

Census Validation

A publication of the Government Statistical Service



#### © Crown copyright 1994 First published 1994

Brief extracts from this publication may be reproduced provided the source is fully acknowledged. Proposals for reproduction of larger extracts should be addressed to Copyright Section, Room D 134, Central Statistical Office, Cardiff Road, Newport, Gwent, NP9 1XG

ISBN 011 620656 X ISSN 0017-3630

It is hoped that *Statistical News* will be of service and interest not only to professional statisticians but to everybody who uses statistics. I should therefore be glad to receive comments from readers on the adequacy of its scope, coverage or treatment of topics and their suggestions for improvement.

Enquiries about individual items in this issue should be made to the appropriate sources where indicated; otherwise they should be addressed to Natalie Williams, Editor, *Statistical News*, Central Statistical Office, Room D.134, Government Buildings, Cardiff Road, Newport, Gwent NP9 1XG. Telephone: 0633 812915.

Enquiries about orders and subscriptions for Statistical News and other Central Statistical Office publications should be made to:

HMSO, PO Box 276, London SW8 5DT (Telephone: 071-873 8499 for subscriptions; 071-873 9090 for orders).

#### Photographs:

Page 12 Oiled Birds Graham Burns Environmental Picture Library

Page 13 The Braer Mark Edwards Still Pictures

Page 16 Cement Factory Graham Burns Environmental Picture Library

#### Cover:

Landfill Site Power Station Background Warrington Cheshire David Drain Still Pictures



# Statistical News

Developments in British
Official Statistics

No. 104 Spring 1994

London: HMSO

Diamination and Madation Charles of the Late of the Company of the			page 104.4
Survey of Public Attitudes to the Environment 1993			104.12
The Gambia Hepatitis Intervention Study (GHIS)			104.19
Census Validation Surveys - Design Comparisons	n Issues	raised by International	104.22
Government Publications		Home Office	
Central Statistical Office		Motoring Offences England and Wales 19	92104.33
Annual Census of Production Summary Volume (PA 1002) Standard Industrial Classification 1992 The CSO Survey of Charities 1990-1991	104.27 104.27 104.28	Criminal Statistics England and Wales 199 Time Intervals for Criminal Proceedings in Magistrates Courts June 1993 Criminal Appeals England and Wales 199 Control of Immigration: Statistics United Kingdom 1992	n 104.35 2 104.35 2 104.35
Teachers Qualifications and Development in Maintained Secondary Schools in England 1992 Participation in Independent Sector of Further and Higher Education Statistics of Education Student Awards in England and Wales 1991/92 Women in Post-Compulsory Education Education Statistics for the United Kingdom - Bulletin 1993 Edition Student Loans 1992/93 Education Statistics for the United Kingdom 1993 Edition	104.28 104.29 104.29 104.29 104.29	Birth Statistics 1992 Teenage Conceptions and Fertility in England and Wales First Results from West European Censuses 1991 Census of Population Northern Ireland Analysing Fertility International Migration 1992 Infant and Perinatal Mortality Deaths by Cause 1992 National Population Projections 1992	104.38 104.38 104.38 104.39 104.39 104.39 104.39 104.39 104.39
Release of Government Training and Enterprise Programmes Results from the Summer 1993 Quarterly Labour Force Survey Travel to Work Area (TTWA) Review  Environment  House Property and Inheritance in the UK Analysis of Land Use Change Statistics	104.29 104.30 104.31 104.31 104.32	General Household Survey 1992 Cancer Registrations 1988 Childrens Dental Health UK 1993 Census Publications Update Household Composition  Office of Manpower Economics  Doctors and Dentists Renumeration Pay of Nursing Staff Senior Salaries School Teachers Pay Armed Forces Pay	104.40 104.41 104.42 104.43 104.43 104.44 104.45 104.45 104.45

Oftel		Appointment of Registrar General for	
Telephone Service 1993	104.46	Northern Ireland	104.51
		Scotland	
Trade and Industry		The Scottish Office Environment	
Energy Trends Insolvencies	104.47 104.47	Department	
VAT Registrations and Deregistrations	104.47	The Scottish Abstract of Statistics No 22	
		1993 Edition The Scottish Environment Statistics No 4	104.52
Transport		1993 Edition	104.52
London Area Transport Survey	104.48	Scottish Statistics: Factcard	104.52
Two actions		Statistical Publications Information  Leaflet	104.52
Treasury		Statistical Bulletins - Housing	101.52
Civil Service Statistics	104.49	Services	104.53
Northern Ireland		Education Department	
Department of the Environment		Scottish Education Statistics	104.53
Northern Ireland Housing Bulletin		General Register Office	
December 1993	104.50		
Department of Finance and Personn	iel	Population Estimates Scotland 1991 Census - Scotland	104.54
A Guide to Northern Ireland Statistics	104.50	Vital Statistics - Scotland	104.54
Family Expenditure Survey Report 1989-			
1992	104.50	Wales	
Registrar General Northern Ireland		Welsh Office Data on Housing	
		Completions Overteeler Welch Housing Statistics	104.55
1991 Censuses of Population - Education Report	104.50	Quarterly Welsh Housing Statistics  Quarter ending 30 September 1993	104.55
1991 Census of Population -	104.50		
Irish Language Report	104.51	Other Publications	
Department of Agriculture for		Bank of England	
Northern Ireland			
C:		Inflation Report  Quarterly Bulletin	104.56
Size and Performance of the Northern Ire- land Food and Drinks Processing Sector		Fixed and Floating-rate Finance United	101.50
	104.51	Kingdom and Abroad	104.56
Current Developments		The determination of M0 and M4 The Role of the European Monetary	104.56
Transfer of Census Office and General		Institute	104.56
Register Office (NI) from DSS to DFP	104.51	The Gilt-edged Market Developments in 1993	
		1775	104.56
			104.5

# Dissemination and Marketing Strategy for the Labour Force Survey

# by Wendy Baillie Employment Department

#### Dissemination

In the Statistical Services Division (SSD) of the Employment Department (ED) we are very aware of the value of the Labour Force Survey (LFS) to both the public and the private sector. Compared to others the LFS is a very large survey - 60,000 households involving about 150,000 individuals are interviewed every quarter by interviewers employed by the Social Survey Division of the Office of Population Censuses and Surveys. Interviews cover a range of topics, including employment, unemployment, training and qualifications, on the basis of internationally standard concepts and definitions.

As well as using the LFS intensively for briefing purposes on a range of key policy areas, statisticians in ED have endeavoured to develop an external dissemination strategy for the LFS which makes the data available as widely as possible via a number of different media.

ED's flagship publication for LFS data is the LFS Quarterly Bulletin (LFSQB). Introduced in September 1992, it is designed to release a fuller set of final results, with accompanying explanatory text and charts and is published 3½ months after each quarterly survey.

Access to the results has always been available through the Employment Gazette. Feature articles on such subjects as 'Women and the Labour Market', 'Lone Parents and the Labour Market' and 'Ethnic Origins and the Labour Market' appear regularly as do the tabulated results. In November 1992, an additional monthly figure, called LFS HelpLine, was in-

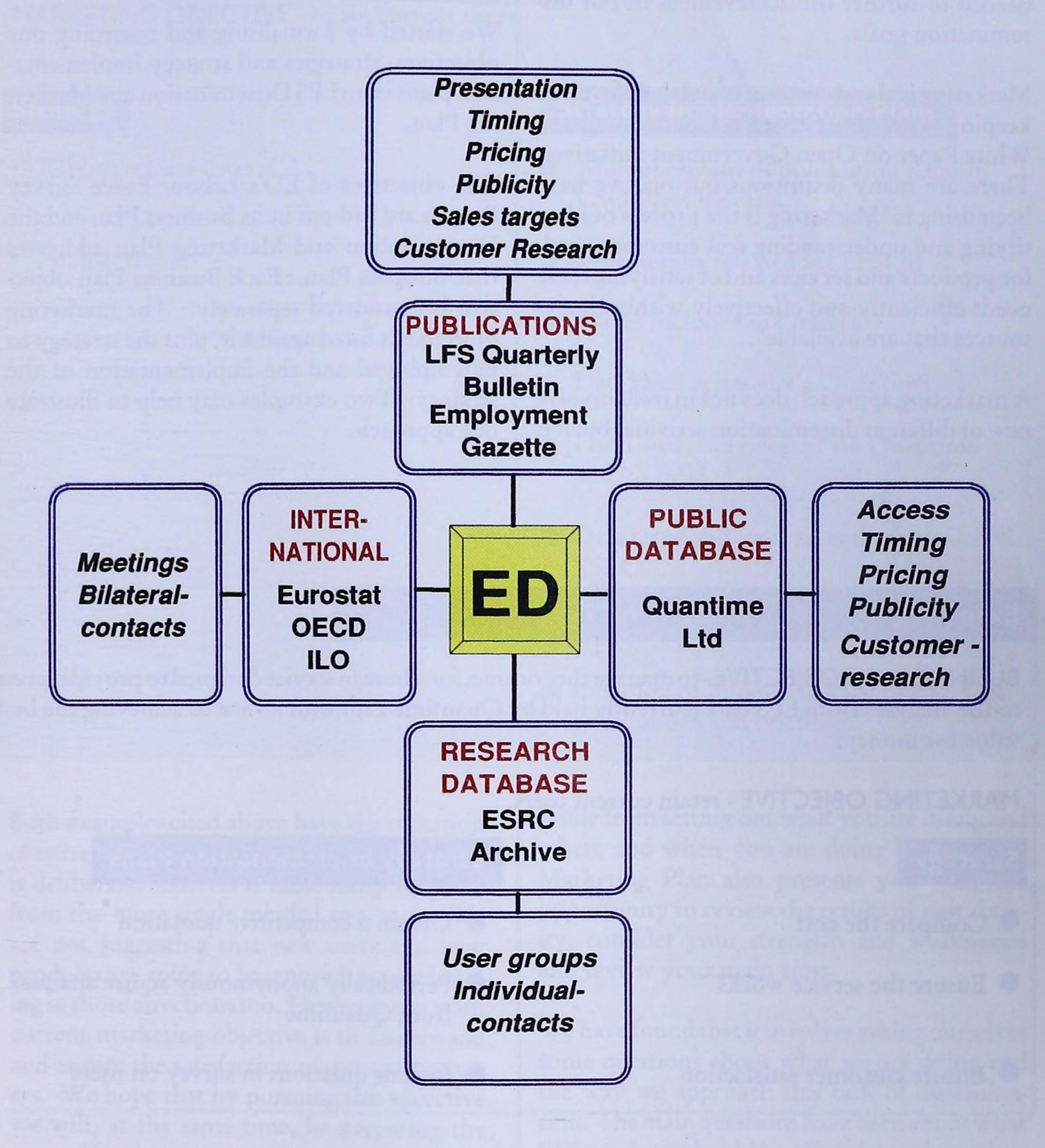
troduced to the Gazette to provide brief coverage of up to a dozen topics per issue.

Results are also available in the Labour Market Quarterly Report (LMQR) and many other ED publications, plus the CSO Social Trends and Regional Trends. Many LFS tables are also supplied for publication by Eurostat, the OECD and the International Labour Office.

Because the range of LFS data is so wide, it is most important for many users to have the opportunity to obtain ad hoc tables or to analyse the LFS database themselves. This need is provided for by making the anonymised microdata available via ESRC Data Archive, for use by academic researchers, and via Quantime Ltd for government and private sector users; both of these organisations operate an enquiry desk to assist data users.

A recent addition to the LFS product range is summary data, in tabular form, for local areas. Summaries are available via Quantime Ltd. and the National On-Line Manpower Information System (NOMIS) for Training and Enterprise Council (TEC) and Local Enterprise Company (LEC) areas and for Counties and local authority areas. A suitable level of suppression is applied where sample numbers are too small to provide reliable figures.

# LFS DISSEMINATION AND MARKETING STRATEGY



#### Marketing

In 1992, when the LFS was switched from annual to quarterly frequency, we felt that the application of a marketing type approach was needed to further the achievement of our dissemination goals.

Marketing is about customers and therefore is in keeping with the Citizen's Charter and the White Paper on Open Government initiatives. There are many definitions but one we have been using is "Marketing is the process of identifying and understanding real customer needs for products and services and of satisfying these needs efficiently and effectively within the resources that are available".

A marketing approach does not in itself involve new or different dissemination activities but it is likely that the application of the discipline will highlight certain areas of strength or weakness that will result in a search for new solutions. A marketing approach may lead to a change of strategy or a more focused strategy.

We started by formalising and recording our objectives, strategies and strategy implementation plans in an LFS Dissemination and Marketing Plan.

The objectives of ED's Labour Force Survey Branch are laid out in its Business Plan and the Dissemination and Marketing Plan addresses that Business Plan. Each Business Plan objective is considered separately. The marketing objective is listed against it, plus the strategy to be employed and the implementation of the strategy. Two examples may help to illustrate our approach.

# Example I

BUSINESS PLAN OBJECTIVE-to manage the contract for a bureau service designed to provide access to the analyses from LFS data (currently held by Quantime Ltd) with a view to achieving the best value for money.

MARKETING OBJECTIVE - retain current users.

# Strategy

- Ompare the cost
- Ensure the service works
- Ensure customer satisfaction

# Strategy Implementation Plans

- Obtain a competitive quotation
- Periodically anonymously aquire analyses from Quantime
- Include questions in survey on users

# Example 2

BUSINESS PLAN OBJECTIVE - to publish, on pre-announced dates, the main results of the quarterly LFS.

MARKETING OBJECTIVE - retain current users.

# Strategy

- · Publish release dates
- · Publish results

# Strategy Implementation Plans

- Announcement of publication dates in CSO Press Releases
- Main results released via LFSQB
- Tables included in Gazette
- Data tapes released via Quantime
- Local area data released via Quantime and NOMIS
- Data tapes and local areas data released via ESRC
- Press Release
- Inclusion of findings in various ED, GSS publications and briefings.

Both examples cited above have the retention of current users as a marketing objective. This is deliberate. Success is most likely to come from the more single-minded approach. We are not suggesting that new users and new products are going to be ignored; we are looking in those directions too. However our main current marketing objective is to understand and ensure the satisfaction of our current users. We hope that by pursuing this objective we will, at the same time, be preparing the ground for the retention of any new customers we acquire through our wider dissemination programme.

Aside from setting out what you are doing and where and when you are doing it, writing a Marketing Plan also presents you with the opportunity to review the results of past activity, consider your strengths and weaknesses and review your main aims.

We have found that it involves asking ourselves some questions about what we are doing and the way we approach this task of dissemination. The main questions have been about what LFS products should be offered, to whom they should be offered, how the products should be sold and at what price.

#### What should be offered?

Under this heading we have been thinking about issues such as which data sets, how things should look and which publication medium to use.

Some statisticians may not have much choice about which data sets to use, but with the LFS we do. The LFS is an enormously rich source of information about people's working patterns, their training and qualifications, plus demographic details about the respondents themselves. It is simply not possible to present all the findings within the pink pages of the Employment Gazette or in the various feature articles covering individual topics. We participate in the Labour Market Statistics User Group and communicate with local authorities and TECs/ lecs so we have some idea of what customers want, but in many ways our output has been based on the best guess of the statisticians concerned.

To coincide with the change from an annual to a quarterly LFS in Spring 1992, we took the opportunity to launch the LFS Quarterly Bulletin (LFSQB). This is a subscription-based report and is intended to be the first of a series of products produced from the quarterly LFS. It has been a great success; we met our break-even target of 1,000 subscriptions six months ahead of schedule.

The LFSQB is a full-colour glossy publication that includes charts, tables and commentary. It is produced in-house using desk-top publishing (DTP) techniques and is printed and distributed by private sector contractors. It is not intended that all our products should be in such a highly finished format but we do wish to continue to use DTP software to give a professional image to our output.

In disseminating LFS results, we have taken a positive decision to adopt the approach that good presentation leads to easier and faster

communication, creates an impression of competence and professionalism and engenders a pride in the job for the producer. We were happy to find that the customers to whom we have already talked agreed with us; they were most complimentary about the appearance of the LFSQB.

Although the results of the quarterly LFS were published to a much faster timetable than those from the previous annual survey (3½ months delay compared with 9½ months delay), a strong demand for even faster key results exists. To meet this need we are exploring, with OPCS, ways of producing an accurate sub-set of data to an accelerated timetable.

Essentially our dissemination strategy continues to lean towards paper, which many seem to like because information can be quickly absorbed and easily circulated to other people. However, we also cater for users of all types of electronic media. The anonymised tapes logged with ESRC and Quantime Ltd allow for bureau, on-line or down-loaded data access. NOMIS and Quantime Ltd also hold tabulations in a databank. Many of our ad hoc tabulations are available either on paper or on computer disc.

