

## THE DEMAND FOR FOOD IN THE UNITED KINGDOM

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In a developed economy such as the United Kingdom consumers are generally more than able to satisfy their basic dietary needs. Increases in income tend to be spent more on luxury non-food items or on more sophisticated food marketing services. Alongside the growth in real incomes mechanisation has brought about more sedentary lifestyles which has reduced per capita calorific needs. Together these factors have resulted in a fairly static total food market: growth in the overall volume of demand tends to be linked more to population growth than to income. Tables 1 to 3 show the broad pattern of consumer expenditure on food since 1960. From Table 1 it can be seen that although overall nominal expenditure on food increased substantially during this period its importance in relation to total consumer spending declined. In the 1960s there was a rapid decline, from 29.1% to 23.4%, and a further but less rapid decline to around 20% by 1980. The downward trend is likely to continue during the next decade although probably at a slower rate due to the lower anticipated growth in real incomes. There was only a modest increase in the relative importance of processed foods from 68.4% to 72.1% of total spending. A clearer picture of real expenditure can be seen from the data in Table 2. The volume of spending on food per capita increased by about 0.3% per annum between 1970 and 1980 whereas total consumer spending increased by about 1.7% per annum. The most notable growth category was beverages which is thought to have been due largely to an increase in the consumption of soft drinks and fruit juices. None of the other categories showed such a marked upward or downward trend, with the exception of fish whose consumption declined by about 1% per annum. It is interesting to note that the consumption of meat and bacon recovered somewhat in the latter part of the 1970s, whereas consumption of dairy products was relatively static or may even have declined.

Table 3 shows that the distribution of food expenditure between the main food categories was remarkably stable between 1960 and 1980. Meat and bacon consistently have been the major category of expenditure at around 27% of total spending on food, followed by dairy products at

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Table 1: *Consumers' Expenditure on Food at Current Prices*  
(£ million)

|                                     | 1960   | 1970   | 1975   | 1976   | 1977   | 1978   | 1979    | 1980<br>(prov) |
|-------------------------------------|--------|--------|--------|--------|--------|--------|---------|----------------|
| 1. Total consumers expenditure      | 16,674 | 31,358 | 63,439 | 73,663 | 84,301 | 96,855 | 113,684 | 131,933        |
| 2. Households food expenditure      | 4,228  | 6,369  | 12,036 | 14,077 | 16,157 | 17,936 | 20,518  | 23,230         |
| 3. — of which processed food        | 2,892  | 4,446  | 8,437  | 9,910  | 11,633 | 13,004 | 14,814  | 16,749         |
| 4. (3) as a % of (2)                | 68.4   | 69.8   | 70.1   | 70.4   | 72.0   | 72.5   | 72.2    | 72.1           |
| 5. Catering expenditure on food (a) | 622    | 996    | 1,788  | 2,133  | 2,419  | 2,662  | 3,083   | 3,551          |
| 6. Total food expenditure           | 4,850  | 7,365  | 13,824 | 16,210 | 18,576 | 20,598 | 23,601  | 26,781         |
| 7. (6) as a % of (1)                | 29.1   | 23.4   | 21.8   | 22.0   | 22.0   | 21.3   | 20.8    | 20.3           |

(a) Catering expenditure valued at purchase prices.

SOURCE: National Income and Expenditure.

Table 2: *Indices of Consumers Expenditure at Constant (1975) Prices:*  
1970 = 100

