6 BEFERENCE

November 1983

COPY

1 - DEC 1983

650

HMSO £3.95 net

# STATISTICAL NEWS Developments in British Official Statistics



A publication of the Government Statistical Service



#### **Government Statistical Service**

It is hoped that *Statistical News* will be of service and interest not only to professional statisticians but to everybody who uses statistics. The Editor would therefore be very 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 the Editor of *Statistical News* at Central Statistical Office, Great George Street, London SW1P 3AQ: Telephone: 233 8246/7455

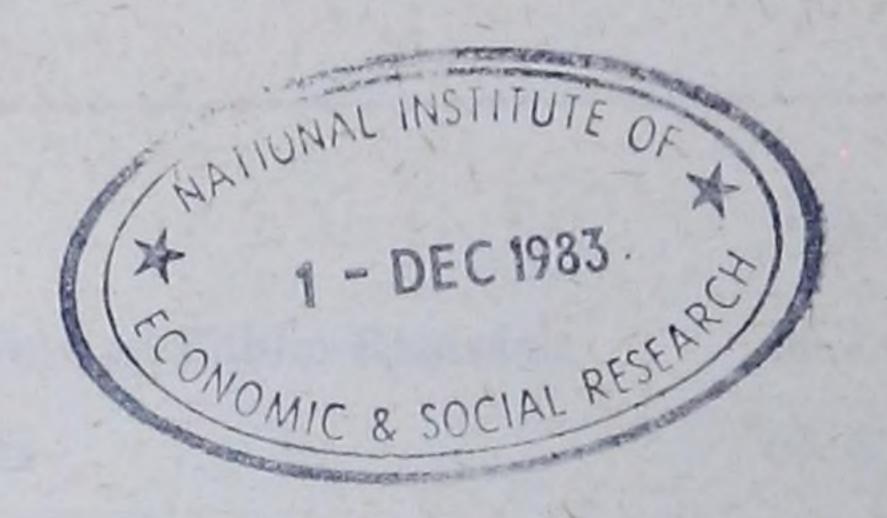
Enquiries about orders and subscriptions for *Statistical News* and other Central Statistical Office publications should be made either to Open University Educational Enterprises Ltd., 12 Cofferidge Close, Stony Stratford, Milton Keynes, MK 11 1BY Telephone: Milton Keynes (0908) 566744

or to

Her Majesty's Stationery Office, PO Box 276, London SW8 5DT
Telephone: 01-928 6977, extension 345 for subscriptions; 01-211 0363 for standing orders; 01-622 3316 for orders

REFERENCE COPY

NOT TO BE REMOVED



# Statistical News

Developments in British
Official Statistics

No. 63 November 1983

London: Her Majesty's Stationery Office

#### © Crown copyright 1983

First published 1983

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, Her Majesty's Stationery Office, St. Crispins, Duke Street, Norwich NR3 1PD

MARINES ME ESTABLISHMENT OF THE STATE OF THE

THE THOUSAND BY THE CONTROL OF

# Contents

# November 1983

ARTICLES			Page
CIPFA's database services		Chris Griffin and Phillip Ramsdale	63.1
Computer assisted retrieval of medical documents on microfilm		Ben Wilders	63.6
The automatic collection and analysis of traffic	c data	A. D. Butler and M. J. Collop	63.9
REGULAR FEATURES			
New surveys assessed by the Survey Control U	nit		63.14
Recently available statistical series and publications			63.15
NOTES ON CURRENT DEVELOPMENTS			
	Page		
Population and vital statistics		Health	(2.22
1981 Census results	63.17	Hospital in-patient statistics	63.23
1981 Census – Scotland	63.18	Industrial injuries statistics	63.23
Population Trends	<b>60.10</b>	Statistics of pregnancy and childbirth	63.24
Family size and age at childbirth	63.18	Infectious diseases	63.24
Immigrant mortality	63.18	OPCS newsletter to the NHS	63.24
Population in communal establishments	63.18	Cancer statistics: registrations	03.24
Population definitions	63.18	Edwarties	
Marriages	63.18	Education  Digest of Education Statistics, England	63.25
Mortality statistics	63.19		63.25
Local authority vital statistics	63.19	Scottish education statistics: review of the	63.25
Population projections – Scotland  Vital statistics – Scotland	63.19	1983 school census	
Vital Statistics – Scotland	03.17	1705 SCHOOL CCHSus	
		Manpower and earnings	
Social statistics		Employment and the working population -	63.26
Social Trends 14	63.19	adjustments for underestimation	
Family Expenditure Survey	63.19	More frequent Labour Force Survey	63.26
The family	63.20	Unemployment flows; new statistics	63.26
Survey of young people in the eighties	63.20	Unemployment in local authority districts	63.27
Scottish social work statistics	63.21	MSC labour market quarterly report	63.27
Criminal statistics, England and Wales	63.21	Scientific instruments industry: manpower,	63.27
Prison statistics, England and Wales	63.21	training and outlook	
Reconvictions of those given community	63.22	New earnings survey 1983 – main results	63.27
service orders		Average earnings index – Standard Industrial	63.27
Civil judicial statistics – Scotland	63.22	Classification Revised 1980	62.20
Prisons in Scotland	63.22	Relative earnings in counties containing	63.28
United Kingdom citizenship	63.22	Special Development Areas	63.28
Experiments on living animals	63.22	Armed forces pay (Service medical and dental	05.20
Smoking attitudes and behaviour  Charity statistics	63.23	officers) Wages and employment – agricultural workers	63.28
Charity statistics	05.25	wages and employment – agricultural workers	03.20

	Page		Page
Agriculture and food		Lifespan analysis of businesses in the United	63.36
National Food Survey	63.28	Kingdom 1973-82	
Agricultural censuses and surveys	63.28	Investment intentions survey 1972-82	63.37
Agricultural Statistics for the United Kingdom 1982	63.29	Financial assets of insurance companies and pension funds 1982	63.37
Farm management survey in England	63.29	Tax reliefs on occupational pension schemes	63.37
Agriculture in Scotland 1982	63.29	Welsh local government financial statistics	63.37
Scottish agricultural censuses	63.29		
		Overseas trade and finance	
Industrial statistics		United Kingdom Balance of Payments 1983	63.37
Industry statistics	63.29	Edition	
Business Monitors – Annual Census of Pro-	63.30	Overseas travel and tourism	63.38
duction 1981	62 20	Overseas transactions by film and television	63.38
Housing and Construction Statistics 1972-	63.30	companies	
1982		Decearch and development	NAME OF STREET
Distribution and other services		Research and development statistics	63.38
Distribution and other services  Distribution and service trades: results of four	63.30	Research and development statistics	05.50
years inquiries	03.50	International	
Cinemas 1982	63.30	International comparisons of profitability	63.38
Cincinas 1702	03.50	1955-81	03.50
Defence		International Statistical Institute: short book	63.38
Defence statistics	63.31	reviews	
	-10111-11		
Energy		Publications	
Digest of United Kingdom Energy Statistics	63.31	Bank of England Bulletin	17 1101
1983		Nature and implications of financial	63.39
		innovation	
Transport	18090	Competition, innovation and regulation	63.39
Transport Statistics - Great Britain	63.31	in British banking	
Road accidents	63.32	What the City expects from the account-	63.39
Road accidents – Wales	63.32	ing profession	
Continuing study of road goods transport	63.32	Intervention, stabilisation and profits	63.39
International road haulage 1982	63.32	Geographical analysis of UK banks' ster-	63.39
Ports statistics	63.33	ling liabilities and claims	(2.20
Purchases and sales of ships by the UK ship-	63.33	Finance leasing: estimates of investment	63.39
ping industry 1982		in assets for leasing out	63.39
	THE OWNER.	National Institute Economic Review	63.40
National accounts	Solding.	Eurostat index	63.40
National Income and Expenditure 1983 Edi-	63.33	International publications	05.40
tion	00.00	Conferences and meetings	
		Royal Statistical Society Study Group on the	63.41
		GSS: series of meetings	A TOOLE
Home finance	63.34	Statistics in Health	63.41
Commodity flow accounts United Kingdom economy cyclical indicators:	63.35	Statistics in Production	Pale of
some developments	05.55	Government Statistical Service	
Price index numbers for current cost	63.35	Obituary	63.41
accounting	30.00	Appointments and changes	63.41
Forecasting the public sector borrowing	63.35	Reviews of regular surveys	63.41
requirement			Bernet,
Cash limits	63.36	Late items	63.42
Inland Revenue Statistics 1983	63.36	Contract to the second of the	
Companies in 1982	63.36	ALPHABETICAL INDEX	63.44

#### CIPFA's Database Services

# Chris Griffin, Statistician, Department of the Environment, and Phillip Ramsdale, Head of CIPFA Statistical Information Service

In the November 1982 issue of Statistical News, Roger Sellwood, Chief Statistician at the Department of the Environment (DOE) and Chris Griffin, on secondment from DOE to the Chartered Institute of Public Finance and Accountancy (CIPFA) described the plans for a whole range of new developments in the use of statistics at CIPFA. This note describes some of the achievements that have already been made and the new services that are available from the central database, and outlines the next steps towards the achievement of a national statistical and management information service using new technology.

Background

CIPFA's Statistical Information Service (SIS) has its roots in the first comparative survey, the 'Return of Rates' carried out in 1885 and ever since has striven to provide financial and other statistics, and related advice, to managers in local and other public authorities. Recently a unique service has been built up, centred on the collection of data from authorities and its processing and publication in a series comprising some 35 detailed annual booklets in the SIS series.

For the most part, the information so collected relates to the financial activities of the 457 local authorities in England and Wales, together with associated non-financial data covering manpower and other resources used, client groups, installations etc. Some publications also cover Scotland. Subscribers to SIS receive the resulting listings and summary statistics very much in the form in which they are collected, and predominantly linked to financial 'estimates' (budgets) or 'actuals' (outturn) for particular local government services.

While the management of SIS was centralised under the control of a number of specialist working parties (who also provided professional advice about the development and interpretation of the statistics), collection and processing was largely devolved to individual volunteer compilers in local authorities, who were also responsible to some extent for any associated supporting activities—interpretation and handling follow-up inquiries.

#### The need for change

By 1980 it was recognised that the SIS would require a major new investment if it was to overcome some of the problems inherent in the system that had developed and to keep abreast of developments elsewhere. On the former front, the increased use of CIPFA statistics for management and political purposes meant that attention was needed to quality, in terms of guidelines, accuracy, standards and definitions.

This wider use of the service also led to pressures for more analysis of the raw data and its interpretation for an audience outside the regular users of financial and associated data. Also, CIPFA was keen to extend the SIS to service managers beyond the accountancy profession, to other parts of the public sector (e.g. health and water), and to include more information that was relevant to the management of public authorities.

A further influence for change was the growth of information technology which could greatly assist in the transmission and dissemination of data, beyond the already well-established use of central computers for data processing. The recent developments in the distribution of the CSO economic database have been of considerable interest on this front.

#### Development plan

Reflecting these external and internal influences it was decided to invest in a new, centralised database at CIPFA, comprising the following activities:

- centralisation and integration of processing and analysis
- more efficient means of data capture
- use of electronic dissemination media
- increased coverage
- provision of analytical and related services.

Inevitably, progress on each front has been variable, due to the financial constraints imposed on the operation (broadly speaking the need to break even over a relatively short period), the time required to test and install new systems, the availability of tried and tested technology to achieve what was required, and the sheer resources needed to transfer an existing and continuously expanding distributed database into an integrated whole.

It was decided that the core of the new SIS database should be a purpose-designed suite of programs to run on CIPFA's CMC Reality minicomputer. The choice of a minicomputer which relied to a considerable extent on processing and interrogation through remote terminals was motivated by the need to encompass both data capture and dissemination, as well as processing, within the same system.

At the same time it was recognised that the choice of any single computer system then available (mid 1981) to undertake all the tasks associated with the new database would require many sophisticated facilities; yet it could also act as a potential constraint when it came to exploiting developments in information technology not yet on the market. The pace of change in this field, especially in the power of microcomputers and their ability to communicate, meant that a single comprehensive system purchased in 1981 might well be obsolescent before its useful life had expired, creating a possible restraint on development.

It was therefore decided, quite deliberately, to opt for a 'three cornered' solution where the necessary hardware and software were concerned, and to keep all options open in regard to communications. Quite simply this involved the use of the central minicomputer in association with microcomputers and remote mainframes (including bureaux), at all times exploiting the particular strengths, in terms of processing and communication, cost and flexibility, sophistication and user-friendliness that each possessed.

#### Central database

Before describing the achievements that have been made, and further plans, under the five broad activity headings set out above, it may be of interest to refer in some detail to the software that has been installed on the 'core' minicomputer, and the associated structure of the database. As mentioned, the computer which was installed in late 1981 to operate SIS and a number of other CIPFA systems (word processing, accounts, membership, Financial Information Service (procedural guidance) etc.) is a CMC Reality with 256 K memory and 250 Mb of disk storage, operated through, at present, 16 terminals located in CIPFA's three headquarters buildings and elsewhere. Only two ports, at this stage, are available for access by outside enquirers. The software - officially named the Statistical Information System - was commissioned under the contract with CMC from ISIS Computer Services of Bristol. The system comprises the following modules:

System Structure

- (i) input
- (ii) validation
- (iii) database structure/file creation
- (iv) distribution to main database
- (v) data/file manipulation
- (vi) special analyses
- (vii) output

The system has a number of features which were in turn either benefits accruing from the choice of the CMC machine, features borrowed from other database systems, or requirements specified by the professional staff involved based on their experience in central and local government and elsewhere. These features include the following:

System Features

- (i) entirely terminal driven all documentation is included in the system;
- (ii) menu driven each of the seven structural modes listed above has its own master menu, within a heirarchy of superior and subordinate menus;
- (iii) at the same time, the system uses standard CMC software for many features, including the ENGLISH interrogation/retrieval system, file documentation, security levels etc;
- (iv) CMC are making continuous progress towards full integration of separate bespoke or standard systems word processing, accounts etc.;
- (v) where required e.g. to create complicated data manipulation statements or output statements - the standard features available can be enhanced via storable DATA/BASIC subroutines;
- (vi) the system can run one of two 'state of the art' validation routines, with optional levels and types of validation and acceptance;
- (vii) all data entering the database is held in a hold store pending validation and acceptance, which has certain features to record the state of response, validity etc.;
- (viii) the database is constructed on master survey files containing the fundamental data required for all other purposes, thus minimising repetitive data storage: this is only feasible due to the software's ability to retrieve individual data cells quickly and cost effectively;
- (ix) a completely independent structure is maintained for the units on which variables are measured, i.e. a variable coding structure, which drives, and is automatically cross-referenced to, the data files;
- (x) data files are held in matrix format (rows = records, columns = attributes or variables), although it is possible to relate the data;
- (xi) multi-mode input is possible (via keyboard, magnetic tape or via microcomputer storage media);
- (xii) multi-mode output includes screen, printer, remote machine, magnetic tape, special analyses, 'camera-ready' print copy;
- (xiii) manipulation routines are held separately and may be augmented permanently (by system enhancement), temporarily (via DATA-BASIC or ENGLISH sub-routines); or on an ad hoc basis (via terminal instructions): these operate on rows and/or columns;
- (xiv) regularly-used analytical facilities are inbuilt

(ranking, selection, aggregation, regression, frequency distributions).

Reflecting the above features of the software system, the structure of the database itself is along the following lines:

#### Database structure

- -Central data files ('survey files') are maintained either in the form of input (usually a questionnaire) or of the main output (currently, the published booklets). Data repetition is minimised, and users create their own manipulation/output files by extracting/merging/reproducing all or part of the basic survey files available to their account;
- -Each survey of data is referenced at present according to whether it relates to 'estimates' (budgets) or 'actuals' (outturn) data or both;
- -Each authority (e.g. Cambridgeshire County Council) or institution (e.g. Brighton Polytechnic) has a unique reference number called a 'Public Authority Number';
- Each public authority is then referenced or cross-referenced with different coding structures ('type codes') which are used to group and summarise the data automatically into different spatial areas (e.g. district councils into counties/counties into regions/regions into countries) or into different authority types (e.g. metropolitan as distinct from non-metropolitan), or to create, speedily, new survey files (for instance, on standard cluster membership);
- Each record for each 'public authority' in the survey file is then referenced by year so that archived data can be extracted in time series form;
- Data are first received into a 'hold file' for validation and subsequent distribution (or otherwise) into a survey file;
- There is also the facility within the software to maintain comments about the individual columns of data, or about an entire survey file. This is especially useful when it is necessary to merge data from different surveys, since archived comments can remind the user of possible incompatibilities;
- All users of the database whether internal or external – are allocated separate working files to which data are extracted from the survey files.

Much of the activity of the past year has understandably concentrated on establishing the central database as a going concern, rather than developing in the other four areas listed above (data capture, electronic dissemination, increased coverage, and special services). In the 12 months since the system went live, much time has been spent on simply testing, learning and evaluating the software. Not surprisingly teething troubles have emerged, particularly in the time which the software used to take to perform certain tasks. A skilled database technician has been recruited specifi-

cally to master, exploit, and develop the software and to eradicate problems, since the existing annual cycle of SIS activity has of course had to be maintained alongside the database development.

Alongside the task of software development, much thought and effort has been devoted to the structure of the survey files, given the philosophy of freeing these from the format of the source document or anticipated output, for efficient storage and retrieval. At the same time the work of loading data into the database is now well under way, concentrating on information of the following kinds:

- current surveys (mostly from tapes provided by volunteer compilers);
- any surveys not presently processed on computer;
- data required by clients (see below);
- selected historical data (where a need is identified);

Owing to the arrangement whereby authority code structures are built up in separate files, the initial task of constructing the database is more intensive than it would otherwise have been, but once a basic coding structure has been established the effort involved will be amply repaid, and effective links could be made with other banks of statistics with fixed coding structures.

The other current task on this front has been to identify potential major clients for the database service, who would use its facilities on-line to access and analyse CIPFA data, interface these data with their own information, and generally reap the benefits of using an advanced computing system combined with the unique information available from SIS. This notion of a 'data plus analysis' service is fundamental to the creation of the CIPFA SIS, and an encouraging number of clients is beginning to build up.

#### Data capture

The existing means of capturing data reflects the pattern that has been established in SIS in recent years: either, questionnaire information is input via keyboard, or pre-punched for magnetic tape input, or received on magnetic tape from remote computers and other databases. In the past considerable difficulties arose over handling the data tapes generated by different compilers, but these have to a large extent been overcome because an integral part of the software copes with variable tape formats. However, all CIPFA compilers have now agreed upon a standard to overcome unnecessary loading problems.

For the future, CIPFA has been watching carefully the developments that are in hand elsewhere for the automatic or semi-automatic capture of data from remote units. It is obvious that a number of technological, system and human problems have yet to be overcome, but there is felt to be considerable potential in, for example, the replacement of questionnaires by direct input through remote terminals over a telephone line. It is hoped that suppliers of data could in this way use the system to prevalidate their responses to inquiries at the time of input, so reducing the validation effort required at the centre and improving quality and timeliness.

Another possibility that has yet to be explored is the provision of questionnaires in the form of microcomputer disks, with perhaps inbuilt validation routines. Once completed on the form-filler's own microcomputer the data could either be posted back to the central database for automatic read-in or, preferably, sent down the telephone line to the host machine.

#### Electronic dissemination

It is envisaged that the published series of SIS booklets will need to be produced for many years to come. However, the growth of cheap, reliable and sophisticated information technology has already made it clear that electronic dissemination media have much to offer. Advantages include the ability to:

- analyse the source data without first specifying a particular dataset;
- allow the consumer to decide to what degree the raw data should be processed to meet particular local requirements;
- afford more frequent and more up to date access to data, at the times required by the user;
- bring the analysed results of the data to a wider audience without the need for a middleman;
- allow the user to combine information from the database with his own data and then analyse and store it at will.

The range of possible modes of dissemination is wide and expanding, but the 'three-concerned' philosophy adopted means that the following are already operational:

#### Dissemination media

On-line inquiries: provided a suitable terminal or microcomputer exists, the system can be accessed by any institution or individual on line or via a bureau service: where a user requires e.g. advanced analytical facilities, data can be made available at a bureau of the user's choice.

Distributed: database extracts can be packaged on computer tape and diskettes for distribution to customers. Data has been provided on tape for most types of mainframe computer tape and diskette for the IBM Personal Computer (and the BBC Acorn series B micro computer). Depending on demand, a diskette service will be developed.

Teletext: if sufficient demand can be demonstrated, CIPFA will make subsets of the data available on the various national systems e.g. PRESTEL, British Telecom Gold.

The distributed form of dissemination for microcomputer users is seen as being particularly important, as users acquire machines that are 'personal' to themselves and use standard software with which they are familiar. There are several software packages available on the market which could be used to analyse the data in 'spread sheet' form or statistically. However the former are felt to be limited in their analytical scope, and the latter, similarly, in their user-friendliness for non-professional staff.

CIPFA have therefore developed their own micro package to run, initially, on a BBC micro computer. This is essentially a prototyping exercise to encourage a wider audience to use the data (hence the choice of the BBC) and to create an interest in converted packages which could run on other machines. Nevertheless the existing package is robust and provides many attractice features, including multiple linear regression, colour graphics, estimation/forecasting, ranking, and analysis of outlying authorities. The package can of course be used to analyse the user's own data, or CIPFA data, or a mixture of the two.

#### Increased coverage

Three particular influences can be identified which have caused CIPFA to seek to expand the coverage of their existing statistics in parallel with the introduction of advanced technology. Firstly, there has been increasing pressure on government departments both to improve access to the disaggregated data that they hold which concerns or is relevant to other parts of the public sector, and at the same time to reassess their priorities and practices in providing data to outsiders.

Following the Review of Government Statistical Services by Sir Derek Rayner, government departments regard their first priority as collecting data for government's use, and there is some variability in their dedication to meeting the needs of other users. In the forum of the National and Local Government Statistical Liaison Committee and its Information Technology sub-group, departments and the local authority Associations have recognised the existing importance of CIPFA's SIS as providing a national database for all local government. The potential for expansion now exists and it is important to nurture this towards local needs and priorities.

A second force for expansion has been the emphasis in recent years on performance measurement, and the demand for more standardised and detailed data to service it. In some circumstances such data cannot be released in full detail, or has to be anonymised, or will be retained in the institution to which it pertains. The new database service provides for all these kinds of data to be brought together for the experimental or established analyses that are fundamental to performance measurement.

A third activity concerns the increased interest in the compilation, analysis and release of disaggregated data pertaining to public authorities in e.g. the health service, the water industry and the public corporations, at the level which is already available through CIPFA for local authorities. Although the initial work of identifying and defining the statistics concerned is carried out in many places – including the working parties of SIS—the new database has been designed as the eventual home for much of this information.

For the above reasons CIPFA is discussing with other interested parties in many fields the development of new datasets and is itself developing experimental listings, surveys and publications in some of them. CIPFA would welcome discussions with government departments and other public authorities who feel that they could contribute to the database, as a means of collecting or disseminating data to a wide audience, or as a by product of using the database themselves.

#### Special services

The previous article referred in a wider context to some of the special services connected with the Statistical Information Service that it was hoped to develop. Besides the services that are available for the collection, processing, storage and dissemination of individual authorities' or institutions' data it may be worthwhile including a reminder here about two such services.

The statistical comparisons service provides for the comparison of an individual local authority's figures with groups of similar authorities on a prespecified dataset. (The CIPFA software for the BBC microcomputer offers a similar facility). It is hoped to expand the types of public authority that can be covered by this service and the range of datasets on which it is available as a matter of course.

The second service, which is aimed particularly at expanding the audience for CIPFA and similar statistics outside the traditional, professional arenas, is the computer mapping service. By arrangement with Pinpoint Analysis Ltd any set of CIPFA data (or, at additional cost any other set of published data) and various analyses on that data, can be reproduced in the form of eight computer printed, multi-coloured density maps, defined on a variety of spatial areas, notably local authorities. The resulting maps are of very high quality and suitable as camera-ready copy, and can be used in consequence to enhance and illustrate statistical publications, annual reports, proposals for consideration by senior management or the public etc.

#### Conclusion

CIPFA's new database service has made considerable strides in the year since it was introduced. While most effort has so far been devoted to constructing the central database itself, work is now in hand in the fields of data capture, dissemination, special services and, above all, increased coverage of public sector information relating to finance, inputs, outputs, client groups, and background statistics.

CIPFA is keen through its SIS Working Parties or otherwise, to offer its services to a wider range of interested parties, to exchange experiences in the fields of information technology with other bodies, and to widen the service offered, as described in this article, in response to potential user's needs.

Inquiries on the services and activities of the Statistical Information Service should in the first place be made to:

Phillip Ramsdale CIPFA 1 Buckingham Place London SW1E 6HS (tel. 01 828 7661)

#### Reference

Statistical News 59.12 November 1982 (HMSO) (Price £3.50 net)

#### Computer assisted retrieval of medical documents on microfilm

#### Ben Wilders, Senior Scientific Officer, Ministry of Defence

Using recent developments in information technology the Defence Statistics Organisation has introduced a new system (acronym CARMED) for coping with large volumes of documentation relating to the health of the Armed Services. The documents are microfilmed, indexed on a mainframe computer, and accessed using a microfilm viewer linked to a microcomputer which acts as the enquiry terminal.