Interpreting the data, via the commentary in the LFSQB and LFS HelpLine and other features in the Employment Gazette, is something else in which we believe. Why waste all the money spent on data collection by having it misinterpreted? When LFS data is misinterpreted by the press or others it arguably gives a poor impression of the Government Statistical Service (GSS) because the reader associates the information (ie data plus interpretation) with the GSS. Again, our discussions with customers have confirmed our belief. Many of our users find a whole page of statistics rather daunting. Even quite sophisticated data users said that they need to talk to SSD about using the LFS data.

To assist us in this aim of aiding people to interpret the LFS data, we run an LFS Helpline telephone service that with the aid of an answerphone is available 24 hours a day, every day.

To complement this Helpline work, and for use as a marketing tool, we also developed, and had professionally designed and printed, an LFS Information leaflet which provides answers to a range of basic questions about the LFS such as "What is the LFS?" and "How is unemployment defined in the LFS?".

Within all these considerations, we are mindful that there is an important link to be maintained between marketing the LFS itself and marketing it as one of a range of labour market information services for current and potential users. So SSD is also developing a high level strategy for the dissemination and marketing of its labour market information.

## Who are the target?

Our first step is directed towards finding out who our current customers are. We tend to know about ED and other national government users; it is outside customers about whom we are not so sure. What do customers actually do, or try to do, with the data? What are they looking for and how close are we to meeting their needs? The answers will come from a postal survey we have commissioned among our 1,400 LFSQB subscribers and Quantime Ltd users. It will tell us about the companies and individuals within those companies, the sources they use, the use to which the data is put, their ratings of the services we provide whilst also informing us of some of their needs.

In preparation for that survey we talked to a few of our customers. It was fascinating and also a morale booster. It is very satisfying to talk to people who in their everyday jobs actually use the data you produce. They were so complimentary, particularly about the telephone help-line

service that was "efficient and helpful and never passed you on to someone else for an answer". Even among these few, the use made of the LFS data was broadly based. Uses included checking their company against the market for trends in working patterns, looking at potential staff resources either for recruitment reasons or for planning where to locate a new business, economic modelling and comprehension of the dynamics of the labour market, and in-depth analysis of a specific area or group of people.

In many cases we were meeting the needs of these people but not necessarily completely. It was also evident that many of them were not as well informed about the LFS as they thought they were - there were requests for analyses and types of information already available and published. So we know, even from this preliminary exercise, that we need to inform customers more effectively about our existing products, as well as to create new ones.

We have set up a customer database with as much information as we currently possess and will add additional information as it becomes available. We hope also to include the listings from other ED publications, one of which extends to 40,000 subscribers. Thus, at its simplest, our database will include current users plus labour-market-interested non-users.

#### How should we sell?

The database will provide us with a mailing list. It can be expanded to include current non-customers. In ED we have several publications, such as the Employment Gazette and the Labour Market Quarterly Review, in which we can place announcements or advertisements. There are also the various publications issued by other government departments. Our single experiment of using an outside, paid for, publication did not prove it to be superior to our internal ones.

The launch of the LFSQB was effected using a single page colour advertisement containing a response coupon. This was placed as an advertisement, in publications such as the Employment Gazette and the Labour Market Quarterly Review. It was also used for a direct mail-shot to organisations we thought might be interested and as a loose-leaf insert in publications.

Additionally, announcements of the latest results and data extracts appear in various ED and CSO publications.

It is a good idea to write down what you did and when you did it and plot that activity against the resulting sales. The lessons learnt for one launch can then be applied to future ones. Do this as you go along because people's memories fade very quickly and slips of paper go astray all too easily.

### At what price?

LFS data is available free of charge to:

- the media via the Press Office
- other parts of the ED Group
- other Government Departments for urgent work for Parliamentary Questions etc.
- o international and EC organisations.
- academic researchers via the ESRC data archive.

Results and features appear in the Employment Gazette which may be assessed in local libraries. Extracts also appear in various free ED publications and in press releases.

It is specific products such as the LFSQB that have a price attached, as do individual detailed inquiries. After all why should the tax-payer pay for the individual needs of a private sector industrialist or financial analyst? Our pricing

policy is still developing but currently aims to cover fully the external distribution and production costs. There is no intention to attempt to recover the expenditure incurred in collecting statistics.

An annual subscription to the LFSQB is currently priced at £20 for the four quarterly reports. The recent conversations with customers suggested some of them would have been prepared to pay considerably more and we are pursuing this subject in our Users Survey.

Quantime charges vary according to the data required. As an example, they will provide a wide range of standard unpublished tables for £65 plus VAT. They will also provide users with copies of the whole LFS database to run on their own microcomputer for £200 plus VAT per quarter.

#### The Future

Shortly we will have the results from our LFS Users Survey and, having learnt more about our current users from that study, we will then be able to decide what we need to do to ensure their satisfaction and which, if any, new products seem appropriate to research against them.

From the ED statistics users' database we can contact similar types of people to our current users to see if there is something we can offer them. So, in marketing jargon, we will be in a position to:

- maintain our market by retaining our current users through ensuring their satisfaction; and/or
- expand our existing market by developing new products for all or some of our current customers; and/or
- expand our market by acquiring new customers for our existing products.

Meanwhile, the development of a number of new LFS products goes on in response to user demand. Among these are: (a) speeding up the publication of key results; (b) the dissemination of income data collected in the LFS from 12,000 households each quarter; and (c) the development of "linked" LFS files which could use information from households interviewed in the LFS in successive quarters to shed light on gross flows in the labour market.

# EXCLUSIVE FROM QUANTIME... THE COMPLETE QUARTERLY LABOUR FORCE SURVEY DATABASE 'ON YOUR DESK'



National and regional labour market survey data are now available in a form which you can access directly. The Quanvert data analysis package makes it possible for you to create your own tabulations, to your own specification, using the data you require.

You can generate the results yourself using a standard desktop terminal or PC, or the Quantime LFS Bureau Service can do it for you.

Quanvert has been designed to be used by any researcher, after just a short period of practice. It is simple to use, but also powerful and very fast -capable of producing your table in less than two minutes. You can export the results directly to other applications you use.



For more information please contact Lisa McCormack at Quantime on 071 625 7222.

# Survey of Public Attitudes to the Environment 1993

John Custance and Tom Marlow, Environmental Protection Statistics Division, Department of the Environment

#### Introduction

In 1993 the Department of the Environment commissioned a national survey of England and Wales to investigate people's environmental concerns, awareness, and behaviour. This was the third such survey, the previous two having been carried out in 1986 and 1989.

The main results of the survey showed that people are concerned about a wide range of environmental problems and issues. They are also relatively optimistic that a lot could be done about most of them. However, it is clear that, despite various Government educational campaigns and media coverage, there is still a considerable amount of confusion and lack of understanding about causes of environmental problems, and a high proportion of respondents said they wanted more information from both Government and manufacturers.

Despite this confusion many people report that they are taking environmentally friendly actions on a regular basis. One exception to this is in cutting down the use of their cars and using public transport as an alternative. In all the areas covered by the survey there appears to be plenty of scope for more action.

In this article we shall not dwell on the survey results, which are covered in other publications, but will instead concentrate on the work that went into developing and carrying out the survey. The article covers consultation with users, some methodological aspects of sampling and questionnaire design, errors and biases, and analytical considerations. In addition it includes a few selected results for illustration. Many of the aspects described will no doubt have been experienced at first hand by many readers in the GSS in their own survey work. A fuller description of the survey results can be found in the Digest of environmental Protection and Water Statistics No. 16.

#### Consultation with users

Even though similar surveys had been conducted twice before, almost every aspect of the survey required re-evaluation. This was first tackled by two extensive rounds of consultation with the users of the 1993 survey - our policy colleagues across the Department. Shifts in environmental issues over time meant that emphasis needed changing. In some areas new



Oiled birds Shetlands January 1993

issues had also emerged since the last survey. All new or revised questions had to be considered within the constraints of avoiding making the interview too long.

Following the consultation a draft questionnaire was developed. This included a core of about half the questions asked in the earlier surveys which enabled comparisons with the 1986 and 1989 surveys to be made. The remaining new questions reflected the needs raised by



The Braer oil disaster - Shetlands 1993

individual policy divisions. Earlier surveys had tended to concentrate mainly on people's attitudes; the latest survey took the opportunity to ask more about what people actually have done to help the environment and to test their knowledge about environmental issues.

The length of questionnaire directly affects the time needed to complete an interview and this, in turn, directly affects the cost of the survey and also possibly the response rate. There were many competing demands which had to be balanced against the potential length of the interview. On average, the interviews in 1993 took approximately 40-45 minutes which was longer that previous surveys. Feedback from interviewers, however, suggested that most re-

spondents were interested in participating in this environmental survey and generally the length of the questionnaire was not a critical factor in people's agreement to participate.

## Questionnaire design

The survey included a substantial section covering attitudes to 27 given environmental issues. These issues were illustrated by a pack of 27 picture cards some of which were the same as

those used in the two previous surveys. Seven issues were added to those used in 1989 and one was omitted. In addition some of the pictures used in previous surveys had to be changed. For instance, most aerosol cans are no longer damaging to the ozone layer and so they were not shown on the 1993 picture card illustrating ozone depletion.

Respondents used the pack of cards to answer a series of questions by dealing them into piles according to their responses. So, for example, the cards were sorted into piles according to 'respondent's level of concern for each of the issues, eg

Very worried, Quite worried, Not very worried, and Not at all worried. The top five issues of most concern were:-

- Ohemicals put into rivers and the sea
- Disposal and import of toxic waste
- Radioactive waste
- Contamination of beaches and bathing water by sewage
- Oil spills at sea and oil on beaches

Over 50 per cent of respondents said they were very worried about each of these issues.

For each issue about which a respondent had claimed they were very worried, the respondent was then asked to indicate how much they felt could be done about the issue and who should do something about it. To help respondents sort the cards for these exercises, basecards were used with options marked on them.

For most questions, respondents were prompted with a given list of possible answers or options. These were given on showcards, or respondents used the 27 picture cards mentioned above. The advantages of closed-ended questions are that they are easy to ask, quick to answer, and the coding and analysis of the replies is generally straightforward. The disadvantage of this type of question is that it forces respondents to select from the given options and these may not fully reflect their views or the responses they would have given to an open-ended question.

Three questions in the survey were unprompted. For these, respondents were asked to answer in their own words rather than select from a choice of answers or options. This tended to result in a wide range of answers which then had to be categorised to fit within a coding frame. Openended questions are useful for determining respondents' level of awareness.

One such unprompted question asked respondents where would they find information on air pollution in their area. The results revealed the lack of awareness amongst many respondents about available sources of this information. Two out of five of all respondents said that they did not know where they could get information and a similar proportion mentioned Local Authorities or Environmental Health Officers. Each of the other sources were mentioned by five per cent or fewer respondents with only two per cent mentioning the Department of the Environment's telephone information line.

# Sampling and fieldwork

The 1993 survey was carried out by NOP Market Research Limited. A pilot survey was first conducted in June 1993 to test the draft ques-

tionnaire and a number of amendments were made as a result.

The final survey was based on a random sample of 3,200 adult (aged 18 and over) drawn from the electoral register in England and Wales. All constituencies were stratified by region, urban/rural mix, and social class. 160 constituencies were selected (previous surveys sampled from about 80 constituencies) with the probability of being selected proportionate to the population size, and a sample of 20 electors drawn from each of these constituencies. The number of constituencies sampled was increased for the 1993 survey in order to improve the coverage of the sample.

The main fieldwork was conducted in July and August 1993. This timing was not ideal because of summer holidays of potential respondents, etc, but it was necessary to enable some early results to be included in the Uk Strategy for Sustainable Development<sup>1</sup>. We provided interviewers with an official signed letter explaining the reasons for the survey, which could be given to potential respondents to authenticate the interviewer and encourage participation. Considerable efforts were made by the contractors to maximise the response rate, for example, a minimum of five call backs were made to each address to try to establish contact and to arrange an interview. (In some cases these efforts may have been a bit overzealous for one sampled individual claimed the interviewer was "plaguing" him and wrote asking us to "call him off".)

A total of 2,038 people were interviewed face-to-face in their homes giving an effective response rate of 64 per cent, which was slightly higher than for the previous two surveys. The fieldwork included 248 interviews with non-electors (aged 18 and over) who were chosen by an additional sampling procedure using the Kish grid method. The combined sample of electors and non-electors was then weighted to take account of the elector/non-elector split in the

population as a whole. About 500 more interviews were conducted in 1993 than in the previous two surveys. Table 1 shows the main sampling features and differences between the three surveys.

# Sampling errors

Table 2 gives some illustrative examples of 95 per cent confidence intervals for proportions relating to all respondents, and males and females separately. The errors given correspond to a simple random sample. However, the 1993 survey sample was clustered into 160 sampling points. The clustering increases errors by a factor knows as the design effect. This effect

varies for each variable and cannot easily be built into each error calculation. In the absence of this calculation, and given the nature of the sample, we are advised that a reasonable estimate of an average sample design effect for most variables would be about 1.3. Thus, more realistic estimates of errors may be calculated by multiplying the errors in the table by 1.3. On this assumption it can be seen that estimated proportions based on all respondents are likely to be within 3 percentage points of the proportion for the population in England and Wales as a whole, eg the 95 per cent confidence limit for an estimated proportion of 50 per cent is +3 percentage points.

Table I Public attitudes to the environment survey sampling				
England and Wales Numbers	and percent	ages		
	1986	1989	1993	
Dates of fieldwork	Sept	May-June	July-Aug	
Sample size	2,610	2,096	July-Aug 3,206	
Number of constituencies	81	81	160	
Sample within constituencies	32	32	20	
Number interviewed	1,575	1,567	2,038	
Response rate	62	60	64	
Source: Department of the Environme	nt			

Table 2 Confidence intervals for proportions			
Sample	Sample	Estimated proportion	95% Confidence interval (+/-)
All	2002	50%	2.2
Females	1058	20 or 80% 50%	1.8 3.0
Males	944	20 or 80% 50%	2.4 3.2
Source: Department of the Environmen	t	20 or 80%	2.6

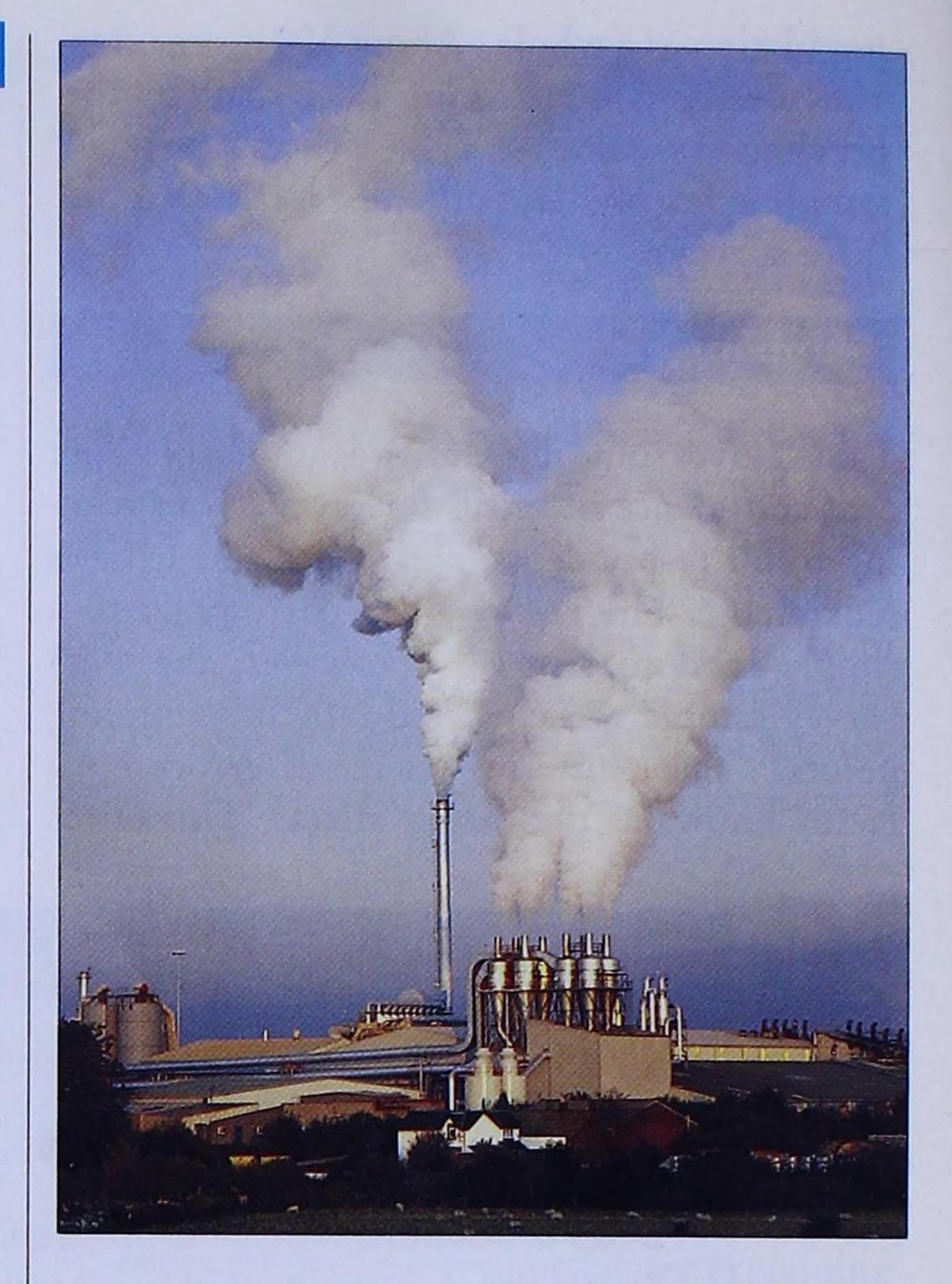
#### Other errors and biases

The survey estimates may be subject to other systematic errors and biases. For example, non-respondents may have been generally less concerned about the environment and this may have introduced a bias into the results. The efforts in 1993 to improve the response rate may have helped to reduce such biases.

