boots	Chocolate bars, biscuits etc.
Bristol-Myers Co.Ltd.	Nutrament	Liquid meal.

TABLE 3.4

Recommended retail prices, price-changes and margins of selected meal-replacement products.

Brand	Product	Retail price at Sept. 1975	Increase in price over year earlier	Margin at stated date	Margin at one year earlier
		pence	%	%	%
Limmits	Chocolate bar	28	43.5	25.0	24.5
	Biscuits	38	35.7	25.0	25.0
	Chocolate wholemeal biscuit	42	31.3	25.0	19.0
Trimetts	Fruit shortcake biscuit	42	40.0	25.0	25.0
	Savouries	40	25.0	25.0	25.0
Bisks	Chocolate bar	26	30.0	19.3	23.1
	Custard creams	39	18.0	22.0	22.0
	Water biscuits, $7\frac{1}{2}$ oz.	47	30.5	20.2	20.8
Simbix	Assorted biscuits	42	40.0	25.0	25.0
	Chocolate nut cookies	36	20.0	25.0	19.0

TABLE 3.5

Low-calorie products and sweeteners: main manufacturing or marketing companies

Product Group	Manufacturing or marketing company	Brand-name
Soups	H. J. Heinz & Co. Ltd.	Low-calorie soups
	Boots Company Ltd.	Low-calorie soups
	Trentham Laboratories Ltd.	Low-calorie soups
Margarine	Van den Berghs & Jurgens Ltd.	Outline low-fat spread
Salad Creams	Nestle Co. Ltd.	Crosse & Blackwell Waistline
	Appleford Ltd.	Dietade low-calorie
Soft Drinks	Cadbury-Schweppes Ltd.	Schweppes Slimline
	Beecham Group Ltd.	Chekwate
		Hunts
		PLJ lemon juice
Sweeteners	Cavenham Ltd.	Slimcea sugar
	Slimming Aid Co. Ltd.	Sugaree sugars
		Sugaree-plus
	Boots Company Ltd.	Sweetex
		Hermesetas
	Ashe Laboratories Ltd.	Sucron
	Ranks Hovis McDougall Ltd.	Simbix saccharin tablets
		Energen tablet sweeteners
	Fisons Ltd.	Bisks
	Health & Dietary Foods Ltd.	Inform grape sugar dextrose
	Dietary Foods (Bletchley) Ltd.	Sweet 'n Low
	Appleford Ltd.	Dietade fruit sugar

TABLE 3.6

Recommended retail prices, price-changes and margins of selected sweeteners.

	Retail price at Sept. 1975	Increase in price over year earlier	Margin at stated date	Margin at year earlier
	pence	%	%	%
Sugaree Barbados	32	33.3	20.0	20.0
Sugaree plus	28	...	20.0	...
Sweetex, 500 tablets	34	17.3	25.0	25.00
Hermesetas, 650 tablets	45	9.8	25.0	25.0
Sucron, 12 oz.	33	50.0	17.5	17.5
Simbix, 500 saccharin tablets	20	33.3	33.3	33.3
Bisks, sweeteners, 200	17	13.3	28.4	26.1
Inform, grape sugar dextrose	10	-	21.5	21.5
Dietade, fruit sugar	35	9.4	25.4	25.0
Energen, non-sugar sweetener	22	33.3	17.4	19.1

4: INVALID FOODS AND HEALTH DRINKS

4.1: Once again there is no precise and tidy definition of the products which come under the heading of invalid foods and health drinks, but the main types of products and the principal brands in each category are listed in Table 4.1.

4.2: The three main products identified under the heading of invalid foods are all produced by pharmaceutical firms. Both Glaxo's Complan and Fison's Bengers are fortified milk-based preparations, whereas Beecham's Bemax is cereal-based. Complan has been produced by Glaxo for many years as a "complete food" and was originally aimed at the invalid and convalescent market, but now it could just as well have appeared as a "meal replacement" in the section devoted to slimming foods. While advertising expenditure on Bengers is very limited, both Complan and Bemax have been quite heavily promoted in recent years. Thus, Complan has been advertised on press and TV to the extent of nearly £150,000 a year in 1970/71 and over £180,000 a year in 1972/73, while advertising spending on Bemax averaged over £75,000 a year for 1970/71 and rose to over £100,000 a year in 1972/73.

4.3: It is possible to draw a distinction among the health drinks as between those which are basically sweetened malted milk preparations and those which are glucose or fruit-based products. There are three leading brands of sweetened malted milk drinks - Beecham's Horlicks, Wander's Ovaltine and Cadbury's Bournvita. In recent years, the market for these drinks, often promoted as an aid to sleep, has been declining in both volume and value terms. In 1973, the total market has been valued at £10 millions. The relative importance of 'own-label' products is believed to have increased, but of the branded market, more than four-fifths is claimed by Horlicks and Ovaltine, with Horlicks enjoying a slight lead until recently.

4.4: According to one report, a reorganisation of the structure and management of Wander Ltd., coupled with a reformulation of the product and extensive promotion, has led to Ovaltine recovering much of the loss of sales that it sustained after 1970 and replacing Horlicks as the brand-leader. The appeal of the product has been described as more embracing than that of Horlicks:

> ".... it has an even profile over all age groups. Compare Ovaltine's 'natural goodness' claims against Horlicks' line of inducing a good night's rest or Bournvita's relaxation. Sleeplessness and tension are problems of the elderly and middle-aged. There is even an Horlicks advertisement showing a couple relaxing with a cup after the children have gone to bed. Ovaltine has a much more positive attitude towards the young, which must attract mothers."

4.5: In the remaining category of food drinks, the dominant concern is undoubtedly the Beecham Group Ltd., with its two glucose-based products, Dynamo and the longer-established and better-known Lucozade, and its blackcurrant syrup, Ribena. For the latter Beecham has established a new product market, and apart from own-label lines, Ribena has to meet little competition.