|                                    | 1960  | 1970 | 1975  | 1976  | 1977  | 1978  | 1979  | 1980<br>(prov) | Consumption Trend<br>1970-1980<br>(% per annum) |
|------------------------------------|-------|------|-------|-------|-------|-------|-------|----------------|---|
| <i>Food<sup>(a)</sup></i>          |       |      |       |       |       |       |       |                |   |
| Bread and cereals                  | 102.0 | 100  | 94.6  | 95.5  | 95.2  | 94.4  | 95.8  | 96.3           | -0.3  |
| Meat and bacon                     | 88.2  | 100  | 97.6  | 97.7  | 99.7  | 102.0 | 105.3 | 105.9          | +0.7  |
| Fish                               | 101.9 | 100  | 89.6  | 91.8  | 83.7  | 84.4  | 87.1  | 95.8           | -1.0  |
| Oils and fats <sup>(b)</sup>       | 91.6  | 100  | 98.2  | 96.6  | 96.3  | 97.4  | 97.2  | 99.5           | +0.1  |
| Sugar, preserves and confectionery | 103.3 | 100  | 95.6  | 101.9 | 102.4 | 106.0 | 100.2 | 98.3           | -0.3  |
| Dairy products <sup>(b)</sup>      | 89.2  | 100  | 108.7 | 108.7 | 104.6 | 104.4 | 104.5 | 104.1          | 0.0   |
| Fruit                              | 88.6  | 100  | 93.7  | 99.5  | 91.2  | 94.1  | 100.8 | 104.8          | -0.1  |
| Potatoes and vegetables            | 80.2  | 100  | 99.9  | 95.4  | 97.1  | 104.2 | 106.4 | 108.2          | +0.4  |
| Beverages <sup>(c)</sup>           | 79.5  | 100  | 122.0 | 128.6 | 118.5 | 123.0 | 138.7 | 141.8          | +3.8  |
| Other manufactured foods           | 83.5  | 100  | 104.5 | 107.8 | 100.5 | 100.7 | 105.5 | 97.9           | +0.5  |
| TOTAL FOOD                         | 90.2  | 100  | 100.0 | 101.1 | 99.8  | 102.0 | 104.4 | 105.1          | +0.4  |
| TOTAL FOOD PER HEAD                | 95.3  | 100  | 99.0  | 100.2 | 99.0  | 101.2 | 103.5 | 104.2          | +0.3  |
| Other consumers expenditure        | 75.5  | 100  | 114.5 | 114.9 | 114.4 | 121.9 | 127.8 | 127.8          | +2.0  |
| Total consumers expenditure        | 78.7  | 100  | 111.4 | 112.0 | 111.3 | 117.7 | 122.8 | 123.0          | +1.7  |

(a) Excluding catering expenditure.

(b) Butter is classified with oils and fats and not dairy products; the latter includes eggs.

(c) Includes soft drinks.

SOURCE: National Income and Expenditure.

Table 3: *Distribution of Household Expenditure on Food at Current Prices*

|                                    | 1960  |                    | 1970  |                    | 1980 (prov) |                    |
|------------------------------------|-------|--------------------|-------|--------------------|-------------|--------------------|
|                                    | £m    | As a %<br>of total | £m    | As a %<br>of total | £m          | As a %<br>of total |
| Bread and cereals                  | 558   | 13.2               | 838   | 13.2               | 3,019       | 13.0               |
| Meat and bacon                     | 1,140 | 27.0               | 1,758 | 27.6               | 6,485       | 27.9               |
| Fish                               | 153   | 3.6                | 197   | 3.1                | 732         | 3.2                |
| Oils and fats (a)                  | 220   | 5.2                | 275   | 4.3                | 922         | 4.0                |
| Sugar, preserves and confectionery | 413   | 9.8                | 599   | 9.4                | 2,345       | 10.0               |
| Dairy products (a)                 | 640   | 15.1               | 949   | 14.9               | 3,438       | 14.8               |
| Fruit                              | 260   | 6.1                | 368   | 5.8                | 1,255       | 5.4                |
| Potatoes and vegetables            | 437   | 10.3               | 741   | 11.6               | 2,402       | 10.3               |
| Beverages                          | 270   | 6.4                | 406   | 6.4                | 1,850       | 8.0                |
| Other manufactured foods           | 137   | 3.2                | 238   | 3.7                | 782         | 3.4                |
| TOTAL FOOD                         | 4,228 | 100.0              | 6,369 | 100.0              | 23,230      | 100.0              |

(a) Butter is classified with oils and fats.

SOURCE: National Income and Expenditure.

15% and bread and cereals at 13%. It is very likely that the broad pattern of the last two decades will continue, i.e., slow volume growth in the overall food market and stable shares of expenditure by the major food categories. However, at a more disaggregated level, there have been important changes in the composition of demand for food coupled with a significant growth in the demand for food marketing services. The remainder of this article examines some of the important socio-economic factors which are responsible for the changing structure of United Kingdom food demand together with their marketing implications. As a first step, however, it would probably be useful to look at some of the more important volume changes in the United Kingdom food market in order to provide an estimate of the size of the more important product market segments.<sup>1</sup>

### The Demand for Frozen Food, Meats and Dairy Products

#### (1) *Frozen Food*

This category, of course, cuts across virtually all of the traditional fresh food categories. In general, volume demand for frozen foods increased very substantially in the 1970s and it is probably appropriate to mention briefly the more important household market changes:

- (a) Frozen vegetables: dramatic growth in the early 1970s especially for items such as broccoli, carrots, sprouts and cauliflower. The total household market in frozen vegetables has now settled down to a steady but healthy growth of around 7% per year. In 1980 this market amounted to 280,000 tonnes and was valued at £214 million.
- (b) Frozen potato products: this market more than trebled between 1972 and 1980, and by the end of the period the household market was about 100,000 tonnes valued at £61 million.
- (c) Frozen convenience meats and meat products: grew by about 10% per year in the 1970s and by 1980 had a volume of 118,000 tonnes valued at £230 million.
- (d) Frozen uncooked fish: this market grew by about 6% per year despite a decline in the overall fish market of about 4% between 1972 and 1980. By 1980 the frozen uncooked fish market was about 46,000 tonnes with a value of £106 million.