#### Introduction

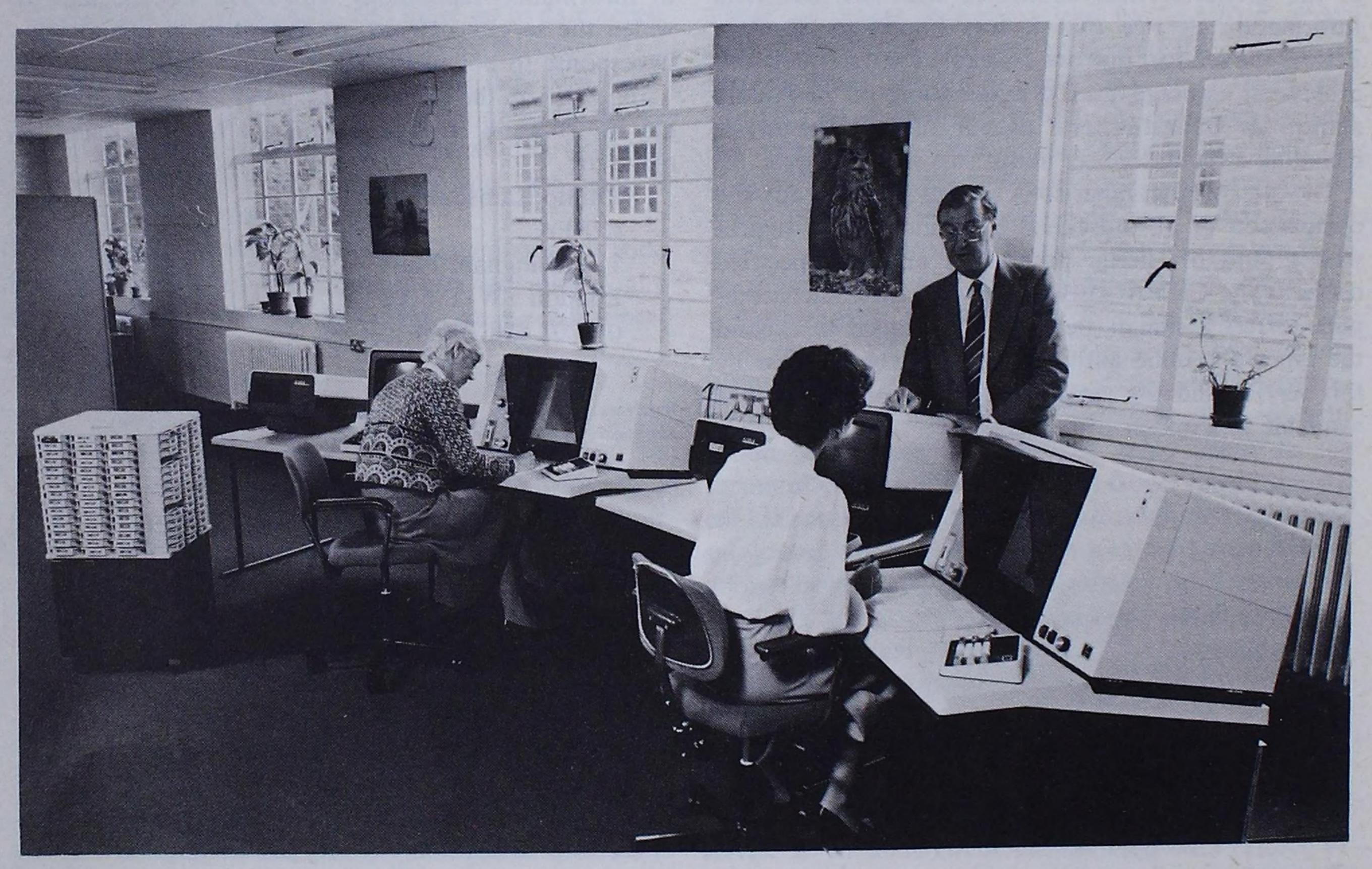
The medical statistics branch of the Defence Statistics Organisation (Stats (G)4) maintains a medical database, known as the Tri Service Medical Statistics System (TRIMEDS) covering the personnel of all three Services<sup>1</sup>. This provides standard output tables on the health of the Services, and is used as a source of data to answer ad-hoc queries, aid medical researchers, and perform analyses in order to determine the efficient allocation of medical resources. The branch also has

responsibility for storing a central medical record which contains a duplicate of the more important records of everyone in the Services. The case notes contained in these records provide much additional detail that is not in TRIMEDS. By using TRIMEDS as an index of the main medical events this information can be accessed, increasing considerably the range and depth of statistical analyses.

Hitherto the duplicate records have been stored in envelopes called F Med 29s, one for each serviceman or woman, filed on the basis of service number. A considerable manual effort was required to file all the incoming records (in excess of 1,000 each working day) and extract the files of the F Med 29s of those who had left the Services. The latter records were kept in reserve files for 10 years before being archived. The records of currently serving personnel alone required over 10,000 sq. ft. of floor space to house them. Retrieval was straightforward, but since the number of documents filed in a year (over 250,000) far exceeded the number of retrievals (about 25,000) the system was inefficient in terms of effort per enquiry.

<sup>1. &#</sup>x27;Progress in medical statistics for defence' by B. Oelman and B. Wilders.

Statistical News 55.1 (HMSO 1981)



1. Viewing stations and carousel of 180 cassettes of film

Photographs by courtesy of Kodak.

In order to increase the efficiency and reduce the cost of the operation in terms of staff time and overheads on space a new approach was sought. Microfilming had long been a possibility for predictable regular returns, but until recently was not a viable proposition for processes in which related documents arrive at irregular, possibly widely spaced intervals. The Management Services division of the Ministry dealing with office machinery systems drew attention in 1981 to an innovative system which linked microfilm viewers to computer-held indexes. Microfilming then became a real possibility. After detailed investigation one such system was adopted by Stats(G)4.

There are three essential parts to the system: a microfilm camera incorporating a printer under process control which numbers documents before they are photographed; a database to link these numbers to identifying information from the documents; and an intelligent microimage terminal coupled to a microcomputer which on request, when the correct cassette of film is inserted, will locate and display the appropriate frame.

#### The camera

A flow camera (Kodak Recordak Reliant 750 with controller and imprinter) is used. Sensors detect the

leading edge of each document as it is fed into the camera and trigger a printer to number the document in the correct position. The number is sub-divided into three groups of digits. The film number is manually reset on one group of digits, the other two groups record the batch number and item number within the batch counting from the start of the film. The document then passes between two glass plates where both sides are photographed simultaneously and a light is triggered to produce a small blip on the edge of the film. Batch headers carry bar markings which are sensed as they pass through, reset the item counter on the printer and produce larger blips on the film. Printing and blip sizes are under process control and several programs are available.

#### The microimage terminal

This is a microfilm viewer (Kodak IMT-150 with multilevel search module) taking automatic self-threading film cassettes which locates a particular frame by counting blips, distinguishing between the different blip sizes. The frame required (batch and unit) may be set on a keypad, and in this form has been available for several years. The innovative feature was to add a unit with a standard computer interface. This is connected to 'listen in' to all communications to a VDU, and when



2. Some 750,000 medical documents

the correct prompt is encountered (usually >>>) the following characters are used to search for a frame, rewind the film, etc. Different modes may be set to match the other programs used in the camera.

#### The computer-held database

The database is designed to index the records of everyone currently serving plus those who left the Services
in the last 10 years. Once this size has been reached,
representing between 100 and 200 Megabytes of disc
storage, the index entries of those who left more than
10 years before will be transferred to microfiche.
Because of its size the index has been set up on the
Ministry of Defence mainframe installation at Devizes
(BuWest) which also houses TRIMEDS.

The database itself consists of three indexed sequential files, one for each Service. Each record contains a header with service number, name, and year of exit, followed by a variable number of data blocks which in the main will be records of micro-filmed documents giving date, type of document, and microfilm number, though other information such as change of name or service number is also catered for.

Because the TRIMEDS files contain the information that is in the CARMED headers for everyone in the Services since 1978 it was possible to set up all those headers immediately and use them to validate the incoming data by matching names with the service number.

#### Accessing the records

The database is accessed using CASU microcomputers connected to a modem multiplier (to separate the channels) and a dedicated line to BuWest.

To view a record for an individual, a code for the Service followed by the service number is typed on the microcomputer keyboard. The header information plus a menu of all the data items is displayed on the VDU. When the number of the required selection is typed the serial number of the film is shown. As soon as this film cassette is loaded into its slot in the viewer the film is automatically fed through at high speed to locate and display the required frame.

This method of access shows a considerable time saving when a statistical analysis is being performed which requires consultation of the case notes of particular medical events of a large number of individuals. Under the old manual system the records could well be spread through several rooms.

#### Types of record held

The records fall into three broad classes, each requiring different treatment. There are the documents to be coded for TRIMEDS, about 50,000 a year; the documents that do not require coding, about 350,000 a

year; and more than 5,000,000 documents held in the old files.

TRIMEDS coding is carried out before filming, and the coding sheet is filmed immediately following the original document. The number that the camera stamps on the coding sheet is keyed in with the other TRIMEDS data, and is subsequently transferred to the CARMED index and used as a reference to both documents, avoiding additional data entry.

Documents that do not require coding are sorted by Service and type of document, and batch headers are inserted. After filming, the batches are sent to the Ministry of Defence central data processing facility (CDPF) at Devizes who enter the required data directly from the original documents.

The records in the old files are treated rather differently. A set of documents is extracted from the F Med 29 envelope and a bar-marked header which has been stamped with a six digit serial number (derived from the TRIMEDS files) to identify the individual is placed in front. The program in the camera is switched so that only the headers are stamped with a number. After filming the headers are extracted and sent to CDPF for data entry. The identifying serial number is reconverted to provide a standard CARMED data item. The enquiry program recognises the different camera programs from the form of the number stamped by the camera and changes the mode of the search program accordingly. Thus an enquiry for these previously filed documents will go straight to the header and all the related documents will be found in sequence after it.

#### Progress to date

The equipment has been installed, with two viewing stations to meet the expected level of enquiries. Filming began in earnest at the beginning of the year. A number of problems have been met and overcome in the various stages of microfilming and data input, and in this connection the work of Stats (S)2 (the Defence Statistics computer programming branch) in writing the data input programs is gratefully acknowledged. Some idea of the saving in space that will be realised is shown in the accompanying photographs. The first photograph shows the two viewing stations in use—the carousel of film cassettes on the left holds as many records as can be seen in part of the old filing system shown in the second photograph.

The system became operational in July and will be in daily use by the time this article is published. It will not be fully effective until the considerable task of transferring all the present files to microfilm has been completed. As this task proceeds the benefits of greater speed and efficiency in storing and retrieving medical documents and carrying out statistical analyses of medical data will be realised.

#### The Automatic Collection and Analysis of Traffic Data

# A. D. Butler, Statistician and M. J. Collop, Senior Assistant Statistician, Department of Transport

#### Summary

Preparations are being made whereby at 120 sites of the Department of Transport's Core Census of traffic, vehicles will be counted and classified (Figure 1) using automatic equipment.1 Counting will be continuous but totals will be produced for each hour. Data for the previous day will be collected from all sites via telephone lines between midnight and 6 am by a minicomputer either in London or Edinburgh. They will then pass through automatic validation routines, be edited as necessary, and be used to provide estimates of the changes in traffic flows (Figure 2). Contracts have recently been let by the Department of Transport and the Scottish Development Department to Ferranti Computer Systems Limited, with Golden River as Sub-Contractor, for the production of hardware and associated micro-processor software. The first sites should be automated in the Spring of 1985 and a fully automated Core Census in operation by mid-1987.

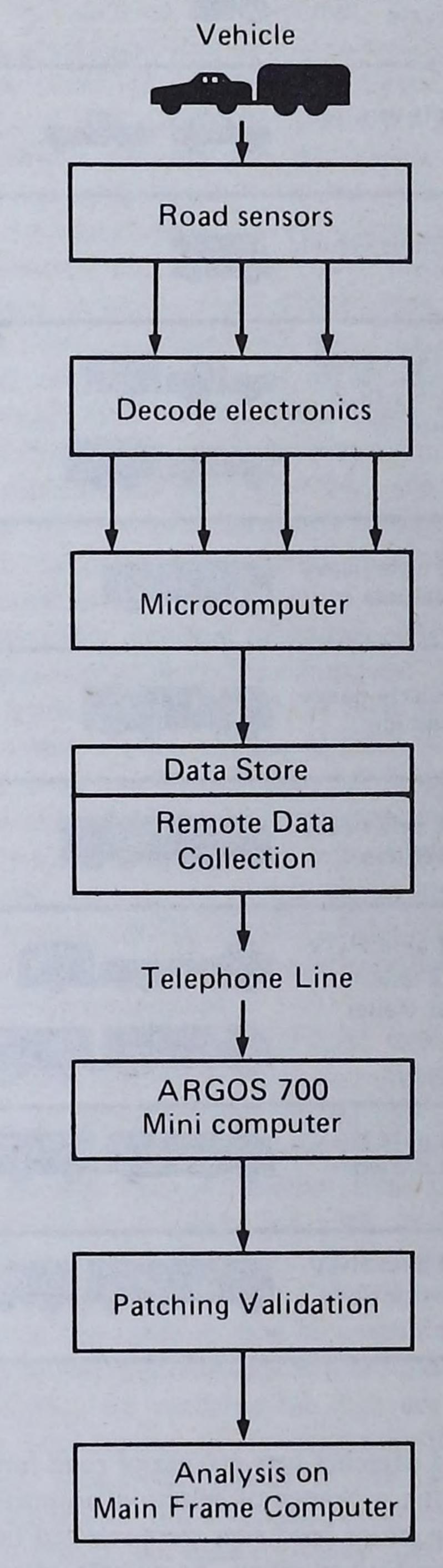
#### The Core Census

The Department of Transport relies on two censuses to provide traffic information. Described in Statistical News No 53<sup>2</sup> they are the Core Census and the Rotating or Link-based Census. The Core Census is designed to give estimates of national traffic trends by type of vehicle and class of road. Sites have been randomly chosen throughout Great Britain in such a way that the distribution of sites, for each road class, between Scotland, Wales and the regions of England is proportional to the length of road<sup>3</sup>. This ensures that, whatever variation between regions there may be in traffic trends, each region is given an appropriate weight in the national estimates. (However the sample size is not large enough to give acceptable estimates at the regional level.) The numbers of sites, by class of road, are given in Figure 3.

These were chosen to enable particular changes in traffic by vehicle type or road class to be estimated to pre-determined levels of accuracy. (For example the proportionate change in all motor vehicle traffic on trunk roads between the same month in consecutive years should be estimated to an accuracy of ± 4 per cent with 95 per cent confidence.) The motorway sites comprise a set selected at 80 kilometre intervals on the 1964 motorway network with further sites added at each 80th kilometre as the network expands. For trunk and principal roads, sites were selected by sampling

FIGURE 2

BLOCK DIAGRAM OF AUTOMATIC
TRAFFIC DATA RETRIEVAL



#### FIGURE 1

#### VEHICLE CATEGORIES FOR THE GB AUTOMATIC CORE TRAFFIC CENSUS

Class	Vehicle description		Class	Vehicle description
	Bicycle		44	Rigid 3 axle HGV +3 axle drawbar trailer
	Moped, scooter motorcycle	5	51	Artic, 2 axle tractor +1 axle semi-trailer
	Car, light van, taxi		52	Artic, 2 axle tractor +2 axle semi-trailer
	Light goods vehicle		53	Artic, 3 axle tractor +1 axle semi-trailer
1	Car or light goods vehicle + 1 or 2 axle caravan or trailer		54	Artic, 3 axle tractor +2 axle semi-trailer
	Or trailer		55	Artic, 2 axle tractor +3 axle semi-trailer
31	Rigid 2 axle heavy goods vehicle		56	Artic, 3 axle tractor +3 axle semi-trailer
2	Rigid 3 axle heavy goods vehicle			
			61	Bus or coach, 2 or 3 axle
33	Rigid 4 axle heavy goods vehicle			
11	Rigid 2 axle HGV + 1 or 2 axle drawbar trailer		7	Vehicle with 7 or more axles
				1N Vehicle with 1 axle counted
12	Rigid 2 axle HGV			2N 2 axle vehicle not otherwise classified
	+3 axle drawbar trailer			3N 3 axle vehicle not otherwise classified
13	Rigid 3 axle HGV			4N 4 axle vehicle not otherwise classified  5N 5 axle vehicle not otherwise classified
	+2 axle drawbar trailer			6N 6 axle vehicle not otherwise classified

links (i.e. road stretches between major road junctions), each link having a chance of selection proportional to its length. The minor road sites were selected randomly from Ordnance Survey maps. At present, data collection is by manual enumeration; that is, by people at the roadside classifying and counting the vehicles that pass each hour between 6 am and 10 pm. Each site is counted for three days each month (a given weekday, a Saturday and a Sunday). This method is subject to random enumerator error, a source of non-sampling

error in the results. Experiments have shown that enumerator error leads to expected coefficients of variation for the daily totals at a single site of about five per cent for cars and for all motor vehicles, and about 15 per cent for other vehicle types. However there is no evidence of systematic bias, either of under-recording or over-recording of vehicles.

Figure 3. Core sites by road class

Road class	Manual	Automatic
Motorway	35(+6)1	24(+4)1
Built up: trunk	9	5
principal	23	14
В	9	6
C	9	6
unclassified	11	7
Non built up: trunk	24	16
principal	23	16
В	7	6
C	12	10
unclassified	7	6
	ried a solve	eq-,link to
All roads	169 (+6) <sup>1</sup>	116 (+4)1

<sup>1</sup> Motorway sections selected but not yet open.

#### Automation

Recent progress in vehicle detection equipment and microprocessor software has led to the development of automatic counting and classifying equipment which will be used in the Core Census. Inductive loops forming an array installed in the road surface will register the presence of a vehicle by a change in an electrical signal. Impacts upon two associated axle detectors a known distance apart within a loop (see figure 4) will enable a roadside microprocessor to calculate the number of axles, the distance between them on the vehicle, and the speed of the vehicle. It is also hoped to record the weights on each axle but this depends upon future research. Vehicles are classified into 20 categories, of different types with a given number of axles (figure 1). Classification is achieved primarily by the wheelbase measurements; while the strength of the electrical signal, which relates to chassis height, may also be used to discriminate between vehicle types.

The automatic Core Census will operate at 120 sites (see figure 3), 90 in England, 10 in Wales and 20 in Scotland, selected randomly from the original 175. A further 100 sites of special interest in Scotland will also be automated. Traffic will be recorded for each of the 24 hours of each day of the year. Thus the automatic equipment will provide substantially more data, particularly for weekdays, than are currently collected, and the reduction in the number of sites counted will not result in any loss of precision in the national estimates.

A number of comparisons have been made between prototype automatic classifying equipment and manual enumeration at one particular site. Considerable care was taken to ensure accuracy of the manual counts by using two teams of enumerators and video equipment. When the two manual counts and the automatic counts were compared the differences in the daily totals for cars, and for motor vehicles with more than two wheels, were not statistically significant. The recording error of the automatic equipment had estimated coefficients of variation of two per cent, less than half that expected from manual enumeration.

The results suggest that in most conditions the automatic equipment will provide daily estimates of classified traffic at least as accurately as the present manual system. This is certainly the case where there is free flow at reasonable speeds with one vehicle at a time crossing the equipment. Correct allocation to vehicle type is more difficult when queues of traffic form, and when motor cycles or pedal cycles cross the array at the same time as other vehicles. This can lead to significant under-recording of pedal cycles and twowheeled motor vehicles, and research into special equipment and revised microprocessor analysis is in hand to develop improved methods. However, since traffic data from core sites are primarily used to measure changes in traffic rather than the levels of flow, consistent under-recording of this kind would not imply any bias in the aggregate national estimates. Even where the manual and automatic traffic equipment showed differences in levels for a given vehicle type, the day to day changes within a week calculated from the data at the trial site were not significantly different. Problems arise, however, if the level of under-recording changes. It is likely that seasonal variation in pedal cycle traffic flow would lead to recording variations. For twowheeled traffic monthly factors will be applied to scale the observed count. Further comparisons at different sites are to be undertaken.

The numbers of vehicles of each type detected by the array will be accumulated into hourly totals and stored by a microprocessor at the side of the road. These data will be retrieved each day by telephone line, using automatic dial-up facilities from an Argus 700 minicomputer in London for sites in England and Wales. A second minicomputer in Edinburgh will collect data from Scottish sites, and each will provide a back-up for the other in case of machine failure. The system is shown diagrammatically in figure 2. Routines for validating and patching the data are being developed by Department of Transport staff. These will also apply diagnostic checks to the data to detect malfunctioning of the counting equipment and where necessary 'patch' the data to replace defective records by estimates. In some cases it seems likely that such

malfunctioning will be first apparent from the data before the fault is detected by the on-site microprocessor's own internal diagnostics. Of course, some faults such as power failure or communication lines being cut will be identified by the Argus. Engineers will then visit the site to effect maintenance or repair.

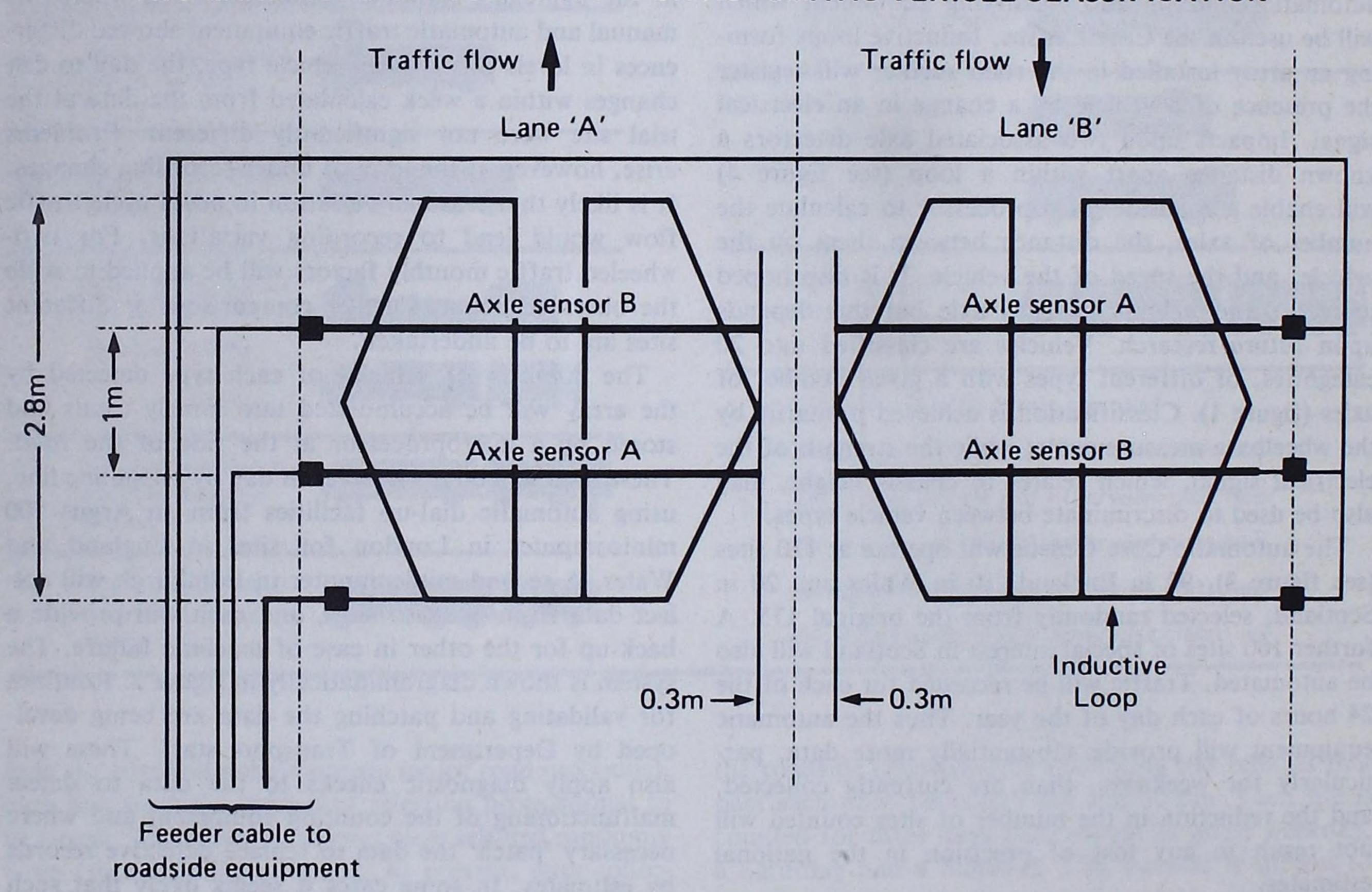
#### **Analysis**

Data from the Core Census is regularly used in two main ways. Firstly the census gives monthly estimates of national traffic trends by road class and vehicle type, from the growth (or decline) in traffic between the current month and a base month (usually 12 months earlier). To derive the estimates the month is broken down into different daytypes (viz. weekdays, Saturdays, Sundays, and public holiday affected days), and separate estimates for each are weighted together by the appropriate number of days. With the present system there can be significant loss of precision if abnormal circumstances, such as bad weather, cause the base flows to be depressed on the counting days at some sites. With continuous data from the automated sites it will be easier to assess the effects of abnormal conditions on isolated days. The estimates of trend will

be combined with the estimates of the levels of traffic derived from the Rotating Census to give the national traffic estimates published in Statistical Bulletins with quarterly press notices, and annually in *Transport Statistics Great Britain*.

