

## **MASMANAP country report: The United Kingdom**

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# MASMANAP country report: The United Kingdom

### J.A. Young and A.P. Smith

Department of Marketing, University of Stirling, Scotland FK9 4LA, UK

**SUMMARY** – The report presents the evolution of the production, trade and apparent consumption of seafood products in the United Kingdom over the last decade. It also described the methodology used and the different sources of data. The general downwards trend for production in the UK is due to a decline in the capture sector's production despite increases in aquaculture output. Although production has declined in volume terms it has increased in value terms. Imports have increased from 440,000 tonnes to 532,000 tonnes in the last decade. Exports have fluctuated in volume terms in the last decade. This means that the UK has a trade deficit in terms of aquatic food. Apparent consumption has varied over the last decade around 15 kg per caput. This could be attributable to changes in the level of supply and therefore price or other more immeasurable factors, e.g. lifestyle changes, health consciousness, food scares, etc.

Key words: United Kingdom, fishery, aquaculture, seafood, supply, consumption.

**RESUME** – "Rapport national dans le cadre de MASMANAP : Royaume-Uni". Ce rapport présente l'évolution de la production, du commerce et de la consommation apparente de produits de la mer au Royaume-Uni sur la dernière décennie. Y sont également décrites la méthodologie utilisée et les différentes sources de données. La tendance générale à la baisse de la production au Royaume-Uni est due à une diminution de la production du secteur de la pêche de capture malgré une augmentation des livraisons de l'aquaculture. Bien que la production ait baissé en termes de volume, elle s'est accrue en termes de valeur. Les importations ont augmenté, passant de 440 000 tonnes à 532 000 tonnes sur la dernière décennie. Les exportations ont fluctué en termes de volume sur cette même période. Ceci signifie que le Royaume-Uni présente un déficit commercial quant aux produits aquatiques. La consommation apparente a varié pendant cette dernière décennie autour de 15 kg par habitant. Ceci pourrait être attribuable aux changements de niveau de l'offre et par conséquent aux prix ou à d'autres facteurs moins mesurables comme les changements de style de vie, la prise de conscience du facteur santé, les crises alimentaires, etc.

Mots-clés : Royaume-Uni, pêche, aquaculture, produits de la mer, offre, consommation.

# Statistical methodology evaluation

## Introduction

Statistical data on the UK fisheries and aquaculture sectors exists in a range of publications extending from official national government publications, published by the Ministry of Agriculture Fisheries and Food (MAFF), through various quasi-governmental organisations and into a myriad of more focused private sector reports. As is to be expected there is a considerable degree of cross-reporting where part of one data set is subsequently incorporated within other works and interpretations.

Rather than seek to establish the definitive bibliography of UK aquatic food data, this section of the report identifies the key sources of information used in compiling the related spreadsheets and comments on aspects that might warrant further improvement. In a number of cases alternative data sources exist but, in keeping with the agreed objectives for this report, those considered best suited to the tasks in hand have been utilised for reasons which are discussed.

# Aquatic food production data

A variety of data is available on the production of fish from both capture fisheries and, to a lesser

extent, aquaculture. The principal source related to capture fisheries is the annual MAFF Sea *Fisheries Statistical Tables* which covers the UK in respect of the volume and value of different species landed by the UK and non-UK fishing fleets at ports around the country. Similar data pertaining to Scotland and also Northern Ireland is also produced annually by the counterpart divisions within the Scottish Executive SOAEFD and DANI in Northern Ireland. MAFF *Sea Fisheries Statistical Tables* normally has a publication lag of around 2 years, the others being necessarily somewhat shorter. Data is recorded at designated ports by sea fisheries inspectors on a daily basis as fish is landed, commonly at fish markets. These data are collated and cross-checked with EU logbook returns from skippers and is then sent electronically to respective HQs. A further data flow exists via the business transactions of fish selling agents who are responsible for the sale of product to first hand buyers. These data contain the most detailed level of information but they are commercially sensitive and, within any one organisation, refer only to the boats managed by that agency. Producer Organisations (POs) also have their own returns as this data is required, *inter alia*, for management decisions regarding the allocation of quota amongst members.