The catering market in frozen foods is somewhat difficult to break down into individual products. Trade estimates, however, put the total value of this market at around £240 million in 1980 giving a total frozen food market of just under £900 million.

#### (2) *Carcass Meat*

- (a) Beef and Veal: there was a substantial increase up to 1975 but since then the market has declined slightly, probably as a result of static or declining real household incomes during the second half of the 1970s.

The total household market in 1980 was about 650,000 tonnes valued at £1,719 million.

(b) Pork: increased by about 4% per annum and in 1980 amounted to about 330,000 tonne valued at £665 million.

(c) Mutton and lamb: this market declined up to the mid 1970s but recovered in the latter part of the decade, probably at the expense of beef as consumers were forced to 'trade down'. In 1980 the market was 360,000 tonnes valued at £740 million.

(d) Poultry meat: growth in this market was steady but unspectacular at around 2% per year. The total market in 1980 amounted to 530,000 tonnes valued at £736 million.

(e) Bacon and ham: the market in the uncooked product was virtually static and in 1980 amounted to 326,000 tonnes valued at £724 million. However, the market for the cooked product increased by about 2% per year and in 1980 amounted to about 86,000 tonnes valued at £266 million.

It is estimated that purchases of the above categories of meat by caterers amounted to about £850 million in 1980 giving a total market in these products of around £5,700 million.

### (3) *Dairy Products*

The most striking feature of this market has been the decline in the butter market and the corresponding rise in the market for margarine. Between 1975 and 1980 the former declined by 28% while the latter increased by 47%. In 1980 the household market in butter was 324,000 tonnes valued at £511 million and the margarine market was 307,000 tonnes valued at £235 million. It is thought that the margarine market has now overtaken the butter market in volume terms. The decline in the butter market is not surprising in view of its very substantial real price increase in the second half of the 1970s. Pitts (1981) has estimated that a 10% increase in the real price of butter would reduce volume demand by about 4.4%.

The cheese market was fairly static in overall terms in the 1970s, although volume increased sharply in 1980. The total market for natural cheese in 1980 was 300,000 tonnes valued at £645 million. It is interesting to note that after Ireland — at 3.1 kg per head in 1978 — the United Kingdom per capita consumption of 5.8 kg per head is the lowest in Europe.

Finally, before examining some of the factors which have brought about demand changes it is worth mentioning the very rapid growth which has taken place in the market for 'fast-food'. In the European Community in 1980 the total market was around £3 billion and trade estimates suggest that this could double by 1990, with the number of outlets rising from 165,000 to 300,000. The United Kingdom and West Germany currently account for around 60 per cent of fast food sales in the Community,

### Socio-Economic Factors

It is possible to identify several factors in the United Kingdom society which have brought about changes in the structure of food demand and which undoubtedly will continue to operate in the 1980s.

Firstly, the percentage of married women participating in the labour force has increased substantially. Over 50% of married women now work outside the home compared with around 20% in 1950. In the 1970s alone the percentage of working married women in the 35-55 age group increased from under 60% to around 70% (Department of Employment, 1981). The trend of increasing female participation will probably continue in the 1980s partly because there will be a higher percentage of women in their late forties and early fifties — the group with the highest participation rate — and partly because more of the traditionally male dominated jobs probably will become available to women.

Secondly, the average household size has declined considerably and single person households in particular have increased in importance. Between 1952 and 1978 the latter increased from 11% to 22% of total households and the growth trend indicates that they will account for around 27% by 1990 (Social Trends, 1981). The main reason for the decline in household size has been the growth in real incomes. This has enabled young single people and young married couples to establish their own homes at an earlier stage in the life cycle. In addition, older people have tended to become more self-sufficient and thus able to retain their independence of the family for a longer period.

Thirdly, the amount of formal leisure time has increased substantially over the last 30 years. For example, in 1951 98% of workers had 2 weeks or less annual holidays, whereas in 1980 over 90% had at least 3 weeks and over 50% had 4 weeks and over. The trend towards earlier retirement and the reduction in the number of hours worked each week have also added to the amount of leisure time available. It is estimated that by 1985 the amount of leisure time in the employed population will be 7% greater than the 1980 level.