4.6: Other brands of food drinks of the fruit syrup type, often marketed as infant foods, are Delrosa (Sterling-Winthrop Group Ltd.) and Optrose (Optrex Ltd.) while CPC (UK) Ltd. have recently started manufacturing and marketing Gerber's orange juice.

4.7: Some indication of the level of recommended retail prices and margins as at September 1975, and the changes that have occurred in the preceding year in those prices and margins, are shown in Table 4.2 for the leading brands. For most Beecham's products, there are no recommended retail prices, so the only figures shown relate to the year's increase in their trade prices.

TABLE 4.1

Invalid foods and health drinks: main manufacturing and marketing companies

	INVALID FOODS	HEALTH DRINKS
Fisons Ltd., Pharmaceutical Division	Bengers	
Beecham Group Ltd.	Bemax	Lucozade Ribena Dynamo Horlicks
Glaxo Co. Ltd.	Complan	
Wander Ltd.		Ovaltine
Cadbury-Schweppes Ltd.		Bournvita

TABLE 4.2

Recommended retail prices, price-changes and margins of selected invalid foods and health drinks

	Retail price at Sept. 1975	Increase in price over year earlier	Margin at stated date	Margin at year earlier
	pence	%	%	%
Beecham's Bemax, 10 oz.	...	17.3*	...	...
Fison's Bengers, No. 1.	57	7.5	19.6	19.2
Glaxo's Complan, 1 lb.	73	31.5	20.0	20.0
Beecham's Lucozade	...	44.7*	...	...
Ribena	...	50.4*	...	...
Dynamo	16	...	20.9	...
Beecham's Horlicks, 1 lb.	53	21.8	22.6	22.2
Wander's Ovaltine, 1 lb.	39	-	16.2	16.2

* relates to trade prices

5: VEGETARIAN AND ORGANIC HEALTH FOODS

5.1: Although consideration of the market represented by health foods of a vegetarian or organic nature was not specifically required by the Directorate-General, it is useful to deal with it briefly and in the broadest terms since it is a market which at least has some points of contact with the range of products already considered. Broadly speaking, the range of health foods sold through specialist retail outlets includes mueslis stone-ground wholemeal flour, natural fruit jams and marmalades, soya products, malt drinks, honey, peanut butters, decaffeinated coffee, and both the ingredients for and complete vegetarian meals.

5.2: The principal concern in the manufacture, wholesaling and retail distribution of these types of health foods is Booker McConnell Ltd., through Associated Health Foods Ltd. which it acquired in 1969/70 and to which it added Allinson Ltd. in 1972. The main brand-names are Alfonal, Allinson and Prewett's. Booker McConnell also operate a chain of health food shops under the names of Holland & Barrett London Health Centre, Prana Wholefoods, Realfoods, Radiant Health Centre and Country Market.

5.3: The next most important concern is probably Granose Foods Ltd., whose ultimate holding company is British Advent Missions Ltd. Mention has already been made of this company's interests in various product-markets, but in addition it markets a yeast extract, meatless steaks and sausages, peanut butter and other nut products. Next in line comes Mapleton Foods Ltd. and Appleford Ltd., the latter marketing products under the EM, Delicia and Dietade brand-names. For a time, Mapleton Foods Ltd. was a subsidiary of Cadbury-Schweppes Ltd., while the ultimate holding company of Appleford Ltd. is Allied Breweries Ltd. Another company active in this field is G.R. Lane Health Products Ltd., which besides marketing foods also manufactures and distributes pharmaceutical products and cosmetics.

5.4: The recommended retail prices of health foods tend to be higher than those of their standard equivalents as can be seen from Table 5.1. (The prices in brackets against the last three listed products are trade-prices, since there are no recommended retail prices for the health foods). With the one exception of the yeast extract, the recommended or trade price of the health food product is higher by amounts ranging from under 15 per cent. to 50 per cent. (the latter taking into account the quantity as well as the price difference for the two brands of tomato soup). The margins allowed to retailers also tend to be higher in the case of the health foods, ranging from 15 to 25 per cent. for the items shown, as compared with 13 to 17 per cent. for the standard equivalent products. It must be recognised, however, that these price-comparisons were those applying at one particular point of time, as well as the fact that the products are not identical in preparation, processing or customer appeal.

TABLE 5.1

Recommended retail prices and margins for selected health foods and equivalent standard products, September 1974

HEALTH FOOD			EQUIVALENT STANDARD PRODUCT		
Brand	Retail Price	Margin	Brand	Retail Price	Margin
	pence	%		pence	%
Granose Honey, Set. 1 lb.	53	20.0	Gales Honey, Set. 1 lb.	39	13.5
Mapleton's Yeast Extract, Barmene, 8 oz.	30	25.3	Marmite Yeast Extract 8 oz.	40	16.7
Allinson's 100% Wholewheat Plain Flour, 3 lb.	28	14.9	McDougall's McD Plain Flour, 3 lb.	24½	12.8
Mapleton's Raw Sugar Mincemeat, 14½ oz.	27	20.1	Robertson's No. 1 Mincemeat, 14½ oz.	21½	14.1
Appleford's Wholemeal Spaghetti Rings in tomato sauce, 7½ oz.	(10.1)	...	Heinz Spaghetti Hoops in tomato sauce 7½ oz.	(5.8)	16.7
Delicia Tomato Soup, 5 oz.	(16.5)	...	Heinz Tomato Soup, 10 oz.	(7.1)	16.7
Appleford's Meatless Sauce Bolognese, 7 oz.	(17.9)	...	Crosse & Blackwell, 7½ oz.	(9.4)	...