Recorded MAFF data will include fish species with standard subdivisions according to pelagic, demersal and shellfish. Additional information in respect of fish size and quality grade, as determined by the EU CFP Marketing Policy, are not provided within the standard published versions of the data although this can be retrieved electronically from the database.

The standard tendency to aggregate data is adhered to and one criticism of the data published is that no indication of the composition of the aggregate volume is readily available. This information may be useful if, for example, one is concerned with trends in respect of the size of fish available. Since the size of the fish typically influences the price buyers are willing to pay, as determined by market preferences, some indication of the price range and differentials would be useful. In some sectors of aquaculture, and especially in future as the range of species expands, this is likely to be especially valuable because producers, in theory at least, they have the option to determine the size of the fish placed on the market.

Value of product is also aggregated and only average unit values are available. Given the dynamics of price movements within fish markets, in part because of the heterogeneity of the product available, average values are of limited use in making marketing management decisions. Whilst such provision would necessarily tend to produce a much more voluminous document, it is conceivable that significant additional benefits would be perceived by data analysts.

Some scope for error in interpreting volumes, and related values, moving into human consumption might arise through the withdrawal of fish from the market where it fails to reach the pertinent official withdrawal price. Although the mechanisms of the market tend to ensure that the quantities involved are small, there may be some scope for misinterpretation at the more localised level. For example in some ports one may tend to find a concentration of withdrawals of certain fish types and sizes at certain periods of the year.

Geographical coverage of production data at the port, or fisheries district in the case of Scotland, provides a useful insight to the extent of regional variation in the fish supply chain. Some indication of temporal variations is also provided with the monthly division of data.

Data from aquaculture is centred primarily upon salmon which accounts for around 90% of the UK farmed fish production, trout being the other significant species. Official data again focus upon the volume and value at the farm gate which is analogous to the fish market. Grade sizes are more transparent and thus provide some better information to the data user than is readily available for capture species. Given the greater control possible within the aquaculture sector such provision is likely to be increasingly demanded. Similarly where any quality mark scheme exists it may be useful to provide some indication of the proportion of fish attaining different grade standards. Clearly though, such information may be considered sensitive by some sectors of the industry.

In addition to data on the landings of fish, there is also a considerable quantity of data regarding other production aspects of the fishing fleet such as vessel size, age, methods of capture, location etc. Information on the numbers of fishermen is also provided as well as the trade data discussed below.

### Aquatic food production data: Imports and exports

Imports and exports are recorded by HM Customs and Excise and are logged at the point of entry or exit to the UK. Landings by British vessels abroad, and conversely, foreign vessels at UK ports, are listed as exports and imports respectively. Data so collected is incorporated within the annual publications mentioned above but, usefully, is also published beforehand by the Sea Fish Industry Authority (SFIA) whose monthly *UK Trade Bulletin* provides the most comprehensive coverage available with a relatively short publication lag of 2-3 months.

The *UK Trade Bulletin* provides a comprehensive coverage of exports and imports of both marine and freshwater species. In addition to information on the export destination and import origin product is listed, in volume and value, according to the method of preservation such as chilled, frozen, cured and for a range of product categories.

Given the diversity of products traded internationally it is almost inevitable that compromises will be made in the data collected. This is especially problematic where raw material is processed with attendant variations in edible product yield. Attempts to fit product into sufficiently wide categories also results in problems when attempting to analyse certain aspects of the production.

Yield-conversion ratios may be introduced in order to redress comparability but where the composition of a category is mixed and not subdivided, any notional allowance of values is rendered purely arbitrary. This may be especially significant where a species accounts for a large part of the data and is present in a wide range of product types often with quite disparate product yields, volumes and thus values. Tuna is one such example.