Poor questionnaire design (eg leading question) can also influence the results and efforts were made to limit such problems. For example, the core of the 1993 questionnaire was based on the previous tried and tested surveys of 1986 and 1989 and most of the new questions were based on questions included in other successful surveys. The questionnaire was also piloted before the main fieldwork. Past experience had shown that what people do and what they say may be different, so for a "green actions" section, respondents were asked what they had done in the last 12 months rather than what they would be prepared to do in the future. In a few cases there still appeared to be some over-claiming, eg 46 per cent of dog owners claimed they regularly used a poop scoop. However, in other cases responses were consistent with other independent sources of environmental information. For example the proportion of respondents who claimed they used unleaded petrol regularly (53 per cent) was very close to the proportion of petrol sold in July and August 1993 which was unleaded.

Responses can also be biased by media coverage of events around the time of a survey (eg the sinking of the Braer oil tanker off the Shetland Isles). The 1993 survey was carried out a year later than originally planned, in part to avoid any possible short term effects of the 1992 General Election campaign and of coverage of the United Nation's Earth Summit in Rio in June.

Answers to attitudinal surveys may be influenced by the context in which the survey is



Cement factory - Central Scotland

carried out. For the 1993 survey most respondents were aware from the beginning that the survey was commissioned by the Department of the Environment and this may have influenced some respondents' replies. For example, more respondents may have mentioned the environment when asked to name the most important issues the Government should be dealing with.

A further illustration of a 'context' effect is probably given by the results of one 1993 question which asked whether UK environmental policy should be decided by the UK Government alone or jointly within the EC. This was based on an almost identical question asked in the 1992 Eurobarometer survey<sup>2</sup>, which covered all EC countries. The results from the 1993 UK survey showed 43 per cent favouring decision by the UK Government and 52 per cent favouring joint decision within the EC. This

compares with 28 per cent and 71 per cent respectively from the Eurobarometer survey. The differences between the findings of the two surveys may partly reflect a genuine change in attitudes between 1992 and 1993, but probably also shows that an EC survey may encourage different responses to questions involving the EC, or that respondents to an EC survey are more likely to be pro EC action.

## Analyses and publication

A substantial part of the preparatory work was the development and design of an extensive set of tables for the contractors to produce once the field work and data processing had been completed. Our aim was to cover as many uses of the results as was practical in order to avoid the need for ad hoc analyses at a later date. There was also the need for considerable checking of the provisional tables. The final suite of tables were completed in early 1994 and consisted of 475 pages of tabulations.

In addition to hard copies of these tables the Department was also supplied with these tables in LOTUS-123 format and an SPSS compatible database of the results which could be used for further analyses.

Most of the tabulated analyses were based on straight counts or percentages of the weighted results. However, a number of useful derived variables were developed to assist interpretation of the results. These were based on combinations of replies by each respondent. For example respondents were grouped according to those generally the most concerned over the whole range of 27 environmental issues, those who were the greenest consumers, the greenest activists, the most knowledgable about contributors to global warming, etc.

The analysis for some questions were restricted to only those for which the question was applicable. So for example, people without access to a car were excluded from the calculation of the

percentage of people who claimed to use unleaded petrol regularly.

As mentioned earlier, the results of the 1993 survey are published in the DoE's Digest of Environmental Protection and Water Statistics No. 16. More detailed results, including comparisons with the 1986 and 1989 surveys, are published in the Department's Statistical Bulletin (1994). In order to further increase awareness of the survey within the Department two presentations of the key results were also given to senior colleagues and to Ministers.

#### A final comment

Attitudinal surveys, of course, have their limitations. We have discussed some of the biases which influence the results and doubts about the credibility of some responses. Nevertheless, the exercise has proved very worthwhile. Despite concerns over the accuracy of some of the results, such information is important for policy purposes and must be more reliable than much of the anecdotal evidence that might be used in its absence. The 1993 results will, for example, help in targeting future publicity campaigns and in building on people's willingness to take greener actions.

The authors would be happy to answer any questions and would be interested to hear of any experiences readers may have had with similar surveys. Their telephone number is 071 276 8874.

#### References

The Department of the Environment, (1994). Sustainable Development: The UK Strategy, HMSO.

Commission of the European Communities, (1993). Europeans and the Environment in 1992.

# ESSEX SUMMER SCHOOL IN SOCIAL SCIENCE DATA ANALYSIS & COLLECTION

now in its 27th Year

The Essex Summer School offers a series of self-contained two-week courses (from 9 July to 20 August 1994) in social science data collection and analysis at both introductory and advanced levels. Full computing facilities are provided.

#### Faculty include ...

James Davis
Harvard University

Tony Coxon

University of Essex

Allan McCutcheon

University of Delaware

Peter Schmid

University of Giessen

Harold Clarke

University of North Texas

Eugene Horber

University of Geneva

Mike Procter

University of Surrey

Ekkehard Mochmann

University of Cologne

David Bedford

Keele University

Nathaniel Beck

University of California

Colin Mills

London School of Economics

Simon Price

University of Essex

Anne-Marie Aish

University of Brussels

Paul Scott

University of Essex

Oriel Sullivan

University of Essex

Stanley Feldman

State University of New York

Klaas Sijtsma

Utrecht University

Jacques Tacq

Erasmus University

Jacqueline Scott

University of Essex

Pam Campanelli

Survey Methods Centre

Chris Mooney

West Virginia University

Among the topics offered are ...

Introductory Data Analysis

**Analysis of Textual Data** 

Causal Modelling

**Dimensional Analysis** 

Log Linear Analysis

Data Analysis with SPSS-PC

Survey Sampling & Analysis

Latent Class Analysis

Multi-Level Analysis

Regression Analysis

Time Series Analysis

Dynamic Modelling

**Exploratory Data Analysis** 

**Artificial Intelligence** 

**Rational Choice Models** 

Further details from:
The Organising Secretary, 27th Essex Summer School
University of Essex, Colchester, Essex CO4 3SQ, UK
Tel: 0206 872502 Fax: 0206 873598

# The Gambia Hepatitis Intervention Study (GHIS).

## by Nick Maine

(Nick is a statistician working for the World Health Organisation on secondment from the Central Statistical Office)

Hepatitis B is a blood-borne virus, and in the UK, its mode of transmission is well understood. It is spread through the exchange of blood, which may happen from sexual contact, sharing needles, or from receiving a transfusion of infected blood. In West Africa, and other parts of the developing world however, the virus is usually spread at a very early age, but the way it is transmitted is not understood. Perinatal transmission, where an infected mother passes on the virus to her child during or shortly after birth, is known to occur in Asia, but it is thought to be rare in West Africa. Theories about the transmission of the virus here, include being carried by mosquitoes or bedbugs, and studies have been carried out to test them. No study has

yet produced any evidence to support these theories, however.

When young children are infected with the Hepatitis B virus they do not usually become ill with the disease, and the infection can be detected only by carrying out blood tests. Most people who are infected clear the virus after a short time, but some do not and

remain carriers of the virus. These carriers are at high risk of getting liver cancer later in life - and as they are usually infected as young children, later in life often means as young adults; most liver cancer cases in The Gambia occur in males between the ages of 25 and 40.

Hepatitis B infection rates are very high in The Gambia. It has been estimated that 90 per cent of Gambians have been infected by the time they are 15, and that 20 per cent of those infected will be carriers. The likelihood of an infected person becoming a carrier is not constant for all ages, however. The younger the age at infection, the less likely the infection will be cleared. Ninety-five per cent of children infected in their first year will become carriers of the virus.

In the mid 1980s a group of doctors and scientists came up with the idea of trying to reduce the incidence of liver cancer by vaccinating new born children against hepatitis B, in endemic



The Office

areas. It was hoped that giving the vaccine to young children would reduce the spread of infection, so reducing the incidence of carriage, and therefore, in the long term, reduce the incidence of liver cancer. The International Agency for Research on Cancer (IARC), which is a branch of the World Health Organisation, was approached and was persuaded to organise and finance a long term study to evaluate the effectiveness of hepatitis B vaccination in reducing liver cancer. Because of its size and infrastructure, and also because it already had a very successful childhood vaccination programme into which hepatitis B vaccination could be incorporated, The Gambia was chosen as the country where the study should be carried out.

The original plan was to carry out a randomised controlled trial, but a number of people considered it unethical to select a group of children and withhold the vaccine from them (even though the vaccine had been tested for safety and efficacy only on adults in developed countries). However, for logistical reasons it was not possible to introduce the vaccine into the whole country at the same time. Instead, it was introduced progressively, health centre by health centre. The first centre to give the vaccine started in August 1986 and the last in February 1990. Data were collected on all children registered at all health centres between these dates, and we now hold data on some 125,000 children, approximately half of whom have received hepa-

titis B vaccine, and half who have not. This study design has yielded therefore, much the same data as if a randomised trial had been carried out. As always there are advantages and disadvantages with different designs. Although the present trial design has only 70 per cent of the power of a randomised trial, it does have the approval of the WHO ethical committees.

The data will be used to compare the incidence of liver cancer in those vaccinated against hepatitis B with the incidence in those not vaccinated. The project is, therefore, a long term study, and the final analyses will not be carried out for about another 30 years. As well as carrying out statistical analyses I am also responsible for maintaining the data base, which is not yet complete. When complete it will contain, for all 125,000 children, personal histories, records of all vaccinations received and identifiers so that in 30 years time liver cancer cases can be matched to the right record in the data base

Path leading to the beach

There are also a number of ancillary projects. Data collection for the ancillary studies usually means going out and taking blood samples which are then examined for evidence of hepatitis B infection. I firmly believe that a statistician must have as complete an understanding of the data as possible, to be able to analyse them properly (and I like getting out of the office and going for rides in a Landrover), so I sometimes go out in the field with the field teams, to see the samples being taken. A few people are suspicious of western medicine and some even believe that any blood taken will be sold. Most however, understand what we are trying to do and are happy to allow us to take blood samples from their children. It is very interesting indeed to get to the villages and to meet people in their

homes. It certainly provides an insight into the origin of what would otherwise be, to me at least, simply a number in a computer. Not only that but sometimes, if I am lucky, I get to drive the Landrover!

Although it is too early to assess the effect of hepatitis B vaccination on the incidence of liver cancer, we have looked at the effect of vaccination on hepatitis B infection and carriage. A paper describing our results was published in the 1st of May 1993 edition of the Lancet.

Nick Maine can be contacted via the Statistician Group Management Unit, PO Box 1333, Millbank Tower, Millbank, London SW1P 4QQ.



Night heron in Abuko nature reserve

# Census Validation Surveys - Design Issues raised by International Comparisons

### Patrick Heady, OPCS

British interest in validation survey methods has recently been heightened by two facts: the shortfall of the 1991 Census totals compared to the rolled-forward population estimates, and the fact that the Census Validation Survey which had been designed to estimate the Census undercount - only picked up part of this short-

fall (1). In this article I will attempt to highlight some of the methodological issues raised by a comparison of our methods with those used in other countries.

In a recent article in Population Trends, Begeot et al (2) listed the different ways in which European countries set about validating the data they collect in their censuses. The authors found an astonishing variety of methods, including checks against demographic estimates, checks against different kinds of administrative sources and, very commonly, census validation surveys designed to check whether a sample of people and addresses had or had not been correctly enumerated. The variety would have been even greater if they had looked at the situation on the other side of the Atlantic - particularly at the Canadian 'Reverse Record

Check' against a sample of records from the previous census (3), and at the range of validation methods that the U.S. Bureau of the Census are considering for possible use with their next census (4).

In this article I will restrict my attention to checks carried out by means of surveys. Census validation surveys are carried out in several



different ways. Unfortunately there is no room here to list the details of the different methods; but interested readers can learn more about them from the references given at the foot of this article. (5,6)

The aim of this article is, instead, to try and understand some of the reasons why the methods are so varied. What is it about the apparently simple task of calling back to check whether census forms have been correctly completed for all addresses, that gives rise to so many different methodological choices? Some of the different choices are explained by specific features of the census in question, such as whether the objective is to measure the population on census night or the usual population, and whether the Census was carried out by interview, by hand delivery of census forms, or by post. Another factor is whether the validation survey aims to check only on coverage, or whether it also aims to measure the accuracy of the information provided about particular topics - for instance occupation, accommodation, and so on. But even if we set aside these complications, there are some fundamental methodological issues which mean that the basic task of checking up on census coverage is less straightforward than it might appear at first sight. These issues concern the answers to two basic questions: "What counts as being missed or wrongly included in the census?" and "What counts as true?".

# 1 What counts as being missed or wrongly included in the Census?

If we forget about sampling, the answer to this question is comparatively simple. People could have been missed, they could have been enumerated once - as they should have been, or they could have been double-counted. (For the sake of simplicity the following discussion will be phrased in terms of census coverage of the present population. Analogous points apply to coverage of the usual population. I will also ignore the possibilities that people were triple-

counted or simply invented). However, the situation becomes more complex when we look at the practicalities of designing and carrying out a validation survey. This must be based in some way or another on a sample of addresses - so that the question of **whether** or not the person was enumerated inevitably becomes entangled with the question of **where** that person might have been enumerated. When this is taken into account, there are six different possible situations which we can label  $x_1$  to  $x_6$ .

x<sub>1</sub>The person really was at the sampled address and was enumerated there and nowhere else.

x. The person really was at the sampled address but was not enumerated there or anywhere else either.

x, The person really was at the sampled address, was missed there, but was enumerated at another address.

x<sub>4</sub>The person was not at the sampled address, but was enumerated there and nowhere else.

x<sub>5</sub>The person was at the sampled address, was enumerated there, but was also enumerated somewhere else.

x<sub>6</sub>The person was not at the sampled address, but was enumerated there as well as being enumerated somewhere else.

It is important to note that these six categories cannot be distinguished from each other simply on the basis of validation interviews carried out at the sampled addresses. On the basis of these interviews we can identify three broad categories:

 $(x_1 + x_5)$  the people who were enumerated at the address and should have been;

 $(x_2+x_3)$  the people who should have been enumerated at the address but were not;

 $(x_4+x_6)$  the people who should not have been enumerated at the address but were.

In order to break these pairs down into their component parts it is necessary to identify all the other addresses at which the individual might have been enumerated, and check the relevant census schedules to see whether they were.

If you were able to sum the results for every address in the country, the total number of people enumerated in the Census would be given by:

$$(x_1 + x_4 + x_5 + x_6)$$
 (1).

The total who should have been enumerated is given by:

$$(x_1 + x_2 + x_3 + x_5)$$
 (2)

These formulae can be used to derive three different estimators of net under-enumeration. (Since the estimators are sample-based, they will of course need to be weighted so as to gross to national totals.)

The first of these estimators is derived by subtracting formula 1 from formula 2, which gives:

$$(x_2+x_3) - (x_4+x_6)$$

This can be thought of as a place-based estimator, since it takes those who should have been enumerated at the sampled addresses but were not - regardless of how they were treated elsewhere - and subtracts from them those that were enumerated at the sampled addresses but should not have been, again regardless of what happened to them elsewhere. This place-based estimation strategy was used by our own Census Validation Survey (CVS) and also, in a modified form, by the American Post-Enumeration Survey. It has the great advantage that there is no need to trace people to other addresses apart from those selected for the sample.

The other two estimators can be thought of as person-based, because they involve taking the

individuals identified at the sampled addresses and identifying all the places at which those **individuals** might, rightly or wrongly, have been enumerated. In order to derive these estimators, one needs to note that - taking the country as a whole -  $\mathbf{x}_3$  will be very similar to  $\mathbf{x}_4$ , and  $\mathbf{x}_5$  must equal  $\mathbf{x}_6$ . (If there were no foreign visitors, and no one went abroad,  $\mathbf{x}_3$  would equal  $\mathbf{x}_4$  exactly.) If we substitute these values before subtracting formula 1 from formula 2, we obtain the second estimator of net under-enumeration, namely:

This is the estimator used by the French in their validation survey. Its advantage is its intuitive interpretability, which derives from the fact that  $\mathbf{x}_2$  is gross omission and  $\mathbf{x}_5$  is gross double-counting. Its disadvantage is the amount of work and the risk of error involved in trying to trace people to alternative addresses where they might also have been enumerated.