N.B. Figures in brackets relate to trade prices

6: THE MAJOR CONCERNS IN DIETETIC AND HEALTH FOODS

6.1 Reference has been made in the preceding sections of this Chapter to the many dietetic and health food concerns, and it is convenient to consider the major concerns in more detail at this point. Within each of the groups of products distinguished in the Chapter, there are distinct categories of enterprises.

6.2 Falling into one category are those food processing concerns whose main interests lie outside the dietetic and health foods trades but who have extended their interests into these markets. Another category is the group of primarily pharmaceutical concerns who also market dietetic and health foods, although the products are rarely manufactured by them, tending to be produced to their specifications by other food concerns. Thirdly there are those enterprises with diverse interests in fields other than food or pharmaceuticals, and finally the smaller, specialist concerns.

6.3 The food processing concerns which are also active in the dietetic and health food product groups have, in the main, been dealt with in other Chapters. CPC (UK) Ltd. is an American owned company and though its subsidiary Frank Cooper Ltd. is the main UK producer of branded diabetic jams and marmalades and also produces jellies, desserts and canned fruits for diabetics. The main activities of the company lie elsewhere, particularly in Infant Foods and the company is considered in more detail in the Chapter relating to Infant Foods. Similarly Cadbury-Schweppes Ltd. produces a range of diabetic and low-calorie soft drinks, (under the Rose's and Schweppes 'Slimline' brands), diabetic chocolate, and the Bournvita brand health drink and until recently was involved in the production of diabetic preserves through ownership of Mapleton's Foods Ltd. yet in the context of the overall sales of the Cadbury-Schweppes Group, these products are of minor significance. In the slimming breads, rolls, crispbreads and muesli product groups many enterprises are engaged whose primary activities lie in grain milling (Ranks Hovis McDougall Ltd, Associated British Foods Ltd.) in breakfast cereals (Kellogg Company of G.B. Ltd., Weetabix Ltd.), and in biscuits (United Biscuits Ltd., Associated Biscuit Manufacturers Ltd.), and these enterprises are considered in the relevant chapters. Further the companies who manufacture or market low-calorie equivalents of their normal products (e.g. Heinz soups, Van den Berghs and Jurgens' margarine, Crosse and Blackwell's salad cream) have been discussed in Chapters relating to their major activities.

6.4 There are several major companies which are primarily pharmaceutical and toiletry concerns but which also engage in the manufacture and more often the marketing, of dietetic and health foods, and more specifically meal-replacement and other slimming foods. Amongst these the most important are Unicliffe Ltd., Fisons Ltd. Pharmaceutical Division, Ashe Laboratories Ltd., and the Boots Company Ltd.

6.5 Unicliffe Ltd. is a United Kingdom subsidiary of the American company Chas Pfizer and Co. Inc., and was registered in 1965 and engages in the manufacture and sale of proprietary medicines, slimming aids and toiletries. Turnover, employment and net assets of Unicliffe Ltd. during the 1968-73 period were as follows:

	1968	1969	1970	1971	1972	1973
Turnover (£ millions)	2.4	2.6	2.9	3.6	4.4	5.7
Employment	163	142	134	153	141	133
Net Assets (£ millions)	2.2	2.2	2.2	1.5	0.9	2.0

The brand names under which Unicliffe sells its slimming meals and meal replacement products are Limmits and Trimetts and the company claims brand leadership in the market. Unfortunately, financial data relating to the company's activities in this market alone are not available and the statistics given above relate to the complete range of products manufactured and sold by Unicliffe Ltd.

6.6 Fisons Ltd., through its Pharmaceuticals Division is engaged in marketing meal-replacement biscuits under the brand name Bisks, and the invalid food Bengers, a fortified milk-based preparation. Until July 1969 these activities were carried on by Fisons Pharmaceuticals Ltd. This company with sales of £5.3 millions in 1968 and £7.1 millions in 1969 was active in the manufacture and sale of medical and toiletry, as well as slimming products. From June 1969 onwards, however, the company ceased trading on its own account and the activities were taken over by the holding company, Fisons Ltd.

6.7 Ashe Laboratories Ltd. was registered in 1943 and its principal trading activity is the manufacture and distribution of pharmaceutical, toiletry, perfumery and veterinary products. In 1973 the ultimate holding company became the International Telephone and Telegraph Corp. of New York. The interests of Ashe Laboratories in the slimming meals market are confined to the marketing of the Simbix range.

6.8 The principal activity of the group, of which the Boots Company Ltd. is the holding company, is that of retailers of chemist and other merchandise and the manufacture and wholesale distribution of pharmaceuticals, drugs, fine chemicals and toilet preparations. The Boots Company Ltd. is active in nearly all the groups of dietetic and health food products distinguished earlier, particularly diabetic foods where they market nearly all diabetic lines, although they only produce diabetic pastilles for themselves. They also market under the Boots brand, a high-protein sliced bread, a range of meal-replacement chocolate bars and biscuits and the Sweetex and Hermesetas sweeteners.

6.9 In addition to these four companies, there are other pharmaceutical companies engaged in dietetic and health food product groups other than meal-replacements and slimming foods. Most notable are the Beecham Group, the Glaxo Group, Smith and Nephew Pharmaceuticals, Wander Ltd., a subsidiary of Sandoz Ltd., and Laporte Industries. The

Beecham Group Ltd., had sales in 1973 of £138 millions in the United Kingdom although only a very small amount was sales of health foods. The product groups in which Beechams are active are soft drinks, (Chekwate, Hunts and PLJ), and health drinks, most notably Lucozade, the sparkling glucose drink, Ribena, a blackcurrant health drink, Dynamo, a glucose syrup drink with mineral salts, and Horlicks, one of the market leaders for milk food drinks. Additionally, Beechams produce the invalid food Bemax, which is a stabilised wheat germ food.