Where the actual product composition of the data is so mixed attempts to make statements about the apparent consumption can develop the potential to mislead observers. This problem is of course compounded by the fact that products, either exported or imported, will often be further transformed once they have passed through the data collection point. Such changes in the physical form of the product will of course also be reflected in the unit value of the product and this differential can be extremely problematic to account for.

At the wider scale there is the inevitable problem of product passing through various borders and thus entering into the records as a multiple entry. This is especially so where product in the first instance enters a break-of-bulk port from where smaller loads are distributed and are subsequently processed.

Earlier comments pertaining to the aggregation of data in respect of average values should be repeated. Indeed given the wider range of product types being recorded, unit values for the less specific categories become even less meaningful. For example even in the relatively homogeneous case of say prawns which may be whole, tails, peeled or otherwise, little meaningful interpolation can be made unless more specific division is possible.

Whilst the compromises of publication understandably encourage more composite categories, access to the disaggregated data would be valuable to assist in making marketing decisions. Such a database would also provide information on preferred grade sizes, pack types, etc. At the current time individuals are simply left to hazard a guess at the actual composition of the product listed, or of course undertake more expensive primary data collection – a route which is commonly financially prohibitive for smaller sized enterprises.

Hitherto the data collected in the above reports has essentially been observed through the mandatory process of recording relevant information. Individual respondents have a legal obligation to make statistical returns which may be cross-checked or verified independently. Given the legal requirement to document the data the sampling process is effectively that of the census: all phenomena are accounted for so far as is practically possible. However, this stage of practical difficulty is soon reached, at least in terms of verification, where product is processed since there are so many alternative product options available to individual processors.

#### Consumption

Consumption data in the UK is taken from a range of sources, both official governmental and the private sector. These sources differ in the focus of attention and in the related methodologies. More importantly the data tends to be gathered through the co-operation of respondents on an unenforced basis.

Household fish consumption is also published in *MAFF Sea Fisheries Statistical Tables* which presents an abstract from the more comprehensive MAFF *National Food Survey* (NFS), an annual publication with quarterly updates. The *National Food Survey* is the world's oldest continuous data source of its type and is based upon diary returns from a sample of around fifteen thousand households throughout the country.

Households are classified according to a range of criteria, including geographical location, socioeconomic class and the number of adults and children living in the house. Some debate surrounds the typicality of any respondent behaviour recruited into such a survey, although this is generally regarded as acceptable practice. Bias may also be reduced by periodically resting the panel.

Recording data at the household level also raises issues about the accuracy of any inferences on the behaviour of the individual consumer. Clearly it is possible for quite distinctive and discrete patterns of behaviour to exist within the one household and may become more occluded where the household size is large.

NFS provides quite wide ranging details of different food categories although inevitably aggregation leads to ambiguity in the volumes and expenditure values noted. Categorisation according to product type encounters the difficulty of product yield and the related values. For example, the edible proportion actually consumed will be misrepresented where a whole fish is purchased but the bones and related residue are left. This may be in some contrast to the situation where a filleted product is eaten in its entirety.

Aggregation of disparate products within the same category also hinders understanding of any trends and emergent preferences for different types of products, e.g. fillets in sauce as opposed to enrobed fillets. Such levels of detail may be impractical at the generally available published level but access to such disaggregated data is valued and is vital for some. Extending the more qualitative data provision to include integral product detail such as packaging is no less important and may be of no lesser importance in attempting to understand food choice decisions.

Consumption in the home is of course only part of the process and in attempting to determine what happens away from home many more difficulties are identifiable. Not least is the diversity of the catering sector where individuals may eat fish as part of a meal/snack along with other menu selections. Within both the profit and cost-based sectors considerable diversity exists and attempts to monitor consumption away from home tend to be more heavily reliant upon private sector sources.