Finally, it is reasonable to suggest that consumers in general have become more 'self-aware'. One of the results of this has been that greater attention is now given to the total amount of food eaten and to the possible health consequences of eating certain types of food. For example, it would be wrong to suggest that all or even the major part of the movement away from butter towards vegetable fats has been due to relative price movements. Undoubtedly the desire to reduce intake of animal fats has been an important, although unquantified, factor in this movement. The same may be said about the decline in the number of people eating the traditional breakfast of bacon and eggs, which has had an adverse

effect on demand for these products. At the same time the 'self-awareness' phenomenon has strengthened consumer preferences for the more nutritionally acceptable breakfast such as high fibre breads and cereals.

### Marketing Implications

These changes, to a large extent, have been the direct or indirect result of improvements in real income. This has important implications for marketing management in the food sector, particularly in relation to the demand for food marketing services. In the UK real personal disposable income per head increased by 27.6% from 1971 to 1981 (National Income and Expenditure 1982) whilst per capita volume demand for food grew by only 4.2% during the same period. This would point to a long run income elasticity of demand in the region of 0.15. Clearly income is a relatively minor factor in terms of its effect on overall volume demand for food. However, it has had and will continue to have fairly profound effects on the structure of demand for food through its catalysing effect on socio-economic factors. A good illustration of the indirect effect of income can be seen in the aggregate demand for food marketing services. Baron (1977) investigated the factors influencing UK demand for these services and derived the following equation:

$$\text{Log } Q = 3.941 - 0.766^2 \text{ Log } P + 0.685^1 \text{ Log } W$$

where the variables are:

Q: annual per capita quantity of food marketing services.

P: annual average deflated price of food marketing services.

W: index of housewives' opportunity cost

Somewhat surprisingly this suggested a price inelastic demand for food marketing services, the elasticity co-efficient being  $-0.766$ . This would imply that a 1% fall in the real price of food marketing services would induce a 0.766% increase in per capita quantity demanded. A significant positive, although inelastic opportunity cost, co-efficient of 0.68 was indicated implying that a 0.68% increase in per capita demand for services would follow from a 1% increase in housewives' opportunity cost.

The above equation indicates that for two reasons the demand for food marketing services is likely to grow steadily over the next decade. Firstly, Baron (1977) observed that the supply schedule for services had moved to the right during the period of analysis indicating a steady annual improvement in the productivity of food marketing agencies. If technological and managerial improvements continue to move the supply schedule to the right the price of services continues to fall in real terms. And, secondly, the predicted trend towards increased participation by women in the labour force will inevitably result in a higher average real

<sup>1</sup>Significant at 90% level.

<sup>2</sup>Significant at 95% level.

value for the opportunity cost of housewives' time. A parallel development will probably be a greater degree of participation by women in leisure activities which would also represent a competing demand on housewives' time. This probably will tend to reinforce the upward pressure on their perception of the opportunity cost of their food collection and preparation time.

In conclusion it should be pointed out that food marketing services must not be thought of simply in terms of sophisticated food processing and packaging, although these are very important elements in the total service mix. The implications for the services offered by food retailers may also be quite far reaching. It is interesting to consider that the concentration of food retailing into large self-service chains has led, in many cases, to an overall reduction in the level of provision of in-store services. Increasingly, however, housewives will place a high value on the time spent on purchasing food items. This will have obvious implications for factors such as store layout and the efficiency of check outs. However, there may well be more important long-term implications for the nature of the retailer/customer interface. As the market for food services grows food retailers may be able to identify profitable opportunities to supply a wider range of services. For example, one development may be the reintroduction of customer ordering and delivery services. Indeed, it may be the case that an effective demand for these services already exists. The question which retailers must answer is the extent to which this demand amounts to an economically significant market segment. If this is the case it may be an indication that the wheel of retailing will turn, if not full circle, then by a substantial amount. It would seem reasonable to conclude that if services such as ordering and delivery again become important food service elements at the retail level, store location may become a less important factor in the retailers overall marketing mix. In other words the emphasis would change from one of giving customers the maximum possible degree of accessibility to the product, to one where greater prominence is attached to taking the product to the customer.

#### REFERENCES

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#### NOTES

- <sup>1</sup> These estimates are based on data obtained from various issues of the Household Food Consumption and Expenditure Reports, the Family Expenditure Surveys, and trade consultations.