6.10 Smith and Nephew Pharmaceuticals Ltd. had a turnover of £1.7 millions in 1973 compared with £0.9 millions five years earlier. The principal activity of the company is the sale of pharmaceutical products and its main interest in dietetic and health foods, of marketing Nutriplan soups and omelette mixes are very much a subsidiary activity. The same applies to Glaxo Co. Ltd.- although their brand Complan is a market leader in the invalid foods group, in terms of the total turnover of the Glaxo Group sales of Complan are of little significance,- and even more so to Laporte Industries Ltd., which are the main UK producers of sorbitol, but whose activities are principally directed to the manufacture and sale of chemical products, and whose turnover amounted to £42 millions in 1973.

6.11 Wander Ltd. is one of the few subsidiaries of a pharmaceutical enterprise, whose major activity is concerned with the dietetic and health food markets. Registered in the United Kingdom in 1923, Wander Ltd's. holding company is now Glaro Ltd., of Fribourg, Switzerland, which is itself a subsidiary of the Swiss company Sandoz Ltd. The company and its six active overseas subsidiaries are manufacturing chemists engaged principally in the manufacture and marketing of the Tonic Food Beverage Ovaltine and other dietetic products and pharmaceutical products. During 1968 to 1973 turnover, employment and net assets were as follows for Wander Ltd. and subsidiaries:

	1968	1969	1970	1971	1972*	1973*
Turnover (£ millions)	7.7	7.7	9.0	10.5	9.4	11.0
Employment	869	910	983	953	817	654
Net Assets (£ millions)	4.8	4.8	4.9	5.0	4.5	4.7

* relate to Wander Ltd. only, not group accounts

6.12 Apart from the concerns who are primarily interested in food or pharmaceuticals, there are also certain large companies with diverse activities who are engaged in marketing and/or manufacturing dietetic and health foods. Most important of these are Booker McConnell Ltd. and Allied Breweries Ltd.

6.13 Booker McConnell Ltd. is a rapidly-growing company with a turnover in 1974 of £285 millions, capital employed of £84.2 millions, and profit after taxation of £5.6 millions. The range of activities in which the firm is involved has become steadily wider, and now embraces food distribution, both wholesaling, and retailing, sugar and molasses, spirits and liqueurs and engineering, in addition to health food manufacturing, wholesaling and retailing. In 1974 the health and food-manufacturing group had a total turnover of £23.8 millions, of which £10.3 millions was in retailing, £8.4 millions in wholesaling and £5.1 millions in manufacturing. The major subsidiary companies engaged in health food manufacturing are Associated Health Foods Ltd. and Allinson Ltd. and the brand names under which these companies operate are Alfonal, Allinson and Prewett's covering a wide range of health foods, from stone ground wholemeal flour and starch reduced rolls to meatless sauce bolognaise and wholemeal spaghetti rings. Turnover and net assets of Associated Health Foods Ltd. and Allinson Ltd. between 1968 and 1973 were as follows:

£ Millions

	1968	1969	1970	1971	1972	1973
Associated Health Foods Ltd.						
Turnover	2.9	3.6	4.8	5.6	1.8	2.1
Net Assets	0.2	0.2	0.4	0.5	0.7	0.6
Allinson Ltd.						
Turnover	0.6	0.7	1.0	1.1	1.0	0.9*
Net Assets	0.1	0.2	0.2	0.2	0.2	0.2*

(* 16 month period to 31/12/73)

In 1968 Alfonal Ltd. was the name of the company, owned by Forestal Land, Timber and Railways Co. Ltd., which had as its main activity the distribution of health foods. However, by the start of 1972 significant changes had taken place. The company had changed its name to Associated Health Foods Ltd., and the major activity was the manufacture of health foods and further Booker McConnell Ltd. had become the ultimate holding company. Booker McConnell decided to enter the health food trade as an additional means of diversifying their activities, and when Forestal Land, Timber and Railways Co. Ltd. was acquired by Slater Walker, the subsidiary company engaged in the health food trade was sold as promptly as possible. Allinson Ltd. stoneground wholewheat flour millers and manufacturers and wholesalers of specialist food products, is a company also recently acquired by Booker McConnell Ltd., in December 1972.

6.14 In general, health food shops in the United Kingdom tend to be independent stores, rather than part of a chain. However, Booker McConnell own the only chain of retail health food shops of any significance. Through the subsidiary company Holland and Barrett Ltd., a chain of 123 health food shops operates under the names Holland and Barrett, Realfoods and three or four other names. Additionally Booker McConnell are engaged in health food wholesaling via the activities of Brewhurst Health Food Supplies Ltd. and the Newman Turner Publications Ltd. subsidiary gives them an important position in publishing health magazines.

6.15 Allied Breweries Ltd., the giant brewing enterprise, has also diversified its activities into the health foods area in recent years. By 1975 the company had rationalised its health food activities so that Appleford Ltd. was carrying out almost all the health foods activity of Allied Breweries. Previously, until April 1974, the name of the company had been Harnworth Food Products Ltd. which in 1973 had turnover amounting to £668,000 and net assets of £576,000. In that year Eustace Miles Food Co. Ltd., with turnover of £326,000 and net assets of £11,000 was a direct trading subsidiary of Harnworth Food Products Ltd., but in 1974 the activities of this company, namely the production of health foods, were transferred to its immediate holding company. Thus in 1975 Appleford Ltd. was selling a wide range of products, from canned diabetic fruits and meats to sugar substitutes to low calorie salad creams under the Dietade, Delicia and EM brand-names.