Returns on the consumption of fish away from the home are typically done on a panel basis whereby a diary return will be made from a group of selected respondents. Such returns, irrespective of the phenomena being investigated, encounter a myriad of problems regarding the actual volume and value of the fish components of the meal. Nonetheless data on what consumers are currently choosing to purchase and consume away from the house is important as it commonly accounts for around 50% of the aggregate market in the UK.

Returns from the alternative end of the catering exchange: the output of caterers is made difficult by the private, small and disparate structure of much of the sector. There are comparatively few large players in the market and even where such exist fish is typically seen as an integral part of a food catering operation where purchase records tend to aggregate detail and cover variable time periods of actual consumption. The very perishable nature of the fish product commonly means that caterers will choose to store at least some part of their purchases in frozen form which may then be consumed over an almost indefinite period of time.

### Further thoughts

We would contend that a major constraint within the secondary data available is its almost exclusively quantitative orientation. This emphasis upon absolute volumes and values however is of limited practical value since arguably much of the really useful data is obscured under the broader picture. Macro-market perspectives may be useful in outlining the aggregate position of aquatic foods but increasingly the tendency is for significant change to be operative within the market at the level of the individual market segment or niche.

More detailed analysis of market segments would provide a useful fillip to market researchers and others. This is especially so for aquaculture producers who tend to be comparatively small scale and therefore have rather greater concern with the detail in particular sectors of the market rather than the wider aggregate picture. In many cases targeting beyond the confines of a fairly narrow market segment/niche is impractical. As IT improves it is much more realistic to contemplate provision of access to such more detailed databases wherein individual producers would have the opportunity to undertake more individual and proactive analysis.

Greater provision of qualitative data would seem to be a priority for attention. Whilst it is likely that much of this provision will continue to be made through primary data capture techniques, there is undoubtedly scope to extend detailed provision of comparatively simple but useful indicators of emergent market trends but with hued shapes and contours.

### Production and supply of aquatic food

#### Production

The aim of this section is to review the current situation in terms of the volume and value of production and supply and the apparent trends over the last decade. Notwithstanding the various reservations about the efficacy of the official and unofficial sources of statistics reviewed in the previous section of the report, the figures show the key features of the UK situation up to the agreed 1998 common deadline.

As Fig. 1 illustrates, the trend for production in the UK is downwards. This is due to a decline in the capture sector's production despite increases in aquaculture output. Anecdotal and other evidence suggests this decline is set to continue as quotas are revised. Aquaculture production consists principally of salmon production (115,000 tonnes in 1998) the trend is upwards as it is in aggregate value terms despite a downward trend in unit price over the last ten years.

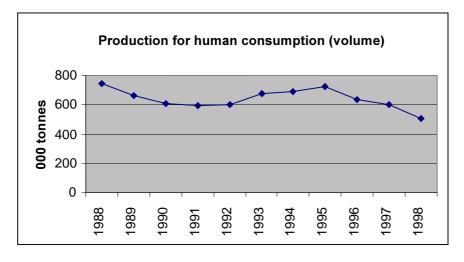


Fig. 1. Production for human consumption.

Although production has declined in volume terms it has increased in value terms as Fig. 2

illustrates. Clearly this might be a result of the operation of the law of supply and demand as capture production declines. Presumably the extra cost is transmitted to the consumer, or is absorbed by agents in the distribution chain. If the former scenario has occurred then it represents a barrier to increased consumption of food. The latter scenario may have longer-term implications for the structure of the industry.

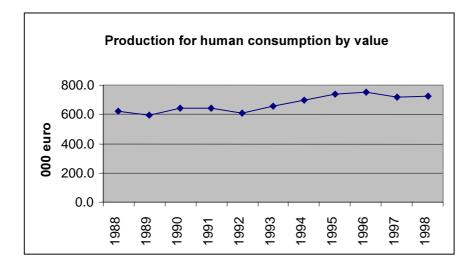


Fig. 2. Production for human consumption by value.