The third estimator is:

which can be interpreted in exactly the same way as the second estimator. The difference simply reflects different strategies for sampling double-counted individuals: in estimator 2, double-counted people are included if they are picked up at the address where they should have been enumerated; in estimator 3 they are included if they are picked up at an address where they should not have been enumerated. Although our own CVS used place-based estimates as its main strategy, we also collected the data necessary to calculate estimators 2 and 3, which provided a useful check on the reliability of the main method.

# 2 What counts as true?

A potential objection to any census validation survey is that if census enumerators can make

mistakes, so can validation survey interviewers. This raises the question of why we should believe validation survey interviewers rather than enumerators and census form-fillers, particularly as the validation survey usually takes place some time after the census itself and informants may therefore have forgotten the true situation at that time.

The first answer to this question might perhaps be described as justification by faith. It was most succinctly expressed to me by a foreign visitor who said that the data obtained by his country's validation survey must be treated as valid because it was collected by trained statisticians! But, though some may find this argument convincing, others do not - and so prefer to build safeguards into the survey design. One way of doing this - used in our own CVS - is to ask a fuller and more probing set of questions than those used in the census itself, in order to reduce the possibility of misunderstandings.

A further way of quality assuring the validation survey data is to investigate discrepancies between census and validation survey information before deciding which is correct. In our own CVS we did this by asking interviewers, before they carried out the validation survey interviews, to transcribe census data for the household in question onto their questionnaires. This enabled them to check discrepancies on the spot during the CVS interview. Some countries feel that this procedure may influence the validation survey interviewers - making them less likely to pick up census-errors than they would be if the validation survey procedures were entirely independent of the census itself. This view is taken by the French and by the Americans, which means that their surveys involve two waves of interviewing: the first independent interview whose results are then checked in the office against Census data, and the second interview which is carried out when it is necessary to resolve any discrepancies. With some exceptions, the census is only considered to be incorrect if apparent errors identified in the first interview are confirmed in the second interview.

Even this does not satisfy the Americans, who argue that, if the original census missed some people who were correctly picked up by the validation survey, and the first wave of the validation survey missed some people who were correctly picked up by the census, then there must have been some people who were missed by both the census and the validation survey. In order to estimate this number they use a procedure known as dual system (or capture-recapture) estimation, which calculates the number of people missed by both sources on the assumption that they represent two independent attempts to capture the relevant population. Although the estimates of the number of people missed by both census and survey are typically very small, they can make a noticeable difference for some groups - such as young men - with particularly high levels of under-enumeration.

#### Conclusion

These themes are developed further in the forthcoming coverage report of the CVS. As has already been said, the 1991 CVS produced very different estimates of under-enumeration from those derived from demographic checks. The differences were set out in a recent article in Population Trends (1) which also explained why OPCS has concluded that the demographic estimates are more likely to be true than those produced by the CVS. This has led us to look again at the methods used by the CVS. We are not in fact sure that the survey's failure to identify a large section of under-enumeration was entirely due to problems with the survey design. There is some anecdotal evidence of public suspicion of the 1991 Census - linked to fears that it might be used in the compilation of community charge registers - and any such suspicion might have well rubbed off onto the CVS, leading census-avoiders to avoid the CVS as well. On the other hand, subsequent investigations by OPCS

and GRO(S) failed to produce convincing evidence of a 'community charge effect' and suggested that other important factors might have been people who were only at home infrequently, and an unwillingness by some people to open their doors to strangers.

As we cannot be sure how far the shortfall in the CVS estimates was related to the survey's methodology and how far it was due to factors outside our control, the forthcoming coverage report includes a full discussion of both aspects. This article is a condensed version of some of that discussion.

#### References

1. OPCS 1993 How complete was the 1991 Census?

Population Trends 71:22-25

- 2. Begeot F, Smith L, Pearce D 1993 First results from Western European censuses. Population Trends 74:18-23
- 3. Burgess R 1988 Evaluation of reverse record check estimates of undercoverage in the Canadian census of population.

  Survey Methodology 14:137-156
- 4. Mulry M. 1993 Census coverage measure ment methodology research: past and present. Proceedings of 1993 conference of the International Statistical Institute
- 5. Coëffic N 1993 En France, une enquête originale de mesure du degré d'exhausivité du ecensement de 1990. Proceedings of 1993 conference of the International Statistical Institute
- 6. Wiggins R D 1993 The validation of census data: post-enumeration survey approaches.

  In Dale A, Marsh C (Eds) The 1991 Census User's Guide. HMSO

# Weekend Courses

# BOOTSTRAPTECHNIQUES

Saturday 30th & Sunday 31st July, 1994

# CORRESPONDENCE ANALYSIS

Saturday 13th & Sunday 14th August, 1994

The Essex Summer School in Social Research Methods and Data Analysis is running separate intensive residential weekend courses on Bootstrap Techniques and Correspondence Analysis. Each course costs £150.00 exclusive of accommodation.

# For further details contact:

The Organisation Secretary
Essex Summer School in Social Research Methods
University of Essex
Colchester Essex C04 3SQ
Tel: 0206 872502

Fax: 0206 873598

# Government Publications

The following section provides detailed information on individual publications. Where no reference or price is shown please refer to the supplement covering Departmental listings for purchase details.

#### Central Statistical Office

# Annual Census of Production -Summary Volume (PA 1002)

PA1002, the Summary Volume of the Annual Census of Production, for 1991 was published on 17 January 1994.

The Summary Volume includes both Business level tables, which summarise results previously published in the separate industry monitors (PA 111-500), and Enterprise analyses.

The Business level tables show information for a five year span on total sales and work done, cost of purchases, net output, gross value added, employment, wages and salaries, capital expenditure, stocks and work in progress and operating ratios. This information is shown at the three digit level of the standard industrial classification revised 1980, a separate table shows a limited range of data at the four digit level of the classification. Additionally, for the current year only, tables showing regional and sizebanded information at the two digit level of the classification are also included.

The Enterprise tables include an analysis of public and private enterprises, concentration ratios for the five largest enterprises by employment size at three digit group level, analyses of the private sectors' 100 largest manufacturing enterprises defined by size of employment, net output and turnover and information about foreign owned enterprises.

The Summary volume is published by HMSO price £33 net.

Enquiries about the Summary Volume or its contents should be addressed to

Mr J Dowsell Tel 0633 812455.

## Standard Industrial Classification 1992

A companion indexes volume to the new United Kingdom Standard Industrial Classification of Economic Activities, SIC(92) was published in July 1993, the main SIC(92) was issued in November 1992, SIC(92) replaces the SIC that was last revised and issued in 1980, SIC(80).

In the indexes volume a numerical index lists each heading of the SIC followed by a list of characteristic activities included within each heading, while a second index shows these activities listed alphabetically. The indexes attempt to cover all activities referred to in previous indexes as well as new ones from SIC(92). Wherever possible, therefore, both the SIC(92) and SIC(80) codes are shown.

From the indexes it can be seen that some codes are directly comparable between SIC(80) and SIC(92) and can be shown as a one to one match. In other cases codes have been split or amalgamated so that the links can only be shown as a number of partial correlations. This information has been summarised and published as Business Monitor PO 1009.

However, what needs to be stressed is that it is not possible to automatically re-code from one classification to the other where activities previously covered by one code are now covered by more than one new code. The Business Monitor also shows the links of SIC(92) to the United Nations International Standard Industrial Classification of Economic Activities

UK Standard Industrial Classification of Economic Activities 1992 HMSO, November 1992, price £18 net

Indexes volume to UK SIC 1992 HMSO, July 1993, price £17.50 net

The combined publications can also be purchased on floppy disk, price £95 net. Enquiries should be directed to David Small, telephone 0633 812991

Business Monitor PO 1009 HMSO, price £26.50 net ISBN 0 11 536311 4

# The CSO Survey of Charities 1990 - 1991

Aston University (Aston Business School) has completed for the CSO a special survey of the income and expenditure of general charities. The term general charities is intended to be close to the popular meaning of charities and charitable grant making bodies. In particular, the survey did not cover schools, colleges, universities, clubs and societies mainly depending upon subscription income, professional bodies, trades unions and places of worship.

The results of the survey are presented in an article published in the December 1993 issue of Economic Trends. The article gives further information on the coverage of the survey and the sampling frames used. It explains how the survey returns were used as an aid to establishing the size of the sector covered. The survey was intended primarily to establish a new 1990 and 1991 benchmark for charities' final current expenditure, which represents their contribution to GDP. The concept of final current expenditure is discussed in the article.

A full breakdown of current income and expenditure was collected and summary results are shown. The survey also collected an analysis of charities' expenditure on goods and services with the intention of establishing weights for a price index to deflate charities' expenditure.

For further information about the survey and its results, please contact

Mike Scott Central Statistical Office 071-270 5994

or

Les Hems Aston Business School 021-359 3011.

#### Education

# Teachers' Qualifications and Development in Maintained Secondary Schools in England 1992

This bulletin reports on a survey of 20,000 teachers in 500 maintained secondary schools in England at January 1992. It provides in-depth information on the secondary teaching force not available from other sources, updating the results of the 1988 secondary school staffing survey.

The bulletin describes the basic characteristics of the teaching population, together with information on teachers' responsibilities, pay scales, subject qualifications and deployment.

# Participation in Independent Sector of Further and Higher Education

This bulletin provides a snapshot of participation in the independent sector of further and higher education in Great Britain. The findings are based on research carried out for the Department for Education, the Scottish Office Education Department and the Welsh Education Department by the Centre for Higher Education Studies (CHES) at the University of London Institute of Education (ULIE) and updates previous research carried out in this area in 1979.

# Statistics of Education Student Awards in England and Wales 1991/92

This volume provides information on awards made by LEAs to students domiciled in England and Wales. Information is provided on both mandatory and discretionary awards to students in higher and further education. Details are also given about awards for postgraduate students. Tables give data for the academic years 1975/76, 1980/81, 1985/86 and 1988/89 through to 1991/92. Data by LEA are provided for 1991/92.

## Women in Post-Compulsory Education

This bulletin provides a summary of the differences between the participation and performance of women and men in post-compulsory education. It contains information on a wide variety of areas including: GCSE and A-level results, participation in education post-16, subject choices, teachers and destinations of graduates. Most of the information has been published before but this is the first time that is has been brought together in one publication.

# Education Statistics for the United Kingdom - 1993 Edition

The bulletin summarises the statistical tables published in the annual volume of the same name. Basic statistics for the whole of the United Kingdom illustrate the size and nature of its education system and facilitate international comparisons. The figures cover the academic years 1991/92 and previous years.

#### Student Loans 1992/93

This bulletin updates Statistical Bulletin 8/93 and provides statistics on loans to students in higher education in the United Kingdom. It begins by outlining the background to the student loans scheme. It then analyses the repayment and take-up of loans in 1992/93, the third academic year of the loans scheme, and makes some comparisons with the first two years. It also gives some of the findings of the recent Student Income and Expenditure Survey in relation to student loans.

# Education Statistics for the United Kingdom - 1993 Edition

The volume sets out in forty tables UK-wide data for 1991/92 and previous years on population, finance, teaching staff, schools, curriculum, post-compulsory education, further and higher education and qualifications and destinations. The 1993 edition also contains two articles; the first covering international comparison work (an update of the 'International Comparison' article featured since 1989) and the second is on the EC ERASMUS Students Programme and its take-up in the UK. There is also a list of the latest annual and periodic DFE statistical bulletins

## **Employment**

# Release of Government Training and Enterprise Programmes

Ministers have approved the regular publication of statistics on government training and enterprise programmes - Youth Training (YT) including Youth Credits, Employment Training/ Training For Work (ET/TFW) and Business Start-Up Scheme (BSUS). This information is gathered from management information provided under Training and Enterprise Councils' contracts with ED, our starts/leavers databases and associated follow-up surveys.

The Employment Gazette is our primary avenue for the release of these data, although some is released earlier in the Labour market Statistics Press Notice. The first set of monthly tables were released in the December 1993 issue and further quarterly tables in the January 1994 issue. These also include a regular commentary on the figures. The December issue also contained a note on sources and methods.

The data published contains information on the number of starts and participants, taken from the national databases.

More detailed regional and local information will be released via the NOMIS online database. Details will be given in a future issue of Statistical News

# Results from the Summer 1993 Quarterly Labour Force Survey

The results of the Autumn 1993 (September to November 1993) Labour Force Survey (LFS) were released by the Employment Department (ED) on the 16th of March 1994.

The LFS is the largest regular household survey carried out in Great Britain, with about 150,000 people in 60,000 households being interviewed each quarter. The survey covers a wide range of labour market topics on the basis of internationally standard concepts and definitions. The topics covered include employment, self-employment, hours of work, unemployment, redundancies and education and training, all of which can be analysed by demographic characteristics to give, for example, information on women, young people and ethnic minority groups. Comprehensive information is available for regions and metropolitan districts and now, as a results of enhancements to the sample design in spring 1992, selected data are also available for TEC/LECs, counties and Local Authority Districts (LADs).

Up-to-date LFS data are available 24 hours a day, 7 days a week via the Quantime Bureau Service. In addition direct access to the data for analysis and use on your own PC can be obtained by using the Quanvert data base interrogation package. The data can be exported in a range of formats and full training and technical support is available if required. For further details about the Quantime LFS service telephone 071 625 7111.

In addition to this, all the local area information (TEC/LECs, counties, LADs) that is available from the LFS can be obtained via the NOMIS service. For more information about NOMIS contact 091 374 2468/2490.

The main findings are presented in the Labour Force Survey Quarterly Bulletin (LFSQB). The latest issue (No 7) presents the Autumn 1993 results in full colour with easy to follow text, tables and charts and makes some comparisons with earlier surveys. Although most of the analysis relates solely to Great Britain, some information is also given at a regional level. In addition, some of the main series are published on a seasonally adjusted basis.

ED has also published an LFS Historical Supplement which gives all the main LFS estimates back to 1984 and in some cases 1979. Copies of this and the LFSQB can be obtained on subscription from ED; if you wish to subscribe please write to or telephone:

Chris Randall
SSD C2
Employment Department
Level 1, Caxton House
Tothill Street
LONDON SW1H 9NF
Tel: 071 273 6110

LFS results also appear regularly in the monthly Employment Gazette. Every edition contains an LFS Help-Line feature which concentrates on the otherwise unpublished information that is most regularly sought by enquiries; a list of the topics covered is given in the April 1994 issue of the Gazette. Additionally, the January Gazette included a detailed analysis, based on LFS results, of Irish Nationals in the British labour market, while the March edition featured an article comparing results from the 1992 LFS with the Census of Population. Further articles are planned to follow shortly, analysing 'ethnic origins and the labour market', and 'characteristics of the ILO unemployed'.

For further information about the Labour Force Survey, please telephone the

LFS Helpline on 071 273 5885.

## Travel - To - Work Area (TTWA) Review

The Employment Department is currently undertaking a Review of Travel-to-Work Areas (TTWAs) based on the Special Workplace Statistics (SWS) from the 1991 Census of Population.

TTWAs have been developed by ED as approximations to self-contained labour markets. They cover the whole of the United Kingdom and represent the smallest area for which the Department publishes official unemployment rates.

In their present form, TTWAs have a variety of purposes for users. For example, the Department of Trade and Industry use TTWAs as a base for defining the Assisted Areas map. Local Authorities use TTWAs mainly for assessing their local labour markets, and there are numerous other ad hoc uses.

ED have recently contracted a research team to carry out the technicalities of the Review. This involves the mapping of ward-to-ward commuting patterns using set C of the SWS. These provide a matrix of flows to and from all wards.

After this initial stage has been completed, ED will be circulating draft TTWA boundaries for comment. They will be sent to organisations such as local authorities, TEC/lecs, other relevant Government Departments and sections within ED. It is hoped that draft boundaries will be available by late Spring 1994. All comments will be considered in drawing the final TTWA boundaries.

As well as a definitive set of TTWAs, the Department will also be investigating commuting flows of sub-groups of the working population as they are known to have different commuting patterns. Separate TTWAs will be investigated for groups such as gender, age, hours of work and socio-economic group. It is likely that these will be available in the form of research papers.