The second main use of the Core Census is to derive factors whereby an estimate of the annual average daily flow (AADF) can be derived from a single day's traffic count.4 These factors are then applied to a twelve hour count on a given day at sites not in the Core Census. Such site-specific estimates are made each year for each Rotating Census count. At present the Core Census is primarily used to apply the correct seasonal pattern in weekly flows, according to road class. Data used to convert the given 12-hour count to an estimated weekly flow are derived from continuous whole-week manual counts at a sample of sites last undertaken in April 1978 and October 1980. Continuous automatic data from the census will give much more information on the daily profiles during a week and on seasonal effects, and will provide a better basis for monitoring how these may change over time and to derive up-to-date factors for the AADF estimates.

FIGURE 4
TWO LANE ROAD SENSOR ARRAY FOR AUTOMATIC VEHICLE CLASSIFICATION



#### Timing

The first census site to be automated should start to provide data in the Spring of 1985. Thereafter, other sites will be converted to automation, until the full programme of 120 sites is completed in 1987. At each site there will be an initial three month period when the three-day-a-month manual counting will continue with the automatic counting in order to enable accurate calibration.

THE THE TERM OF THE PARTY OF TH

#### References

- An automatic method to count and classify road vehicles by R. C. Moore, OECD Seminar on road traffic information 1980 (TRRL Report R 757, 1983) available from the Transport and Road Research Laboratory, Crowthorne, Berkshire (Price £15.00 net)
- 2. 'New Road Traffic Censuses (Great Britain)' by D. E. Allnutt, Statistical News May 1981 53.9 (HMSO)
- 3. 'The Sampling of Road Traffic' by J. C. Tanner, Royal Statistical Society Journal, Applied Statistics (Series C). Vol VI No 3.
- 'Calculation of the annual average daily flow of traffic along a stretch of road length' by A. D. Butler, Transport Statistics of Great Britain 1972-1982 (HMSO 1983) (Price £19.00 net)

#### New surveys assessed by the Survey Control Unit (Continued from page 63.14)

#### LIST OF ABBREVIATIONS

Sponsors		Location	S
COI	Central Office of Information	E	England
C&E	HM Customs and Excise	EM	East Midlands
DAFS	Department of Agriculture and Fisheries for Scotland	EW	England and Wales
DEM	Department of Employment	GB	Great Britain
DHSS	Department of Health and Social Security	S	Scotland
DNS	Department of National Savings	SE	South East England
DTI	Department of Trade and Industry	SW	South West England
DTp	Department of Transport	UK	United Kingdom
ETB	English Tourist Board	W	Wales
HOME	Home Office	WM	West Midlands
MAFF	Ministry of Agriculture Fisheries and Food		
MSC	Manpower Service Commission	Frequenc	y
SDD	Scottish Development Department	AH	ad hoc
SEPD	Scottish Economic Planning Department	I	intermittent
TRRL	Transport and Road Research Laboratory	Y4	four yearly
WO	Welsh Office		
		Other	
		SDA	Scottish Development Agency

# New surveys assessed by the Survey Control Unit June to August 1983

For further information on the surveys listed, the appropriate departmental contact may be obtained from Miss Claire Gallagher (01-233 8583), Survey Control Unit, Central Statistical Office, Great George Street, London SW1P 3AQ.

An introductory note was given in Statistical News 36.41

New surveys assessed June to August 1983

Title	Sponsor	Those approached	Approximate number approached	Location	Frequency
Bus	iness surveys				
Small business campaign research—professional & owner managers	COI	Owner managers, bank man-			
		agers and accountants	130	GB	AH
DTI 'How to Make Your Business Grow' booklet evaluation	COI	Owner managers	54	GB	AH
Overseas trade statistics – survey of user needs	C&E	Manufacturing firms	400	UK	I
EC farm structure survey 1983	DAFS	Farmers	6500	S	Y4
Survey of enterprise allowance scheme	DEM	Self-employed	600	GB	AH
ndustrial language training project	DEM	Manufacturing firms	35	E	AH
scientific research & development 1983	DTI	Manufacturing firms	75	UK	Y4
small business loan guarantee scheme—third telephone survey	DTI	Industrial/commercial small			
		firms	100	UK	AH
mall business loan guarantee scheme—study of borrowers	DTI	Industrial/commercial small			
		firms	150	UK	AH
Grassland survey 1983	MAFF	Farmers	235	SW	AH
Standards of secretarial training	MSC	Employers	36	SE	AH
Training & selection of computer personnel	MSC	Employers	4000	UK	AH
Transport costs in peripheral regions	SEPD	Manufacturing firms	1130	UK	AH
strategy development—offshore industry's technical base in Scotland	SEPD	Oil company suppliers	50	S	AH
Current workplace organisation & practice	SEPD	Manufacturing firms	70	S	AH
Review of property development activities	SEPD	SDA tenants	50	S	AH
Goods vehicle survey on M6 near Doxey	TRRL	Drivers	1500	WM	AH
Local s	uthority surv	eys			
Building control in Scotland Distribution of grants survey—LA	SDD WO	Planning departments Housing departments	50 37	S W	AH AH
0	ther surveys				
Aid to small business campaign evaluation	COI	Adults	1000	GB	AH
Child pedestrian safety: 1983 target market study	COI	Children and mothers	880	GB	AH
TS Evaluation research	COI	Adults	4000	GB	AH
983 Child pedestrian safety: campaign evaluation	COI	Children	1600	GB	AH
Artificial limbs and their users	DHSS	Disabled	480	EW	AH
Hospital food survey	DHSS	Patients	100	EM	AH
Evaluation of long stay accommodation for elderly people	DHSS	Elderly	NK	E	AH
Survey of premium bond gift tokens	DNS	Adults	500	GB	AH
	DNS	Mothers and children	180	EW	AH
National Savings money box survey		Drivers	8500	SE	AH
A406 North circular/A10 interchange strategic study	DTp		4000	GB	AH
Holiday-taking of applicants for 'Spring into Summer' 1983	ETB	Tourists Parent and teenagers	1000	EW	AH
Delinquency & parental supervision of teenagers	HOME	Educational establishments	60	GB	AH
Evaluation & development of management extension programme—educ estabs	MSC		1000	S	AH
Scottish house condition survey 1983 (private sector inter-war stock)	SDD	Tenants	950	UK	AH
Survey of recipients of the Scottish Economic Bulletin	SEPD	Readers		W	AH
Distribution of grants survey	wo	Grant recipients	1500	VV	All

For list of abbreviations see page 63.13

#### Recently available statistical series and publications

The following publications containing social statistics have recently, or will soon become available during October – December quarter of 1983. Unless otherwise specified, copies may be purchased from Her Majesty's Stationery Office. A list of release dates of economic series is published monthly in *Economic Trends*.

Department of Employment

Employment Gazette, published towards the end of each month, regularly contains recent data and time series on employment, unemployment, earnings, prices and family expenditure and other indicators. In recent months, articles have appeared on a number of aspects of employment statistics—self-employment by industry, school leaver projections, the introduction of a continuous Labour Force Survey, and revised employment estimates, also on new statistics of flows into and out of unemployment and different methods of estimating unemployment, on hours worked, and on the conversion of earning statistics to the Standard Industrial Classification Revised, 1980.

#### Department of Education and Science

Digest of Education Statistics, England.

Copies of the above can be ordered from the Department of Education and Science, Room 337, Mowden Hall, Staindrop Road, Darlington DL3 9DG.

Statistical Bulletin 10/83: Finance

Statistical Bulletin 11/83: Education Statistics for the United Kingdom, 1980-81

Statistical Bulletin 12/83: Participation in Education by the 16-19 Age Group and its Association with the Socio-Economic Characteristics of an Area

Statistical Bulletin 13/83: Employment of Newly Trained Teachers

Statistical Bulletin 14/83: Teachers in Service and Teacher Vacancies 1982-83

Statistical Bulletins are available free of charge from the Department of Education and Science, Room 1/29, Elizabeth House, York Road, London SE1 7PH.

#### Office of Population Censuses and Surveys

Census 1981

Persons of pensionable ages, Great Britain
National report, Great Britian, Parts 1 and 2
Report for Wales
Welsh language in Wales
Housing and households, England and Wales
National migration, Great Britain
Regional migration, North
Regional migration, East Anglia
Regional migration, North West

Regional migration, South Wesi Regional migration, Wales Regional migration, West Midlands Key statistics for local authorities, Great Britain Ward and Civil Parish Monitors (available only from OPCS Information Branch)

Evaluation of the 1981 Census: Post Enumeration Survey (OPCS Monitor CEN 83/4 available only from OPCS Information Branch)

#### **OPCS** Monitors

Marriages 1981 FM2 83/2

Drinking behaviour and attitudes in Great Britain SS 83/1

Mid-1981 based sub-national population projections for England PP3 83/1

Annual Reference Volumes

Mortality statistics: area 1981 (Microfiche) DH5 no. 8
Trends in cancer mortality 1951-80 DH1 no. 11
Communicable disease statistics 1981 MB2 no. 8
Communicable disease statistics 1982 MB2 no. 9
Hospital In-Patient Enquiry 1979: main tables (Microfiche) MB4 no. 14

Hospital In-Patient Enquiry 1980: summary tables MB4. 15

Population projections 1981-2051, Great Britain PP2 no. 12

Occasional Papers

No. 30 Criteria for determining areas with high and low mortality

No. 31 The Family, British Society for Population Studies Conference Papers

Social Survey Reports

SS 1153 Smoking attitudes and behaviour

SS 1169 Registration with general medical practitioners in Inner London

SS 1181 Smoking among secondary school children

#### Department of Health and Social Security

The Department of Health and Social Security produce regular monthly and quarterly statistical series on such topics as Unemployment benefit, Child benefit and Sickness, invalidity and injury benefits. Extracts and summaries from these series are eventually published in Social Security Statistics.

Further information can be obtained from:

Mr R. V. Easey,

Department of Health and Social Security, Room A2111, Newcastle Central Office Newcastle-upon-Tyne NE98 1YX

Telephone: Newcastle (0632) 797373

#### Scottish Education Department

Statistical Bulletins on the following subjects:

Excess and Deficit of Teachers by Subject (1981 and 1982)

Autumn Enrolments of Students in Vocational Further Education (1982)

Copies of these and other bulletins may be obtained from:

Scottish Education Department

Division VII/4

43 Jeffrey Street

Edinburgh EH1 1DN

(Telephone: 031-556 9233 Ext 286)

The Social Work Services Group of the Scottish Education Department have published the following annual bulletins:

Children in Care or under Supervision, 1981

Community Service by Offenders, 1981

Home Care Services, Day Care Establishments and Day Services, 1982

Staff of Scottish Social Work Departments, 1982 Residential Accommodation for Children, 1982

Copies of bulletins published before September 1983 may be obtained from:

Statistics Branch

Social Work Services Group

Scottish Education Department

43 Jeffrey Street

Edinburgh EH1 1DN

Tel: 031-556 9233 Ext 370

The last three bulletins listed above may be purchased (Price 50p post paid) from:

The Library

Official Publications Sales

Scottish Office, Room 2/65

New St Andrew's House

Edinburgh EH1 3TG

Tel: 031-556 8400 Ext 5901

#### Welsh Office

Staff of Social Services Departments

Statistics of Education in Wales

Welsh Economic Trends

Welsh Social Trends

Welsh Housing Statistics

Children in Care or Under Supervision Orders in Wales

1981 Based Home Population Projections for the Counties of Wales

The above publications are available only from:

**Publications Unit** 

Economic and Statistical Services Division

Welsh Office, Cathays Park

Cardiff CF1 3NQ

Telephone: Cardiff (0222) 82-5054

#### Departments of the Environment and Transport Environment

Housing and Construction Statistics second quarter 1983

Part 1 No 14 and Part 2 No 14

Housing and Construction Statistics 1972-1982

Local Housing Statistics Issue 67 figures for second quarter 1983

The following statistical bulletins are issued on a regular basis:

Monthly: Housebuilding, construction new orders, building new orders, building materials and components, brick and cement production, and new orders by type of work.

Quarterly: Tender price indices, output price indices, construction output and employment.

#### **Transport**

Road Accidents Great Britain 1982

International Road Haulage Survey 1982 Annual Report

Ports Statistics 1982

Road Goods Transport Survey (CSRGT report)

Transport Statistics Great Britain 1972-1982

The following statistical bulletins are also available:

Traffic in Great Britain second quarter 1983

Road Accidents and Casualties in Great Britain first quarter 1983

Road Accidents and Casualties in Great Britain second quarter 1983

Statistical bulletins are available for both Departments from DOE/DTp, SPPG4, Room A1 40, Romney House, 43 Marsham Street, London SW1P 3PY.

#### Home Office

Fire Statistics, United Kingdom, 1982 (including supplementary tables by Fire Brigade Areas).

Probation and after-care statistics, England and Wales, 1982.

Statistical Bulletin: Betting licensing statistics, Great Britain, June 1982-May 1983.

Statistical Bulletin: Statistics on the prevention of terrorism (Temporary Provisions) Acts 1974 and 1976, 3rd quarter 1983.

Statistical Bulletin: Control of immigration statistics, United Kingdom, 3rd quarter 1983.

Statistical Bulletin: Statistics of domestic proceedings.
Statistical Bulletin: Liquor licensing statistics, England

and Wales, July 1982-June 1983.

Statistical Bulletin: Notifiable offences recorded by the police in England and Wales, 3rd quarter 1983.

Statistical Bulletins are available from: Home Office, Statistical Department, Room 1813, Tolworth Tower, Surbiton, Surrey KT6 7DS.

#### Notes on Current developments

#### POPULATION AND VITAL STATISTICS

#### 1981 Census results

Results from the 1981 Census continue to be published at regular intervals. In the past few months the following publications have appeared:

Persons of pensionable age gives statistics of the populations who were 60 or over (women) and 65 or over (men) on census night and details of the household size and housing conditions in which they live.

National report gives, in two volumes, national and regional versions of the tables published in the County reports. A separate report for Wales is also now available.

Welsh language in Wales contains figures for wards throughout the principality on the population speaking, reading and writing Welsh; the same information is analysed by age at district level.

Ward and Civil Parish Monitors are a new series of Monitors from OPCS containing summary figures of population and households in wards and parishes. Each Monitor includes, for the county and for every ward and parish within it, eight basic counts and nine further key variables, expressed as rates or percentages, covering population change 1971-81, population density, sexand age composition, unemployment and the proportion of the population in new commonwealth-headed households (for wards only) and household tenure and car availability. The series started with Monitors for Oxfordshire, Greater London and Clwyd and is expected to be complete by the end of the year. A complete set of Monitors plus a binder is available at a cost of £40 (including postage and packing) from OPCS Information Branch see references for address.

Evaluation of the 1981 Census: Post Enumeration Survey is another OPCS Census Monitor devoted to further results from a survey which checked the coverage of the 1981 Census. It contains a brief description of the characteristics of missed persons and missed households together with an account of the accuracy of the classification of accommodation recorded as unnoccupied and some key characteristics of absent households.

Housing and households presents tables of statistics on housing, households and availability of cars for England and Wales and, in many cases, for regions of England, metropolitan counties, regional remainders and Wales.

National migration gives statistics for the population who gave a usual address one year preceeding census day different to that at census day. Data is included

for Great Britain, constituent countries and, in some cases, metropolitan counties and regional remainders. Further volumes (one for each region, one for Wales and one for Scotland) present statistics for county down to local authority district level. To date volumes for North, East Anglia, North West, South West and Wales have been published.

Key statistics for local authorities gives a selection of over 100 key census statistics for every local authority and administrative region in Great Britain. It is intended as a compact work of reference which will be useful to the occasional user of statistics as well as to the more frequent researcher.

In addition to reports already published OPCS plan to release the first detailed statistics on economic activity towards the end of the year and early next year in a series of *Economic activity* reports, one for each county, on microfiche. Each volume will tabulate residents and workers in each area (county, districts, city centres and New Towns) by employment status and economic position, occupation, industry and socioeconomic group. A national report giving further detailed figures at the national and regional level will follow in the new year (not on microfiche).

The prospectus on special workplace statistics for England and Wales has now been issued as OPCS User Guide 87. The prospectus describes the special tables which provide statistics about persons in employment by area of residence and area of workplace and about the journey-to-work movements between residences and workplaces.

#### References

OPCS/Registrar General, Scotland Persons of pensionable age, Great Britain (HMSO 1983) (Price £14.40 net)

OPCS/Registrar General, Scotland National report, Great Britain. Part 1 (HMSO 1983) (Price £11.70 net). Part 2 (HMSO 1983) (Price £6.80 net)

OPCS Report for Wales (HMSO 1983) (Price £9.10 net) (A version in Welsh is also available)

OPCS Welsh language in Wales (HMSO 1983) (Price £5.00 net) (A version in Welsh is also available)

OPCS Evaluation of the 1981 Census: Post Enumeration Survey OPCS Monitor CEN 83/4 (OPCS 1983) (Available free from OPCS Information Branch)

OPCS/Registrar General, Scotland Housing and households (HMSO 1983) (Price £18.40 net)

OPCS/Registrar General, Scotland National migration, Great Britain (HMSO 1983) (Price £11.70 net)

OPCS Key statistics for local authorities in Great Britain (HMSO 1983) (Price to be announced)

OPCS Ward and Civil Parish Monitors (OPCS 1983) (Price varies with each Monitor according to size. A complete set, with binder, is available at £40 from OPCS Information Branch, St Catherine's House, 10 Kingsway, London, WC2B 6JP.)

OPCS Special workplace statistics prospectus OPCS User Guide 87 (OPCS 1983) (available free from OPCS, Customer Services, Segensworth Road, Titchfield, Fareham, Hampshire, PO15 5RR)

#### 1981 Census—Scotland

The following volumes containing data from the Census have recently been published by HMSO:

New Towns Vol 1, price £5.80 net New Towns Vol 2, price £4.10 net

National Summary Vol 1, price £6.80 net

National Summary Vol 2, price £6.30 net

Country of Birth price £4.40 net Gaelic, price to be announced

Housing and Households, price to be announced

It is hoped to publish the following volumes by the end of the year:

Economic Activity (10%)

Workplace and Transport to Work

Migration (100%) Vol 1

Migration (100%) Vol 2-Part of the Regional Migration series of reports produced by OPCS

Migration (10%) Vol 3

Further details of these publications and of the unpublished data available may be obtained from:

Census Customer Services GRO(S), Ladywell House Ladywell Road Edinburgh EH12 7TF

#### **Population Trends**

The latest issue of the OPCS quarterly journal *Population Trends* includes the following articles:

Family size and age at childbirth: trends and projections

Changes in the ages at which women give birth can lead to substantial fluctuations in the annual numbers of births in the country, but trends in completed family sizes tend to be less volatile. Projections of future fertility are therefore based on models of the family building patterns of different generations of women and the models for the mid-1981 based series of population projections included explicit assumptions about the structure of families and the timing of successive births. This article by Barry Werner (Population Statistics Division, OPCS) describes the assumptions made in constructing the models and the way these assumptions were influenced by recent trends in fertility.

Immigrant mortality in England and Wales 1970-78
Studies from a number of countries have shown appreciable differences in the mortality of migrants compared with the mortality of the population in both country of origin and country of destination of the migrants. This article by Michael Marmot and Abraham Adelstein (of the London School of Hygiene and Tropical Medicine) and Lak Bulusu (Medical Statistics Division, OPCS) describes the purpose of studying migrant mortality and discusses some of the problems of interpretation. It also presents some of the key findings from an extensive examination of the mortality

of migrants to England and Wales who died in 1970-1978.

Population in communal establishments

In the 1981 Census  $2\frac{1}{2}$  per cent of the population of Great Britain were counted as present in communal establishments and not in private households. The census is the only comprehensive source of statistics on those who usually live in communal establishments – a group not usually included in household surveys. This article by David Pearce (Census Division, OPCS) describes the special problems associated with carrying out a census in such establishments.

Population definitions

The population of an area can be defined and measured in several different ways for differing purposes. This article briefly describes the various statistics which are now available.

In addition to these articles the issue also presents up-to-date statistics on population, births, marriages, divorces, deaths, migration and abortion.

#### Reference

OPCS Population Trends 33 Autumn 1983 (HMSO 1983) (Price £4.50 net)

#### Marriages

An OPCS Monitor published in September gave summary statistics of marriages in England and Wales in 1981 and compared them to those for previous years. Detailed analyses will be published later this year in the Marriage and divorce statistics reference volume series.

#### References

OPCS Marriages 1981 OPCS Monitor FM2 83/2 (OPCS 1983) (Available free from OPCS Information Branch)

OPCS Marriage and divorce statistics 1981 (HMSO 1983) (Price to be announced)

#### **Mortality statistics**

The review of the Registrar General on deaths by usual area of residence in England and Wales for 1981 was published in August. The volume includes death rates by sex and age-group and standardised mortality ratios by cause for England, Wales, standard regions, Greater London, metropolitan counties and regional health authorities. The table on deaths by cause, sex and age-group is presented on microfiche and gives detailed statistics for each local authority and for each health area.

Provisional figures for deaths in 1982 in England and Wales analysed by sex, age-group and cause were also published in August in an OPCS Monitor.

In a report published in October, Dr Clive Osmond and colleagues at the Medical Research Council Environmental Epidemiology Unit, analyses trends in cancer death rates in England and Wales over the period 1951-80.

In July a comparison of the 8th and 9th revisions of the International Classification of Diseases was published incorporating short list bridge-coding, 1978 (sample) for England and Wales.

#### References

OPCS Mortality statistics: area 1981 (Microfiche) (HMSO 1983) (Price £6.50+VAT)

OPCS Deaths by cause OPCS Monitor DH2 83/4 (OPCS 1983) (Available free from OPCS Information Branch)

OPCS and MRC Trends in cancer mortality 1951-80: analyses by period of birth and death (HMSO 1983) (Price £6.80 net)

Mortality Statistics-comparison of 8th and 9th Revisions of the International Classification of Diseases, 1978 sample Series DH1 no. 10 (HMSO 1983) (Price £8.60 net)

#### Local authority vital statistics

Local authority vital statistics, Vital statistics for administrative and health areas of England and Wales 1981 was published on 4 October 1983 by HMSO for the Office of Population, Censuses and Surveys. The publication is number 8 in the VS series, price £5.20 net.

#### Population projections (Scotland)

1981-based sub-national population projections for Scotland are now available from GRO(S), Room 42, New Register House, Edinburgh. The projections run to 1996 for Regions and Health Board areas and to 1991 for districts. A summary booklet is available and more detailed results can be supplied on microfiche.

#### Vital statistics (Scotland)

Vital statistics tables relating to the second quarter of 1983 appeared in the Registrar General's Weekly Return from WR 34/83.

It is expected that the Registrar General's Annual Report for 1982 will be published during November.

#### SOCIAL STATISTICS

#### Social Trends 14: 1984 edition

December sees the publication of the 14th edition of Social Trends. As with previous issues, Social Trends 14 includes thirteen chapters, most of which correspond broadly to the administrative functions of Government. Social Trends describes broad trends and patterns in social conditions, and is oriented as far as possible towards current policy concerns.

The topics covered in the first twelve chapters of Social Trends 14 are: population; households and families; education; employment; income and wealth; resources and expenditure; health and personal social services; housing; transport, communications, and the environment; leisure; participation; and law enforcement. The thirteenth chapter covers one 'social group', namely the unemployed.

This year Social Trends includes an article by Mark Abrams, joint head of the Research Unit, Age Concern, on 'Changes in the Life-styles of the Elderly 1959-1982'.

The chapters of Social Trends 14 contain 207 tables and 76 charts, about a third of which are new. The latest available data are included wherever possible, in particular from the General Household Survey and from the 1981 Census of Population. An important new source, the British Crime Survey, has been used in the chapter on law enforcement.

Further details can be obtained from: Miss Jackie Morris

Branch 8
Central Statistical Office
Great George Street
LONDON
SW1P 3AQ
(Telephone: 01-233,8201)

(Telephone: 01-233 8201)

#### Reference

Social Trends 14, 1984 (HMSO) (Price £19.95 net) ISBN 0 11 620098 7

#### Family Expenditure Survey

The June issue of Employment Gazette saw the introduction of three new tables (7.1, 7.2 and 7.3) to the 'Labour Market Data' section, showing results from the Family Expenditure Survey. They featured respectively quarterly series of average weekly household and personal spending at current and constant prices, the composition of expenditure by commodity group (also on a quarterly basis), and household characteristics together with detailed composition of spending (on an annual basis). These tables will be regularly updated as further data become available, while from time to time supporting commentary will be included in the 'Employment Topics' section of the Gazette. These three analyses have previously been featured in periodic special articles, most recently (for the quarterly series) in March 1983. Other analyses from the Family Expenditure Survey, for example those concerned with the annual revision of weights for the Retail Prices Indices, will continue to appear as special features in Employment Gazette.

Early results for the Family Expenditure Survey for 1982 were published in the August 1983 edition of the Gazette. Average household expenditure on goods and services among the 7,428 United Kingdom households which co-operated in the survey (an effective response of 71 per cent) was nearly £134 per week, almost 7 per cent higher than in 1981. Average expenditure per person rose by about 8 per cent although this was somewhat less than the increase in retail prices over the period (around 9 per cent). The full report of

the 1982 Family Expenditure Survey will be published towards the end of the year.