6.16 Several smaller specialist concerns are engaged in the dietetic and health food trades amongst which Smith Kendon Ltd., and Granose Ltd. are the largest. There are a number of other small manufacturers, such as G. R. Lane Health Products Ltd., a company engaged in the manufacture and distribution of health foods, nutritional supplements, pharmaceutical products and cosmetics in the UK and throughout the world, with a group turnover in the 18-month period to July 1973 of £552,000; Dietary Foods (Bletchley) Ltd., which manufacture dietary foods for sale to the public and had a 1973 turnover of £26,000; Welfare Foods (Stockport) Ltd., which sells and develops nutritional and dietary products for human consumption; and many other firms of a small size, catering often for slimming product groups.

6.17 Smith Kendon Ltd. was registered in 1948, and manufactures confectionery and pharmaceutical products, the brand name for which the company is best known being Skels, whose lines include diabetic pastilles and boiled sweets, chocolate, chewing gum, jellies and wafer biscuits. Turnover, employment and net assets of Smith Kendon Ltd. between 1968 and 1973 were:

	1968	1969	1970	1971	1972	1973
Turnover (£ thousand)	400	475	586	666	819	930
Employment	117	125	133	157	144	141
Net Assets (£ thousand)	135	137	159	177	210	284

The company is located in South Wales having moved there in 1973, a move financed to a degree by loans from the Department of Trade and Industry.

6.18 The other major independent specialist health food company is Granose Foods Ltd., a subsidiary of British Advent Missions Ltd. Turnover, employment and net assets between 1968 and 1973 are shown below:

	1968	1969	1970	1971	1972	1973
Turnover (£ thousand)	303	305	334	356	357	393
Employment	131	128	99	96	89	...
Net assets (£ thousand)	153	127	162	171	173	185

Granose Foods Ltd. is a long established company, which was first registered in 1899 as International Health Association Ltd. Its principal activity now is the manufacture and distribution of starch-reduced rolls, health foods and breakfast cereals.

6.19 Thus a large number of companies are engaged in the four product groups of dietetic and health foods distinguished in this chapter. The majority of these companies are subsidiaries of large combines, either in other food or pharmaceuticals and generally the independent companies are rare and of relatively small significance.

CHAPTER 11

SUMMARY AND CONCLUSION

1: THE SAMPLE OF PRODUCTS & MANUFACTURERS' SALES CONCENTRATION

1.1: The first part of this two-stage study of the UK food processing industry was concerned with the level of concentration at the industry scale, concentration being mainly measured in terms of ten financial variables, such as turnover, net assets, net and retained profits, and own means, although reference was also made to the size distribution of enterprises from Census of Production data. The general conclusion drawn from detailed study of these concentration indices was that concentration in the food processing sector as a whole was much the same in 1972 as it was in 1969. This conclusion was, however, qualified in two respects: first, that a longer time period was required in order to measure reliably the trends in concentration at the industry scale; and second, that changes in the level of concentration at the product-level between 1963 and 1968, as shown by the available Census of Production sales concentration-ratios for the two years, were much more evident than changes in the overall structure of the food processing industry during the same period.

1.2: The importance of considering concentration at the product market level as well as the industry scale was recognised by the Directorate-General for Competition in that the second part of the two-stage study was directed towards establishing the situation in nine specified industries and product-markets (to which another, dietetic and health foods was later added). These are the industries and product markets which have been the subject of the preceding chapters of this Part 2 of our Study.

1.3: Altogether at least thirty product markets have been covered in varying degrees of detail in the course of the preceding chapters. These product markets differ greatly in their size, partly reflecting the degree of disaggregation by which they have been defined and partly the character of the product itself. There is, of course, no single and comprehensive measure of market size which can be generally applied, but accepting the limitations of the data available, it is reasonable to assess relative market-sizes by consumer spending in terms of current retail prices. By that criterion, the retail market-sizes among the products covered range from under £10 millions for diabetic foods, infant milk foods, infant milk cereals, sterilised cream and crispbread to £200 millions or more for butter, cheese and biscuits.

1.4: It is possible in the first instance to classify most of the products into two broad categories: the traditional foods, and the newer products. The latter may have resulted from new technologies or product innovation on the one hand, or they may be products which have existed for many years but only became mass-produced and mass-marketed comparatively recently. The distribution of the thirty product markets by their 1973 retail sales and as between the traditional and newer foods is shown in Table 1.1.

1.5: It will be seen that there is a certain degree of arbitrariness in classifying products under one or other of the two broad headings. In addition, it must be stressed that in some instances retail market sales do not adequately indicate the overall size of the market for the product. For example, the value of the flour produced by UK millers (at ex-mill prices) in 1974 was about six times greater than the value of the retail sales of flour for household consumption. Similarly, the volume of domestically refined sugar going to the household market represented less than two-fifths of total UK consumption in 1973, while for margarine, the comparable proportion was three-quarters. Other products where such considerations also apply are milk powder, fresh cream, and ice cream.

1.6: What is most apparent from Table 1.1. is that all but two of the product-markets where retail sales exceeded £100 million come under the heading of traditional markets, and two exceptions - ice cream and breakfast cereals - are examples of a comparatively recent mass production market rather than products of a new technology. On the other hand, eight out of the twelve products with retail sales valued at £10 millions or lower in 1973 are newer products, the other four sharing the characteristic of being milk-based foods.

1.7: In considering the structure of these product markets and establishing either the degree of sales concentration at the level of production, or market-shares at the retail level, the initial approach has been to turn to the Census of Production data for the trade of which they form part. For some products, the Census authorities have published sales concentration-ratios for 1963 and 1968, but they only cover one-half of the thirty products listed in Table 1.1. There may be several reasons why sales concentration-ratios have not been published for the remaining products: because they do not correspond with any defined Census of Production principal products, because their ex-factory sales in 1968 were too low, or possibly even because publication in some instances might involve disclosure of the sales of individual firms.