The traditional reliance of the UK fleet on cod and haddock remains despite pressure on stocks and reducing quotas. That pressure might explain the decline in the volume of production over the two years depicted in Fig. 3.

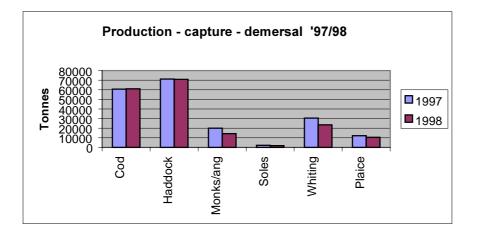


Fig. 3. Capture production – principal demersal species.

Pelagic production (as depicted in Fig. 4) is traditionally dominated by mackerel and herring, although like the demersal catch this has declined over the last year shown. In the case of herring this decline has been substantial in percentage terms. The trend for pelagic production is downward falling from 279,500 tonnes in 1988 to 136,300 tonnes in 1998. The aggregate value of the catch has remained steady in monetary terms though fallen in real terms.

In terms of value demersal species dominate and monkfish (a.k.a. anglerfish) represent a substantial income generator, primarily because of their export orientation (Fig. 5). The value of the demersal catch has declined in real terms in the last decade although remaining reasonably stable in monetary terms. Clearly the decline in aggregate value puts pressure on producers and makes covering costs increasingly problematic.

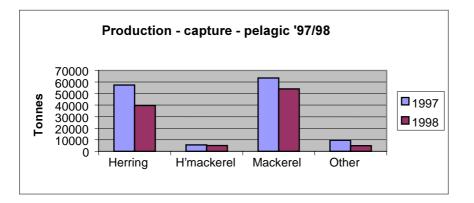


Fig. 4. Capture production - principal pelagic species.

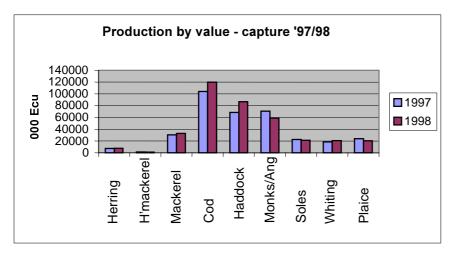


Fig. 5. Production of principal species by value.

# Imports and exports

The UK market is reliant on imports of cod and salmon, two important production species that have experienced substantial increases in imports in the last two years (Fig. 6). In the case of cod this can be explained in part by the reduction in the domestic landings, although production of salmon has steadily increased. Tuna is also a very important imported species for the UK market principally as an added value product, and often tinned. Imports have increased from 440,000 tonnes to 532,000 tonnes in the last decade and increased in value terms from 1.2 million euro in 1988 to just under 2 billion euro by 1998.

Pelagic exports consist almost entirely of mackerel and herring (Fig. 7). The former increased in terms of volume whilst the latter has declined. This decline is consistent with the decline in production over the last decade.

The aquaculture species salmon represents the primary export species from the UK, followed by shrimps and prawns and in 1998 by tuna (Fig. 8). Exports have fluctuated in volume terms in the last decade although the value has increased from 0.6 billion euro in 1988 to 1.1 billion euro in 1998. Clearly this means that the UK has a trade deficit in terms of aquatic food.

# Apparent consumption

Apparent consumption has varied over the last decade. This could be attributable to changes in the level of supply and therefore price or other more immeasurable factors e.g. lifestyle changes, health

consciousness, food scares etc. Its is not possible to categorically state the causes of this trend without primary research. The figures represented in Fig. 9 are for landed weight however rather than weight actually consumed. The population of the UK has increased marginally over the last decade therefore the per capita trend mirrors the aggregate apparent consumption trend (Fig. 10).

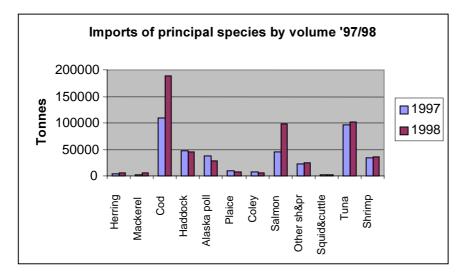


Fig. 6. Imports: principal species.