Reference

Employment Gazette (HMSO monthly) (Price £2.35 net)

#### The family

The British Society for Population Studies held a conference at the University of Bath on 14-16 September to examine and discuss several aspects of the family. Seven of the papers presented at the conference have been published in conjunction with OPCS. They are:

What is new about the modern family: an historical perspective

Research over the last twenty years has significantly questioned the popular image of the family of the past as characterised by stability and morality and close and warm relationships between family members. In this paper by Michael Anderson of the University of Edinburgh the evidence on these points is briefly surveyed and a number of more distinctively 'modern' features of today's family life are suggested.

The structure of families today: continuity or change? In this paper Kathy Kiernan of the Centre for Population Studies looks at the structure of the contemporary family in Britain and examines the dynamic underpinnings that determine current family structures. The range of topics covered include first marriage, cohabitation, childbearing within and outside marriage, marital dissolution, lone parenthood, remarriage and the re-formation of families.

The formal demography of the family: an overview of the proximate determinants

The core of the formal demography of the family is the investigation of how demographic factors control the numbers and compositions of families in a population. These factors such as fertility, mortality, divorce, ages at establishment and dissolution of households may conveniently be called the 'proximate determinants'. This paper by William Brass of the Centre for Population Studies develops a model for the study of the impact of the proximate determinants on the mean size of the family.

The life course of individuals in the family: describing static and dynamic aspects of the contemporary family Michael Murphy of the London School of Economics and Political Science is concerned in this paper with the description of families in contemporary society by the use of large scale statistical data sources. Definitions of the family based on the closely related coresident group may tend to understate the extent of contact with kinfolk outside this narrow unit. The

relationship between definitions of households and families is considered and the overwhelming importance of the one-family household is illustrated by considering the time individuals might be expected to spend in various family and non-family categories.

Family finances: taxation, social security and incomes This paper by Lesley Rimmer of the Family Policy Studies Centre considers three major issues: the implications of changing family patterns as a factor in determining the tax unit, the family dimension of the poverty and unemployment traps, and the desirability of monitoring and evaluating changes in policy and policy options on a regular basis from a family perspective.

The family and housing policy: the interaction of the family, the household and the housing market

David Eversley of the University of Cambridge, presents in this paper the main recent changes in household size and structure in Britain and relates these to the age and marital structure of the population.

A social agenda: policy issues relating to the family In modern societies the business of biological and social reproduction and the stabilisation of adult personality have been largely rested upon a particular conception of the family. Many social provisions and arrangements are based on the assumption of life-long monogamy, intact nuclear family households and orderly family careers. In this paper Robert Chester of the University of Hull argues that contemporary family changes and marital instability in particular put such arrangements in question and seem to call for considerable remoulding of institutions and ideas if individual distress and social difficulties are to be avoided.

#### Reference

OPCS/BSPS The Family: Conference papers, University of Bath 14-16 September 1983. OPCS Occasional Paper 31 (OPCS 1983) Available only from OPCS Information Branch (Price £5.00 net)

#### Survey of young people in the eighties

Young People in the Eighties is the report of a survey commissioned by the Review Group on the Youth Service. Independent interviewers sought the views of more than 600 young people, aged 14-19, on topics such as: home and parents; achieving adulthood; drink and drugs; the police and law enforcement; employment; money and ownership; and other political and social matters. The sample took account of ethnic origin, sex, age, geographical location and status—whether in full-time education, employment or unemployed. The report runs to more than 100 pages and contains detailed statistical background material.

#### Reference

Young People in the Eighties-A Survey (HMSO July 1983) (Price £4.50 net)

#### Scottish social work statistics

Children in Care or under Supervision: Scotland 1981 This bulletin, covering the year ended March 1981 is the fifth in a series. Information given on children in care/supervision at 31 March 1981 includes statutory reason for care/supervision, type of accommodation, age and duration of care/supervision. Details of admissions and discharges over the year are also given.

Community Service by offenders, Scotland 1981

There were more than twice as many community service disposals made in 1981 as in 1980 and schemes under the Community Service by Offenders (Scotland) Act now cover the greater part of Scotland. This bulletin, the second in a series relating to Community Service (which started in Scotland in 1979) gives characteristics of offenders, the nature of the offence and details of the orders are given, together with a list of schemes now in operation.

Home care services, day care establishments and day services: Scotland, 1982

The information in this bulletin, the fifth in a series, is obtained from statistical returns completed by social work departments and voluntary organisations. Details are given, for the year ended March 1982, of the home help service, meals on wheels and laundry services provided by local authorities. The day care and services section includes centres for the elderly and handicapped adults and nurseries, pre-school playgroups and childminding facilities for children.

Staff of Scottish social work departments, 1982
This bulletin, the fifth in a series on this topic, contains the results from the staff census held on 4 October 1982 together with details collected in previous years. Detailed information given includes the grade, location and qualifications of staff and staff turnover.

Residential accommodation for children: Scotland, 1982

This is the sixth bulletin of the annual series and gives information on local authority social work department children's homes, registered voluntary children's homes and List D schools for the year ended March 1982, and is based on annual retuns made by the homes themselves. There was a fall in the number of children both in homes and in List D schools in the period 1981 to 1982, continuing a trend begun in the middle 1970's. Tabulations are given by region, age and sex of child, type of size of home, duration of stay and staffing levels. Some details of admissions and discharges are also given.

The above bulletins on Scottish social work statistics

are the first in a new format having a vertical layout and improved presentation. Copies of bulletins may be obtained from the addresses given on page 63.16

#### Criminal statistics, England and Wales, 1982

The statistics in this volume relate to criminal offenes recorded by the 43 police forces in England and Wales and to known offenders dealt with for offences by formal police cautions or by criminal court proceedings in those police force areas.

As last year, this volume comprises a commentary and tables covering the major topics. Chapters 2 to 4 give detailed statistics for England and Wales of notifiable offences recorded by the police. Chapters 5 to 9 give statistics of offenders dealt with by a formal police caution or court proceedings and cover such associated subjects as the use of police bail and court remand, legal aid, appeals and the use of various kinds of sentence.

Further detailed annual figures for the latest year are released separately, in four volumes of *supplementary* tables; the volumes for 1982 are:

Volume 1-Proceedings in magistrates' courts (price £11.00 net)

Volume 2-Proceedings in the Crown Court (price £9.00 net)

Volume 3-Tables by police force areas and some court areas (price £11.00 net)

Volume 4-Convictions, cautions, DPP prosecutions, mentally disordered offenders, appeals, prerogative of mercy, legal aid (price £6.00 net)

These supplementary volumes can be purchased from the Home Office Statistical Department, S1 Division, Room 1715, Tolworth Tower, Surbiton, Surrey KT6 7DS (Tel. 01-399-5191, ext. 272) or from the Senior Librarian, Home Office, 50 Queen Anne's Gate, London SW1H 9AT. For those interested in only one or two tables, individual tables may be purchased separately from the Home Office Statistical Department (as above) at a price of 13 pence per page (plus VAT and postage).

#### Reference

Criminal statistics, England and Wales, 1982 (Cmnd. 9048) (HMSO September 1983) (Price £11.90 net)

#### Prison statistics, England and Wales, 1982

This volume gives statistics about receptions into custody in 1982, together with comparable figures for earlier years, mainly 1972 to 1981. During 1982 it was necessary to make extensive use of police cells in the South-East Region of England to accommodate prisoners. This resulted from an unavoidable loss of accommodation for development work coupled with industrial action by prison officers. The tables pre-

sented in this volume do not include prisoners held in police cells but there is brief discussion of their numbers in Chapter 1.

A new table in Chapter 1 shows numbers of receptions of prisoners under sentence and the population under sentence on 30 June, by court sentencing, over the period 1972-82. Seven tables concerning the population, which appeared in Chapter 1 in last year's volume have been transferred to other, more appropriate, chapters. Chapter 8 has been expanded to include discussion of the results of a further analysis of the reconviction data presented in last year's volume.

A revised system for the collection and analysis of statistics on offences and punishments in prison department establishments was introduced in 1981. The quality of the data has improved considerably since early problems with the 1981 data, and it has, therefore, been possible to reintroduce the separate information on suspended and activated suspended punishments at the foot of each section of Tables 9.3-9.7. Chapter 9 has been expanded to include commentary on the incidence of the various types of offence against prison discipline 1972-82, the types of punishments awarded over the same period, punishments awarded in 1982 by type of offence and on the amounts of remission lost.

#### Reference

Prison statistics, England and Wales, 1982 (Cmnd. 9027) (HMSO August 1983) (Price £11.75 net)

Reconvictions of those given community service orders

Details of the reconvictions of a sample of persons given community service orders were published on 6 October 1983 as a Home Office Statistical Bulletin. This is the first large scale study of reconviction rates carried out on those receiving community service orders and provides more reliable estimates than were previously available. The proportion of persons reconvicted over a two-year period from the commencement of the community service order is given, together with analyses of reconviction rates by age, sex, number of specified hours of community service and type of offence for which the community service order was given. Details are also given of the type of offence and type of sentence on reconviction. Comprehensive details about the use of community service orders generally are published annually in Probation and aftercare statistics, England and Wales.

#### References

Reconvictions of those given community service orders; Home Office Statistical Bulletin, Issue 18/83, 6 October 1983 (Price £2.00 net)

Probation and aftercare statistics, England and Wales 1981; (Home Office, price £3.00 net)

Statistical Bulletins are available from Room 1813, and *Probation and aftercare statistics* from Room 1806, Home Office, Statistical Department, Tolworth Tower, Surbiton, Surrey KT6 7DS.

#### Civil judicial statistics: Scotland

Civil Judicial Statistics Scotland 1981 was published on 5 August. This publication is divided into four Chapters: Chapter 2 deals with the Court of Session; Chapter 3 with sherriff courts; and Chapter 4 with other civil business. At the beginning of each chapter there is a short introduction outlining the work of the court, followed by presentation of the statistics. The detailed statistics are contained in the annual tables which follow Chapter 4. Licensing statistics are no longer provided.

#### Reference

Civil Judicial Statistics Scotland 1981 (Cmnd. 8921) (HMSO Edinburgh 1983) (Price £6.35 net)

#### Prisons in Scotland 1982

The main events and developments in the Scottish Prison Service in 1982, and the relevant statistics are detailed in the various chapters of *Prisons in Scotland*, *Report for 1982* which was published in September. A brief review picks out the most significant of these for special comment. This is followed by chapters on: population and receptions; regimes; health and hygiene; accommodation and security; staff; and finance. Appendix tables show average daily population and receptions 1972-82. Further detailed tables show receptions, variously analysed, under 21 inmates, defaulters, employment of prisoners, staff at 31 December, etc.

#### Reference

Prisons in Scotland, Report for 1982 (Cmnd. 8980) (HMSO Edinburgh 1983) (Price £6.00 net)

#### United Kingdom citizenship

A White Paper published in August 1983 gave tables of persons acquiring citizenship of the United Kingdom and Colonies 1982.

Citizenship granted inside and outside the United Kingdom is shown in separate tables by country, broken down into various categories. An historical table gave figures for 1973 to 1982 by geographical regions.

#### Reference

Tables of persons acquiring Citizenship of the United Kingdom and Colonies 1982 (HMSO) Cmnd. 9009 (Price £3.10 net)

#### Experiments on living animals

Statistics of experiments on living animals Great Britain 1982 was published in July. As well as introductory notes and a commentary there are four sections and

two appendices. The first three sections give 1982 details of the major characteristics of experiments; relation of pain to experiment; and licensees and registered places. The fourth section gives historical data mainly covering 1977 to 1982. Appendix A deals with the general system of control and Appendix B gives the Advisory Committee and their terms of reference.

#### Reference

Statistics of experiments on living animals Great Britain 1982 (HMSO) Cmnd. 8986 (Price £5.10 net)

#### Smoking attitudes and behaviour

The report of a major survey on smoking attitudes and behaviour, conducted by Social Survey Division of OPCS on behalf of the Department of Health and Social Services, was published in September. The survey aimed to explore the attitudes and beliefs that determine the intention to smoke or not to smoke and how such intentions might, in turn, determine subsequent behaviour. The report includes chapters on attitudes, behaviour and smoking; smoking as a public issue; smoking behaviour and intentions (how and what people smoke or will smoke); dependence on smoking; smoking and illness; smoking and the emotions; social influences on smoking; smoking and the economic factor; smoking as reasoned action. Details are also given of the postal follow-up survey which took place six months after the main survey interview.

The report of a second survey into the smoking habits, this time, of schoolchildren was also published in September. the survey, carried out on behalf of the Department of Health and Social Services, the Welsh Office and the Scottish Home and Health Department had two main aims. The first was to provide estimates of smoking prevalence among secondary school pupils by estimating the proportion of pupils who have ever smoked and the proportion who smoke now, however much or little. The second was to describe in detail the smoking behaviour of the pupils who did smoke—their level of consumption and their patterns of cigarette smoking.

#### References

Alan Marsh and Jil Matheson Smoking attitudes and behaviour, Social Survey Report SS 1153 (HMSO 1983) (Price £15.80 net)

Joy Dobbs and Alan Marsh Smoking among secondary school children, Social Survey Report SS 1181 (HMSO 1983) (Price £8.50 net)

#### Charity statistics

The latest issue of *Charity Statistics* has recently been published by the Charity Aid Foundation for 1982/83.

The publication includes articles and tables. Section One shows government, local authority and company giving as well as that by foundations and trusts. Donations by individuals are also commented upon.

The next section deals with the accounts of charities. Section three shows the receipts of the top two hundred receiving charities. Two articles attempt to estimate the aggregate income of all charities. Company giving is now shown not only in absolute terms but also by numbers of employees and by pre-tax profit.

A Charity Financial Index is published for the first time and will be published quarterly in future. It is obtained from a sample of charities by postal questionnaire.

#### Reference

Charity Statistics 1982/83 Published by and obtainable from the Charities Aid Foundation, 48 Pembury Road, Tonbridge, Kent TN9 2JD, Telephone: Tonbridge (0732) 356323 (Price £9.00 plus 60p post and packing)

#### HEALTH

#### Hospital in-patient statistics

The main tables of the 1979 Hospital In-Patient Enquiry (HIPE) for England and Wales were published in September. HIPE is a continuous survey, based on a ten per cent sample of NHS patients in all hospitals excluding psychiatric hospitals and departments. The volume amplifies and supplements the summary tables published earlier and contains statistics of in-patients spells, discharge rates, waiting times, duration of stay and use of beds analysed by diagnosis, hospital department and region of treatment, source of admission, surgical operations and type of accident and by sex, age, marital status and area of residence of the patient. These tabulations have been published for the first time as a set of 30 microfiche together with some explanatory notes and comprehensive index.

Summary tables for 1980 were also published in September.

#### References

OPCS Hospital In-Patient Enquiry 1979: main tables (Microfiche) (HMSO 1983) (Price £9.00 + VAT)

OPCS Hospital In-Patient Enquiry 1979: summary tables (HMSO 1982) (Price £6.20 net)

OPCS Hospital In-Patient Enquiry 1980: summary tables (HMSO 1983) (Price £6.20 net)

#### Industrial injuries statistics

The statistics series of industrial injuries resulting from work activities has undergone two major changes in recent years.

In 1981, new reporting regulations the 'Notification of Accidents and Dangerous Occurrences (NADO) Regulations' came into force. They extended reporting requirements to virtually all industries and services, and provided the first comprehensive and consistent coverage of work-related injuries. They also included, for the first time, a requirement to report fatal and major injuries to non-employees affected by work

activities. (Prior to this, the statistics were fragmentary and were collected from various sources under differing pieces of legislation).

Under the NADO Regulations, fatalities and major injuries were reportable direct to the enforcing authority (Health and Safety Executive (HSE), local authorities or agencies of the Health and Safety Commission). However, the Regulations made provision for the bulk of information on injuries at work to be supplied to the HSE by the Department of Health and Social Security from claims made under the Industrial Injury Benefit scheme.

Recent changes in the arrangements for industrial injury benefit, introduced in April 1983, are likely to result in a considerable reduction in the flow of information to the HSE about the less serious injuries – possibly by as much as 80 per cent.

The combined effect of these changes will be that it will not be possible to study long-term trends during the first half of the 1980s, except for fatal, and possibly major, injuries which will not be affected by the latest change.

A new system for collecting information on industrial injuries is under consideration, and a consultative document outlining this was issued in July. However, any new system is unlikely to come into effect before the beginning of 1985.

A press release giving figures for 1981 and 1982 under the NADO Regulations was issued in September, and a more detailed volume of Health and Safety Statistics for the two years will be published in due course.

#### Statistics of pregnancy and childbirth

Recent controversies about maternity services have created a demand for statistics. This has made it apparent that many of these involved in discussions on the subject are unaware of the vast range of information collected routinely by government departments and the National Health Service.

In a new book to be published shortly, Alison Macfarlane (a statistician) and Miranda Mugford (an economist) bring together statistics about pregnancy, childbirth and newborn babies, the health services provided for them and the social, economic and environmental factors which can affect the outcome of pregnancy. At the same time it acts as a guide to further sources of data and offers a critical appraisal of them and shows how some of their limitations arise from the historical context in which systems of data collection developed.

The book is intended both for those who work in the health services and those who use them. Both of the authors work at the National Perinatal Epidemiology Unit on research concerned with the evaluation of the maternity services.

#### Reference

Alison Macfarlane and Miranda Mugford Birth Counts: statistics of pregnancy and childbirth (HMSO 1983) (Price to be announced)

#### Infectious diseases

The report for 1981 on infectious diseases in England and Wales, produced jointly by the Communicable Disease Surveillance Centre of the Public Health Laboratory Service and OPCS, was published in September. It contains the statistics for that year similar to those appearing in previous reports as well as a detailed commentary on the figures. Also published at the same time in a separate volume were the statistics for 1982, the commentary for which will appear in an OPCS Monitor in the new year.

#### References

OPCS/PHLS Communicable disease statistics 1981 (HMSO 1983) (Price £6.80 net)

OPCS/PHLS Communicable disease statistics 1982 (HMSO 1983) (Price £6.20 net)

#### **OPCS** Newsletter to the NHS

The first issue of a new OPCS publication appeared in October. The Newsletter is intended to help those people in the National Health Service (NHS) at all levels, who either use OPCS statistics or help provide information that OPCS itself uses. For example, it will give an early warning of any changes in the availability of data from OPCS. Sources of detailed information, latest news on coding procedures, production timetables and so on will also be included.

The Newsletter will be issued quarterly and its usefulness will be reviewed after four issues. Distribution with the NHS is through the Regional and District Administrators. But people who work outside the NHS can be put on a mailing list by writing to The Editor (Newsletter to the NHS), Vital Statistics Branch, OPCS, Titchfield, Fareham, Hampshire PO15 5RR.

#### Reference

OPCS Newsletter to the NHS No. 1 (OPCS 1983) (Available free)

#### Cancer statistics: registrations

Cancer statistics, 1979 presents data on patients with cancer first diagnosed in England and Wales in 1979, particulars of whom have been registered by 9 March 1983. Comparable statistics for England and Wales for 1971 to 1978 have been published in the Cancer statistics (Series MB1) reports. For data prior to 1971, statistics have been published in the Registrar General's Statistical Reviews of England and Wales, Supplements on Cancer.

Following a review of the published tables, the urban, rural and metropolitan county rates tables have been excluded. Analysis by socio-economic groups has also been discontinued. However, copies of these unpublished tables are available on request to: Cancer Registration Section, Office of Population Censuses and Surveys, Segensworth Road, Titchfield, Fareham, Hants. PO15 5RR.

The range of registered neoplasms has been extended to accommodate changes brought about by the introduction of the International Classification of Diseases, Ninth Revision, site codes. The standardised registration ratios (SRR) in table 1 are, therefore, now calculated using 1979 as the base year and show trends over a five-year period. The method of calculating SRR's in tables 1, 8 and 9 has been changed to exclude registrations of persons aged 75 years and over, as clinical experience suggests that investigation and diagnosis is less uniform in elderly patients.

#### Reference

Cancer statistics, registrations, England and Wales, 1979, Series MB1 no. 11 (HMSO September 1983) (Price £8.00 net)

#### **EDUCATION**

#### Digest of Education Statistics, England

The Department of Education and Science (DES) will shortly commence annual publication of a new Digest of Education Statistics in England. Priced at £2.00, the main features of the 1983 Digest will be its handy size and easy reference, and that it will contain the most up-to-date figures available in around 30 simple tables showing time series of the most sought-after statistics in educational finance, school pupils and teachers, school leavers, 16-19 year olds, further and higher education, overseas students and teachers.

Queries should be directed to Mr J. Sheridan (Tel: 01-928 9222 Ext 2157) but orders for the first edition of the Digest (expected publication date is in December) to Room 337, Department of Education and Science, Mowden Hall, Staindrop Road, Darlington DL3 9DG.

# Participation in Education, 16 to 19 age group, and socio-economic background

Young people reaching school leaving age can continue their education either by remaining at school or by enrolling in full or part-time further education. DES Statistical Bulletin 12/83 analyses in depth local variations for England in non-advanced education participation by the 16-19 age-group between 1978/79 and 1980/81. It updates and extends the work reported in Bulletin 15/79 in two main ways: by studying those aged 16 as well as 16 to 19 year olds and by including

in the analysis a large number of social and economic factors, in addition to the two previously tested. Two other changes have been made: local authorities in Wales have been omitted and the students' ages defined at 31 August, not December.

Copies of DES Statistical Bulletins are available from the address given on page 63.15

## Scottish education statistics: review of the 1983 School Census

School Census-general information

In Scotland, information on schools, pupils and teachers has been collected regularly throughout this century. The annual School Census was introduced in its present form in 1974, with modifications being made in 1977 and 1978. The Census collects basic statistics on schools, pupils and teachers, together with additional information on the arrangement of classes, the courses followed by pupils at each stage of the secondary school, and on the qualifications, grades and deployment of teachers.

Forms are distributed to education authority and grant-aided schools each year in September, with different sets of forms being completed in respect of nursery, primary, secondary and special schools. Limited information only, on pupil and teacher numbers, is collected from independent schools.

The information collected in the Census is used within the Scottish Education Department (SED) for the establishment of staffing levels, assessment of intake levels required for teacher training courses, for financial planning, and for contributing to the development of educational policies. Data compiled from the Census are published in SED Statistical Bulletins, and in other Scottish Office and UK publications.

#### Alterations to the School Census

A recent review of the content and design of the forms used in the Census has concluded that the general structure and timing of the returns should remain unchanged, but that some of the information collected and the frequency of collection of some items should be altered. The areas in which the most significant changes have been decided are outlined below:

- a. Special educational needs: Following the introduction in January 1983 of a new method for recording pupils as having special educational needs, a complete revision of the terminology used and data collected in the returns from special schools has been required.
- b. Subjects studied in secondary schools: In the past, sample information on this topic was found to be unreliable. This has been replaced by a section which collects full curriculum information for each stage in the school,

together with details of the number of pupils and year groups involved.

c. Individual teacher returns: In 1983, only teachers who have moved school since the last Census or who have recently commenced teaching will be required to complete an individual return. A supplementary form, to obtain additional background information on these teachers, will also be distributed.

Draft forms incorporating the envisaged changes were successfully piloted in more than 50 schools in the Spring of this year. The School Census takes place in the week ending 24th September.

Copies of the revised forms, and more detailed information on the alterations to the forms may be obtained from:

Mr D. Grant
Scottish Education Department
Room 108
43 Jeffrey Street
Edinburgh EH1 1DN
(Tel: 031-556 9233 Ext 280)

#### MANPOWER AND EARNINGS

# Employment and the working population – adjustments for underestimation

Supplementary estimates of selected aggregates for employment and the working population are given in the 'Labour Market Data' section of *Employment Gazette* each month since July 1983. These supplementary series include allowances for undercounting and are given in addition to the basic series.

The results of the 1981 Census of Employment showed that the provisional quarterly series had underestimated the number of employees in employment between June 1978 and September 1981, especially in the service industries. It is now considered likely that there has been further underestimation since September 1981, so the supplementary series includes an allowance at the rate of 40,000 per quarter from December 1981, of which 36,000 are in the service industries.

An adjustment has also been made to the self-employed estimates. Data from the Census of Population and Labour Force Survey showed an increase of 215,000 self-employed between 1979 and 1981; before this information was available, a constant figure over that period had been assumed. The supplementary series assumes continued growth in self employment since 1981 at the rate of 25,000 per quarter, of which 18,000 are in services.

An article introducing the new series and explaining the reasons for undercounting was published in June 1983 Employment Gazette. The article also outlines the implications for other derived series, such as the productivity tables.

#### Reference

Employment Gazette (HMSO monthly) (Price £2.35 net)

#### More frequent Labour Force Survey

The biennial Labour Force Survey, carried out in the United Kingdom in the Spring of alternate years since 1973, is being replaced by an annual survey with interviewing spread throughout the year. The new survey will provide more frequent and timely estimates of the main components of the labour force, and will continue to meet European Community requirements through an enhanced sample in March, April and May each year.

The survey is been carried out by Social Survey Division of the Office of Population Censuses and Surveys, on behalf of the Department of Employment. A new feature is the rotating panel design of the sample, with participating households being interviewed five times at quarterly intervals. This will improve the reliability of estimates of change and provide a basis for measurement of gross flows between categories within and outside the labour force. Other features include the use of the telephone wherever possible for second and subsequent interviews, and computerised production of questionnaires incorporating details of responses at the previous interview, enabling interviewers to check the validity of apparent changes in status.

Interviewing started in October 1983, on a reduced scale, and full scale operation will commence in January 1984. More details of the new survey were given in a special feature in the July 1983 issue of *Employment Gazette* (page 295).