For additional information, please contact:

Joanne Cockerham
Statistical Services Division B3
Employment Department
Level 1
Caxton House
Tothill Street
London SW1H 9NF

#### Environment

# House Property and Inheritance in the UK

The increase in owner occupation in the 1980s and the rise in house prices led to increased interest in the place of owner occupied house property in the British economy. The changes were thought to have produced a major shift in the distribution of personal wealth. A high proportion of men and women would, on death leave very substantial sums to their heirs. Large numbers of households would acquire through inheritance, financial assets which they would have been unlikely to acquire in other ways. The growth of owner occupation would in time have

a powerful secondary effect on ownership of other kinds.

The Department of Environment undertook a study of the magnitude and likely effects of transmission wealth by inheritance. To obtain information about inheritances and the uses to which inherited sums are put, the Department added questions to the OPCS General Household Survey. The questions were designed to estimate the number of inheritances above a threshold of £1,000, but excluded inheritances by a surviving spouse. The report 'House property and inheritance in the UK' was published in March by HMSO. It describes the ownership of house property and other assets in the recent past, details the findings of the survey and assesses the likely impact of inheritance over the next decade. Findings of the survey include -

- In the late 80s, there were about 600,000 inheritances a year, of amounts over £1,000.
- The value of these inheritances was about £11.3 billion a year. Of this about £4.9 billion consisted of dwellings, shares in dwellings or executors' sales of dwellings.
- Few inheritors received very large amounts. 61% received less than £10,000 (in 1990 prices), indeed 44% received less than £5,000.
- Most inheritors were already well established in their housing careers when they inherited. Over half were aged over 44 and 80% aged over 29.
- Most inherited property, whether vacant or not at inheritance, was sold within a short time. Few inheritors of property became landlords.
- Over half of the money inherited was invested or saved. About 30% was used for buying property or improving the existing home.

The report concludes that the effect of inheritance on the distribution of financial assets over the next two decades will be far from negligible, but will not amount to a transformation. Substantial holdings of financial assets will still be held by a minority of households, even though a larger minority than now.

# **Analyses of Land Use Change Statistics**

This report provides a detailed assessment of the Land Use Change Statistics (LUCS) which has been carried out by the South East Regional Research Laboratory (SERRL) with Halcrow Fox. The Land Use Change Statistics are collected for the Department of the Environment by Ordnance Survey during the course of their map revision programme. This study assessed the robustness of the statistics, developed a set of indicators that can be used for monitoring change, and illustrated the application of these indicators to issues of policy significance.

The researchers concluded that the dataset is of unrivalled scope and geographical coverage. Nevertheless the information depends on the recording of change of OS surveyors, and there is inevitably a time lag between a change occurring and it being recorded. The pattern of OS survey activity may also vary over time and from place to place. This has implications for the way in which Land Use Change Statistics are presented and used.

The research concluded that indicators of residential land supply are robust for very small areas; indicators of urban regeneration perform well at the local district level; and other measures of change between urban uses are robust at county level or above. Indicators of rural to rural change tend not to be robust.

This report is an essential reference document for anyone wishing to use the LUCS data in depth.

#### Available from:

South East Regional Research Laboratory Department of Geography Birkbeck College 7-15 Gresse Street London W1P 1PA (071 631 6483)

Year Published: 1994

Price: £20

Summary results from the Land Use Change Statistics are published annually by the Department of the Environment. The latest bulletin is Land Use Change in England No 8, Statistical Bulletin (93)1 which is available from:

Department of the Environment Publication Sales Unit Building 3, Spur 2, Room 1 Government Buildings, Eastcote Ruislip, Middlesex, HA4 ONZ (081 429 5170)

The statistics are also available in disaggregated form (ie individual land use change records). Contact:

Julius Gwyer,
PLUS2, Dept of the Environment
Room P1/170A
2 Marsham Street
London SW1P 3EB
(071 276 4171)

#### Home Office

# Motoring Offences - England and Wales 1992

This annual bulletin gives statistics on motoring offences dealt with by the police for the years 1982-1992, together with summary tables show-

ing the years 1951, 1961, 1971 and 1981. The number of offences dealt with by court proceedings (2.4 million fixed penalties (5.0 million), written warnings and VDRS scheme (0.2 million each) are separately shown with details as to court disposals, number of fixed penalties paid and VDRS notices complied with. Information is also included on the first six months use of automatic cameras for road traffic law enforcement.

The associated supplementary tables give more detailed information, for 1992 only, by type of offence, type of court, court disposal (including length of custodial sentence and amount of fine), and police force, for court proceedings, and include details of driving licence disqualifications. Offence type, result and police force are shown for fixed penalty notices.

#### Reference

'Motoring offences - England and Wales 1992'. (Home Office published 21 December 1993).

'Offences relating to motor vehicles, England and Wales 1992, S Office publication ISBN 1-85893-117-7, published 21 December.

# Criminal statistics England and Wales 1992

This annual reference volume includes information on recorded crime, the use of firearms, homicides, court proceedings and sentencing as well as the use of remand. Time series, generally for 1982 to 1992 are provided together with more detailed data for the latest year. There is a list of key points at the start of each chapter. This publication is accompanied by four volumes of supplementary tables which contain more detailed offence classification data by magistrates' courts and Crown Court and a further breakdown by police force area and petty sessional division.

#### Recorded crime

 Of the 5.6 million offences recorded by the police in 1992, 94 per cent were against property.

#### **Firearms**

 In 1992, the police recorded 13,300 offences in which firearms were reported to have been used.

#### Homicide

For both sexes, in the majority of homicides,
 the victim was acquainted with the suspect.

## Those cautioned or found guilty

The number of offenders found guilty or cautioned for indictable offences rose from 518,000 in 1991 to 541,000 in 1992.

### Court proceedings

The proportion of indictable proceedings which were discontinued or withdrawn, has increased from 5 per cent in 1982 to 26 per cent in 1992.

# Sentencing

 With a few exceptions, the number of sentenced juveniles and other young offenders has fallen in each year since 1982.

# Use of police bail and court remand

 The proportion of persons failing to appear at court continued to increase in 1992, as did subsequent prosecutions for this offence.

Telephone enquiries about these statistics should be made to:

071 273 2711	Recorded crime
071 273 3531	Firearms
071 273 3531	Homicide
081 760 2730	Cautions and found guilty
081 760 2651	Court proceedings
081 760 2325	Sentencing
081 760 2651	Use of police bail and court
	remand

#### References

Criminal statistics England and Wales 1992 (Cm 2410).

HMSO, £22.70 net published December 1993.

Criminal statistics England and Wales Supplementary tables 1992:

Volume 1 Proceedings in Magistrates' Courts £11.50

Volume 2 Proceedings in the Crown Court £11.50

Volume 3 Recorded offences, firearms offences and court proceedings by police force area, cautions £13.50

Volume 4 Court proceedings by Petty
Sessional Division and Commission
of the Peace Area
£13.50

The Supplementary volumes may be purchased from the:

Home Office, Research and Statistics
Department,
Dissemination Unit,
18th Floor,
Lunar House,
40 Wellesley Road,
Croydon CRO 9YD
(Telephone 081 760 2850).

## Time Intervals for Criminal Proceedings in Magistrates' Courts: June 1993

This bulletin presents the results from the second collection for 1993, which referred to all criminal cases completed in a week in June. Information is collected on cases dismissed, discharged and adjourned sine die and, for indictable and either way cases, those committed to the Crown Court as well as those in which a sentence was passed.

The following main points are described:

- In June 1993, the average time to process all criminal cases through magistrates' courts was 138 days, 10 less than in June 1992.
- Between June 1992 and June 1993 the average time from first listing to completion, fell for all types of offence 10 days to 53 days for indictable offences, 2 days to 19 days for summary non motoring offences and 8 days to 33 days for summary motoring offences. However, there was little change for those remanded in custody throughout their proceedings.
- Falls were also seen between the same periods in the average length of adjournments, of 3 days for indictable offences, 10 days for summary non motoring offences and 8 days for summary motoring offences.
- These falls are likely to reflect initiatives from the Working Group on Pre-Trial Issues implemented in October 1992 and a fall in magistrates court proceedings.

#### Reference

'Time Intervals for Criminal Proceedings in Magistrates' Courts: June 1993' (Home Office Statistical Bulletin, Issue 32/93, available free of charge from: Dissemination Unit, Research and Statistics Department, Home Office, 18th Floor, Lunar House, 40 Wellesley Road, Croydon, CRO 9YD Tel 981 760 2850)

Responsibility for the collection of statistics on Time Intervals from 1994 onwards has been transferred from the Home Office to the Lord Chancellor's Department.

### Criminal Appeals, England and Wales, 1992

This bulletin presents details of criminal appeals made to the Crown Court against magistrates' sentences and those made to the Court of Appeal (Criminal Division) against Crown Court sentences in 1992, by result for appeals against conviction, against sentence and appeals against both conviction and sentence. The tables show figures for the year in which the appeal decision was made (the original court decision may have been made in an earlier year) and are based on returns made directly to the Home Office from the courts.

The following main points are described:

- The 'rate of appeal' against magistrates' sentences in 1992 has remained at 0.7 per cent and against Crown Court sentences it fell by one percentage point to about 7 per cent.
- In 1992 there were almost 16,000 known appeals against magistrates' decisions to the Crown Court and around 7,000 to the Court of Appeal against Crown Court decisions (up from 6.300 in 1991).
- The success rate of appeals against sentence was 51 per cent at the crown Court and 25 per cent at the Court of Appeal.

- The proportion of appeals against conviction made to the Crown Court that were successful has increased from 25 per cent in 1985 to 38 per cent in 1992, the same as in 1991.
- In 1992, 16 per cent of appellants to the Court of Appeal had their conviction quashed

   a rise of 3 percentage points on 1991 and 7
   points higher than in 1985.

#### Reference

'Criminal Appeals, England and Wales, 1992' (Home Office Statistical Bulletin, issue 1/94, available free of charge from:

Dissemination Unit,
Research and statistics Department
home Office,
18th Floor,
Lunar House,
40 Wellesley Road,
Croydon, CRO 9YD
Tel 981 760 2850)

## Control of Immigration: Statistics - United Kingdom 1992

The annual Command Paper on immigration statistics was published on 28 October 1993. The statistics relate to persons who are subject to immigration control under the Immigration Act 1971. The Command Paper contains detailed information for 1992 and historical tables for (wherever possible) 1982-92 on all the main aspects of the immigration control. It contains information on:

- entry clearance applications made abroad, and their outcome
- admissions and refusals at ports
- applications for asylum and their outcomes

- decisions on after entry applications for an extension of stay
- acceptances for settlement in the UK
- persons dealt with under enforcement powers
- the outcome of appeals to immigration adjudicators
- estimates of net migration to/from the UK

This includes information not previously published in this Command Paper on entry clearance applications outside the Indian sub-continent, grants and refusals of after-entry applications, asylum applications and decisions, net migration estimates and demographic information on persons granted settlement.

Some of the main points described in the commentary are:

- 9.2 million passengers (excluding EC nationals) were admitted to the United Kingdom in 1992. This was 13 per cent more than the 8.1 million in 1991 but about the same number as in 1990. The increase mainly reflected a rise of nearly a million in visitors to 6.5 million. Around 15,000 non-EC nationals were refused leave to enter and removed from the United Kingdom in 1992, 3,500 fewer than in 1991.
- Around 840,000 applications for entry clearance were granted at British posts overseas. The large majority of the grants were for visits or other temporary purposes, and were mainly in countries whose nationals require a visa before entering the United Kingdom.
- Applications for asylum in the United Kingdom, made in country or at ports, totalled 24,600. This was noticeably fewer than the 44,800 in 1991 following measures

to deter multiple and other fraudulent applications, but remained five times the figure in 1988. The number of decisions made in 1992 increased substantially to 34,900. 1,100 cases were recognised as a refugee, 15,300 were not recognised but granted exceptional leave and 18,500 were refused.

- 169,000 after-entry applications for an extension of stay (excluding asylum-related cases) or of settlement were granted and 13,000 applications refused.
- 52,600 persons were accepted for settlement in the United Kingdom in 1992. This was some 1,300 fewer than in 1991 though some 6,600 more than the low of 1987. The some what lower settlement figure in 1992 mainly reflected a temporary slowdown in the processing of applications because of the need for more careful consideration of certain spouse cases. 29 per cent of acceptances for settlement in 1992 were from the Indian subcontinent, 19 per cent from the remainder of Asia, 17 per cent from Africa and 14 per cent from the Americas. 70 per cent of non EC nationals granted settlement in 1992 after entry, were aged under 35.

6,200 persons left the United Kingdom as a result of enforcement action. This was 600 more than in 1991 and more than double the 1987 figure of 2,700. The majority of those removed were dealt with as illegal entrants. Working in breach of conditions and over staying were the principal reasons for deportation action being taken.

#### Reference:

"Control of Immigration: Statistics United Kingdom 1992" (Cm 2368) (HMSO £21.70 net)

## Control of Immigration: Statistics - First and Second Quarters 1993

The regular six monthly Home Office Statistical bulletin on the control of immigration was published on 14 December 1993. This contains summary information on acceptances for settlement in the United Kingdom, entry clearance applications made in the Indian sub-continent and enforcement action.

56,100 persons were accepted for settlement in the 12 months to the end of June 1993. This was 5,000 more than in the previous 12 month period and 10,000 more than the low of 1987. The increase in the latest 12 months partly reflected the effect of additional staff resources in reducing a backlog of applications which developed as a result of the somewhat lower number of acceptances in the previous 12 months. 6,100 people left the United Kingdom in the 12 months to the end of June 1993 as a results of enforcement action, an increase of 200 on the previous 12 months and more than double the 1987 figure of 2,700.

#### Reference:

"Control of Immigration: Statistics - First and Second Quarters 1993" (Home Office Statistical Bulletin issue 33/93).

#### Inland Revenue

In December Gordon Keenay and Richard Eason attended a Special Conference of the International Association for Research in Income and Wealth in Canberra on 'microsimulation and public policy'. Gordon was invited as a discussant and Richard contributed a paper on the Inland Revenue's experiences. Over 100 delegates attended.

The conference confirmed the Revenue's position at the forefront of microsimulation modelling for fiscal policy analysis and forecasts. The personal tax model (based on administrative

data) and the CSO's tax and benefit model (based on the Family Expenditure Survey) provide wide ranging facilities for income tax analyses. The models for corporation tax and North Sea oil taxation provide comparable facilities for corporate taxes.

Copies of Richard Eason's paper are available from the author at

Inland Revenue Statistics and Economics
Office
West Wing, Room T143
Somerset House
Strand
LONDON WC2R 1LB

An article on seasonal adjustment of the number of property transactions in England and Wales was published in Economic Trends February 1994 Edition.

## Office of Population Censuses and Surveys

The latest edition of Population Trends, the quarterly journal of the Office of Population Censuses and Surveys, (OPCS), was published in September, and contained the following articles:

## Birth statistics 1992 by Penny Babb, Population Statistics, OPCS

This article examines the latest annual statistics for live births (1992) in England and Wales. Birth statistics are compiled every year from information collected at birth registration for entry into the live birth and still birth registers, and from additional confidential particulars collected at the same time under the Population (Statistics) Acts of 1938 and 1960.

## Teenage conceptions and fertility in England and Wales, 1971-91 by Penny Babb, Population Statistics, OPCS

This article focuses on the trends in teenage conceptions and fertility over the past twenty years. Recent trends have included a large increase in births outside marriage, and a corresponding decrease in births within marriage. Teenage fertility rates within the United Kingdom are compared with the rates in other countries in Western Europe.

## First results from West European censuses by Francois Begeot and Lana Smith, Eurostat, and David Pearce, Population Statistics, OPCS

This article is a follow-up to one included in Population Trends 68, which described the history of census taking in the European Community. It includes some first results from the 1990-91 round of censuses in Western Europe, and a brief description of the types of methods used to check census results. The amount of detail given is necessarily limited in order to include some statistics for all countries. More detailed results will be published by Eurostat during 1994 and 1995.

## 1991 Census of Population for Northern Ireland by Robert McMurray, Registrar General for Northern Ireland, and Trevor Evans, Census Manager.

Continuing the pattern of earlier censuses, the 1991 Census in Northern Ireland was taken on the same day as those in England and Wales, and Scotland. This article looks at the planning and geography and at the coverage. It also provides some key statistics for Northern Ireland.

#### Analysing fertility and infant mortality by mother's social class as defined by occupation - Part II by Beverly Botting, Health Statistics, OPCS, and Jacqui Cooper, Population Statistics, OPCS

Mother's occupation has been collected at birth registration since 1986. This article presents for the first time infant mortality rates by social class based on the mother's occupation. Although levels of occupation recording improved between 1986 and 1990, by 1990 only 41 per cent of live births, 31 per cent of stillbirths, and 29 per cent of infant deaths had mother's occupation recorded. This article discusses the biases introduced by the high levels of missing information. Despite these biases, differentials in infant mortality rates by social class, as defined by the mother's occupation, still exist.