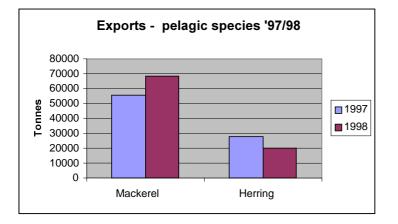


Fig. 7. Exports: pelagic.

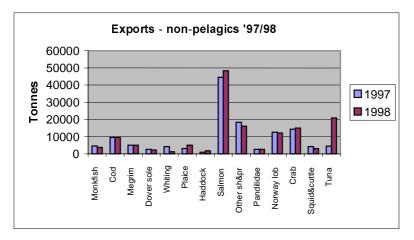


Fig. 8. Exports: non-pelagics.

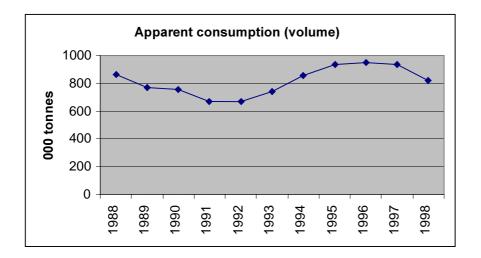


Fig. 9. Aggregate apparent consumption.

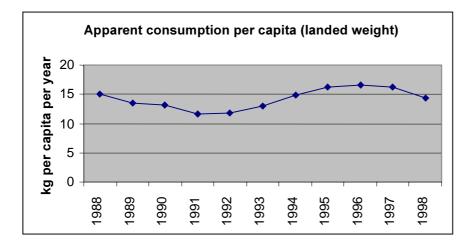


Fig. 10. Apparent consumption per capita.

# National seafood market information

## Introduction

The supply chain for aquatic foods within the UK is best described by initial recourse to the respective capture and culture sectors. Whilst in more recent times there has been some integration of the channels utilised, they remain essentially apart commonly at least until beyond the point of exchange at port markets.

# Capture fisheries supply chain

Fish landings are typically sold at port markets by auction or alternatively according to the terms of some pre-arranged contract. The exception to this may be in the case of pelagic vessels where the auction can be held whilst the boats are still at sea.

Fish auctions, held at port markets, permit aggregation of supplies from a range of producers and have the benefits of evening out variations in quantities from different grounds, qualities and range of species. Individual buyers are also given access to a wider range of product and in turn permits a more diverse product range to be sold. Buyers commonly represent fish processing firms who will

subsequently transform the whole fish into a range of products. In other instances buyers will be wholesalers, retailers or possibly caterers seeking to internalise the processing function. In other instances individuals may operate as agents simply seeking to sell product on to other parts of the chain, quite possibly to another port market.

Fish sold by contract would tend to be associated with larger buying organisations wishing to reduce the exposure of their fixed production costs to the risks of uncertain supplies endemic to the capture supply chain. Contract sales have increased in importance over recent years and, although they have a fairly established history in segments of the pelagic, shellfish and frozen whitefish sectors, they have emerged within the fresh whitefish fleet too.

A notable proponent of contract sales has been supermarket buyers who have been anxious to move fish procurement in line with practices adopted elsewhere in their product range. Commonly this has been done in conjunction with fish processors but there have also been trends for this to be done on a direct basis with boats.

In some cases the supply chain will be subject to vertical ownership although this does not automatically ensure that product does not pass through the same stages as would be done under separate ownership. Indeed, in some instances the discrete profit centre basis of the vertically integrated organisation ensures competition rather than co-operation.

# Culture fish supplies

Raw material supplies from fish farms are also sold in a variety of ways but only a very small proportion mimics the auction route of the capture sector.