#### Reference

Employment Gazette July 1983 (HMSO) (Price £2.35 net)

#### Unemployment flows: new statistics

New information about flows into and out of unemployment and about the duration of unemployment has become available following the introduction of the computerised count of unemployed claimants. An article in the August 1983 issue of *Employment Gazette* entitled 'Unemployment flows: new statistics' gives examples of the new analyses for the standard regions and for different age groups. The data available and the methods of compilation are described together with limitations in the data.

Initial results presented in the article show that the high unemployment rates for young people are associated with a high inflow rate of people becoming unemployed but with comparatively short durations of unemployment. For those approaching retirement age, the converse is true. Additionally it is shown that the variation in unemployment rates between Travel to Work Areas is due both to the differences in the rate of people becoming unemployed and to differences in the average duration of unemployment.

#### Reference

Employment Gazette August 1983 (HMSO) (Price £2.35 net)

#### Unemployment in local authority districts

May 1983 unemployment figures for each local authority district in Great Britain are given in *British business* 19 August 1983. The previous set, produced for December 1982 and first published in *British business* on 25 March 1983, are repeated for comparison. The data are not seasonally adjusted, include school leavers and make no allowance for the effects of the provisions announced in the 1983 Budget for some men aged 60 and over who no longer have to sign on at an unemployment benefit office in order to obtain national insurance contribution credits, or the long-term rate of supplementary benefit.

#### Reference

British business (HMSO weekly) (Price £1.10 net)

#### MSC labour market quarterly report

The Manpower Services Commission (MSC) publishes a regular quarterly analysis of the labour market in February, May, September and November of each year. The report which is normally eight pages in length, includes graphs and short tables but is not a statistical reference publication like the centre pages of the *Employment Gazette*. It provides an overview of recent trends in the economy, employment and in unemployment, together with short analyses of particular aspects of the labour market of relevance to MSC. The September 1983 edition for example, included sections on discouraged workers, special employment and training measures, and on second jobs; as well as the regular commentary on recent trends.

Copies of the report, for which at the moment no charge is made, can be obtained from:

Manpower Services Commission Marketing and Information Branch Moorfoot Sheffield S1 4PQ

# Scientific instruments industry: manpower, training and outlook

Manpower and training in the scientific instruments industry—Reference Paper RP/7/83 was published recently by the Engineering Industry Training Board (EITB). The Report sets out statistics available from a variety of sources on the scientific and industrial

instruments and systems industry. It deals specifically with data relevant to employment and training, and also examines the overall economic outlook for the industry.

#### Reference

Manpower and training in the scientific instruments industry—EITB Reference Paper RP/7/83 (Price £2.50 including postage) is available from EITB Publications, PO Box 75, Stockport, Cheshire SK4 1PH.

#### New earnings survey 1983 - main results

The first results of the New Earnings Survey for April 1983 were published on 18 October in Part 'A' of the six-part report. It contains the streamlined analyses which give the principal results by major collective agreements and wages councils, industry, occupation, age and region; and a range of more detailed analyses by collective agreements.

The other five parts will appear at approximately three-weekly intervals and the whole report will be available by early February 1984, six weeks earlier than last year.

The main contents of Parts B to F are:

- Part B (available 7 November): report, summary analyses and other analyses by agreement.
- Part C (available late November): earnings and hours for particular industries.
- Part D (available mid-December): earnings and hours for particular occupations.
- Part E (available mid-January 1984): earnings and hours in regions, counties and agegroups.
- Part F (available early February): hours; earnings and hours of part-time women workers and employees on adult rates.

An article commenting on some of the features of the survey report appeared in the October *Employment Gazette*.

#### References

New Earnings Survey 1983 (HMSO in six parts) (Price £7.50 net each or subscription for the whole set of six £45.00 including postage)

Employment Gazette October 1983 (HMSO) (Price £2.35 net)

#### Average earnings index - Standard Industrial Classification Revised 1980

The Average Earnings Index, which has been based on the Standard Industrial Classification 1968, was reclassified to Standard Industrial Classification Revised 1980 when the August 1983 figures were published in October 1983. Time series of the monthly indices on the new classification extending back to January 1980 were also published, together with an introductory article. The new indices have a revised base date of January 1980. Further details are given in the article

entitled 'Standard Industrial Classification Revised 1980' published in Employment Gazette, March 1983.

#### Reference

Employment Gazette March 1983 (HMSO) (Price £2.35 net)

# Relative earnings in counties containing major Special Development Areas

An article in the September 1983 issue of Employment Gazette examines average earnings since 1974 in counties with major Special Development Areas (SDAs). Comparisons are made with national average earnings. Relative earnings in the SDA counties are compared with their relative unemployment rates. Finally, the relative employment structure of SDA counties is examined as a possible explanation of slightly higher average earnings in the SDA counties than nationally. The article does not investigate the underlying causes of the existing mix of earnings and unemployment rates in different geographical areas. It does, however, indicate that any adjustment of relative earnings in the SDA counties due to relatively higher levels of unemployment in these areas has been both small and slow to occur.

#### Reference

Employment Gazette, September 1983 (HMSO) (Price £2.35 net)

Armed forces pay (Service medical and dental officers)

A supplement to the Twelfth Report of the Review Body on Armed Forces Pay deals with the pay of Service medical and dental officers. Recommended military salaries for the ranks of Captain to Colonel, appropriate at 1 April 1983 and 1 January 1984, are in Table 1; paragraphs 18-22 include details of recommended salaries for Brigadiers, pre-registration medical practitioners and cadets; and paragraphs 23-26 are concerned with medical additional pay. Appendix 2 gives a summary of key manning statistics for the defence medical services from 1980 to 1983; Appendix 3 details salaries introduced at 1 April 1982; and a full list of the Review Body's Reports is in Appendix 1.

#### Reference

Review Body on Armed Forces Pay, Service Medical and Dental Officers, Supplement to Twelfth Report: (Cmnd. 8950) (HMSO July 1983) (Price £3.00 net)

#### Wages and employment - agricultural workers

The main results of the Wages and Employment Enquiry into the earnings and hours of hired agricultural workers in England and Wales for the months April to June were published in the Ministry of Agriculture, Fisheries and Food's press notice No 239 issued on 31 August 1983. Results for the quarter ended 30 September 1983 should be available shortly.

#### AGRICULTURE AND FOOD

#### **National Food Survey**

The National Food Survey Committee's recently published Annual Report for 1981 presents extensive analyses of data obtained from the National Food Survey about household food consumption, expenditure and nutritional levels in Great Britain in 1981. A commentary on the Survey's findings is also provided. The data included in the Report are considerably more detailed than those presented in the Ministry of Agriculture, Fisheries and Food's Food Facts series.

In addition to providing detailed analyses of the changes in national average household food consumption and nutrition up to 1981, the Report also presents averages for each of the standard statistical regions and other areas, and for groups of households classified according to income, composition, the age of the housewife, housing tenure and according to the ownership of a deep-freezer.

An appendix to the Report gives a general account of the Survey methodology and of its sample structure. Another appendix gives estimates of income and price elasticities of demand for food and of other demand parameters derived using Survey data; these results are prefaced by a full account of the statistical techniques employed.

Summarised quarterly results are released to the press as soon as they become available and a commentary is published in *British business*. Detailed monthly, quarterly and other unpublished data are also available on a subscription basis. For details contact:

National Food Survey Branch
Ministry of Agriculture, Fisheries and Food
Room 419
Whitehall Place (West Block)
London SW1A 2HH
(Telephone: 01-233 5088)

#### References

Household Food Consumption and Expenditure: 1981 (HMSO July 1983) (Price £16.50 net)

British business (HMSO weekly) (Price £1.10 net)

#### Agricultural Censuses and Surveys

Orchard fruit survey - March 1982

Results of this survey in England and Wales were published in Statistical Information Notice STATS 196/83 on 11 July 1983.

Irrigation survey - February 1983

Results of this survey in England and Wales were published in Statistical Information Notice STATS 217/83 on 2 August 1983.

#### Annual estimates of crop production - 1982 harvest

- (i) The annual estimates of production (with the areas and estimated yields per hectare) for the principal agricultural crops in England, England and Wales and the United Kingdom were published in Statistical Information Notice STATS 218/83 on 2 August 1983.
- (ii) The County and Regional estimates of yield for England and Wales were published in August 1983.

#### Agricultural census - June 1983

The provisional results of this census were published in a combined England and United Kingdom Press Notice STATS No. 236 on 25 August 1983.

#### Potato crisps and snack foods

Results of the first quarter 1983 were published in Statistical Information Notice STATS 190/83 on 5 July 1983.

#### Agricultural Statistics for the United Kingdom 1982

This volume records, for reference purposes, the main figures from the annual agricultural censuses and regular surveys of agricultural prices. The volume, which is the latest in a long series of similar publications, was published on 19 September.

#### Reference

Agricultural Statistics for the United Kingdom 1982 (HMSO 1983) (Price £9.50 net)

#### Farm management survey in England

Supplementary Analyses 1981/82 – This booklet contains a range of analyses of data which supplement the main results of the Survey recorded in the report Farm Incomes in England 1981/82.

Report on the Liabilities and Assets Survey 1981/82—This report is based on a sub-sample of farms participating in the main Survey and sets out detailed results of the survey of farm balance sheets.

These publications can be obtained from: MAFF Publications, Lion House, Willowburn Estate, Alnwick, Northumberland, NE66 2PF.

Prices: Supplementary Analyses £5.50 plus £1.00 postage and packing.

Report on the Liabilities and Assets Survey £9.50 plus £1.00 postage and packing.

#### Reference

Farm Incomes in England 1981/82 (HMSO) (Price £8.75 net)

#### Agriculture in Scotland in 1982

The annual Command Paper Agriculture in Scotland was published recently. The Report contains both commentary and tables on the various aspects of Scottish agriculture and commences with a brief review of the

general agricultural situation in Scotland. Chapter 2 covers output, production and prices, Chapter 3 processing and marketing and Chapter 4 deals with subsidies. Other Chapters cover land use, improvement, pest control, agricultural labour, etc. and also Departmental organisation and finance, and estate management in Scotland.

#### Reference

Agriculture in Scotland, Report for 1982 (Cmnd. 8922) (HMSO Edinburgh September 1983) (Price £5.45 net)

## Results of the Scottish sample pig census for April 1983

The results of the April 1983 Scottish sample pig census were published as a Scottish Office Press Notice on 20 June 1983 (Press Notice number 605/83).

# Provisional results of the Scottish June 1983 agricultural census

The provisional results of the June 1983 Scottish agricultural census were published as a Scottish Office Press Notice on 2 August 1983 (Press Notice number 760/83).

#### INDUSTRIAL STATISTICS

#### **Industry statistics**

In September when the national accounts of the United Kingdom were rebased, the Central Statistical Office introduced the new Index of Output of the Production Industries (1980 = 100). The index is based on 1980 and uses the Standard Industrial Classification 1980 (SIC(80)). Several methodological improvements are incorporated in the new index, which replaces the previous 1975 based Index of Industrial Production. The monthly index numbers are now confined to the production industries (SIC(80) definition) and thus exclude the construction industry for which data are only available quarterly. The CSO has produced two Industry Statistics Occasional Papers which describe the new index:

Series and weights used in the index of output of the production industries; 1980 base (No. 18); and Derivation of output estimates for the production industries; 1980 base (No. 19), which describes how the aggregate index numbers, based on a mix of sales and production indicators, are adjusted for changes in levels of manufaturers stocks so as to track output movements more closely than in the previous index.

The output measure of gross domestic product was also rebased in September. An Occasional Paper, Series and weights used in estimating the output measure of gross domestic product at constant factor cost; 1980

base (No. 20), describing the rebased measure will be available in mid-November and will supplement No. 18, providing detailed weights for the rest of the economy.

A revised version of Calculation and interpretation of the cyclical indicators of the UK economy (Occasional Paper No.16), incorporating changes made to the cyclical indicators system subsequent to the rebasing of the major economic series and incorporating some methodological changes is also available.

Industry Statistics Occasional Papers are available, price £2.50 each (cash with order), from: OSS Branch, Room 73/3, Central Statistical Office, Great George Street, London SW1P 3AQ.

Offprints of the following articles in *Economic Trends*, March 1983 edition, are also available; from Branch 3, Room 74/3, Central Statistical Office (price £1.20 net each).

'Index of industrial production, rebasing and reclassification'.

'Introduction of the revised standard industrial classification 1980'.

'Rebasing and reclassifying the national accounts: the reasons and likely effects'.

Business Monitors – Annual Census of Production 1981
Readers of Statistical News are made aware of the results of the 1981 Census of Production as the Business Monitors become available. The following table lists the monitors published since notification in the last number of Statistical News.

Business	Description	Standard
Monitor		Industrial
Number		Classification
		1980 Group
		Heading
PA 322	Metal-working machine tools and engineers' tools	322
PA 323	Textile machinery	323
PA 330	Manufacture of office machinery and data processing equipment	330
PA 361	Shipbuilding and repairing	361
PA 413	Preparation of milk and milk products	413
PA 427	Brewing and malting	427
PA 441	Leather (tanning and dressing) and fellmongery	441
PA 453	Clothing, hats and gloves	453
PA 475	Printing and publishing	475

All 111 monitors in the series have now been published. Copies of these Business Monitors are available on standing order from Her Majesty's Stationery Office, PO Box 276, London, SW8 5DT (Telephone 01-622-3316) or through any Government Bookshop.

Further information on the PA series of Business Monitors and Censuses generally can be obtained from:

Mr C. Lerway, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent NPT 1XG (Telephone 0633-56111 ext 2455) Individual Monitors or a free brochure describing the full range of Monitors with prices and order form may be obtained from:

The Librarian, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent NPT 1XG (Telephone 0633-56111 ext 2973)

#### Housing and construction statistics

Housing and Construction Statistics 1972-1982 gives detailed information on house building, house renovations, slum clearance, dwelling stock, housing finance, etc, also details on construction new orders and output, labour, structure, materials and investment. A table on Bank mortgages is included for the first time. As in previous editions most tables cover an eleven year period.

#### Reference

Housing and Construction Statistics 1972-1982 (HMSO September 1983) (Price £22.75 net) ISBN 0 11 751686 4

#### DISTRIBUTION AND OTHER SERVICES

# Distributive and service trades: results of four years inquiries

A recent article in *British business* gave results from the Business Statistics Office inquiries into the distributive and service trades from 1978 to 1981. Figures for wholesaling, catering and the motor trades relating to 1977 to 1980 were given in *British business* 6 August 1982. The present article covers these sectors and road transport and ancillary services, other service trades, and property. The article also covers the methods used, sampling and other errors and includes notes and definitions.

#### Reference

British business 15 July 1983 (HMSO weekly) (Price £1.10 net).

#### Cinemas 1982

The full results of the annual film exhibitors inquiry for 1982 were recently published in Business Monitor MA2. The monitor includes analyses by region, seating capacity, size of box office takings and type of cinema (single, twin, etc.).

A summary of the results was also carried in British business.

#### References

Business Monitor MA2 Cinemas 1982 (HMSO September 1982) (Price £4.20 net)
British business 8 July 1983 (HMSO weekly) (Price £1.10 net)

#### DEFENCE

#### Defence statistics

The 1983 edition of the Statement on the Defence Estimates was published in the usual two volumes on 6 July 1983. Following the established pattern Volume 1 gives a review of the current defence position together with indications of the Government's thinking on important general issues. Volume 2, prepared by the Defence Statistical Organisation, offers statistical information in support of Volume 1 together with other information covering a wide range of defence activity.

Regular readers will have noticed that Volume 2 looks a little different this year. This is because all the tables are now presented in a standard format. To achieve this those tables which previously gave figures for a single year have been rearranged to present figures for a run of years. Other tables which included subtables as footnotes, have been modified so that the sub-tables are either subsumed or expanded into tables in their own right.

In a few cases, the changes have induced revisions to the table numbering, but such changes have been restricted to adjustments within the same chapter headings. These remain the same as last year, i.e.:

- 1. The Armed Forces showing the formation of front line units and a functional analysis of Service strengths.
- 2. Finance and trade giving details of the Defence budget and the imports and exports of defence equipment.
- 3. Equipment dealing with defence procurement and R and D expenditure; Service supply systems, energy consumption and Dockyard and Ordnance Factory activities.
- 4. Service personnel giving summaries of total and trained strengths along with deployment, recruitment and wastage information.
- 5. Civilian staff with strengths and deployments for civilians (including apprentices).
- 6. Health, education and accommodation giving information on a wide range of topics such as sickness, deaths, aircraft accidents, married quarters, land holdings and qualifications obtained.
- 7. Defence services and the civilian community—with summaries of operations in Northern Ireland, search and rescue, help to civil ministries, fisheries protection, hydrographic and meteorological services.

There has also been a major change in the summary section at the beginning. It is different in that it gives a much broader summary of the information contained in the main tables. It now concentrates on outturn figures rather than Estimates and draws some of its

earlier statistics from previous versions of the Statement on the Defence Estimates, Volume 2 to give a six year run of figures.

It is hoped that this new presentation will be welcomed by its regular subscribers. If you have any comments please direct them to: Mr J. A. Harris, The Ministry of Defence, Room 146, Northumberland House, Northumberland Avenue, London, WC2N 5BP. Telephone: 01-218 0339.

#### Reference

Statement on the Defence Estimates 1983 (HMSO July 1983) (Volume 1, Cmnd. 8951-I, price £4.00 net; Volume 2, Cmnd. 8951-II, price £4.50 net)

#### **ENERGY**

#### Digest of United Kingdom Energy Statistics 1983

The latest edition of this series, prepared by the Economics and Statistics Division in the Department of Energy, was published at the end of July. It contains 77 tables and four pages of maps and charts.

The first section covers general energy statistics and includes tables showing inland consumption of fuels on a primary fuel input basis (in coal equivalent, in oil equivalent and in terms of the thermal content of fuels). Other tables show the estimated value of purchases of fuels, energy consumption, by final users and an analysis of consumption by main industrial groups. The section also contains charts showing trends in the inland consumption of primary fuels and equivalents.

The other sections deal separately with individual fuels, prices and values of fuels and foreign trade in fuels. Fuel production and consumption statistics are derived mainly from the records of fuel procedures and supplies. Foreign trade statistics are derived from returns made to HM Customs and Excise and published in the Overseas Trade Statistics.

#### Reference

Digest of United Kingdom Energy Statistics 1983 (HMSO July 1983) (Price £11.95 net) ISBN 0 11 411309 2

#### TRANSPORT

#### Transport statistics Great Britain

Transport Statistics Great Britain 1972-1982 brings together a comprehensive range of statistical information on inland surface transport in order to encourage informed debate on transport development and policies. In particular the public expenditure table has been extended to include more detailed information for Scotland and Wales. As in previous editions, most of the tables cover eleven years, though some span longer or shorter periods and a few contain forecasts for years ahead. To provide a wider context for the

inland surface transport series, some summary tables on air and sea transport are included.

#### Reference

Transport Statistics Great Britain 1972-1982 (HMSO October 1983) (Price £19 00 net) ISBN 0 11 550598 9

#### Road accidents

Road Accidents Great Britain 1982 was published by HMSO in November for the Department of Transport, Scottish Development Department and the Welsh Office price £5.50 net. The review of road accidents again includes an account of road safety publicity campaigns and follows up last year's description of casualty rates by birth cohort - this time in relation to child pedestrians. Topics covered in detail are accidents to 'teenagers', two-wheeled motor vehicle by type and sources of international road accident statistics. One article considers the effects of the 1982 rail strikes and of public transport fare changes in Greater London and other connurbations. A related topic is a comparison between road and rail transport in the context of passenger safety. The review is completed by short articles on seat belts, heavy goods vehicles, trunk versus principal road accident rates, the cost of road accidents, fires in road vehicles and casualties due to industrial plant – or off the public highways.

The main part of the book consists of ten time series tables and 42 detailed tables relating to 1982. The 1982 tables include four new ones and two reinstated from earlier editions; others have been enhanced. As a result, the tables now include in particular:

- (1) comparison of road deaths with other deaths, be age, from mortality statistics compiled by the Registrar General
- (2) tabulations by individual speed limits (previously only two groups used)
- (3) casualties by seating position in cars and light vans, relating to the seat belt issue
- (4) more disaggregated vehicle/casualty rates by vehicle type and road class
- (5) more rates in terms of population by age
- (6) separate information on mopeds in several tables, previously amalgamated with motor-cycles
- (7) some individual figures (and rates in an article) for groups of heavy goods vehicles by number of axles previously not possible for GB.

Statistical bulletins, giving quarterly information on road accidents and casualties (currently giving provisional figures up to (September 1983) continue to be published. A revised version of the Digest of road accident statistics by region and county in England (R.A.S.E.R.) should be published in (late December/early January). Enquiries on these to Department of Transport, B2.42, Romney House, 43 Marsham Street, London SW1; (01 212 6763).

#### Road accidents: Wales

The third edition of *Road Accidents: Wales* was published on 17 August 1983. The publication includes detailed analyses of road accidents and casualties in Wales during 1982 together with historical comparisons by severity, age, road and weather conditions, vehicle type and other aspects. Also included are some detailed breakdowns on breath tests and some county analyses.

#### Reference

Road Accidents: Wales 1982 (Price £2.00 including postage) is available from: Publications Unit, Economic and Statistical Services Division, Welsh Office, Cathays Park, Cardiff CF1 3NQ

#### The continuing study of road goods transport (CSRGT)

The latest report sets out data for 1982 and analyses freight activity on public roads in the United Kingdom by goods vehicles greater than  $3\frac{1}{2}$  tonnes gross vehicle weight (GVW) registered in Great Britain. Freight activity is analysed in terms of tonne-kilometres and vehicle-kilometres. Prior to 1978 the estimates measure freight activity in Great Britain, but not the United Kingdom.

Copies are available from the Department of Transport, STA3, Room B252, Romney House, 43 Marsham Street, London SW1P 3PY (telephone 01-212-8076) price £8.00 including postage and packing.

#### International road haulage in 1982

The Department of Transport (DTp) recently published its fourth report on the International Road Haulage Survey (IRHS). This report, giving results for 1982 has retained the format of the earlier reports with background discussion and analysis similar to that in the 1981 report.

Statistics presented in the report concentrate on the performance of United Kingdom international road haulers. One point brought out is that, while most lorries on "hire and reward" journeys are fully loaded, own account lorries often travel empty on the return run. Other figures in the report show that the general trend of international freight is firmly upward.

The International Road Haulage Survey, which began in 1979 to meet the requirements of EC Directive 78/546, is complementary to the DTp Continuing Survey of Road Goods Transport which covers domestic road haulage under the same Directive. The IRHS report contains 10 basic tables giving details of the countries in which goods were loaded and unloaded, the types of commodity carried, the type of service—whether for hire and reward or for own account, and the region in which the goods were loaded or unloaded in the United Kingdom. The survey methodology is also described in detail.

Copies of the report are available from the Department of Transport, Room P2/052, 2 Marsham Street, London SW1P 3EB for £10.40 including postage and packing. Cheques/postal orders should be made payable to the 'Department of Transport' and crossed.

#### Ports statistics

The latest edition of the Annual Publication Port Statistics 1982 has now been published by the Department of Transport and the British Ports Association. This is the third such publication produced since the closure of the National Ports Council but the first on a new 'mode of appearance' basis (a detailed explanation of the new classification was given in Statistical News 56.1). Ports Statistics 1982 provides details of total foreign and domestic traffic through the principal ports of Great Britain broken down into 'mode of appearance', namely bulk traffic (by commodity), container and roll-on traffic, semi-bulk traffic and conventional traffic. Classified in this way, the analysis of port traffic is more relevant to the requirements of both the Industry and the Department and, hopefully, permits a clearer understanding of the main issues for the more casual reader. The new classification was introduced after extensive consultation with the Industry and its trade association, the British Ports Association.

Port Statistics 1982 has been produced jointly by the Department and the British Ports Association and is available from the Association at Commonwealth House, 1-19 New Oxford Street, London WC1A 1DZ (telephone 01-242-1200) price £20 plus postage.

#### Purchases and sales of ships by the UK shipping industry 1982

An article in the 26 August issue of *British business* shows that the UK private sector shipping industry spent nearly £390 million in 1982, net of disposals, on new and second-hand ships, compared with only £60 million in 1981. Higher deliveries accounted for £200 million of the increase. Accompanying tables include analyses by country/area of build and type of deliveries of new vessels, new orders placed and vessels on order at 31 December 1982 (UK private sector shipowners). Timing and method of payments are shown in separate tables, also the cost of ships purchased and sold by UK leasing companies based on time of delivery or sale.

#### Reference

British business (HMSO weekly) (Price £1.10 net)

#### NATIONAL ACCOUNTS

#### National Income and Expenditure 1983 Edition

The 1983 edition of National Income and Expenditure (the Blue Book) was published on 21 September 1983.

Some major changes have been introduced this year. The base year for the constant price estimates of expenditure and output has been changed from 1975 to 1980. Thus all the series which were previously expressed in terms of 1975 prices, or in index number form with 1975 = 100, are now expressed in terms of 1980 prices or with 1980 = 100. The following table compares the percentage changes between 1978 and 1982 in the constant price measures of gross domestic product as given in the 1983 Blue Book with estimates of what these changes would have been if the series had not been rebased and were still compiled in terms of 1975 prices.