## The effects of computerisation of the NHS Central Register on internal migration statistics by Dawn Hornsey, Population Statistics, OPCS

The computerisation of the NHSCR resulted in a dip in the number of moves between RHSAs recorded for 1990. However, since then internal migration data have been of better quality. Migration over the last few years has shown an increase in movement of young adults.

## International migration 1992 by Dawn Hornsey, Population Statistics, OPCS

During 1992, 216 thousand people entered the United Kingdom and 227 thousand people left, with the intention of migrating for a year or more. However, it was estimated that there was a net inward migration of about 35 thousand after allowing for movement to and from the Irish Republic and for people entering as short-term visitors but subsequently allowed to stay for a year or more.

#### Infant and Perinatal Mortality in 1991

Statistics produced from stillbirth records and from the linkage of infant death records to their corresponding birth records were published in December 1993 by OPCS.

The volume contains key tables for England and Wales and for Wales and each regional health authority, giving numbers and rates of stillbirths and various components of infant mortality including Social Class as defined by occupation of the father, age of mother, parity, marital status, and birthweight. Other tables look at country of birth of mother, cause of death, duration of pregnancy (stillbirths only) and type of place of confinement. The differences in mortality between singletons, twins, and higher order multiple births are also shown.

#### Reference

Mortality statistics 1991, perinatal and infant: social and biological factors (Series DH3 no.25) HMSO £9.75 net ISBN O 11 691563 3.

### Deaths by Cause in England and Wales in 1992

Detailed information on cause of death in England and Wales in 1992 was published by OPCS in December 1993.

There were 558,313 deaths registered, a decrease of 2 per cent compared with 1991. The four main causes were heart disease (30 per cent of all deaths), cancer (26 per cent), cerebrovascular disease (12 per cent) and respiratory disease (11 per cent).

#### Reference

Mortality statistics: cause 1992 (Series DH2 no.19) HMSO Price £11.20 ISBN O 11 691565 X

#### National Population Projections: 1992based

The population of England and Wales is projected to increase from 51.3 million in 1992 to 55.5 million in 2027, and then to start to decrease.

This and other information on the projected population of England and Wales was published in January 1994 in an OPCS Monitor.

The age structure of the population is projected to change over the next 40 years, mainly as a result of past fluctuations in the number of births.

#### Reference

National population projections: 1992 based OPCS monitor PP2 94/1 Price £1.80 ISSN 0953-3427

## National Population Projections: a new methodology for determining migration assumptions

The findings of a study of past-patterns of international migration, introducing a new approach to making migration assumptions for future population projections, were published in January by OPCS in the latest in the series of OPCS Occasional Papers.

Changing patterns of migration towards the end of the 1980s, both international and within the United Kingdom, gave rise to a debate about the assumptions for future migration to be incorporated in the official national population projections.

The report is the result of a study undertaken by the Government (GAD) and the Office of Population Censuses and surveys (OPCS) at the request of the Director of the Central Statistical Office. The proposals contained in the report were the basis of the migration assumptions used in the 1991-based population projections for the United Kingdom and its four constituent countries.

#### Reference

National population projections: a new methodology for determining migration assumptions OPCS Occasional Paper 42, Price £4 net ISBN 1 85774 181 1

#### General Household Survey 1992

Detailed results from the 1992 General Household survey (GHS) were published in January 1994 by OPCS.

The report updates information collected each year on population characteristics, households and families, marriage, cohabitation and fertility, employment, education, health, and housing. It also has information on cigarette smoking, drinking, occupational pensions, sight tests, and hearing difficulties, subjects which have been included in selected years only.

This is the latest in a series of annual reports for the GHS, which started in 1971, and is carried out by the Social Survey Division of the Office of Population Censuses and Surveys. The data are obtained from interviewing everyone aged 16 or over in a random sample of private households in Great Britain.

Interviews are achieved with just over 19,000 adult in about 10,000 households each year. For certain topics information is also collected on some 5,000 children in these households.

#### Reference

General Household Survey 1992 (GHS no.23) HMSO £15.85 net ISBN 0 11 691566 8

#### Day Visits in Great Britain

The report of a survey on day visits in great Britain, taken between April 1991 and March 1992, was published in November 1993 by the Office of Population Censuses and Surveys (OPCS). The survey was carried out by the Social Survey Division of OPCS for the Department of National Heritage.

The aim of the day visits survey was to collect information about day trips made by the resident population of Great Britain that started from home, lasted three hours or more and were made for leisure or non-routine business reasons. Trips made on a regular basis were excluded from the analysis.

The survey found that in 1991 2.0 billion day trips were made. In 1988 1.7 billion trips were made. In 1991 visiting friends and relations (29 per cent of all trips) and visiting a restaurant or public house (16 per cent) were the most common reasons for making a day trip.

#### Reference

Day visits in Great Britain 1991/92 (Series SS 1339) HMSO Price £7.65 net ISBN 0 11 691561 7

#### Cancer Registrations: registrations 1988

Information on cancer registration in England and Wales in 1988, including background information on many of the major cancer sites, was published in February 1994 by OPCS.

The volume includes data on those patients who were first diagnosed with cancer in 1988 and whose registrations were received at OPCS by 16 July 1993.

There were 103 thousand new registrations of cancer (excluding non-melanoma skin cancer) for males, and 104 thousand for females, an

overall increase of 4 per cent compared with 1987.

#### Reference

Cancer statistics: registrations 1988 (Series MB1 No 21) HMSO Price £15.25 ISBN O 0 11 691568 4

## Morbidity Statistics from General Practice 1991-92

Preliminary findings from a study of morbidity from general practice was published recently in an OPCS Monitor. The study, carried out between September 1991 and August 1992, was undertaken jointly by OPCS, the Royal College of General Practitioners, and the Department of Health.

Some sixty general practices in England and Wales recorded details of every face-to-face contact with all patients on their NHS register. Information about patients' socio-economic characteristics was collected by interview.

This is the fourth in a series of national studies. Previous studies were carried out in 1955-56; 1970-71; and 1981-82. Detailed statistics, including comparisons with data from previous studies, and a full description of all aspects of the 1991-92 study, will be published by OPCS in the Autumn of this year.

#### Reference

Morbidity statistics from general practice 1991-92 (MSGP4) OPCS Monitor MB5 94/1 OPCS £2.80 ISSN 0953-3427

## Children's Dental Health in the United Kingdom in 1993

Preliminary results from the third Children's Dental Health survey, taken in 1993 to estimate the levels of dental disease and other dental problems among school children aged 5 to 15 in the United Kingdom and its constituent countries, were published in February 1994 by OPCS.

The survey was carried out by the Social Survey Division of OPCS in collaboration with the Unit of Dental Public Health, School of Dentistry, at the University of Birmingham, and with the Department of Child Dental Health at the University of Newcastle-upon-Tyne. The 1993 survey was jointly commissioned by the United Kingdom Health Departments.

The survey, the third in a series, found that by the age of 15 more than five times as many children were free from dental decay in 1993 (37 per cent) in the UK than in 1983, when the proportion was 7 per cent.

Fieldwork for the survey took place between late January and May 1993. Over 17,000 children aged between 5 and 15 in 689 primary and secondary schools had dental examinations.

Preliminary results in the OPCS Monitor concentrate on evidence of dental decay in the permanent teeth, that is, the proportion of children with active decay, filled teeth and teeth which have been extracted because of decay, and the mean numbers of teeth which show evidence of past or current decay.

Full results will be available in the main survey report due to be published later this year.

#### Reference

Dental caries among children in the United Kingdom in 1993 (Series SS 94/1) OPCS £2.50 ISSN 0262-8392

#### Census Publications Update

Three more series of OPCS Census Monitors are now available.

Ward and Civil Parish Monitors are published for each county in England and Wales. Statistics cover population change 1981-91, population density, sex and age composition, limiting long-term illness, ethnic group, migrants, women in employment, tenure, household composition and availability of cars. Great Britain, county and district figures are given for comparison.

Postcode Sector Monitors are published for each of 19 regional areas in England and Wales, and for each Region and Islands Area in Scotland. Statistics for the resident population cover children under 16; pensioners; limiting long-term illness; and women in employment. Statistics for households cover tenure; household composition; and car availability.

Parliamentary Constituency Monitors are published for each region in England (including three for the South East region), for Scotland, and Wales. Each Monitor contains summary tables of statistics covering population, housing, household composition, ethnic group, young adults, pensioners, and social class based on occupation, industry and qualifications.

Other Census reports published recently are as follows:

#### Report for Wales (parts I and 2)

Part 1 of the Report for Wales contains 67 tables of statistics grouped into four main subject areas. They cover demographic and economic characters; housing; households and household composition; and household spaces and dwellings. Each table contains statistics for Wales and constituent counties.

Part 2 of the report contains 29 tables based on a 10 per cent sample. Topics covered include occupation, industry, hours worked, workplace, journey to work, higher qualifications and family composition.

#### Reference

1991 Census. Report for Wales Part 1 (CEN 91 CR RW) HMSO Price £40 net ISBN 0 11 691554 4

1991 Census. Report for Wales Part 2 (CEN 91 CR RW) HMSO Price £29 net ISBN 0 11 691562 5

#### Ethnic Group and Country of Birth

This volume contains 27 tables of statistics on the ethnic group and country of birth of the resident population of Great Britain, analysed by demographic, economic and housing characteristics.

Statistics are given for Great Britain, for its constituent countries, regions of England, metropolitan counties, Inner London, Outer London, regional remainders, Wales and Scotland.

#### Reference

1991 Census. Ethnic group and country of birth, Great Britain (CEN 91 eg CB)
HMSO Price £45.50
ISBN 0 11 691518

## Report for England and its Regional Health Authority Areas (parts I and 2)

Part 1 of the Report for England and its constituent health regions contains 66 tables of statistics grouped into four main subject areas, covering demographic and economic characteristics; housing; households and household composition; and household spaces and dwellings.

Part 2 contains 29 tables of statistics based on a 10 per cent sample. The topics covered include occupation, industry, hours worked, workplace, journey to work, higher qualifications and family composition.

#### Reference

1991 Census Report for England: Regional Health Authorities Part 1 (CEN 91 RERHA) HMSO Price £47 net ISBN 0 11 691558 7

1991 Census Report for England: Regional Health Authorities Parts 2 (CEN 91 RERHA) HMSO Price £31 net ISBN 0 11 691559 5

#### **Household Composition**

This volume contains statistics of the population of Great Britain analysed by household composition. 19 tables include information on household spaces and housing, tenure, economic position and age of head of household, ethnic group of head of household, and dependents.

#### Reference

1991 Census Household Composition, Great Britain (CEN 91 HC) HMSO Price £27.40 net ISBN 0 11 691560 9

#### Office of Manpower Economics

#### Doctors' and Dentists' Remuneration

The Twenty-Third Report by the Review Body on Doctors' and Dentists' Remuneration (Chairman, C B Gough) was published in February 1994. The Report recommends on remuneration for the year beginning 1 April 1994 for

doctors and dentists in the National Health Service.

The Review Body on Doctors' and Dentists' Remuneration did not report last year, following the Government's announcement in November 1992 that public sector pay settlements for 1993-94 would be restricted to between zero and 1.5 per cent. The Review Body resumed its full role for the review of remuneration in 1994-95, and details of its recommendations for 1994-95 are in Appendix A of the Report.

Appendix E contains the results of a survey into the hours of work of doctors and dentists in training. The Office of Manpower Economics (OME) conducted the survey on behalf of the Review Body, particularly to provide information on the effect of reductions in contracted hours on actual hours worked. The survey took the form of a questionnaire and diary covering a seven day period. BMRB International carried out the fieldwork for the survey during October 1993 and a response rate of 69 per cent was achieved from a sample of 2,400 doctors and dentists. The results are analysed by grade, specialty and working pattern, and contracted hours are compared with hours on duty and hours actually worked during the survey week.

#### Reference

Review Body on Doctors' and Dentists' Remuneration, Twenty-Third Report, 1994 (Cm 2460) HMSO February 1994 Price £8.95 net

### Pay of Nursing Staff, Midwives and Health Visitors

The Eleventh Report on Nursing Staff, Midwives and Health Visitors by the Review Body for Nursing Staff, Midwives, Health Visitors and Professions Allied to Medicine (Chairman, Michael Bett) was published in February 1994. Recommended 1 April 1994 pay levels for the

national Health Service (NHS) are shown in Appendix A (together with equivalent levels for 1 April 1993); equivalent information about certain allowances is in Appendix B. Numbers of staff covered are given, by grade, in Appendix C, and details of the paybill in Appendix D.

Appendix E contains the results of a survey of vacancies at 31 March 1993 amongst nursing staff employed in Trusts and directly managed units (DMUs) in the NHS in Great Britain. 72 per cent of the 148 'first and second wave' Trusts which employ nursing staff and 84 per cent of the 518 DMUs provided usable information. Results are given by grade and by area of work, in total and within country, region and London weighting zone. A matched sample comparison with the results of the previous year's survey is also included.

#### Reference

Review Body for Nursing Staff, Midwives, Health Visitors and Professions Allied to Medicine,

Eleventh Report on Nursing Staff, Midwives and Health Visitors, 1994 (Cm 2462) HMSO February 1994 Price £8.60 net

#### Pay of Professions Allied to Medicine

The Eleventh Report on Professions Allied to Medicine by the Review Body for Nursing Staff, Midwives, Health Visitors and Professions Allied to Medicine (Chairman, Michael Bett) was published in February 1994. Recommended 1 April 1994 pay levels for chiropodists, dietitians, occupational therapists, orthoptist, physiotherapists, radiographers, and related grades in the National Health Service (NHS) are shown in Appendix A (together with equivalent levels for 1 April 1993); equivalent information about certain allowances is in Appendix B. Numbers of staff covered are given,

by grade and profession, in Appendix C, and details of the paybill in Appendix D.

Appendix E contains results from a manpower survey of the professions and related grades employed in the NHS, carried out by the NHS Management Executive in conjunction with the professions. Details are given of vacancies, leavers and joiners in Great Britain in the professions covered by the Review Body, together with a matched sample comparison with the results of the previous year's survey. The response rate varied by profession, but in no case did less than 94 per cent of relevant units provide usable data. The sources of joiners and the destination/reason for leaving of leavers are analysed by profession; and details of vacancies are given by profession, and by grade, region/ country and London weighting zone both in total and within each of the five largest professions.

#### Reference

Review Body for Nursing Staff, Midwives, Health Visitors and Professions Allied to Medicine,

Eleventh Report on Professions Allied to Medicine, 1994

(Cm 2463) HMSO February 1994 Price £8.90 net

#### Senior salaries

Report No 34 of the Review Body on Senior Salaries (Chairman, Sir David Nickson) was published in February 1994. The Review Body was formerly known as the Review Body on Top Salaries. The report reviews the salaries of holders of judicial office, senior civil servants and senior officers of the armed forces, and it recommends a number of structural changes as well as salary increases to take effect from 1 April 1994.

OME conducts a regular survey of recently-appointed judges. Information is collected about these judges' receipts and expenses as a lawyers before appointment. The data for several years, brought forward to a common base of the year to April 1994, are summarised in Appendix E.

The separately published Annex to the report comprises a comprehensive evaluation of the performance related pay scheme currently in operation for Grade 2 and 3 civil servants. The evaluation was undertaken by Hay Management Consultants in conjunction with the Review Body's secretariat in the Office of Manpower Economics. The Annex includes statistical data on performance appraisal and performance awards over the last 3 years; an attitude survey completed by over 80 per cent of all Grade 2s and 3s; and results of in-depth interviews with a cross section of these grades, interviews with Grade 1s, and discussions with officials and with the trade unions.

#### References

Review Body on Senior Salaries, Report No 34, Sixteenth Report on Senior Salaries (Cm 2464) HMSO February 1994 Price £7.90 net

Review Body on Senior Salaries, Report No 34, Annex to the Sixteenth Report on Senior Salaries

(Cm 2465) HMSO February 1994 Price £9.80

## School Teachers' Pay and Conditions of Service

The Third Report by the School Teachers' Review Body (Chairman, John Gardiner) was published in February 1994. Recommended levels of remuneration for the year from 1 April 1994 for teachers in maintained schools in England and Wales are set out in Appendix D.

#### Reference

School Teachers' Review Body, Third Report, 1994

(Cm 2466) HMSO February 1994 Price £11.60 net

#### **Armed Forces Pay**

The Twenty-Third report by the Review Body on Armed Forces Pay (Chairman, Gordon Hourston) was published in February 1994. It shows recommended pay rates, together with recommended accommodation and food charges for Service ranks up to and including Brigadier (and equivalent), to apply from 1 April 1994.

Details of the military salary (using Army ranks) are in Chapter 2 with special scales in Appendix 4. Additional pay and allowances are in Appendix 5; accommodation and food charges are shown in Chapter 4.