1.8: For the 15 products (or their nearest equivalent Census category) for which sales concentration-ratios (at the ex-factory level) are available for 1968, 11 come under the heading of traditional products and 4 within the newer products group. Similarly, 8 of the 15 products had retail sales of more than £100 millions in 1973 and all but two of the remaining seven products had retail sales of over £25 millions in that year.

1.9: In Table 1.2 the 15 Census products are classified according to their level of sales concentration in 1968 and by the direction of the change in their concentration-ratios between 1963 and 1968: in all cases, the concentration-ratios indicate the combined share of the five enterprises with the largest sales. An increase or decrease in the sales concentration-ratio between 1963 and 1968 occurs where the ratio rose or fell by more than 1 percentage-point; otherwise, the products are classified to the static concentration category.

1.10: It will be seen from Table 1.2 that eight of the Census products had sales concentration-ratios of more than 90 per cent. in 1968, but for four of the eight products, the level of concentration was static during this period. Furthermore, for the two products with increased sales concentration during the 1963-68 period, the increase was between 3 and 4 percentage-points; for the two with decreased concentration, the fall was over 4 percentage-points in the case of breakfast cereals and nearly 2 percentage-points for ice cream. It is also noteworthy that for all four of the newer products for which Census sales concentration ratios are available concentration exceeded 90 per cent. in 1968, and indeed in 1963 as well.

1.11: The two products with sales concentration-ratios of 80-90 per cent. in 1968 had both experienced a fall in concentration in the preceding five years: for milk powder, the decrease was more than 4 percentage-points, for soups, about 2 percentage-points. The three products with sales concentration-ratios of 70-80 per cent. in 1968 were all traditional products where the total retail market was around £200 millions in 1973. While concentration for cheese remained static between 1963 and 1968, the changes for biscuits and butter were both more than 5 percentage-points.

1.12: The remaining two products - preserved vegetables and preserved fruit - are both traditional canned foods, the latter having a relatively low concentration-ratio in 1968 despite an increase of 8 percentage-points since 1963, in contrast to preserved vegetables where the increase in concentration was, in fact, under 2 percentage-points.

1.13: All in all, therefore, it is clear that for the 15 Census products (out of the 30 product-markets covered in Part 2 of this Study), sales concentration at the level of ex-factory sales exceeded 80 per cent. in 10 instances. On the other hand, as can be seen from Table 1.3 out of all the 30 Census food products for which sales concentration-ratios are available for both 1963 and 1968, there were only 17 where concentration exceeded 80 per cent. in 1968. Thus, by that criterion, our sample of 15 Census products was biased towards those where concentration was relatively high in 1968.

1.14: Similarly, while the 15 Census products covered by our sample split equally between the three categories of changes in concentration during the 1963-68 period, they do not constitute a representative cross-section of the 30 Census products for which changes in concentration are available for that same period. As can be seen from Table 1.3, whereas one-third of our 15 Census products had increases in sales concentration between 1963 and 1968, among the 30 Census products, the proportion was nearer one-half. Moreover, out of our sample, one-third of the Census products had static concentration between 1963 and 1968, whereas out of the whole 30 Census products, the proportion with static concentration was less than one-quarter.

1.15: Unfortunately the Census of Production data does not specify the total number of enterprises from which the five largest enterprises with the given product sales ratio is derived, although in some instances it is possible to deduce that number from within the Census. Although precise numbers are best avoided for that reason, it is possible to classify the 15 Census products within our sample by both their sales concentration-ratio and between four broad categories of numbers of enterprises producing those products. The remaining 15 products in our sample without any Census sales concentration-ratios can also be classified according to the same categories of numbers of enterprises. The results of this exercise are shown in Table 1.4; the four number of enterprises categories being described as "very few" (probably 10 or under), "few" (between 10 and 20), "several" (between 20 and 50), and "many" (more than 50 enterprises).

1.16: It will be seen from Table 1.4 that of the eight Census products where sales concentration exceeded 90 per cent. in 1968, four had "very few" enterprises and another three only "few" enterprises. On the other hand, the five Census products with sales concentration-ratios of under 80 per cent. in 1968 either had "several" or "many" enterprises. Furthermore, of the remaining 15 products within our sample, eight probably come within the "very few" enterprises category and another four had probably "few enterprises". There is a prima facie basis, therefore, for assuming that if sales concentration-ratios had been provided by the Census for these 15 products, the number of products with concentration-ratios of 80 per cent. or more in our total sample of 30 products would have come to 22.

1.17: In order to evaluate more fully the structure of a product-market even at the factory level, the sales concentration-ratio needs to be related not only to the number of enterprises responsible for producing that product but also with the disparity in their sizes. It has been stated, for example, that "where concentration is high and units are few, and their size-differences large, it is likely that strong elements of monopoly power exist" and also that "where the trades possess a larger number of units, the existence of large unit size-differences in a high-concentration trade means that the largest concerns, surrounded by a considerable number of pygmies, may also possess a significant degree of monopoly power." Or again, conditions in highly-concentrated trades which combine few units with small size-differences "seems favourable for collusion, but that does not rule out the possibility that active and fierce competition (of an oligopolistic kind) may in fact prevail."*

1.18: With the data available, it is only possible to provide a crude indication of size-disparity: namely, the ratio of the average sales of the assumed remaining number of enterprises contributing to the total sales of the product in question. Three categories of size-disparity may be distinguished: "large", where the ratio of the average sales of the largest enterprises is more than twenty times that of the rest; "medium", where the ratio is 10-20; and "small", where the ratio is under 10. The distribution of the 15 Census products within our sample by their sales-concentration levels, number of enterprises and the size-disparity of those enterprises, is shown in Table 1.5. Of the 9 products with sales concentration of more than 80 per cent. and very few or few enterprises, the size-disparity of the enterprises is large in the case of frozen vegetables, sugar, margarine and frozen fish, but small in the case of breakfast cereals, condensed milk, milk powder and soups. For the five products where sales concentration is less than 80 per cent. and for all of which there are several or many enterprises, the size-disparity is large in the case of biscuits and butter but only medium for cheese, preserved vegetables and preserved fruit.