#### Percentage change in the gross domestic product at constant factor cost, 1978-1982

	As given in the Blue Book		
	Based on 1980 prices	Based on 1975 prices	Effect of rebasing
Expenditure-based measure	+0.2	-0.9	+1.1
Income-based measure	+0.3	-0.8	+1.1
Output-based measure	-1.4	-1.4	_
Average estimate	-0.4	-1.1	+0.7

Further information on the reasons for rebasing and estimates of its likely effects were given in an article in the March 1983 issue of *Economic Trends*. Detailed assessments of the actual size of the effects of rebasing on the expenditure and output measures will be given in further articles in *Economic Trends*, probably in the December 1983 issue.

The second major change is the introduction of the Standard Industrial Classification Revised 1980, which is being adopted this year as the standard framework for classifying official statistics by industry and activity. All industrial analyses in the Blue Book tables are now based on this new classification instead of the former 1968 classification. The main difference between the two classifications is the grouping of the energy producing industries into a new category 'Energy and water supply' which includes some industries formerly classified to 'Mining and quarrying' and to 'Manufacturing'. An article describing the difference between the new and old classifications in more detail was published in *Economic Trends* March 1983.

Also in this years' Blue Book a new classification system for consumers' expenditure has been introduced. Some detailed categories have been dropped and new ones added. The figures are now presented in two ways:

- in summary commodity groups for which estimates will also be published quarterly
- in detailed categories arranged according to the purpose of the expenditure.

A new procedure has been adopted for the treatment of expenditure by private non-profit-making bodies serving persons; this is now separated from household expenditure and shown as one total. Further details of the changes were given in an article in the September issue of *Economic Trends*.

Other changes made in this year's Blue Book include the publication of separate figures for central government and local authorities' final consumption at constant prices and a similar split of government total expenditure on goods and services at both current and constant prices. The division of income from employment in certain industries between wages and salaries and employers' contributions has been discontinued due to doubts about the reliability of the industrial analysis of employers' contributions. Five former tables have been dropped – the distribution of households' income before and after tax; the industrial analysis of company profits; the current account of the National Insurance Fund; the current account of central government excluding the National Insurance Fund; and the analysis by function of general government current expenditure on goods and services.

Quarterly figures for the last eleven years consistent with those in the Blue Book were published as usual in the October issue of *Economic Trends* which also contained tables of percentages derived from the Blue Book relating to the composition of total final expenditure, total domestic income and total personal income. Also given there are growth triangles (which show the annual rate of change between any given pair of years) for gross domestic product at constant factor cost and real personal disposable income in the years 1948-1982, and a table giving financial year totals for gross domestic and gross national product at factor cost and at market prices for the years 1972/73-1982/83.

The following amendments should be made to the 1983 Edition:

Table 1.7 Summary capital account

	1972	1973	1974	1975	1976	1977
Delete	1,344	4,283	7,074	3,943	7,353	6,789
Insert	1,343	4,362	7,100	3,808	7,302	6,847
	1978	1979	1980	1981	1982	
Delete	5,850	12,202	3,808	1,613	1,832	
Insert	5,939	10,865	3,338	2,790	2,745	

Table 1.7 (continued) Summary capital account: alternative presentation

	1972	1973	1974	1975	1976	1977
Delete	6,338	7,790	7,000	8,467	13,799	18,346
Insert	5,798	7,508	- 5,823	5,950	9,852	11,385
	1978	1979	1980	1981	1982	
Delete	22,121	24,376	27,681	34,594	37,323	3
Insert	13,472	13,483	11,619	11,361	13,381	

EXPENDITURE

Net investment abroad

1973

	The second		
Delete	- 979	-3,278	
Insert	-1,038	-3,353	

Table 13.12 Public sector financial account

1974

	Changes to 1982 values		
Cash expenditure on company securities, etc. (net):	Delete	Insert	
General government	- 380	48	
Total	469	801	
Total	7,827	8,159	
RECEIPTS			
Balancing item	1,380	1,712	
Total	7,827	8,159	

#### References

National Income and Expenditure 1983 Edition (HMSO) (Price £13.95 net) ISBN 011 620 101 0

Economic Trends No 353, March 1983; No 359, September 1983; and No 360 October 1983 (HMSO) (Price £10.75 net each)

#### HOME FINANCE

#### Commodity flow accounts

The Central Statistical Office (CSO) has been developing over recent years a system of quarterly constant price commodity flow accounts (formerly known as the production accounts). These accounts are a form of condensed input-output table: the aim is to achieve a balanced supply/demand account for each of about 40 commodity groups, covering the whole economy. In practice the accounts do not precisely balance because of limitations in the available data—indeed the main function of the accounts within the CSO is to provide a starting point for investigating discrepancies between the expenditure and output measures of GDP.

Quarterly and annual time series covering several years are produced each quarter, about one quarter in arrear. On the supply side seasonally adjusted series are given for stock-adjusted home output and imports; on the demand side for consumers' expenditure, general

government final consumption, gross domestic fixed capital formation, stockbuilding, exports, and total domestic intermediate demand.

The accounts have recently been reclassified to conform with the Standard Industrial Classification Revised 1980, and rebased on 1980 prices. In addition, the underlying technical coefficients and certain other fixed ratios have been recalculated using the recently published 1979 input-ouput tables.

The data are included in the CSO Databank, which is operated on CSO's behalf by SIA Computer Services. SIA will sell the data on subscription in computer-readable form, and they and other bureaux offer online access. Further details may be obtained from the Sales Manager, SIA Computer Services, Ebury Gate, 23 Lower Belgrave Street, London SW1W 0NW (telephone 01-730 4544).

In addition, the printed tables are available by direct subscription from the CSO. Further details from: J. A. Astin, Central Statistical Office, Great George Street, London SW1P 3AQ (telephone 01-233 3553).

#### References

July 1983) (Price £9.95 net)

'Progress report on the construction and use of commodity balances within the national accounts' Economic Trends September 1978 (HMSO)

'Measurement of GDP in 1972' Economic Trends April 1972 (HMSO)

Business Monitor PA104 Input-output tables for the United Kingdom 1979 (HMSO)

#### Cyclical indicators of the United Kingdom economy: some developments

Some changes to the component series and methods of compilation of the cyclical indicators of the UK economy were introduced on 19 October and are fully described in an article in the October issue of Economic Trends. These changes are partly consequent on the rebasing and reclassification of industrial statistics and the national accounts but also incorporate improvements in analysis and techniques arising from a review of the UK system which has taken account of the latest international practices in this field. The review has shown that one of the series that has been included in the indicators - vacancies - has been behaving incompatibly and it has been dropped. Its place has been taken by another labour market indicator - employment in manufacturing industry (revised definition). Minor changes to some of the other component series have been necessary because of rebasing and reclassification. One of the series – manufacturing production – has been replaced by a wider aggregate – production in Divisions 1-4 of SIC(1980) (i.e. in the 'production industries'). There have also been some technical improvements to the methods of compiling composite indicators from the component series, covering the areas of trend estimation, trend elimination, deflation, seasonal adjustment and smoothing.

#### Reference

'Cyclical indicators of the United Kingdom Economy: some developments and an assessment of performance' by Eric Lomas, *Economic Trends* No. 360 October 1983 (HMSO) (Price £10.75 net)

#### Price index numbers for current cost accounting (PINCCA)

A new Business Monitor MO18 Price Index numbers for Current Cost Accounting Summary Volume 1974-1982 has been published by HMSO on behalf of the Business Statistics Office (BSO) and is available both from HMSO and the BSO Library (telephone 0633 56111 ext 2973) price £9.95 net. A magnetic tape version is also available (enquiries to BSO Library).

Pincea indices are compiled mainly from the family of wholesale price indices which are rebased at regular intervals to take account of the changing pattern of industry's purchases, sales, stocks held and capital expenditure.

The latest rebasing of the wholesale price indices now referenced to 1980 = 100 and from which Pincca indices are compiled was published in August 1983, at which time the wholesale price indices were renamed the producer price indices. At the same time the producer price indices were reclassified to the 1980 version of the Standard Industrial Classification.

The effect of these changes on the Pincca indices will in many cases be reflected in a simple change of reference number, but in other cases some indices will disappear and be replaced by a different aggregation of components. The index movements even for those indices not affected by a change of name may differ from those published previously since these will reflect more recent patterns of Industry's purchases, sales, stocks held and capital expenditure. Since indices will not, therefore, be entirely consistent with the previously published indices the new Business Monitor MO18 shows data for the rebased indices back to 1974. Lists correlating new and old indices for Tables 1 and 2 have also been included as an aid to Pincca users.

For those who may wish to use a longer series of data advice can be sought from the Business Statistics Office, Pincca section (telephone 0633 5611 ext 2173) on ways in which it might be possible to link data in the new series with that published in the old. Business Monitor MM17 Price Index numbers for Current Cost Accounting Monthly Supplement will continue to publish the latest rebased and reclassified indices as the means of updating MO18.

#### Forecasting the public sector borrowing requirement

An article in *Economic Progress Report* No. 160 September 1983, published by the Treasury, defines the public sector borrowing requirement (PSBR), describes broad trends in forecasting errors and draws some tentative conclusions.

The outturn of the PSBR in any particular year is affected by a number of factors, including the development of the economy. Forecasting it is difficult as it is the difference between two very large numbers. Errors, though small compared to total public spending or revenues, can be large compared to the PSBR itself. The analysis in this article, which does not attempt to analyse the forecasts for each year, concentrates on errors associated with the Treasury's published forecasts (Budget and Autumn) though reference is also made to average errors in internal forecasts.

#### Reference

Economic Progress Reports available from Publications Division, Central Office of Information, Hercules Road, London SE1 7DV (free).

#### Cash limits

A White Paper published in July 1983 gave provisional outturn figures for cash limited public expenditure in 1982-83 and revised figures for 1981-82.

The cash limits for 1982-83 on expenditure by central government departments were published in the Supply Estimates on 9 March 1982. The remaining cash limits, on local authority capital expenditure and for certain other bodies, were published in March 1982 in the white paper *The Government's Expenditure Plans 1982-83 to 1984-85* (Cmnd. 8494). See Statistical News 57.23.

#### Reference

Cash limits 1982-83: provisional outturn (and 1981-82 outturn) Cmnd. 8987 (HMSO) (Price £3.50 net)

#### **Inland Revenue Statistics 1983**

The 1983 edition of *Inland Revenue Statistics* contains statistics on direct taxation, personal and company incomes, capital gains, wealth and property valuations. Extensive notes are included on each subject.

An historical breakdown of net receipts of taxes and numbers of taxpayers is given as well as estimates of the direct costs of allowances and reliefs relating to the taxes administered by the Inland Revenue. The income statistics include data on employment incomes and the incomes of companies.

The capital and wealth section contains statistics on capital transfer tax, estate duty, capital gains tax and development land tax. Estimates of personal wealth are also given.

Statistics on stamp duties, rateable values, floor space, agricultural land prices and conveyancing complete the set of main tables.

The Appendices show the rates of the various taxes and include tables of income tax thresholds at current and constant prices.

#### Reference

Inland Revenue Statistics 1983 (HMSO October 1983) (Price £9.50 net) ISBN 0 11 641356 5

#### Companies in 1982

The latest Department of Trade and Industry Annual Report of matters within the Companies Acts 1948 to 1981, Companies in 1982, was published in October. The Report, which reviews developments in 1982, and accompanying statistical tables, include information furnished by the Registrars of Companies for England and Wales, and for Scotland. Data shown include new registrations, conversions, number on registers, liquidations notified, petitions for compulsory windingup, investigations, prosecutions by the then Department of Trade, etc. In a number of cases data are shown for 1970 and 1978-82.

#### Reference

Companies in 1982 (HMSO 1983) (Price £4.50 net)

#### Lifespan analysis of businesses in the United Kingdom 1973-82

Articles published in *British business* during 1982 and 1983 have described the data available from the routine administration of value-added tax, defined birth and deaths of firms, and produced estimates for the United Kingdom over the period 1980 and 1982 by sector of trade and by region.

An article in *British business* 12 August provides lifespan analyses of firms which cease to trade. There has been great interest, and not a little speculation, as to what can be said about how long small firms trade, on average, before ceasing to do so and whether or not there is a critical period beyond which might lie the prospect of growth and success. Small firms are an integral part of the economy and one in which there were, according to information from Vat, high failure rates between 1980 and 1982. Hard evidence which could help to decide whether firms passed through periods of vulnerability would therefore be very welcome.

But to be reasonably certain of not adding to the myths and confusions which have grown up in the absence of reliable information it is necessary, first of all, to put together substantial amounts of data which have been collected on a reasonably consistent basis over a considerable period of time. It is then necessary to describe precisely how the estimates are produced and what they stand for.

After setting out the background, the article explains the use of the terms survival, failure and lifespan. There is then an explicit consideration of the question of comparability with other published estimates, a section on the bare bones of the results and, finally, comments on the results.

That concludes the article proper, but there is an important appendix which describes the factors affecting the quality of the estimates produced here. This

bringing together of the detailed data considerations in an appendix simplifies the presentation and should make it easier to place the limitations of the data within the context of its strengths.

Other appendices give detailed figures which extend the scope of the summary figures shown in the article. The graphs and the pie-chart, on the other hand, aim to summarise the large mass of statistical evidence presented in the article.

A further article in *British business* 7 October examines some of the more general findings in greater detail and, as part of the evolving methodology of lifespan analysis, establishes the importance of space identifying the exact nature of the sample being investigated.

Previous articles on the births and deaths of firms were covered in *Statistical News* 56.29, 57.26, 58.32, 59.45 and 61.24

Inquiries about, but not requests for, the articles should be addressed to:

Mr Pom Ganguly
Statistician, Small Firms Division,
Department of Trade and Industry,
Room 214, Ashdown House,
123 Victoria Street, London, SW1E 6RB

#### Reference

British business 12 August and 7 October 1983 (HMSO weekly) (Price £1.10 net each)

#### Investment intentions survey: 1972-82

An article in *British business* 16 September 1983 gives a comparison of estimates of expected capital expenditure obtained from the Department of Trade and Industry's investment intentions inquiries of firms in the manufacturing, distribution and service industries with actual expenditure as recorded. It provides an annual supplement to the more limited comparison published regularly in *Economic Trends*. Tables show a comparison of published results of investment intentions inquiries and actual expenditure outcomes (constant prices) 1972-82, and grossed-up investment intentions of manufacturing industry.

#### References

British business (HMSO weekly) (Price £1.10 net) Economic Trends (HMSO monthly) (Price £10.75 net)

#### Financial assets of insurance companies and pension funds: 1982

British business 16 September 1983 contains the latest annual article giving the total market value of financial assets of insurance companies. At the end of 1982 this amounted to some £96,000 million (29 per cent more than at the end of the previous year). Tables show end-year holdings of assets and net investment during the year of long-term insurance funds, general

insurance funds and pension funds, separately, and in each case by type of security. The insurance data are shown from 1977 to 1982. Pension funds holdings are shown from 1978 to 1982 and their net investment from 1979 to 1982.

#### Reference

British business (HMSO weekly) (price £1.10 net)

#### Tax reliefs on occupational pension schemes

Cost of Tax Reliefs for Pension Schemes – Appropriate Statistical Approach has recently been published by the Board of Inland Revenue. The document, which sets out the present basis of costing and also a proposed new system, is available from the Reference Room, Inland Revenue Library, Room 8, New Wing, Somerset House, Strand, London WC2R 1LB (price £2.90 including postage).

#### Welsh local government financial statistics

The sixth edition of Welsh Local Government Financial Statistics was published in May 1983. This publication is the main source of information on expenditure by local authorities in Wales. This volume gives detailed information on revenue and capital expenditure in 1980/81 together with some historical data. Summary data giving budgets for 1982/83 and provisional outturn for 1981/82 is also presented. In addition, information on rates, rateable values and rate rebates for 1981/82 and 1982/83 is given. Finally the publication tabulates summary data on rate support grant and other financial assistance by central government in recent years.

#### Reference

Welsh Local Government Financial Statistics 1982 (Price £3.00 including postage) is available from: Publications Unit, Economic and Statistical Services Division, Welsh Office, Cathays Park, Cardiff CF1 3NQ.

#### **OVERSEAS TRADE AND FINANCE**

#### United Kingdom Balance of Payments 1983 Edition (Pink Book)

Detailed figures for each of the last eleven years were published on 1 September in the latest Pink Book. There have been no significant changes in this publication in the presentation of the balance of payments series. Estimates have, however, now been included of the impact in recent years of the activities overseas of UK companies specialising in finance leasing.

Revisions are mainly the result of later and more complete information but some result from improvements in the methods of estimating certain series. The most substantial revisions have been to figures for the last two years and only small changes have been made prior to 1976.

Table 6.1, relating to the overseas earnings of UK financial institutions ('City' earnings) was released by the Central Statistical Office as a press notice on 1 August.

An attempt has been made to give the notes and definitions, included at the beginning of each chapter, wider appeal by including a summary section where this appears to be useful.

#### Reference

United Kingdom Balance of Payments 1983 Edition: (HMSO) (Price £9.95 net) ISBN 0 11 620054 5

#### Overseas travel and tourism

British business recently carried the latest article on the annual survey of tourism covering 1982. The estimates and tables in the article were drawn from the results of the International Passenger Survey, which is a sample survey of passengers entering and leaving the United Kingdom. A description of the survey with notes and definitions is given at the end of the article. Results are published quarterly and annually in Business Monitors MQ6 and MA6.

#### References

British business 15 July 1983 (HMSO weekly) (Price £1.10 net)
Business Monitor MA6 Overseas travel and tourism 1982 (HMSO) July 1983 (Price £4.60 net)

Overseas transactions by film and television companies

There was a recovery in 1982 in the net overseas earnings of film and television companies from the production and exhibition of cinematograph film and television material. An article in *British business* 16 September 1983 (the latest in an annual series) shows that net earnings rose to £78 million in 1982 after falling from £81 million to £41 million between 1980 and 1981. All of the recovery was in North America and film companies were responsible for most of it. Television companies net earnings were the lowest since 1976.

The article gives overseas transactions in respect of film and television material 1971-82, overseas transactions in respect of film companies by area 1977-82 (and by type of transaction 1981 and 1982). Overseas transactions of the BBC and IBA programme contractors by area are given for 1979-82. Notes and definitions are also included.

#### Reference

British business (HMSO weekly) (Price £1.10 net)

#### RESEARCH AND DEVELOPMENT

#### Research and development statistics

The September 1983 edition of Economic Trends includes the latest of an annual series of articles on research

and development (R&D). The article, 'Research and development: preliminary estimates of expenditure in the United Kingdom in 1981', by J. R. Bowles, Department of Trade and Industry, presents the results of the latest survey of central government spending on R&D (1980). It also gives the first results of the most recent (1981) inquiry into R&D performed in industry and a brief listing of a number of recent studies of R&D.

Provisional estimates of spending on the training of postgraduate research students and of the wider element of University research into social sciences and humanities have been included for the first time. Both of these items are partly financed from the general grant-in-aid received by the Universities through the University Grants Committee and further studies of the problem of assessing the level of this expenditure are currently being made by the Department of Education and Science. It is hoped that the results will appear in a future article in this series.

#### Reference

Economic Trends September 1983 (HMSO) (Price £10.75 net)

#### INTERNATIONAL

#### International comparisons of profitability: 1955-81

In 1981 most countries experienced falls in net profit shares and rates of return for manufacturing but the experience in the broader groupings was more mixed. An article in *British business* 19 August 1983 updates the comparisons in the 15 October 1982 issue. It is based on calculations by the Organisation for Economic Cooperation and Development supplemented, for the United States of America, by information from the Department of Commerce. An accompanying table is on the same lines as last year, the only addition being rates of return for Finland. Charts show net rates of return for individual years for certain of the countries for non-financial corporations and manufacturing industry. Detailed definitions of terms are given at the end of the article.

#### Reference

British business (HMSO weekly) (Price £1.10 net)

#### International Statistical Institute: Short Book Reviews

The Bureau of the International Statistical Institute has decided to publish Short Book Reviews (SBR) on a permanent basis and issues will appear in April, August and December of each year. Anyone interested in seeing the SBR on a regular basis may take out an annual subscription (US \$10). The Director is E. Lunenberg, International Statistical Institute, 428 Prinses Beatrixlaan, PO Box 950, 2270 AZ Voorburg, The Netherlands.

#### **PUBLICATIONS**

#### Bank of England Quarterly Bulletin

In addition to regular articles providing commentary on recent developments in the UK economy, and on domestic and international financial markets, the September issue of the Bank's Quarterly Bulletin contains the following items:

The nature and implications of financial innovation

This is an account of a conference of central bankers and supervisory authorities from eleven countries which was arranged by the Bank of England in May. The conference discussed developments in the monetary systems of different countries which had led to an acceleration in the introduction of new financial instruments and techniques. The consequences of these changes for regulation and supervision of banks and other financial institutions were considered, along with their implications for monetary control.

#### Competition, innovation and regulation in British banking

The Bank prepared this paper for the conference mentioned above. After briefly outlining the development of competition and innovation in the British banking system from the 1950s up to 1980, it goes on to describe the deregulatory process which followed and to discuss its effect on, first, the conduct and technique of monetary policy and, second, the supervisory framework. The development of building societies over the same period is recounted and the paper then describes the nature and implications of current and prospective changes in the financial system, particularly those emanating from the introduction of new technology.

What the City expects from the accounting profession In this speech to the Institute of Chartered Accountants in England and Wales, the Deputy Governor discussed the role of the accountancy profession as seen from the City, considering in turn the different roles that accountants fill. He remarked that the City expected the continued maintenance of the high standards of technical competence, integrity and independence which had distinguished the profession hitherto. He concluded by mentioning areas to which the profession needed to give further attention in order to achieve this.

#### Intervention, stabilisation and profits

This article examines the proposition that a measure of whether intervention has exerted a stabilising influence in the exchange markets is whether or not it has been profitable. After considering the circumstances in which this proposition might be valid the article suggests that the notion of stability needs to be defined with care and investigates the consequences for profitability and stability of 'leaning into the wind', an intervention strategy used by the authorities in a number of countries. Some illustrative calculations for the United Kingdom tend to suggest that profits have been made but the article points to the difficulties of obtaining a satisfactory measure of profitability and concludes that profitability is unlikely to be a useful measure of the success of intervention.

#### Geographical analysis of UK banks' sterling liabilities and claims

This article introduces new statistics, analysed by country, of UK banks' sterling deposits from overseas residents for the period December 1979 to June 1983. Similar figures are given for the banks' sterling lending to overseas residents.

#### Finance leasing: estimates of investment in assets for leasing out

This note updates tables published in the September 1982 Quarterly Bulletin and previously in the Department of Industry's publication British business. The tables now exclude all forms of operating leasing and are restricted to finance leasing.

The Bank's Quarterly Bulletin (at £6.00 per copy) may be obtained from:

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

#### National Institute Economic Review

Institute Economic Review. 'Policy trade-offs in the NIESR model: exercises using optimal control' by S. Brooks, B. Henry and E. Karakitsos examines how the government should conduct fiscal policy to achieve the best compromise over a number of years amongst potentially conflicting economic objectives including inflation and unemployment. The possibility of unambiguous improvements by means of variations in the standard rate of income tax or the average rate of indirect tax is discussed. The sensitivity of policy and outturns to variations in the relative importance of the objectives is described. The results were obtained by applying the techniques of optimal control to the National Institute's economic model.

The other article is 'Some practical aspects of human capital investment: training standards in five occupations in Britain and Germany' by S. J. Prais and K. Wagner. Government policy to increase substantially the amount of vocational training and education available to school-leavers in the country raises the issue of how much and what kind of training is pro-

vided elsewhere. This article describes the training given in Britain and Germany in five of the more popular occupations: mechanical fitter, electrician, office worker, construction worker and retailing. Comparisons are made of the scope of the syllabus, and the standard reached at final tests. One of the important differences is the greater emphasis on practical (in contrast to theoretical or written) tests in all these occupations in Germany, which are carried out under examination conditions. It also appears that a greater proportion have reached basic and tested standards in mathematics at school; this provides a firmer basis for subsequent vocational instruction.

#### **Eurostat** index

The first edition of Eurostat index was reviewed in Statistical News 55.26. The second edition has been revised and expanded to take account of changes, deletions and additions to the end of 1982. As before, it consists of an alphabetical keyword subject index that directs the enquirer to titles in the Eurostat regular series. It also has headings for tables included in occasional publications in the series issued between July 1981 and December 1982. An introduction describes the statistical series by subject, there is a brief bibliography and appendices list serial titles that have ceased to be published since 1981, new titles and occasional publications. Finally, there is a directory of European documentation centres and depository libraries in the United Kingdom and overseas, European Commission information offices and Eurostat sales agents.

#### Reference

Eurostat index: a detailed keyword subject index to the statistical series published by the Statistical Office of the European Communities, Second edition, Capital Planning Information, 1983 (price £18.00 + £1.50 postage and packing). Available from C.P.I. Publications, 6 Castle Street, Edinburgh EH2 3AT.

#### International publications

The following have recently been published and are available from HMSO:

#### United Nations

Centre on Transnational Corporations

Transborder Data Flows: Access to the International On-line Database Market, Technical paper, price £13.50 net.

Department of International Economic and Social Affairs

Demographic Yearbook 1981, 33rd issue, price £76.50 clothbound, £67.50 paperback, both net.

Yearbook of World Energy Statistics 1981, price £54.00 net.

Department of Technical Co-operation for Development

Computer Software Programs for Demographic Analysis: Aspects of Technical Co-operation, price £3.60 net.

Economic Commission for Europe (ECE)

Annual Bulletin of General Energy Statistics for Europe 1981, Vol XIV, price £13.50 net.

Annual Review of the Chemical Industry 1981, price £24.30 ent.