#### Reference

Review Body on Armed Forces Pay, Twenty-Third Report, 1994 (Cm 2461) HMSO February 1994 Price £6.65 net

#### OFTEL

#### Telephone Service in 1993

OFTEL published in December 1993 its annual report on Quality of Service. The Report covers various aspects of the telephone service and contains the results from a number of surveys carried out for OFTEL during the year.

The Report presents statistics on the following subjects:

General satisfaction with BT's service; Representations and complaints to OFTEL;

- Telephone Selling;
- Nuisance calls;
- Directory Enquiries;
- Public Payphones;
- Telephone directories;
- Telephone numbers and charging;
- Charges on Bank Holidays;
- Special services for disabled and elderly people;
- Recorded announcements on mobile phones;
- Silent monitoring of calls;
- Households without a telephone.
- BT's Customer Service Guarantee scheme.

The results from two other surveys are not presented in the Report. The results from OFTEL's survey of the quality of service on cellular networks were published in OFTEL Statements in March, September and December. Research which was commissioned by OFTEL to investigate the priorities for consumers in the future development of the telecommunications industry, is contributing to the identification of key activities and areas for further work by OFTEL in the year ahead.

Copies of OFTEL's Report are available from OFTEL's Press Office.

Tel: 071 634-8842

#### Trade & Industry

Recently available statistical publications

#### **Energy Trends**

At the end of each month the Department of Trade and Industry publishes its statistical bulletin ENERGY TRENDS, giving monthly and quarterly data for many aspects of the energy supply and demand scene in the United Kingdom.

ENERGY TRENDS, which was first published in 1974, includes text and charts but is largely

composed of tables covering energy production and consumption; production, use and trade in individual fuels; and prices of fuels for industrial and domestic consumers.

In addition each issue has a supplementary article on a specific aspect of the energy market. Amongst the items covered during 1993 were trends in energy supply and demand; trends in energy prices; the oil refining industry in the United Kingdom; combined heat and power; renewable sources of energy; domestic energy consumption for water and space hearing; and investment and drilling activity in the North Sea.

ENERGY TRENDS is available on subscription only, direct from the Department of Trade and Industry. Details of subscription periods and rates may be obtained from;

Mike Ward
ES8
Department of Trade and Industry
Room 3.3.15
1 Palace Street
London SW1E 5HE

Tel: 071-238 3576 Fax: 071-238 3572

## Insolvencies in the Fourth Quarter 1993 and 1993 Totals

Numbers of company insolvencies and personal insolvencies, seasonally adjusted, for England and Wales were published on 11 February through the Association of British Chambers of commerce. An unadjusted breakdown into broad industrial sectors to Q3 1993 is included, as is also a summary of Scottish insolvency figures to date.

Notes explaining insolvency terms such as voluntary liquidation, sequestration and bankruptcy are also available on request. Company insolvencies in England and Wales in the fourth quarter of 1993 totalled 4,634 on a seasonally adjusted basis, representing a 9% fall on the previous quarter and a 24% fall on the same period a year ago. For the calendar year 1993, the total number of company insolvencies was 22,205 representing 2.5% of the number of active companies (2.1% of the total number of registered companies).

Individual insolvencies in England and Wales in the fourth Quarter of 1993 totalled 8513 on a seasonally adjusted basis, representing a decrease of 7% on the previous quarter and of 13% on the same period a year ago.

#### Information:

Felicity Bull,
Association of British Chambers of
Commerce,
9 Tufton Street,
London SW1P 3QB
(071-799 2196).

#### Statistical enquiries:

Bill Cave,
Department of Trade and Industry,
Room 2/42,
151 Buckingham Palace Road,
London SW1W 9SS
(071-215 1921)

### VAT registrations and deregistrations in the UK 1992

The 1992 estimates of VAT registrations and deregistrations was published in a Department of Trade and Industry Statistical Bulletin on 30 November 1993.

The Bulletin contains tables showing registrations, deregistrations and the stock of VAT registered businesses in 1992 classified by region, county and broad industry sectors.

In addition, for the first time, estimates have been prepared of the numbers of registrations and deregistrations for over 200 detailed industry sectors (VAT Trade Classifications). The data given are: stock at end 1979, total registrations and deregistrations between 1979 and 1991, end 1991 stock and the average annual percentage change.

As in previous years, more detailed estimates of registrations, deregistrations and stocks at Local Authority district level are available as hard copy and on disk. Details of format, cost and order forms can be obtained from:-

Nick Tarry
Small Firms Statistics Unit
Department of Trade and Industry
Level 2
St Mary's House
c/o Moorfoot
Sheffield
S1 4PQ
Tel: 0742-59 7538

Data available on disk is also available via NOMIS. None of these publications are available from HMSO.

#### Transport

## 1991 London Area Transport Survey (Lats 1991)

The 1991 London Area Transport Survey (LATS 1991) was undertaken by the Department of Transport and the London Research Centre (acting on behalf of the London boroughs). It was the fourth in a series of large-scale transport surveys in London and will be used to update results from the previous surveys in 1981, 1971 and 1962.

The aim of LATS was to provide coherent and compatible sources of data describing transport movements by all modes in London in 1991, as well as related socio-demographic information.

Its principal users will be the Department of Transport, the London Research Centre and the London boroughs, where it will provide support for policy formulation, planning, scheme assessment and investment as well as general statistical briefing.

LATS consisted of a package of surveys. The main components were a large household survey and a major roadside interview survey programme. The LATS Household Survey collected a combination of household data, person data and trip data from a sample of 60,000 households in the area bounded by the M25. The roadside interviews took place at about 800 sites, and 1.1 million drivers were interviewed.

In order to complete the coverage of travel and transport in London, a number of other surveys were carried out. The most important of these were the rail operators' (London Underground Limited and Network South East) surveys, which were carried out by the operators themselves, after consultation with the LATS team, in order to provide adequate linkage to LATS in the survey. Other surveys were undertaken with the aim of either filling gaps in the data, or validating data from the Household Survey (or both).

Data from all the surveys have now been validated and combined into a series of databases. Having already published two preliminary results bulletins, the Department of Transport and the London Research Centre published the main results report on 23 March.

The report covers many aspects of travel in London, including chapters about car use, rail use and bus use in the capital. The report also looks at a series of case studies, which it was felt were of topical interest. These include travel on the M25 motorway, travel to and within the Docklands area and travel on Saturdays. Examples of results given in the report follow:

- on a typical weekday between 7am and 9pm, approximately 20 million trips are made within the London area.
- over half of all car trips within the study area
   both start and end in Outer London.
- during the course of a typical weekday, almost half of all rail trips to Central London are between home and work and take place between 7am and 10am.
- residents of Hackney are more likely to use a bus than any other borough's residents.
- the average London woman walks 33 per cent more frequently than her male counter part.
- nine per cent of vehicles using the M25 both start and end their trips within the area enclosed by it.

The report was published by HMSO on 23 March 1994.

Further information may be obtained from Iain Dickson on (071) 276 8616.

#### Treasury

#### Civil Service Statistics

Civil Service Statistics 1993 Edition was published on 3 December 1993 by HM Treasury. It gives a broad statistical picture of staffing in the Civil Service and provides relevant facts and figures contrasting these with the picture for previous years.

The major part of the book is a series of tables showing the numbers of Civil Servants, where they work and how they are organised. The tables also show the relative sizes of the groups and grades, recruitment and turnover trends, grading and structure.

The introduction to the book provides some background information and draws out key factors from the tables, illustrated by graphs and charts.

A selected bibliography is included.

#### Reference:

Civil Service Statistics 1993 Edition (HMSO price £11.30 net)

Produced alongside the main publication is a summary handout, Key figures on Civil Service staffing which is available free on request from

> Personnel Management and Statistics Division, HM Treasury telephone 071-270 1716

#### Northern Ireland

#### Department of the Environment

#### Northern Ireland Housing and Construction Bulletin (at 31 December 1993)

Central Statistics and Research Branch have recently produced the above quarterly compilation of Northern Ireland housing statistics. It includes information on house prices, private sector housing starts, Northern Ireland Housing, Executive housing starts, Housing Association housing starts and the Northern Ireland Index of Construction. The bulletin is available, free of charge, from:

Central Statistics and Research Branch
Department of Environment (NI)
Room 436-B, Clarence Court
10-18 Adelaide Street
BELFAST
BT2 8GB

### Department of Finance and Personnel

#### A Guide to Northern Ireland Statistics

Published in January 1994, this edition updates the July 1988 publications of the same name. Produced by the Statistics and Social Division of the Policy Planning and Research Unit, the guide lists government publications (including press notices, bulletins and reports) which include statistics on the main aspects of social and economic life in Northern Ireland. The publication also contains details of the main UK and Eurostat (the Statistical Office of the European Community) statistical publications which include Northern Ireland statistics. The Guide is available, free of charge, from:

PPRU Library
Department of Finance and Personnel
Room 250, Parliament Buildings

Stormont BELFAST

BT4 3SW

## The Family Expenditure Survey Report for 1989-1992

The Family Expenditure has been carried out annually in Northern Ireland since 1967. It provides reliable data from a randomly selected sample of private households on expenditure and income in relation to household characteristics. An analysis of the data is published in a Policy Planning and Research Unit (PPRU) Monitor. Where possible, comparisons with the United Kingdom are made for the most recent year. The Monitor is available, free of charge, from:

Central Survey Unit
Policy Planning and Research Unit
Department of Finance and Personnel
Londonderry House
21-27 Chichester Street
BELFAST
BT1 4SX

#### Registrar General Northern Ireland

## 1991 Census of Population - Education Report

The above report from the 1991 Northern Ireland Census of Population was published in November 1993. It contains tables giving information at Northern Ireland level by age, sex, religion, occupation, and industry by level of academic qualification. Also included are socioeconomic groups by religion and economic ac-

tivity by marital status related to level of academic qualification. The report is available from:

> HMSO 16 Arthur Street BELFAST BT1 4GD

Price £8 net ISBN 0 337 07756 8

## 1991 Census of Population - Irish Language Report

The above report from the 1991 Northern Ireland Census of Population was published in December 1993. It contains information on the population aged 3 years and over, recorded as having a knowledge of Irish language. Tables published in the report include Irish language knowledge by age, sex, religion, economic position, and level of academic qualification. The report is available from:

HMSO 16 Arthur Street BELFAST BT1 4GD

Price £8 net ISBN 0 337 07757 6

## Department for Agriculture for Northern Ireland

## Size and Performance of the Northern Ireland Food and Drinks Processing Sector

This report contains information on sales, exports, value added and employment for the food and drinks processing sector in Northern Ireland for the 3 years 1981 to 1991. In addition 15 performance indicators are given for each of the 10 sub-sectors within the processing sector.

Copies of the report can be obtained from:

Department of Agriculture Economics and Statistics Division Annex B, Dundonald House Upper Newtownards Road, Belfast BT4 3SB

Price £20 net

#### **Current Developments**

## Transfer of Census Office and General Register Office (NI) from DSS to DFP

The Secretary of State for Northern Ireland, Sir Patrick Mayhew QC MP, recently signed a Transfer of Functions Order which will have the effect of transferring the Census Office and General Register Office (NI) from the Department of Health and Social Services to the department of Finance and Personnel. The transfer will take place on 1 April 1994.

Commenting on the planned transfer Sir Patrick said: "The Census and Registration functions are key sources of demographic, social and economic information on the population of Northern Ireland. Drawing these functions into closer relationship with the department of Finance and Personnel's Statistics and Social Division will further strengthen the Government's information base which is essential to the policy planning process".

### Appointment of Registrar General for Northern Ireland

Dr Norman Caven has been appointed Registrar General for Northern Ireland on the retirement of Mr Robert McMurray, after 13 years in the post. The appointment took effect from 11 February. Dr Caven takes on the role of Registrar General alongside his current responsibilities as a Senior Principal Statistician in Statistics and Social Division, Department of Finance and Personnel.

#### Scotland

## The Scottish Office Environment Department

## Scottish Abstract of Statistics No 22 1993 Edition

The latest edition of The Scottish Abstract of Statistics was published in April 1994. It is the most important single source of official and unofficial statistics covering social and economic life in Scotland. It contains over 200 pages of tables and charts, in 16 sectors, complete with explanatory notes, covering topics such as population, leisure, personal income and the environment. Many of the tables show series for a number of years, others give information at region and district level.

Copies, price £22.50 can be obtained from:

The Scottish Office Library
Publication Sales
Room 1/44
New St Andrew's House
Edinburgh
EH1 3TG
Tel: 031-244 4806 (GTN 7188)

## The Scottish Environment Statistics No 4 1993 Edition

The fourth edition of the biennial Scottish Office publication "The Scottish Environment Statistics" was published in April 1994.

This 200 page volume draws on a wide range of published and unpublished sources to present information in tabular and graphic form, on the following topics:

- Population growth, location and density
- Land characteristics and use

- Land Cover features
- Atmosphere meteorology and air pollution
- Water resources and consumption, quality, oil production and pollution
- Conservation nature, landscape and buildings, and wildlife
- Radioactivity environmental monitoring and emissions
- Recreation tourism and leisure activities
- Attitudes to the Environment selected results from a recent survey undertaken by The Scottish Office

Copies, price £12 can be obtained from The Scottish Office Library.

#### Scottish Statistics: Factcard

This pocket sized card contains key information on many aspects of life in Scotland, with UK comparisons for the latest year shown. Topics covered include population, transport, agriculture and employment for 1982, 1991 and 1992. The Factcard is an ideal reference source for the businessman, scholar or student.

Copies are available, free of charge, from:

The Scottish Office
Central Statistics Unit - 2
Room 5/52
New St Andrew's House
Edinburgh
EH1 3TG
Tel: 031-244 4987

## Statistical Publications: Information Leaflet

This leaflet lists all Scottish Office publications during the previous twelve months. It gives

details of regularly produced volumes, such as The Scottish Abstract of Statistics, as well as all statistical bulletins.

Copies are available, free of charge, from The Scottish Office, Central Statistics Unit-2, at the above address.

The following statistical bulletins are available:

Env/1993/1	Waste Collection, Disposal and
	Regulation Statistics, 1990
	(February 1993)
Enw/1993/2	Radioactive Waste Disposals

Env/1993/2 Radioactive Waste Disposals from Nuclear Sites in Scotland: 1988 to 1992 (December 1993)

Env/1994/1 Local Authority Air Pollution Control 1992/93 (January 1993)

#### Statistical bulletins - housing series

#### Quarterly trends bulletins

#### Last issue

HSG/1993/8 Housing Trends in Scotland -Quarter ended 30 June 1993 Published November 1993

This bulletin presents the standard quarterly analyses and annual information on public authorities stock and vacant stock.

#### Current issue

HSG/1994/1 Housing Trends in Scotland -Quarter ended 30 September 1993 Published March 1994

This bulletin presents the standard quarterly analyses and annual information on special needs housing stock.

#### **Future** issues

Topic bulletin

#### Next issue

HSG/1994/2 Operation of the Homeless Persons Legislation in Scotland 1981/82 to 1992/93

This bulletin presents statistics on how local authorities assessed and dealt with applicant households under the homeless persons legislation in Scotland from 1981/82 to 1992/93.

HSG/1994/3 BTS houses in Scotland:
Estimates by Local Authorities
for March 1993 and details of
action on such dwellings

This bulletin gives estimates from local authorities of the number of dwellings in Scotland which failed to meet the Tolerable Standard for the period to 31 March 1993. This includes information on the number of dwellings which lacked certain of the standard amenities. It also gives information on local authority action in dealing with such dwellings over the period 1979 to 1993.

#### **Education Department**

#### Notes on Current Developments

#### Scottish Education Statistics

Pupils and Teachers in Education Authority Primary and Secondary Schools

This bulletin gives final figures for September 1992 and provisional figures for September 1993 for the numbers of pupils in education authority primary and secondary schools/departments in Scotland.

Published March 1994

#### Industry Department

IND/1994/J1.1 Annual Census of
Production. The Manufacturing Sector in Scotland

1983-90

IND/1993/A3.5 Overseas Ownership in

Scottish Manufacturing

Industry 1992

C1.5 The Electronics Industry in

Scotland

D2.4 Index of Industrial

Production and Construction

for Scotland: Detailed Industry Series 1973-90

No 48 Scottish Economic Bulletin:

Winter 1993/94 price £11.50

#### General Register Office

#### Population estimates: Scotland

The Registrar General's mid-1992 estimates of the population of Scotland were released in November 1993. A booklet summarising these estimates was published by HMSO in March 1994.

This booklet also contains a summary of revised mid-year population estimates for 1982 to 1990. These revised population estimates are consistent with the final, census-based, estimates for 1991.

Population estimates for mid-1993 were released in April 1994.

More detailed analyses of population estimates, by sex, single year of age and area, are available for a small charge from: General Register Office for Scotland Population Statistics Branch Ladywell House Ladywell Road EDINBURGH EH12 7TF

Telephone: 031-314 4301 FAX: 031-314 4344

#### Reference

Mid-1992 Population Estimates, Scotland (HMSO, March 1994)

#### 1991 Census - Scotland

The New Towns Report for Scotland was published on 27 February 1994.