1.19: It might be possible to conclude on the basis of this analysis that "strong elements of monopoly power" exist in the case of frozen vegetables, frozen fish, sugar, self-raising flour and margarine, and that there is also a "significant degree of monopoly power" for ice cream with the possible addition of biscuits and butter. Similar conditions "favourable to collusion" but also for "active and fierce competition" could be held to exist for breakfast cereals, condensed milk, milk powder and soups. To come to that conclusion or view might not be

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* See R.W. Evely and I.M.D. Little. Concentration in British Industry, pp.68-76.

wrong, but it would be hazardous to assume that it was correct since sales concentration ratios at the level of production often tell only part of the story, and in order to assess the existence of monopoly power or the reality of competition it is necessary to take many other factors into account which the concentration-ratio per se does not comprehend.

TABLE 1.1

Classification of Sample Products, by Size of Retail Market and Type of Product

	Traditional	Newer
About £200m.	Butter Cheese Biscuits	
About £150m.	Canned vegetables	
£100-£125m.	Sugar Canned meats Canned fruit	Ice cream Breakfast cereals
£75-100m.	Margarine	Frozen vegetables Frozen fish
£50-75m.	Canned fish Canned soups	Frozen ready-meals
£25-50m.	Flour	Fresh cream Canned and bottled infant foods
£10-25m.	Milk powder Condensed milk	Yoghurt Dietary bread and rolls Dehydrated foods Meal replacements
£10m. or under	Sterilised cream Infant milk foods	Diabetic foods Crispbread Infant cereal foods Milk-based health drinks

TABLE 1.2

Sales-concentration ratios in 1968, and changes in concentration 1963-68, for 15 Census products

Product sales concentration groups, 1968	Increases in sales concentration 1963-68	1968 ratio %	Decreases in sales concentration 1963-68	1968 ratio %	Static sales concentration 1963-68	1968 ratio %
Over 90 per cent.	Frozen vegetables Self-raising flour	97 92	Breakfast cereals Ice cream	94 91	Sugar Condensed milk Margarine Frozen fish	99 94 94 91
80-90 per cent.			Milk powder Soups	85 83		
70-80 per cent.	Biscuits	71	Butter	78	Cheese	78
60-70 per cent.	Preserved vegetables	67				
Under 60 per cent.	Preserved fruit	46				

NB Both the 1963 and 1968 concentration-ratios for each product are to be found in Table 3.8 of Part I of this Study.

TABLE 1.3

Comparison of distribution of all Census food products and our sample by sales concentration-ratios in 1968 and 1963-68 changes in concentration

	Census products	Our sample of Census products
Sales concentration-ratios in 1968:		
Over 90 per cent.	11	8
80-90	6	2
70-80	6	3
60-70	3	1
Under 60 per cent.	4	1
Total products	30	15
Changes in sales concentration ratios, 1963-68:		
Increased	14	5
Decreased	9	5
Static	7	5
	30	15

TABLE 1.4

Products-sample, by number of enterprises and sales concentration

Number of enterprises* categories	1968 Census Products with sales concentration-ratios			Remaining 15 products in our sample
	Over 90 per cent.	80-90 per cent.	Under 80 per cent.	
Very few (probably 10 or under)	Frozen vegetables. Breakfast cereals. Sugar. Condensed milk.	Milk powder. Soups.		Frozen ready-meals Canned and bottled infant foods. Dehydrated foods. Sterilised cream. Infant milk foods. Diabetic foods. Infant cereal foods Milk-based health drinks.
Few (probably 10-20)	Margarine. Frozen fish. Self-raising flour.			Dietary bread and rolls. Meal replacements Crispbread. Canned fish.
Several (probably 20-50)	Ice cream.		Butter. Cheese. Preserved vegetables.	Canned meats. Yoghurt.
Many (more than 50)			Biscuits. Preserved fruit.	Fresh cream.

* With larger establishments only.

TABLE 1.5

Distribution of 15 Census products, by sales-concentration, number of enterprises and size-ratio of enterprises

Ratio of average size of 5 largest and rest of enterprises	Sales concentration of over 80 per cent.		Sales concentration of under 80 per cent.	
	Very few or few enterprises	Several or many enterprises	Very few or few enterprises	Several or many enterprises
Large (over 20)	Frozen vegetables. Sugar. Margarine. Frozen fish.	Ice cream.		Biscuits. Butter.
Medium (10-20)	Self-raising flour.			Cheese. Preserved vegetables. Preserved fruit.
Small (under 10)	Breakfast cereals. Condensed milk. Milk powder. Soups.			

2: FROM MANUFACTURERS' SALES CONCENTRATION TO MARKET SHARES

2.1: The major limitations of concentration data based on the combined share of a small number of largest firms at the level of production are well-known and have been summarised as follows:

> "... imports are not counted as market supplies ... exports are not subtracted from home production to give a fair indication of home market power ... they reveal nothing about vertical integration in an industry ... (and) most important, the concentration ratio does not usually recognise close substitutes; products which compete in the same market place for the incomes of consumers may be treated as being in separate categories." *

In addition, the concentration-ratio does not provide any indication of the relative sizes of the three, four or five largest firms: only their combined share of sales output, and their average size as compared with the rest of the enterprises producing the product in question. Nor does it indicate whether the largest enterprises contributing to the concentration ratio change their identity or rank over a period of time. In order to alleviate some of these limitations to which sales concentration-ratios at the level of production are subject, the individual product studies have attempted to move away from the Census of Production data and towards the situation in the market, even though data in relation to market shares are even more fragmentary and certainly less firmly based than the Census sales concentration-ratios.