Bulletin of Statistics on World Trade in Engineering Products 1981, price £34.20 net.

Conference of European Statisticians: Statistical Standards and Studies No. 35, European Handbook of Economic Accounts for Agriculture, price £11.25 net.

Economic Survey of Europe in 1982, price £24.30 net.

Economic and Social Commission for Asia and the Pacific

Statistical Yearbook for Asia and the Pacific 1981, price £43.20 net

Economic and Social Council Official Records 1983: Supplement No. 2 Statistical Commission: Report on the Twenty-Second Session (March 7-16 1983), price £6.30 net.

#### UNESCO

Socio-economic studies 5, Quality of life: Problems of assessment and measurement, price £4.50 net.

#### **OECD**

The Footwear, Raw Hides and Skins and Leather Industry in OECD Countries, Statistics 1981/1982, price £4.50 net.

Labour Force Statistics 1970-1981, price £12.00 net.

Measuring the Effects of Inflation on Income, Saving and Wealth (Report prepared for OECD and SOEC by Jack Hibbert), price £7.00 net.

OECD Economic Outlook Historical Statistics 1960-1981, price £6.00 net.

Revenue Statistics of OECD Member Countries 1965-1982, price £9.20 net.

Statistical Office of the European Communities (SOEC)

Agricultural Price Statistics 1970-1981, price £7.30 net.

Balances of Payments, Global data 1970-1981. price £4.80 net.

Balance of Payments Methodology of the United Kingdom, price £6.40 net.

Comparison in Real Values of the Aggregates of ESA 1980, price £14.00 net.

Demographic Statistics 1981, price £10.50 net.

Economic Accounts—Agriculture and Forestry, price £4.50 net.

Employment and Unemployment—1983, price £8.90 net.

Energy Statistics Yearbook 1981, price £13.00 net.

General Government Accounts and Statistics 1971-1980, price £14.50 net.

Labour Costs 1978: Volume 1 Principal results: Volume 2 Results by size classes and by regions, price £6.90 net for 2 volumes.

National Accounts ESA, Detailed tables by branch 1970-1980, price £10.40 net.

Regional Statistics, The Community's Financial Participation in Investment 1981, price £4.20 net. Structure and Activity of Industry 1978, price £13.50 net.

Studies of National accounts No. 1, The treatment in the National Accounts of Goods and Services for Individual Consumption Produced, Distributed or Paid for by the Government, a critical analysis and a proposal for a solution, by Jean Petre, price £2.10 net.

Yearbook of Agricultural Statistics 1978-1981, price £6.10 net.

Yearbook of Regional Statistics 1983, price £12.50 net.

Readers should note that publications of international organisations are subject to price changes.

#### CONFERENCES AND MEETINGS

#### Royal Statistical Society Study Group on the Government Statistical Service

The following series of meetings has been arranged:

Speakers Date and topic David Wroe and 15 December 1983 Frank Whitehead Instead of a 1986 Census 23 February 1984 David Wishart and John Kidgell Statistics behind the rate support grant

24 May 1984 John Walton

Hidden economy

Each meeting will take place at the London School of Hygiene and Tropical Medicine, Manford Theatre, Keppel Street, London W1 at 5.00 p.m. It is hoped to arrange further meetings in March and April 1984.

#### Statistics in Health

An International Conference organised by the Institute of Statisticians

> Rutherford College, University of Kent 11-14 July 1984

Following the success of the 1981 Conference on 'Statistics in Medicine', the Institute has chosen 'Statistics in Health' as the theme for the 1984 Conference and it is envisaged that the sessions and papers will cover the widest possible range of topics on this theme.

Sessions already arranged cover the lead controversy, which continues unabated, the hazardous effects of radiation, the distribution of resources within Health Services and clinical trials. Other sessions are still being planned and, additionally, there will be room for contributed papers and posters on both the session themes and others.

Professor N. T. J. Bailey of the University of Geneva, formerly Chief of the Epidemiological and Statistical Methodology Unit of the World Health Organisation, will be amongst other leading workers giving invited papers to the Conference.

For brochure and booking form, please contact the Administrative Convenor, The Institute of Statisticians, 36 Churchgate Street, Bury St. Edmunds, Suffolk, IP33 1RD, (Telephone: Bury St. Edmunds (0284) 63660).

#### **GOVERNMENT STATISTICAL SERVICE**

#### **Obituary**

Readers will learn with regret of the death on 14 September 1983 of Mr R. W. Green, Chief Statistician, Department of Trade and Industry, and previously in the Central Statistical Office.

#### Appointments and changes

Mr J. M. Simmonds, Chief Statistician, Business Statistics Office, retired on 31 August 1983.

Mr P. P. Altobell, Chief Statistician, Ministry of Defence, was transferred to the Central Statistical Office on 3 October 1983.

Mr D. L. H. Roberts, Statistician, Department of the Environment, was transferred to the Ministry of Defence, on promotion to Chief Statistician on 3 October 1983.

Mr M. J. G. M. Lockyer, Chief Statistician, Central Statistical Office, retired on 31 October 1983.

Mr K. Mansell, Chief Statistician, Department of Trade and Industry, was transferred to the Central Statistical Office on 1 November 1983.

Mr S. R. Curtis, Temporary Chief Statistician, Business Statistics Office, was substantively promoted to Chief Statistician on 1 November 1983.

#### Reviews of regular surveys

Set out below is the second list of recently completed category B reviews of surveys to businesses and local authorities. These surveys are subject to an internal departmental review and a report which is monitored by the Survey Control Unit. Any enquiries concerning a survey or its review should be made to the appropriate departmental contact point given below.

I-Surveys to business

i. Retail prices index: postal inquiries

Department of Employment Caxton House Tothill Street London SW1

M. Hargreaves

II—Surveys to local authorities
Scottish school census

Scottish Education Department 43 Jeffrey Street Edinburgh

A. J. Harvey

#### LATE ITEMS

#### Judicial statistics 1982

The 1982 report on Judicial statistics was published in October 1983. The report brings together in one volume statistics on the criminal and civil business of those courts in England and Wales for whose administration the Lord Chancellor is responsible, some associated offices, the Judicial Committee of the Privy Council, and certain tribunals. Statistics relating to Northern Ireland courts are this year available separately from the Northern Ireland Courts Service.

There are a number of changes to the layout of this volume compared with previous editions. Most notably, the order in which the chapters are arranged has been amended, and the comparative tables and charts showing longer term trends have been included in their respective subject chapters, instead of appearing together at the end of the volume.

Each chapter includes, where appropriate, a brief description of the function, constitution and jurisdiction of the courts or tribunals concerned. In addition, some commentary is included highlighting the major features of the statistics and any notable trends.

#### Reference

Judicial Statistics, Annual Report 1982 Cmnd. 9065 (HMSO October 1983) (Price £9.10 net) ISBN 0 10 190650 1

#### Ethnic origin and economic status

An article in October Employment Gazette uses data from the 1981 Labour Force Survey, a sample survey of 80,000 households in Great Britain interviewed between late April and early June 1981, to consider the economic status and related characteristics of the non-White ethnic minority populations in Great Britain in the spring of 1981. It identifies similarities and differences between them and makes comparisons with the White population.

#### Reference

Employment Gazette October 1983 (HMSO) (Price £2.35 net)

#### Unoccupied dwellings in Scotland

Statistical Bulletin HSIU No. 1 Unoccupied dwellings: a survey following the 1981 Census is the first in a new series of Statistical Bulletins to be published by the Scottish Development Department. It gives results of a 10 per cent sample survey, which was conducted in 1981 by the Registrar General for Scotland on behalf of the Scottish Development Department, of dwellings which were vacant, or where the occupier was absent, on the night of the 1981 Population Census. All figures in the bulletin are obtained by multiplying the survey results by the sampling fraction and, as such, are estimates of the actual numbers of unoccupied properties.

Data given include: the status of unoccupied dwellings by local authority area; type of vacancy by tenure; unoccupied dwellings by status, year of construction, dwelling type and number of rooms; second homes in each area by area of residence of owner; and other vacant dwellings by tenure and local authority area. A technical account of the survey and statistical notes are given in the Annex. Copies of this bulletin (price 50p) may be obtained from the Housing Statistics and Intelligence Unit, Scottish Development Department, Room 303, St Andrew's House, Edinburgh EH1 3DD (telephone 031-556 8501 ext. 2204).

#### Civil Service Statistics

Civil Service Statistics 1983 was published by HMSO on 20 October for HM Treasury. Tables of staff in post show the government departments, locations and grades in which they serve, and there are also tables of entrants and leavers by grade. The introductory article briefly describes the work of civil servants and charts the reductions in their numbers since 1979. There is comment on the recent bulge in retirements and on the increasing proportion of women in the service.

#### Reference

Civil Service Statistics 1983 (HMSO 1983) (Price £6.50 net) ISBN 0 11 630471 5

#### Sea fisheries

The Sea Fisheries Statistics for 1982 largely follow the layout of the 1981 publication. Where appropriate, figures for earlier years have been converted to metric units. Classification of vessel lengths and gross registered tonnage of vessels remain in imperial units. The tables refer, as far as possible, to the United Kingdom with separate figures for England and Wales, Scotland and Northern Ireland. Additional statistics relating to Scotland are published annually in the Scottish Sea Fisheries Statistical Tables.

These Tables are intended to provide a broad picture of the United Kingdom fishing industry and its operations. Requests for more detailed information should be addressed to:

The Secretary,
Ministry of Agriculture, Fisheries and Food,
Fisheries Statistics Unit,
Great Westminster House,
Horseferry Road,
London SW1P 2AE.

#### Reference

Sea Fisheries Statistical Tables 1982 (HMSO October 1982) (Price £10.00 net) ISBN 0 11 241204 1

#### Distributive trades - new trends series

An article in *British business* 28 October 1983 introduces the new (voluntary) monthly trends survey by the Confederation of British Industry (CBI) into the distributive trades. The survey, which started in July, covers the retail, wholesale and motor trades, and fills a gap in the statistics. It is an extension of the CBI's industrial trends survey. Respondents are asked for the present production (up, down or the same) of sales, orders and stocks compared with one year earlier, and on the expected position for the next month.

A summary of this survey will appear every month in the latest developments of the *British business* 'economic indicators at a glance' feature.

#### Reference

British business (HMSO weekly) (Price £1.10 net)

#### Public sector borrowing requirement: monthly publication

On Wednesday 16 November, the Central Statistical Office and HM Treasury jointly issued the first in a new series of press notices showing the public sector borrowing requirement (PSBR) estimated for calendar months. Subsequent notices will appear on the twelfth working day of each month. The new press notice replaces the quarterly PSBR press notice previously published on the twelfth working day after the end of each quarter. In addition to data on the central government borrowing requirement (including own-

account borrowing), the local authority borrowing requirement and the public corporation borrowing requirement, the new notice will include summary information on transactions over central government funds and accounts. The monthly press notice issued by HM Treasury showing these latter transactions and the central government borrowing requirement has been discontinued. An article describing the derivation of the new series and its relaibility will appear in the November edition of *Economic Trends*.

#### Relative prices over twenty years

Economic Progress Report No 161 October 1983, published by the Treasury, contains an article about the relative price changes which have taken place since July 1963. The article concentrates on the extent to which prices of particular goods or services have risen by less or by more than the general price level as measured by the 'all items' retail price index. Charts show changes in spending patterns, changes in relative prices for the main groups of goods and services, relative increases in domestic fuel prices and relative (mid-year) price changes of goods subject to excise duties.

#### Reference

Economic Progress Reports are available from Publications Division, Central Office of Information, Hercules Road, London SE1 7DU (free).

#### Social Science Research Council (SSRC) Data Archive – CSO macro-economic time series workshop

The Central Statistical Office (CSO) databank service, run on CSO's behalf by 'SIA Computer Services', was the subject of a note in *Statistical News* 61.32. A concession was offered to the SSRC Data Archive, and thus to the academic community, which permits the Data Archive to offer these data at no royalty/licence charge to academic researchers associated with institutions that normally fall within the SSRC's funding remit who require the data for 'pure' academic research (i.e. research which is neither commercially funded nor undertaken as part of a paid consultancy). An article in the *SSRC Data Archive Bulletin* No 26 September 1983 describes the substance of the data base and the Archive's arrangements for its distribution.

To introduce potential academic users to the contents and research possibilities of these data, the SSRC Archive is planning to devote one of its regular series of User Workshops to the CSO databank. The Workshop will be held in December 1983. Interested enquirers should write to the Workshop Organiser (CSO), SSRC Data Archive, University of Essex, Wivenhoe Park, Colchester, Essex CO4 3SQ, who will communicate final arrangements to them as soon as possible.

#### Alphabetical Index

The index to Statistical News covers the last nine issues. Page numbers are prefixed by the issue number, e.g. 58.18 signifies number 58, page 18.

Generally speaking articles relating to the United Kingdom, Great Britain, England and Wales or covering several geographical groups are not indexed under these groups, but topics with a significant regional interest are indicted, e.g. regional earnings. Articles and notes dealing particularly with Scottish statistics are indexed under 'Scotland' as well as the topic, e.g. 'Scotland, population projections', and similarly for Wales and Northern Ireland.

The following conventions have been observed in printing this index: references to items appearing in articles are shown by (A); italics are used for the titles of published books or papers.

abortion statistics, 58.18 accountancy profession, role of, 63.39 agricultural constant price indices of production, Northern Ireland, 61.22 crop production, annual estimates harvest, 1980, 56.18, 1981, 58.21, 59.37, 1982, 62.21, 63.29 December census, 1981, 57.21, 61.21 December, glasshouse census, 55.18, 1981, 58.21, 1982, 62.21 Departmental Net Income Calculation, 61.21 egg yields survey, 1980/81, 56.18 irrigation survey, 63.28 June agricultural census, 1981, 56.18, 57.21, 1982, 59.37, 61.21, 1983, 63.29 land losses in the United Kingdom, 55.4(A) machinery census, 62.21 orchard fruit survey, 63.28 pig inquiry, sample, April 1982, 59.37, April 1983, 62.21 Scotland, 58.22, 60.25, 63.29 Scottish agricultural censuses, June, 56.18, 59.38, 63.29 December 57.21, 58.21, 61.21 vegetable and flower census, 61.21 wages and employment, 59.36, 63.28 workers, hours and earnings, 60.25, 62.20 Agricultural Statistics for England and Wales, 55.18 Agricultural Statistics for the United Kingdom, 55.18, 61.21, 63.29 Agriculture in Scotland, 63.29 animals, living, experiments on, 59.35, 63.22

Annual Abstract of Greater London Statistics, 61.30

1983 Edition, 60.32 amendments to, 56.26

Annual Review of Agriculture 1983, 61.21

Annual Abstract of Statistics, 1982 Edition, 56.26,

Annual Abstract of Statistics 1982, Northern Ireland,

area population projections 1979-1991, 55.12
aerospace industry, manpower, training and outlook,
62.23
armed forces pay, 58.20, 62.20, 63.28
arts, the, 62.16
Audit, District, current developments in 58.10(A)
Automatic collection, road traffic data, 63.9(A)

babies, newborn, 63.24 bail, estimates of the incidence of offending by persons on, 55.14 balance of payments overseas earnings, 62.26 services, 56.25 United Kingdom Balance of payments 1981, 55.24, 1982, 59.46, 1983, 63.37 Bank of England Quarterly Bulletin, 55.22, 56.23, 57.24, 58.26, 59.45, 60.29, 61.28, 62.28, 63.39 banking markets, international, 57.27, 58.27, 61.29 banking statistics, 55.23, 61.28, 63.39 banking, supervisory authorities, 60.29 banking, supervisory authorities, 60.29 banking, competition, innovation and regulation, 63.39 banks and industry, 60.29 birth statistics, 56.14, 60.16, 61.12, 61.15 birth of firms, 56.29, 57.26, 57.28, 58.32, 59.45, 61.24, 63.36 British Aid Statistics, 57.26, 59.46, 61.28 British businesses, by turnover size, 59.45, 62.23

manufacturing units by size, 60.26

60.33

Civil Judicial Statistics, Scotland 1981, 63.22 quarterly inquiries, classified to SIC(R) 1980, 60.25 Civil Service Statistics, 1982, 58.29, 1983, 63.42 businesses, lifespan analysis of, 63.36 Classification freight transport, 56.1(A) calculator, programmable, 59.48 diseases, international, 63.19 cancer statistics, 55.15, 58.18, 60.21, 61.18, 63.24 local education authorities, 59.35 canned and bottled fruit, canned vegetable production, sector booklet, 58.24 55.18, 57.21, 58.21, 61.21 Standard Industrial revised (1980), capital expenditure, manufacturing, leasing, 57.26 UK BSO quarterly enquiries, 60.25 employment statistics, 60.25 shipping, 60.36 capital flows, exchange control abolition effects, 55.24 index of industrial production, 61.26 capital maintenance and the measurement of corporate national accounts, 61.26 wholesale price index, 61.25 income, 55.21 commercial and industrial floorspace statistics, 57.21, cash, changes in use, 60.29 cash limits, 63.36 59.39, 61.24, 62.23 Census of Employment, 1981, 60.23, 62.17 commodity flow accounts, 63.34 communal establishments, population in, 63.18 Census of Population 1971, communicable diseases, statistics of, 57.18, 61.13 fertility report, 60.17 Census of Population 1981, 55.12, 56.13, 57.15, 57.16, community service and reconvictions, 63.22 58.15, 58.16, 59.31, 60.16, 61.12, 62.13, 63.17 commuting in London and the South East, 56.20 comparison with RG's estimates, 60.16 companies, annual report on, 63.36 definitions 1981 Census GB, 56.13 company evaluation of, 63.17 boards, composition, 61.28 Historical Tables, 1801-1981, 60.17 direct exporters, 62.25 housing and households, 63.17 finance, and profitability, 57.25, 58.26, 62.24, 62.28 local authority areas, 60.17, 61.14, 63.17 investment intentions, 63.37 Northern Ireland, 58.31, 61.15 Belfast, 60.18 liquidity survey, 60.28 Scotland, 63.18 profitability, international comparisons, 63.38 Wales, 63.17 reorganisation, 61.28 wards and civil parishes, 63.17 sector, sources and methods, 56.24 Census of Population 1986: decision, 62.35 sources and use of funds, 57.26 Census of Production competitiveness, measures of, 59.45 computer assisted retrieval, microfilmed documents, and purchases inquiry 1979 on SIC (80), 61.23 industry monitors 63.6(A) 1979, 55.19, 1980, 57.22, 58.22, 59.38, 1981, 61.23, computer production, criminal statistics, 60.19 62.21, 63.30 computing, see data processing Summary volumes conferences and meetings 1979, 57.22, 1980, 62.22 COMPSTAT 1982, 55.25 Northern Ireland 1978, 58.32, 1979, 59.51 energy statistics, 60.34 census unit, DOE, 60.11(A) European Statisticians, 62.1(A) censuses, road traffic, 63.9(A) IUSSP, 58.30 censuses, micro-, 62.13 National Statistical Institutes, Directors-General, Central Statistical Office, reorganisation, 61.33 62.1(A) databank service, 59(A), 61.32 Royal Statistical Society Study Group on the Governcharity statistics, 1982/83, 63.23 ment Statistical Service, meetings, 63.41 Chartered Institute of Public Finance and Account-SSRC data archive – CSO macro-economic time ancy, statistical information service, new developseries workshop, 63.43 ment, 59.12(A), 63.1(A) Statistics in Health, Institute of Statisticians Interchildbirth, 63.24 national Conference, 63.41 children of divorcing couples, 61.13 Time Series Meeting, 55.25, 56.27, 60.35, 61.32 children, in care/supervision, Scotland, 63.21 United Nations Statistical Commission, 62.1(A) Christmas bonus, 59.34 congenital malformations, 62.15 cinemas, 63.30 construction industry citizenship, United Kingdom 63.22 Construction Cost and Price Indices, 54.47 Civil Aviation Authority Statistics, 58.30 consumers' expenditure, new classification, 63.33

**Business Statistics Office** 

consumer credit granters, 61.27 consumer durables, stock of, 56.19, 60.26 corporate financial strength, 58.26 corporation tax, 57.24, 57.24(A), 59.7(A) costs, labour 1981, 62.17 cot deaths, 57.19 counties with Special Development Areas, relative earnings, 63.28 country of birth statistics, 61.12 cricket statistics, 62.34 crime survey, 61.16 Criminal Statistics, England and Wales 1980, 55.13, 1981, 59.33, 1982, 63.21 computer production, 60.19 current cost accounting, 59.45 Customs and Excise, HM, annual report, 61.27 cyclical indicators of UK economy, 57.25, 63.35 calculation and interpretation, 63.30 data, dissemination of, 59.5(A) data-bank content and dissemination, 58.28 CSO service, 59.5(A), 61.32, 63.35 trade, OECD, 60.29 database for industrial statistics, 58.3(A) for MSC, 59.20(A) services, Chartered Institute of Public Finance and Accountancy, 63.1(A) Data Editing Group, meeting, 58.28 data processing computer simulation model, corporation tax, 59.7(A) computing in the Departments of Environment and Transport, new developments, 59.18(A) deaths, by birthplace, 56.15 by cause, 63.18 infant, 57.19 of firms, 56.29, 57.26, 58.32, 59.45, 61.24, 63.36 policy custody, 62.14 debt actions in Scotland, survey of defenders, 56.15 defence, progress in medical statistics, 55.1(A), 63.6(A) Defence Estimates, statement on, 58.24, 63.31 demographic trends, 59.29 dental health, adult, 56.15 dentists' remuneration, 58.21, 62.20 development and research, 59.47, 62.29, 63.38 assistance, 59.46 control, 61.5(A) Digest of Education Statistics, England, 63.25 Digest of Environmental Pollution and Water Statistics No. 4, 56.27, No. 5, 61.29 Digest of Sports Statistics 1st edition, 61.17 Digest of United Kingdom Energy Statistics, 59.41, 63.31

disabled people, public sector, 62.20 diseases
communicable, 57.18, 61.13, 63.24 international classification, 63.19 dismissal, unfair, statistics, 60.25 distributive and service trades, results of four-year inquiry, 63.30 distributive trades, new trends series, 63.43 District Audit, current developments, 58.10(A) district health authorities, 59.29 divorce, marriage and, 55.12, 57.15, 61.34, 62.13 doctors remuneration, 58.21, 62.20 drugs, misuse of, 55.15, 59.34, 61.16 drunkenness, 55.13, 59.34 dwellings, unoccupied, Scotland, 63.42

earnings – also see pay and salaries and hours, agricultural workers, 60.25, 62.20 and wage rates, 58.20 overseas, 62.26 New Earnings Survey, 1981, 56.17, 1982, 59.36, 1983 63.27 relative, in counties with Special Development Areas, 63.28 underlying index of average, 58.20, 62.17, 63.27 ECE Statistical Journal, 60.32 economic activity, reports, counties, 63.17 economic and educational activity, young people, 60.22 economic and financial developments, reporting of, 55.23 economic indicators, industrial, 58.30(A) Economic Trends Annual Supplement 1982, Edition, 56.25, 1983 Edition, 60.32, 61.30, 62.31 education adult, 62.15 authority schools in the 1970's, Scotland, 56.16 classification of local authorities, 59.35 engineering related, 61.19 first degree graduates, Scotland, 56.16 further education, advanced, 57.20 further education students, 56.16, 62.16 higher education in Great Britain, 59.35 overseas students, 56.16, 58.19, 62.16 participation, 16-19 age-group, 63.25 pupil/teacher ratios, 57.19 pupils under five years, 57.20 schools, pupils and teachers, Scotland, 55.17, 56.16, 57.20, 60.23, 63.25

SED statistical bulletins, 57.20, 58.19, 59.35, 60.22,

sixth form size, teaching group size and 'A' level

schools, shared use of, 57.19

61.19, 62.16

performance, 55.17

statistics, 58.19, United Kingdom 1982, 60.21 statistics, Digest of, England, 63.25 student awards, Scotland, 55.17 teacher training, Scotland, 56.16 university statistics, 58.32 university students, Scotland, 60.22 educational and economic activity, young people, 60.22 EEC, see European Community electoral registration, 60.18, 61.13 electoral statistics, 1981, 57.16, 1982, 61.15, 1983, 62.14 electronics industry, 59.37 employees in employment, 59.36, 61.19 employment adjustments for under-estimation, 63.26 and structure, service industries, 60.27 and wages, agricultural workers, 59.36, 63.28 census, 1981, 60.23, 62.17, 63.26 disabled persons, 62.20 earnings and hours, agricultural workers, 60.25, 62.20 engineering, Wales, 56.26 EC labour force survey, 56.17, 58.19, 60.23, 62.18 GB labour force, 60.24 graduates, 61.20 hours and holiday entitlements, 62.17 labour costs, 1981, 62.17 labour force survey, EC, 56.17, 58.19, 60.23, 62.17, 63.26 manufacturing units, size, 60.26 markets, regional, 59.36 public and private sectors, 61.20 school leavers, projections, 62.18 Scottish school leavers, 1977-81, 60.33 self-employed, 56.17, 61.19, 62.17, 63.26 statistics reclassified to SIC(R) 1980, 60.25, 62.17 unfair dismissal statistics, 60.25 young people first employment of, 57.20, 60.23 relative pay and employment, 62.18 working population, 63.26 energy, industrial prices, 56.6(A) Energy Statistics, Digest of United Kingdom, 59.41, 63.31 energy statistics conference, 60.34 energy, world statistics, 58.30 engineering industry, training board publications, 56.26, 57.28, 61.19, 62.23 Environment Department, census unit, 60.11(A) environmental pollution, 56.27, 61.29 equipment leasing, 59.45 estimates, population, 55.12, 56.13, 58.16, 59.32, 60.16, 61.14, 62.13 ethnic minorities, statistics on, 58.15, 63.42 Eurobanks and the inter-bank market, 55.24 European Community labour force survey, 56.17, 58.19, 60.23, 62.17

pay inequalities, 56.27 European Statisticians Conference, 62.1(A) Eurostat index, 55.26, 63.40 exchange rate movements, 56.24 expenditure, arts, the, 62.16 government's plans, 1982-83 to 1984-85, 57.22 1983-84 to 1985-86, 61.26 territorial analysis, 56.21 experiments on living animals, 59.35, 63.22 exporters, direct, 62.25 conference on, at Bath University, 63.20 size and age at childbirth, 63.18 59.33, 60.18, 61.15, 1982, 63.19 and food survey feasibility study, 57.1(A) preliminary annual results, 56.15

family, the Family Expenditure Survey Report, 1980, 57.16, 1981, farm management survey, 63.29 farms, liabilities and assets survey, 63.29 farm produce in the United Kingdom, output and utilisation of, 59.38 Farr centenary, 61.13 fertility census 1971, report, 60.17 estimates, 59.29, 60.1(A), 61.15 world survey, 55.26, 57.30, 59.50, 60.34, 61.31, 62.32 film and television, overseas transactions, 59.40, 63.38 film exhibitors inquiry, 63.30 finance houses, assets and liabilities, 61.27 finance leasing, 63.39 financial centres, offshore, 58.28 financial innovation, nature and implications of, 63.39 Financial Statement and Budget Report, 61.26 financial statistics, local government, 58.24, 59.46, 61.28, 62.25 Financial Statistics, 56.24, 58.26, 59.44, 61.27 Explanatory handbook, 61.27 Financial Times Statistics, A Guide, 60.33