Product from fish farms may be sold under contract and this is commonly done since far greater degree of product specificity can be entered into given the opportunities to control the production process. Contracts may also be adopted to enable more planning within the processing operation, especially where there is a significant investment in plant and machinery which is species and product specific.

Agents are also commonly used to sell farmed product whereby negotiation is used to determine precise specifications around market prices which are effectively established according to market supply and demand. Some variations on these prices may be enjoyed by producers having particularly distinctive product attributes (good or bad) but generally price levels will be fairly similar.

## Product transformation

Transformation of the product occurs within a variety of different guises ranging from the simple service addition of break of bulk through to the more elaborate physical addition of value. In the simplest operations break of bulk is undertaken by merchanting firms who are simply concerned with tasks such as regrading and subdivision of loads. Processing firms range quite considerably in respect of their size with comparatively few large organisations, say employing more than 250, but a significant number of firms with less than 10 employees.

Processing plant also vary significantly in respect of the levels of technical and capital investment. In some instances the plants are highly specific to particular product processes, e.g. canned product, whereas in other instances the operation is able to diversify to produce a range of different product lines. In aggregate volume terms the UK market in 1997 was estimated to consist of 50% frozen product, 32% fresh and 18% canned.

Products from these sectors may then pass through to inland wholesale markets for further allocation to a range of buyers drawn from the catering and retailing sectors. Increasingly however products tend to pass direct to users such as retail chains and catering outlets

### Catering and retail market shares

Within the UK the split between retailers and caterers is around 52:48% by volume. This was the

exact split in 1998 and each year there is liable to be some slight variation around this mark, not least because the catering market is sensitive to fluctuations within the economy. Historical evidence shows that in times of depression the propensity of individuals to eat out diminishes.

A notable feature of the UK catering marketing for fish is the importance of the fish and chip trade. Fish and chips still account for some 14% by volume of all the fish consumed within the UK both at and away from home. Whilst the sector has encountered a range of increased competition from other fast foods its prominence remains.

The relative importance of the various distribution channels for fish by value is shown in Table 1.

	1998 Frozen (%)	1987 Frozen (%)	1998 Fresh (%)	1987 Fresh (%)
Supermarkets	71.9	58.5	64.2	14.3
Freezer centres	16.7	24.5		
Department stores	8.8	8.3	5.5	3.7
Fishmongers			20.6	50.9
Market stalls			5.0	14.3
Mobiles			1.6	6.4
Others	2.6	8.7	3.1	10.4
Total	100	100	100	100

Table 1. Relative importance of the various distribution channels for fish by value (source	e: SFIA)
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The most significant change within the distribution channels has been the growth of the supermarkets in both frozen and especially fresh fish sectors. In the case of the latter market share has more than quadrupled and in 1998 stood at nearly two-thirds of the market, and fast approaching their traditional high share of the frozen market. The major decline has been within the specialist fishmongers who specialise in fresh fish and have fallen from over 50% of the market in 1987 to barely one fifth a decade later.

More recent indicators show that the relative strength of the supermarkets seems set to continue. However it must also be recognised that the most serious losses within the specialist fishmongers sectors has probably already occurred and those remaining will tend to be the more upmarket, more profitable outlets with a relatively strong position as a niche market player.

Regional variations in purchasing fish are also evident. Data is available according to television broadcasting regions and in the case of 1998 the pattern for frozen and fresh purchases is given in Table 2.

Region	Volume as % of UK average	
Eastern England	102	
Lancashire	91	
London	108	
Midlands	104	
North East	96	
South West	107	
Scotland/Borders	82	
Southern	106	
Wales and West	98	
Yorkshire	102	

Table 2. Frozen and fresh fish purchases by volume in UK regions 1998 (source: SFIA)

Quite significant regional variations in the pattern of purchase is evident in the above table and explanation lies within a myriad of sociocultural and economic phenomena. In addition to variations in the aggregate quantities of fish purchased distinct preferences are also evident in respect of the species and products preferred. Such differences clearly underwrite the need for detailed market information in order to promote the chances of new products being successfully launched in different markets.