#### Vital Statistics - Scotland

The Vital Statistics Return, Weeks 5 to 9 were published mid-March and include tables for the fourth quarter of 1993.

The 1993 Provisional Annual tables were published at the end of March.

#### Wales

## Welsh Office data on housing completions

This report provides a detailed description of a study undertaken by the Welsh Office to investigate discrepancies in house building statistics in Wales. It describes the investigation, its findings, the main reasons for the efforts and proposes methods by which these errors may be minimised in the future.

#### Reference:

Welsh Office data on housing completions: Report Free on request

## Quarterly Welsh housing statistics, quarter ending 30 September 1993

This Bulletin, prepared by the Welsh Office, presents all aspects of housing in Wales from the quarterly returns made to the Welsh Office by local authorities. The topics covered are new housebuilding, sales of local authority dwellings, renovation grants, homelessness and housing finance.

#### Reference:

Quarterly Welsh Housing Statistics, quarter ending 30 September 1993

Free on request

#### Other Publications

#### **Bank of England**

#### Inflation Report

The February Inflation Report contained a detailed analysis of recent price and cost developments in the UK economy and put forward the Bank of England's analysis of future prospects. Inflation on the government's target measure had fallen sharply since the last report in November 1993, to 2.7% in December. Downward pressures had proved stronger than was expected, and there was little in the current indicators to suggest a pick-up in underlying inflationary pressures. The outlook for economic activity continued to improve. In the Bank's view, the most likely prospect over the following two years was that output would grow at just above its trend and underlying inflation would remain slow.

#### **Quarterly Bulletin**

In addition to regular articles providing commentaries on the operation of UK monetary policy, and developments in the world economy and in financial markets, the February issue of the Bank's Quarterly Bulletin contained the following items:

## Fixed and floating-rate finance in the United Kingdom and abroad

This article analyses the different issues associated with fixed and floating-rate debt contracts, and how the importance of those risks varies depending on whether the borrower is a firm or a household. It examines the current borrowing structure of the UK personal and corporate sectors, comparing this with other countries; and discusses the consequences for the monetary transmission mechanism of a change in the debt structure.

#### The determination of M0 and M4

Recent bank research on M0 and M4, summarised in this article, confirms the leading indicator properties of M0. It also underlines the importance of the role of wealth and of a sectoral approach in explaining M4's behaviour. It suggests that there may be benefit in the simultaneous estimation of equations for consumption and personal sector M4 holdings.

## The role of the European Monetary Institute

This article outlines the role, functions and organisation of the EMI, which began operations on 1 January.

### The gilt-edged market: developments in 1993

This annual article describes activity in the gilt and related derivatives markets and the business of the gilt-edged market makers (GEMMs). In a year in which yields fell markedly, the PSBR was funded without serious difficulty. Turnover in gilts rose, as did the capital of the GEMMs, whose operations remained profitable.

#### Other items

The February issue also reprints speeches by the governor on: the pursuit of financial stability; and the financing of small firms.

The Bank's Quarterly Bulletin and Inflation Report may be obtained as a package (£6.50 per issue or £24 for an annual subscription).

The Inflation Report may be obtained separately

(£4 per issue or £16 an annual subscription)

from:

Bulletin Group
Economics Division
Bank of England
Threadneedle Street
London
EC2R 8AH

#### Articles in recent issues of Statistical News

No 96 Spring 1992

A New Head for the GSS

Official Statistics in the UK: Is there cause for concern?

Defence Statistics Organisation - Risk Management within the MoD

The Home Office Offenders' Index

Sir Jack Hibbert Sean Whellams Sylvia Keith

No96A Summer 1992 Supplement Issue

GSSConference: European Developments and the GSS

No 97 Summer 1992

The Computerisation of School Census, Assessment and Examination Information in Wales

**ASSIST** 

OPCS Omnibus Survey - The first twelve months

John Kinder and Reg Kilpatrick Christine Jeannette Irene Rauta

No 98 Autumn 1992

Challenges in Energy Statistics
Firm Agreements for Supplying Data to the National Accounts

Statistical Liaison with Local Government: Recent Developments

Recent Developments in Balance of Payments Statistics

Jill Marson and Matt Semple Stephen Penneck Richard Laux Bruce Buckingham

No 99 Winter 1992

Official Pay and Earnings in Great Britain

Family Resources Survey

Mike Janes and Alan Spence Sharon Blackburn and

No 100 Spring 1993 - International Edition

Introduction

Official Statistics: The International Dimension seen from the CSO

ODA Assistance to Statistical Services in Developing Countries

A Day in the Life of an ODA Statistician in Africa

Sharing GSS 'Know How' with Eastern Europe and the Former Soviet Union

UK - Hungary Workshop: November 1992 Looking to the Future

Statistics and Developing Countries - Reflections Approaching Retirement

Bill McLennan Alwyn Pritchard Tony Williams Richard Butchart Jenny Church Jenny Church Dick Allen

Sue Lincoln

NO 101 Summer 1993

The 1991 Survey of Origins, Destinations and Transport of UK International Trade

CSO's First Release makes it's Debut

The 1992 Statistics Users' Conference. The CSO-Economic and Business Statistics

into the 1990's

Mike Collop Jeremy Grove Ian Scott

Measuring Traffic Speeds in London

Neil Benn

Households Below Average Income

Nick Adkin / Martin Uglow

Paul Cook / Martin Duckworth

Mike Prestwood / Debra Richards

No 102 Autumn 1993

A Survey of the Welsh Language: The 1992 Welsh Social Survey

Minimising the Form-Filling Burden-CSO's 'Quinquennial Reviews' carried out in 1992-93

The Legal Framework of European Community Statistics

A Good Press For European Statistics

How Not to Collect Fire Statistics from Fire Brigades

Howell Jones
David Blunt
Yves Franchet
John Wright
Gillian AM Goddard

No 103 winter 1993/94

OPCS Sponsors International Conference for users of BLAISE, the Computer Aided

Interviewing Package

Projections of the Prison Population of England and Wales

Performance Indicators for the Police Service

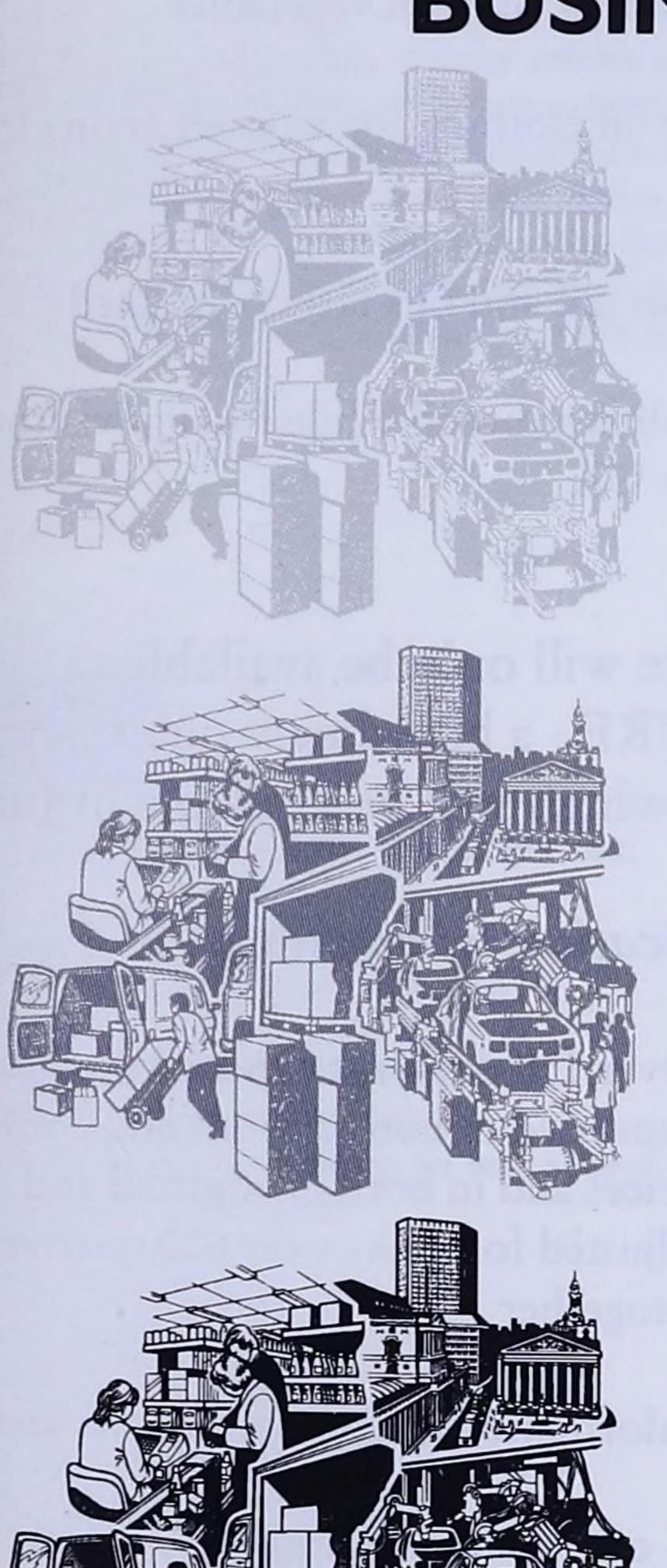
Tackling a Quality Project

Tony Manners
Jackie Orme
Lawrence Davidoff
Paul Vickers and Justin Vetta

Copies of the above and earlier articles may be obtained from: Central Statistical Office, Government Buildings, Cardiff Road, Newport, Gwent NP9 1XG, Library Room 1.001. The cost is £5.00 a copy, inclusive of postage and handling, for the articles listed, and for articles from earlier issues. The appropriate remittance should accompany each order. Cheques, etc., should be made payable to 'The Central Statistical Office'.



# Do you need detailed Product Information? Do you know about BUSINESS MONITORS?



Business Monitors are designed for businesses and others undertaking market research of all kinds. They provide statistics on manufacturing, energy, mining, service and distributive industries. The CSO regularly questions thousands of UK businesses on their output and performance. Some 800,000 inquiry forms are sent out each year, and the data are collated and presented by government statisticians using accepted statistical techniques.

There are over 300 titles in the series variously published at monthly, quarterly or yearly intervals. Business Monitors are the primary and often the only source of the information they contain.

Business Monitors can help you to:

- Monitor business trends
- Identify successful products
- Assess your efficiency
- Identify new markets
- Pinpoint seasonal factors in your business
- Market your products
- Compare the price of your products with those of your industry or sector

#### HOW TO ORDER BUSINESS MONITORS

Ring the CSO Library on:

0633 812973 and ask for our information brochure, "HMSO Publishes for the CSO". This includes a complete list of Business Monitors and an order form.

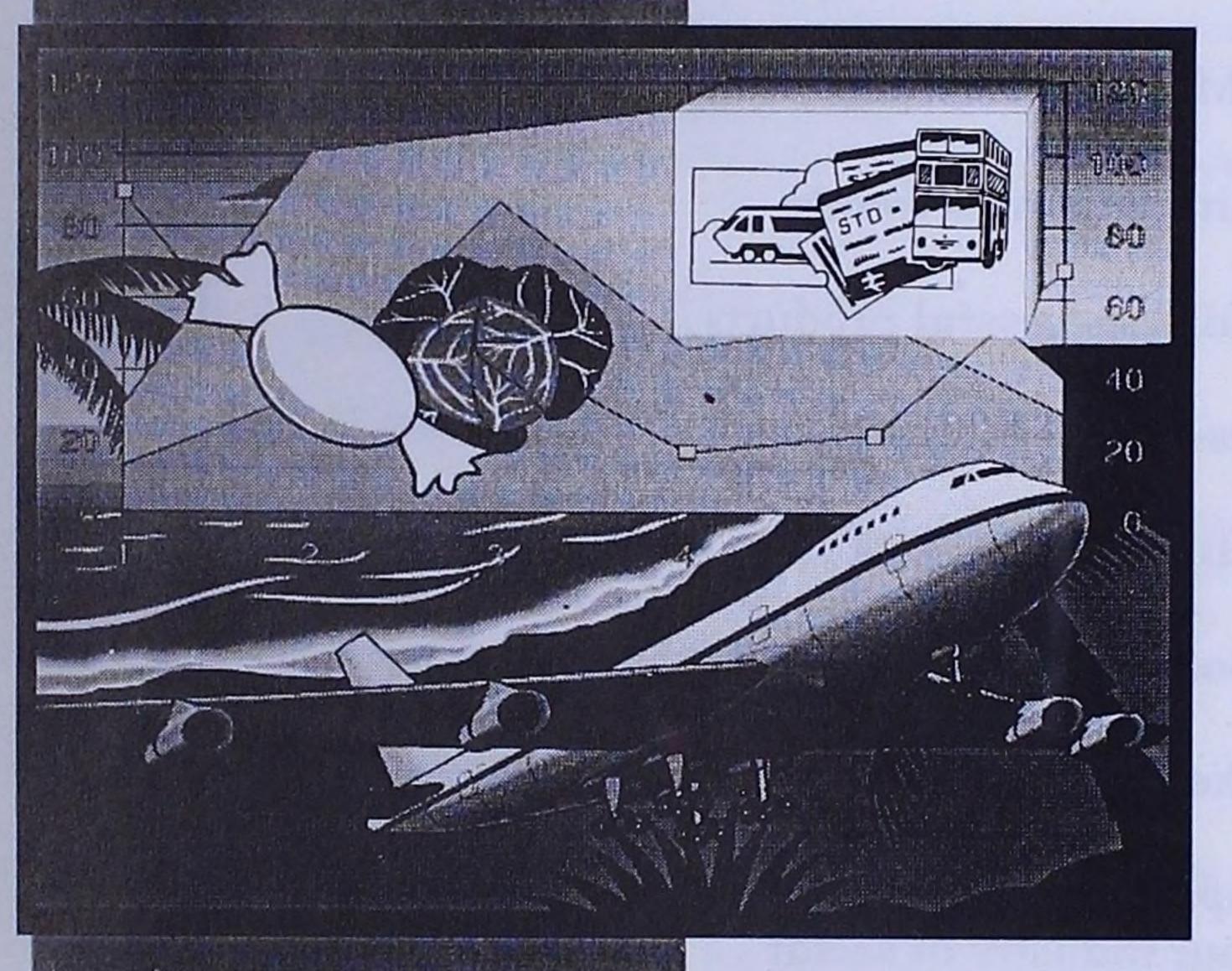


## Interesting Facts

#### Did you know that in 1993 consumers spent:

- More money on confectionery than on vegetables
- More than twice as much on clothing for women as on clothing for men
- More on air travel than on rail and bus fares combined
- £12.8 billion while on holiday abroad while foreign visitors spend £10.3 billion in the UK

These interesting facts and more will only be available in CONSUMERS' EXPENDITURE - a brand new quarterly CSO publication the first edition of which will be available in June 1994.



#### This publication will contain:

- Over 150 different expenditure headings expressed in both current and constant prices and in both unadjusted and seasonally adjusted formats over 600 quarterly series altogether
- Information relating to sources and methods
- A comprehensive index
- A series of graphs illustrating trends in consumer spending

From HMSO and through good booksellers

## Consumers' Expenditure

Published for the Central Statistical Office by HMSO. By subscription at £80 per year

Statistical News - a quarterly publication from CSO.

Statistical News provides a comprehensive account of current developments in British official statistics to help all who use or would like to use official statistics.

Every issue contains two or more articles dealing with a subject in depth.

Shorter notes give news of the latest developments in many fields, including international statistics. Some reference is made to other work which, though not carried out by government organisations, is closely related to official statistics.

Appointments and other changes in the Government Statistical Service are also given. A cumulative index in the winter edition provides a permanent and comprehensive guide to developments in all areas of official statistics.



#### HMSO publications are available from:

#### **HMSO Publications Centre**

(Mail, fax and telephone orders only)
PO Box 276, London, SW8 5DT
Telephone orders 071-873 9090
General enquiries 071-873 0011
(queuing system in operation for both numbers)
Fax orders 071-873 8200

#### **HMSO Bookshops**

49 High Holborn, London, WC1V 6HB (counter service only)
071-873 0011 Fax 071-873 8200
258 Broad Street, Birmingham, B1 2HE
021-643 3740 Fax 021-643 6510
33 Wine Street, Bristol, BS1 2BQ
0272 264306 Fax 0272 294515
9-21 Princess Street, Manchester, M60 8AS
061-834 7201 Fax 061-833 0634
16 Arthur Street, Belfast, BT1 4GD
0232 238451 Fax 0232 235401
71 Lothian Road, Edinburgh EH3 9AZ
031-228 4181 Fax 031-229 2734

#### **HMSO's Accredited Agents**

(see Yellow Pages) and through good booksellers