Imports and Exports

2.2: It has been rightly stated that "the degree of control in the domestic market cannot be equated with the degree of control in home production unless imports are negligible and the export trade is shared between producers in the same proportion as home production." + It is necessary, therefore, to look at the product-markets which have been covered in the preceding chapters (and more particularly the Census products for which sales concentration-ratios exist) to consider whether imports or exports are likely to significantly qualify the implications of concentration at the level of production.

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* G. Walshe: Recent Trends in Monopoly in Great Britain, p.3.

\+ R. Evely and I.M.D. Little, op.cit., p.46.

2.3: As far as imports are concerned, there are three products where imports account for two-thirds or more of total home supplies, and another five where the share of imports is between one-third and two-thirds, namely:

More than two-thirds of home supplies:	Between one-third and two-thirds of home supplies:
Canned fish	Canned meats
Canned fruit	Milk powder
Butter	Frozen fish
	Cheese
	Sterilised cream

Apart from canned vegetables and frozen vegetables, where imports represent between one-fifth and one-eighth of home supplies, imports are relatively unimportant in the case of the remaining products in our sample. It might be inferred that where imports represent a substantial or significant proportion of total supplies, there is little likelihood that the enterprises responsible even for a high proportion of domestic output will enjoy real market power. But even that conclusion must be qualified if the largest enterprises in terms of proudction are also responsible in similar measure for those imports.

2.4: On the side of exports, it is difficult to determine any product among those studied in the preceding chapters where the level of exports could be held to be such as to qualify the sales concentration-ratio at the production-level.

Brand-shares

2.5: The main indicator used in the preceding product market studies to indicate the degree of concentration at the retail level has been the brand-shares of the leading suppliers. Brand-shares as indicators of market power are, however, subject to considerable limitations. In the first place, it is possible that a substantial proportion of the total retail market comprises unbranded products, although this is becoming more and more unlikely as mass marketing techniques are applied to food. But where unbranded supplies are still important, then the relevance of brand-shares as indicators of market power is limited. The more likely situation, however, is that the mass-marketed proprietary brands do not have the field to themselves in that retailing groups are selling their own-label products alongside the proprietary brands. In some instances, information on the own-label share of the total market is available; in other, only the proprietary brand-shares. But, as in the case of imports, there remains the open question as to the extent to which the own-label market is supplied by the enterprises manufacturing and marketing the proprietary brands. Finally, there is the further qualification that must be stressed: namely, that the method used to determine brand-shares means that these tend to reflect more the relative importance of different brands than their absolute shares of the retail market (or that part covered by branded products).

2.6: In view of all these qualifications attaching to the brand-share data, it would be wrong to attempt a direct comparison between them and sales concentration-ratios at the level of production, and on the basis of such a comparison, to draw any set of general conclusions. What the brand-share data indicate is that there can well be differences between concentration in terms of sales at the production level and retail market-shares, and indeed in the identity of the leading enterprises. What is more, the brand-share data underline the problems of defining markets for which either sales concentration data on brand-shares are meaningful.

2.7: In terms of brand-shares, it is legitimate, for example, to regard frozen vegetables as different from canned vegetables, and indeed the two products are also distinct and separate in terms of the Census sales concentration-ratios. But there can be little doubt that frozen vegetables are competitive products with canned vegetables, and that furthermore both are competitive with fresh vegetables. Thus, a high degree of concentration in terms either of output sales or brand-shares in frozen vegetables must be set in the context of the existence of competitive products, not least because some of the firms that are brand-leaders for canned vegetables are not linked to the firms that dominate frozen vegetables.

2.8: There is a real dilemma, therefore, in seeking to determine the basis on which concentration in terms of output or market shares should be determined. Should the criterion be the competitiveness between products? If so, then should butter and margarine be treated as one market and not two, despite the distinct technology, identity of firms and relative importance of imports? Similarly, do fresh cream and sterilised cream constitute two markets, or is it one? When the object is to evaluate the form and degree of competition in the market, it makes sence to associate together close substitute products, such as canned and frozen vegetables, but in looking at the dominance of individual firms in particular sectors, it is a matter of significance that an important producer of frozen vegetables is also an important producer of frozen fish products, so that in these terms it is meaningful to group all the frozen foods together rather than treat frozen vegetables and frozen fish products as distinct and separate products.

3: CONCLUSION

3.1: This study has not attempted to resolve the problems concerning the concept of the market and the relevance of concentration (at whatever level it is measured) to the existence of monopoly power. What it has attempted to do, in accordance with its terms of reference, is to assemble the basic data relating both to sales concentration at the production level, and wherever possible brand-shares at the retail market level, and to provide a more qualitative assessment of the changes that have occurred in the structure of the product-markets and some of the factors contributing to those changes.

3.2: The diversity of those factors, as well as the varying experience within the product-markets studied, need not be emphasised. Equally it is evident from the product-markets studied that there can be no sweeping generalisations drawn about the degree or form of market competition from the level of concentration as such. The reports of the Monopolies Commission, the National Board for Prices and Incomes, and the Price Commission have produced authoritative statements concerning the existence and degree of competition in particular trades or for particular products which confirm that generalisations of any direct and unvarying connexion between competition and concentration are best avoided.

3.3: What it is hoped that the series of studies forming Part 2 of our report has achieved is to provide material for further study and analysis whereby the character of the forces contributing to competition or elements of monopoly power can be more clearly understood, and in that light, policies directed towards the achievement of greater economic efficiency in the interests of producers and consumers alike can be formulated.

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