A significant factor in the determination of what fish is purchased and indeed whether fish is purchased rather than some other substitute is the relative price movement of fish and other foods. Some indication of the trends in UK retail price indices is provided in Table 3.

Period	All food	All fish	Beef
January 1998	164	168	134
April 1998	164	170	132
July 1998	165	180	136
October 1998	166	188	133
January 1999	167	188	136

Table 3. UK retail price indices (1983 = 100) (source: SFIA)

In comparison to other foods fish is shown to have increased in price quite dramatically in relative terms whereas all foods generally have remained relatively constant. The decreasing pricecompetitiveness of fish has forged greater dependence upon other non-price attributes such as healthiness, naturalness, etc. but undoubtedly some reservations must exist about the willingness and ability to pay for such high differentials.

# **General information**

### Eating habits

Table 4 indicates meat consumption to outstrip seafood consumption by some considerable margin. However seafood's share of household expenditure on food has grown from 4.4% in 1983 to, 5.1% in 1997 and 5.2% in 1998 although has declined from a peak of 5.5% in 1990. Cod, haddock and salmon are the primary species consumed in that order of importance by some way, accounting for around two thirds of the total.

	·
	In-home (kg/year)
Seafood consumption per head	7.6
Meat consumption per head	
Beef	5.7
Pork	3.9
Poultry	13.2
Others	45.1

Table 4. Seafood vs. meat consumption<sup>†</sup> (source: National Food Survey)

<sup>†</sup>Apparent consumption evaluation or other source.

The trend for fresh/wet seafood is down although fresh/pre-packed forms are enjoying an increase in consumption and sales. The ready meal market has increased five-fold since 1991; in 1998 sales exceeded 5000 tonnes.

In total 52% of seafood is obtained from retail outlets and eaten at home, the remaining 48% is eaten out of home and is obtained from restaurants or take-way outlets. Take-out meals have grown in popularity rising from 600 million meals in 1992 to over 820 million meals in 1998. Moreover home delivered meals have increased dramatically in popularity in the same time period from 50 million meals to 155 million. Clearly the perceived shortage of time and associated consumer polychronicity has fuelled the demand for convenience foods in the UK. This accounts for growth in ready meals as well. The knock-on effect of this is the de-skilling of the aggregate market as meals prepared in the home decline in importance. This is likely to accentuate the decline in fresh/wet produce.

Supermarkets account for 65% of retail sales, fishmongers account for 23%. The overall trend favours the supermarkets; they often have specialist fishmonger counters in their outlets. The desire for one-stop shopping in the UK has placed great pressure on independent food retailers of all types particularly as comparable provision is made in-store by the supermarkets. Once again the perception that time is increasingly a scarce resource for the consumer has fuelled this change as well as other lifestyle changes and increase in car ownership and multiple car ownership. The UK grocery retail sector is arguably amongst the most dynamic and innovative in the world. The environment for independent retailers is therefore likely to become increasingly problematic and hostile.

### Socio-demographic data

In terms of household size the trend is towards an increase in single person households and a decrease in the number of households with five-plus inhabitants. The contemporary estimated breakdown is as follows: 5+ individuals – 5% of households; 4 - 17%; 3 - 18%; 2 - 35% and 1 - 25%.

Table 5 shows the distribution of the population by age groups. The overall trend is for an ageing population and government estimates consider that this will continue. Female employment rates have increased over the last decade. Owner occupation has increased over the last two decades and is now the norm, although there are significant regional variations.

i albie ei rige range				
Age-range	%	Age-range	%	
60+	22	25-34	14	
45-59	18	15-24	13	
35-44	15	0-14	18	

Table 5. Age ranges in UK

# Economic data

The current headline inflation rate is 1.3% (2.15% underlying). The average in 1998 was 3.3%. Average income is approximately £20,100 per annum.