61.28, 62.25
Financial Statistics, 56.24, 58.26, 59.44, 61.27
Explanatory handbook, 61.27
Financial Times Statistics, A Guide, 60.33
Fire Statistics, 57.17, 59.33, 61.16
firms, births and deaths, 56.29, 57.26, 57.28, 58.32, 59.45, 61.24
fiscal policy (NIESR model), 63.39
floorspace statistics, 57.21, 59.39, 61.24, 62.23

flower, and vegetable, census, 61.21 food, self-sufficiency, 56.18 food survey feasibility study, 57.1(A) food survey, national, 1980, 59.37, 1981, 63.28 foreign exchange markets, 63.39 foreign statistics service, withdrawal, 61.34 foundries, non-ferrous, 61.23

freight transport statistics, a new classification, 56.1(A) industrial injuries, 63.23 fruit, orchard, survey, 63.28 industrial production index derivation of output estimates, 63.29 rebasing and reclassification, 61.26 General Household Survey, 56.28, 58.16, 59.33, 62.14 series and weights, 63.29 gdp industrial relations, 61.20 international comparisons, 57.32 output measure, series and weights, 63.29 industry graduates, supply and demand, 61.20 and banks, 60.29 GRO (Scotland) publications, 55.12, 56.14, 57.16 financing Japanese, 56.24 government expenditure plans, 57.22, 61.26 statistics, 63.29 infant and perinatal statistics, 57.28, 61.18 Government Statistical Service, infant deaths, sudden, 57.19 appointments and changes, 55.26, 56.28, 57.31, 58.31, 59.51, 60.35, 61.34, 62.34, 63.41 infant feeding, 57.19 inflation and sterling, 55.23 Departments of Industry and Trade, 61.34, 62.35 information technology, policy, 59.1(A) disseminating statistics, 58.1(A), 59.5(A), 61.32 District Audit, 58.10(A) injuries, industrial, 63.23 review of regular surveys, 61.33 Inland Revenue, annual report, 62.24 the role of, 58.30 Inland Revenue Statistics 1981, 57.23, 1983, 63.36 GPs, registration with, 62.15 input-output tables for 1979, 61.34, 62.22 Greater London Council, Annual Abstract of Statistics, insurance broking, British, 57.29 insurance business, 62.25 61.30 insurance companies, financial assets, 63.37 Guide to Official Statistics No. 4, 57.27, 58.29 Guide to Financial Times Statistics, 60.33 international banking, flexibility, 58.27 Health and Personal Social Services Statistics 1982, banking markets, 57.27, 61.29 classification of diseases, 63.19 60.20 comparisons, industrial energy prices, 56.6(A) health authorities, district, 59.29, 61.14 comparisons, public expenditure on social prohealth services information, 60.6(A) Health and Safety Statistics, 1980, 60.20 grammes, 62.5(A) comparisons of profitability, 63.38 health and safety, manufacturing and service comparisons of real GDP, 57.32 industries, 62.15 comparisons, taxes and social security contributions, heavy goods vehicles, survey, 61.33 home and day care, Scotland, 63.21 56.25, 60.30 debt problems, 62.28 homeworking, 59.37, 60.25 forecasting conference, 55.25, 57.31 horticultural statistics, basic, 55.18, 57.21, 61.23 industrial productivity, 59.38 hospital in-patients, England and Wales, 55.16, 58.17, migration, 56.14 63.23 hospital statistics, 57.18 passenger survey, 59.42 publications, 59.50, 60.33, 61.30, 62.31, 63.40 hours and earnings agricultural workers, 60.25, 62.20 road haulage survey, 57.22, 59.41 house condition survey 1981, Welsh, 57.17 house prices, index of, 59.44 small firms, 60.27 household accounts, 55.22 statistical institute, short book reviews, 63.38 time series meetings, 55.25, 56.27, 60.35, 61.32 household estimates, 56.14, 57.16, 61.15, 63.17 Housing and Construction Statistics: 1970-80, 56.19 investment, intentions survey, 63.37 1971-1981, 59.40, 1972-1982, 63.30 OECD benchmark definition, 61.1(A) Housing Statistics, Scottish, 55.14, 57.17, 58.17, 59.34, overseas, 57.34, 62.26 61.17, 62.35 iron castings, 58.23, 60.26 Northern Ireland, 58.32, 62.14

immigrant mortality, 63.18 immigration from Indian sub-continent, 58.17 Immigration Statistics, 55.13 income, work/unemployed, 61.30 industrial economic indicators, 58.30(A) industrial energy prices, 56.6(A)

Japanese industry, financing of, 56.25 job vacancies, 59.36

Judicial Statistics 1981, 60.19, 1982, 63.42

irrigation survey, 63.28

IUSSP conference, 58.30

Körner report on health services information, 60.6(A) model, National Institute, 61.31 monetary and liquidity aggregates, 60.29 monetary control, provisions, 55.23, 56.23 labour monetary objectives, 62.28 costs, survey of, 1981, 62.17 monetary statistics, seasonal adjustment, 62.29 force outlook, 56.17 money market, 57.25 force survey, EC, 56.17, 58.19, 60.23, 62.17, 63.26 money supply, 58.26 market and population, 59.29 Monthly Digest of Statistics, 58.30, 61.34, 62.27 market data, 61.20 Annual Supplement, 61.34 market trends, quarterly report on, 57.20, 63.27 morbidity statistics, 58.18 productivity, output per person, 56.18 mortality land and building, sales, 62.25 by area, 63.18 leasing, equipment, 59.45 cancer, 55.15, 58.18, 60.21, 63.18 leasing, manufacturing, capital expenditure, 57.26 immigrant, 63.18 Library Association seminars, 1983, 61.32, 1982, 62.30 longitudinal study, 58.16 local authority long-term trends, 56.13 areas, unemployment statistics, 61.20, 63.27 occupational, 61.13 areas, population estimates, 55.12, 61.14, 63.17 perinatal and infant, 57.28, 58.19, 61.18 Census 1981, summary and review, 60.17 socio-demographic differences in, 57.15 planning statistics, 61.5(A) statistics: accidents and violence, 1979, 55.17, 58.19 statistics, 57.28 statistics: area, 1979, 58.18 surveys, 62.13 statistics 1980, on microfiche, 59.32 vital statistics, 63.19 statistics: cause 1980, 56.15, 58.19 local government financial statistics, 58.24, 59.46, statistics: childhood and maternity, 1979, 55.16, 61.28, 62.25. 63.37 58.19 London statistics: respiratory disease, 55.17 registration with GPs, 62.15 Mortality statistics 1980, 61.18 weighting, indices changes, 58.27, 59.51 mortgage lending, 59.46 Longitudinal study, mortality, 58.16 motor vehicles, offences relating to, 55.20, 59.33 national accounts manpower rebasing and reclassification, 61.26, 63.33 aerospace industry, 62.23 National Accounts: a short guide, 55.22 Civil Service Statistics, 1982, 58.29 national debt distribution of, 56.23, 60.29 data base for MSC, 59.20(A) National Food Survey scientific instruments industry, 63.27 Reports for, 1980, 59.37, 1981, 63.28 manufacturing capital expenditure - leasing, 57.26 FES/NFS feasibility study, 57.1(A) manufacturing industry National Health Service, OPCS newsletter to, 63.24 health and safety, 62.15 National Income and Expenditure 1981, 55.21, 1982, output per person hour, 56.18 59.43, 1983, 63.33 plant openings, 62.23 National Institute Economic Review, 55.25, 57.28, profitability, international comparisons, 63.38 59.49, 61.30, 62.29, 63.39 manufacturing units, employment size, 60.26 National report, Great Britain, Census of Population marriage and divorce, 55.12, 57.15, 61.34, 62.13, 63.18 medical statistics, progress in defence, 55.1(A), 63.6(A) 1981, 63.17 mental health enquiry, 61.19 national saving (real) sectoral composition, 58.26 methodology fertility rate estimates, 59.29, 60.1(A) NEDC, report on industrial energy prices, 56.6(A) New Earnings Survey1981, 56.17, 1982, 59.36, 1983, micro-censuses, 62.13 microfilmed documents, computer assisted retrieval, 63.27 63.6(A) Northern Ireland migrants, visitors and commuters, 59.29 agricultural production, constant price indices, 61.22 Annual Abstract of Statistics, 1982 Edition, 60.33 migration between labour markets, 59.29 Census of Population, 1981, 58.32, 61.15 Belfast, 60.18 international, 56.14 Census of Production, 1978, 58.32 national, 63.17 mineral statistics, UK, 58.31, 62.30, world, 59.50, 62.30 Housing Statistics 1981, 58.32, 1982, 62.14

economic effects, 62.29 61.18 personal saving, 56.23 financing of, 56.23 gas-costs and benefits, 57.24 personal sector, transactions and wealth, 62.24 offshore employment, 62.29 planning statistics, 61.5(A) royalties and licence fees, 59.43 plant openings, manufacturing, 62.23 notifiable offences recorded by the police, 61.16 police custody, deaths, 62.14 nurses working in community, 58.17 pollution, environmental, 56.27, 61.29 population – and see Census of Population occupational mortality, 61.13 GRO(S), 56.14, 57.16, 58.16, 59.32, 60.18, 61.15, occupational pension schemes, 58.26, 62.35 62.13, 63.18 tax reliefs on, 63.37 birth statistics, 56.14, 57.15, 60.16, 61.15 communal establishments, 63.18 OECD benchmark definition of overseas direct investment, county changes, 59.29, 61.12 61.1(A) definitions, 63.18 trade databank, 60.29 elderly, 62.13 official development assistance, 59.46 estimates, 55.12, 56.13/14, 58.16, 59.32, 60.16, offshore financial centres, 58.28 61.14, 62.13 on-line access to statistics, 57.31, 58.1(A), 59.5(A), household estimates, 56.14 61.32, 62.30 local authority areas, 61.14 OPCS Newsletter to the NHS, 63.24 movement, 62.13 orchard fruit survey, 63.28 new towns, 61.12 output measures: index numbers of turnover and net population projections, 55.12, 61.14, 63.19 review of 1981, 60.16 new orders, 55.20 output measures, royalties and licence fees, 59.43 small area statistics, 56.13, 57.15, 57.16, 57.32, output per person hour, manufacturing, 56.18, 61.20 58.15, 59.32, 60.11(A), 60.17 overseas aid, 59.46, 61.28 Trends, 55.11, 56.13, 57.15, 58.15, 59.29, 60.16, overseas earnings, 62.26 61.13, 62.13, 63.18 overseas students, 56.16, 58.19, 62.16 working, 63.26 port choice and routing of UK trade, 60.27 overseas trade Port Statistics, 55.20, 56.21, 59.42, 63.33 mode of transport, 56.21 potato crisps and snack foods, 55.19, 57.21, 58.21, trade databank, 60.29 overseas transactions 1980, 57.34, 1981, 62.26 61.21, 62.21, 63.29 films and television, 59.40, 63.38 postcodes based vital statistics, 59.30 overseas travel and tourism, 63.38 sector line prints, 59.30 for Administration, unemployment statistics, 61.20 Parliamentary Commissioner unit vital event count, 59.30 annual report, 61.30 use and development, 57.32 parliamentary, constituency boundaries, 62.14 pregnancy, 63.24 pay and allowances, 62.19 price index numbers for current cost accounting, 58.27, passenger survey, international, 59.42 pay – and see earnings and salaries 63.35 price indices and employment, young people, 62.18 agricultural production, Northern Ireland, 61.22 armed forces, 58.20, 62.20, 63.28 relative prices, 63.43 doctor's and dentists' remuneration, 58.21, 62.20 wholesale, rebasing, 61.26 parliamentary, and allowances, 62.19 prices, industrial energy, 56.6(A) top salaries, 58.20, 62.19 Prison statistics, England and Wales 1980, 55.14, 1982, pay inequalities in the European Communities, 56.27 pension arrangements, economics, 62.29 63.21 Prisons in Scotland, 1982, 63.22 pension funds, private rented sector, 59.34 financial assets, 63.37 private and public sector employment, 61.20 private sector, 56.22, 60.28 private sector, financial wealth of the non-bank, 55.23 pension schemes, occupational, 58.26, 62.35 private sector pension funds, 56.22, 60.28 pensioners, 61.13, 63.17

perinatal and infant mortality: 57.28, 58.15, 58.19,

North Sea oil

production accounts, 56.21 canned and bottled, 55.18, 57.21, 58.21, 61.21 canned vegetable, 55.18, 57.21, 58.21, 61.21 census - see Census of Production productivity, 56.18, UK/USA retailing, 62.29 profitability, in companies, 57.25, 58.26, 62.28 international comparisons, 63.38 public and private sector employment, 61.20 public disorder, incidents of, 59.34 public expenditure social programmes, international comparisons, 62.5(A) White Paper, 57.22, 61.26 territorial analysis of, 56.21 public money, 55.22 public records: possible amendment to the Statistics of Trade Act, 60.35 public sector, borrowing, requirement, 61.30, 63.35, 63.43 disabled employees, 62.20 pupil/teacher ratios, 57.19 pupils under five years, 57.20 purchases inquiry and census of production 1979 on SIC(80), 61.23 purchases inquiry, review, 62.32 reconvictions, of those given community service orders, 63.22 redundancy statistics, 62.18 registrations, cancer patients, 55.15, 58.18, 60.21, 61.18, 63.24 regional accounts 1980, 56.22, 1981, 60.28 regional labour force, 56.17 Regional Trends 1982 Edition, 57.16, 1983 Edition, 60.18 research and development statistics, 59.47, 62.29, 63.38 retail sales inquiry, monthly, 56.20 retailers credit business, 56.22 review of surveys, 61.33, 62.32, 63.41 retailing, productivity, 62.29 Road Accidents: Great Britain, 55.20, 59.42, 63.32 for English regions, 61.25, 63.32 Wales, 63.32

salaries – and see earnings and pay armed forces pay, 58.20, 62.20 doctors' and dentists' remuneration, 58.21, 62.20 parliamentary pay and allowances, 62.19 top, 58.20, 62.19

road haulage survey, international, 57.22, 59.41, 63.32

road goods transport survey, 61.33, 63.32

road traffic data, automatic collection, 63.9(A)

saving, personal, 56.23 school meals, free, 55.18 children, secondary, smoking, 63.23 schools, shared use of, 57.19 Scotland age distribution of teaching force, 55.17 agricultural censuses and surveys, see agricultural census, 1981, 55.12, 57.16, 58.16, 59.32, 60.17, 61.15, 62.13, 63.29 agriculture in, 63.29 children, in care/supervision, 63.21 Civil Judicial Statistics 1981, 63.22 community service, 63.21 debt actions, survey of defenders, 56.15 destinations of young people leaving school, 60.23 dwellings, unoccupied, 63.42 education authority schools in the 1970s, 56.16 family property in, 55.14 further education, enrolment, 57.20, 62.16 Gaelic language in, 63.18 GRO publications, 55.12, 56.14, 57.16 home and day care, 63.21 housing and households, 63.18 microelectronics application project, 60.32 mobile homes, 61.17 new towns, 63.18 population and vital statistics – see under population postcodes, use and development, 57.32, 59.30 prisons, 63.22 regions, 57.16 school leaver, projections, 59.35 school leavers, 61.19 labour market, 1977-81, 60.33 schools, pupils and teachers, 55.17, 56.16, 57.20, 60.23, 63.25 scientific instruments industry, 63.27 SED statistical bulletins, 57.20, 58.19, 59.35, 60.22, 61.19, 62.16 students awards, 55.17, 59.35 teacher training, 56.16 teachers, excess and deficit, 58.19, 62.16 university first degree graduates, 56.16 university students, 60.22 Scottish Abstract of Statistics, 58.31, 61.30 Scottish Agricultural Economic Report, 1981, 58.22 Scottish Economic Bulletin, 57.27, 59.48, 60.32, 62.29 Scottish Health Statistics, 1981, 57.34, 1982 62.15 Scottish Housing Statistics, 55.14, 57.17, 58.17, 59.34, 61.17, 62.35 Scottish local government financial statistics, 59.46, 61.28 Scottish social work statistics, 63.21 Scottish transport statistics, 56.20, 59.42 sea fisheries, 59.38, 63.43

seasonal adjustment of money, 62.29 sector financing, 58.26, 62.29 sector balance sheets, 58.26, 62.24 sector classification booklet, 58.24 self-employed people 56.17, 61.19, 62.17, 63.26 self-sufficiency in food, 56.18 56.25, 1981, 60.19 service, and distributive, trades, results of four-year inquiry, 63.30 services sector, structure and employment, 60.27 health and safety, 62.15 tinnitus, 61.19 shipping, 56.21, 59.42, 60.36 top salaries, 58.20, 62.19 industry, purchases and sales of ships, 63.33 trade Skelmersdale New Town, population and social survey concentration, 61.29 1981, 57.30, 1982, 62.31 small area statistics, 56.13, 57.15, 57.16, 57.32, 58.15, 59.32, 60.11(A), 60.17 small firms, international scene, 60.27 smoking, attitudes and behaviour, 63.23 transport among secondary school children, 63.23 snack foods, 55.19, 57.21, 58.21, 61.21, 62.21, 63.29 SOEC working party, statistical data banks, 58.28 rail, 62.24 social programmes, public expenditure, international comparisons, 62.5(A) social security quinquennial reviews, 58.25 Social Security Statistics 1982 Edition, 60.20 social services and health, 60.20 56.20, 59.42 Social Trends, 55.15, 59.32, 63.19 amendments to, 57.17, 61.17 sports statistics, 61.17 Rail, 56.20 Standard Industrial Classification Revised (1980), vehicle census, 62.23 analysis of production industries, 61.26 average earnings index, 63.27 BSO quarterly inquiries, 60.25 employment statistics, 60.25, 62.17 index of industrial production, 61.26 national accounts, 61.26, 63.33 wholesale price index, 61.25 statistical information service, Chartered Institute of Public Finance and Accountancy, 59.12(A), 63.1(A) Statistical Journal, UNECE, 60.32 Statistics of Education, 58.19 Statistics of Trade Act, possible amendment, 60.35 statistics, on-line access, 57.31, 58.1(A), 59.5(A), 61.32, 62.28 unit wage costs, 58.19 62.30 sterling and inflation, 55.23 stocks, 60.21 gilt-edged, 58.26 of consumer durables, 56.19, 60.26 surveys, large scale, 62.13 United Nations surveys, reviews of, 61.33, 62.32, 63.41 students, overseas, 56.16, 58.19, 62.16 Survey Control Unit, CSO, 59.47, 60.30, 62.26 review of surveys, 61.33, 62.32, 63.41 ECE Statistical Journal, 60.32 work of, in 1981, 57.6(A)

tax, corporation, 57.24, 59.7(A) tax reliefs on occupational pension schemes, 63.37 taxes and social security contributions, international comparisons, 56.25, 60.30 taxes and benefits, effects on household income 1980, teachers, excess and deficit, Scotland, 58.19, 62.16 television and films, overseas transactions, 59.40, 63.38 time series meetings, 55.25, 56.27, 60.35, 61.32 databank, OECD, 60.29 foreign statistics service, withdrawn, 61.34 mode of transport, 56.20 routing of UK, and port choice, 60.27 training, scientific instruments industry, 63.27 freight classification, 56.1(A) ports, 55.20, 56.21, 59.42, 60.27, 63.33 road goods survey, 61.33, 63.32 road haulage survey, international, 57.22, 63.32 shipping, 56.21, 59.42, 60.36 statistics, Great Britain, 59.42, 63.31, Scotland, traffic data, automatic collection, 63.9(A) trends in commuting to central London by British travel, national survey, 1978/9, 61.24 travel and tourism, overseas, 63.38

unemployed men 1978, DHSS cohort study, 60.24 unemployment, 59.36, 60.24, 62.18, 63.26 in local authority districts, 61.20, 63.27 unfair dismissal statistics, 60.25 United Kingdom Balance of Payments 1981, 55.24, 1982, 59.46, 1983, 63.37 UK economy, cyclical indicators of, 57.25 UK external assets and liabilities, 1981, 58.27, 1982, United Kingdom citizenship, 63.22 United Kingdom Education Statistics 1982 Edition, United Kingdom Mineral Statistics, 58.31, 62.30 United Kingdom trade by mode of transport, 56.20 Statistical Commission, 62.1(A) Statistical computing project, 57.26, 57.33, 58.28,

university
first degree graduates, Scotland, 56.16
pay, 53.20
research, 63.38
statistics, 58.32
students, Scotland, 60.22
unlisted securities market, 62.28
urban deprivation, 62.14

vegetable and flower census, 61.21 vehicle census, 62.23 venture capital, 60.29

wage costs, 58.19
wage rates, 58.20
wages and employment, agricultural workers, 59.36, 63.28
wages council industries, homeworking, 59.37, 60.25
Wales,
commercial and industrial floorspace, 57.21, 59.39, 62.23
engineering industry, employment and training, 56.26

SET THE PROPERTY OF THE STATE O

THE RESIDENCE OF THE PROPERTY OF THE PARTY O

The second beautiful to the second

THE PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PERSON NAMED IN COLUMN TO SE

TO STATE THE PARTY OF THE PARTY

house condition survey, 1981, 57.17 local government financial statistics, 63.37 population, 63.17 road accidents, 63.32 Welsh language in, 63.17 water statistics, 56.27, 61.29 waterway traffic, 59.41 Welsh Office publications, 57.28 wholesale price index, rebasing, 61.25 wholesaling, catering and motor trades, inquiries, 59.40, 63.30 widowhood, widowerhood, trends, 60.16 working population, 63.26 workplace statistics, 63.17 world economic stagnation and recovery, 60.30 world economy, forecasts, 62.29 world energy statistics, 58.30 world fertility survey, 55.26, 57.30, 59.50, 60.34, 61.31, 62.32 world mineral statistics, 59.50, 62.30 yield curve - gilt-edged stock, 58.26

yield curve – gilt-edged stock, 58.26 Young People in the Eighties, 63.20

TO THE PARTY OF TH

THE STREET OF THE STREET OF THE STREET OF THE STREET

principal room president leaves and the land the land

BITT THE STREET STREET STREET STREET

THE POTON SHOW HITE WAS DONNO HOLD LIBERTY OF THE

# Indexes to the Standard Industrial Classification Revised 1980

## Either way you look at it it's vital information for your business

With quick and easy reference to the list of typical products and activities for each heading; this essential companion to SIC Revised 1980 is two indexes.

The first is numerical, listing each heading of the SIC followed by the characteristic activities listed under that numerical heading.

In the second index, the activities have been arranged alphabetically. Alongside each is the numerical heading to which the activity is classified.

Further helpful references to the equivalent SIC Revised 1968 and NACE numbers are also included wherever possible.

An important publication Indexes to SIC Revised 1980 is intended for everyone who will need to acquaint themselves fully with the new classification; which will be in general use by the end of 1983 when most of the major economic statistics are rebased to 1980.

CSO Books are available from;
Open University Education Enterprises Ltd
and Her Majesty's Stationery Office
(whose addresses are on the back cover)
and through booksellers.

Indexes to the Standard Industrial Classification Revised 1980 £12.95 net (ISBN 0 11 620001)

## National Accounts

#### Blue Book

National Income and Expenditure, the Blue Book is the essential data source for everyone concerned with macro-economic policies and studies.

The principle annual publication for national accounts statistics, the Blue Book provides detailed estimates of national product, income and expenditure for the United Kingdom.

The Blue Book covers industry, input and output, personal sector, companies, public corporations, central and local government, capital formation and financial accounts. Tables contain up to 22 years' data. There are definitions and detailed notes.

The National Accounts - A short guide provides guidance and background to the Blue Book.

National Income and Expenditure ISBN 0 11 620101 0

Price £13.95 net

#### Pink Book

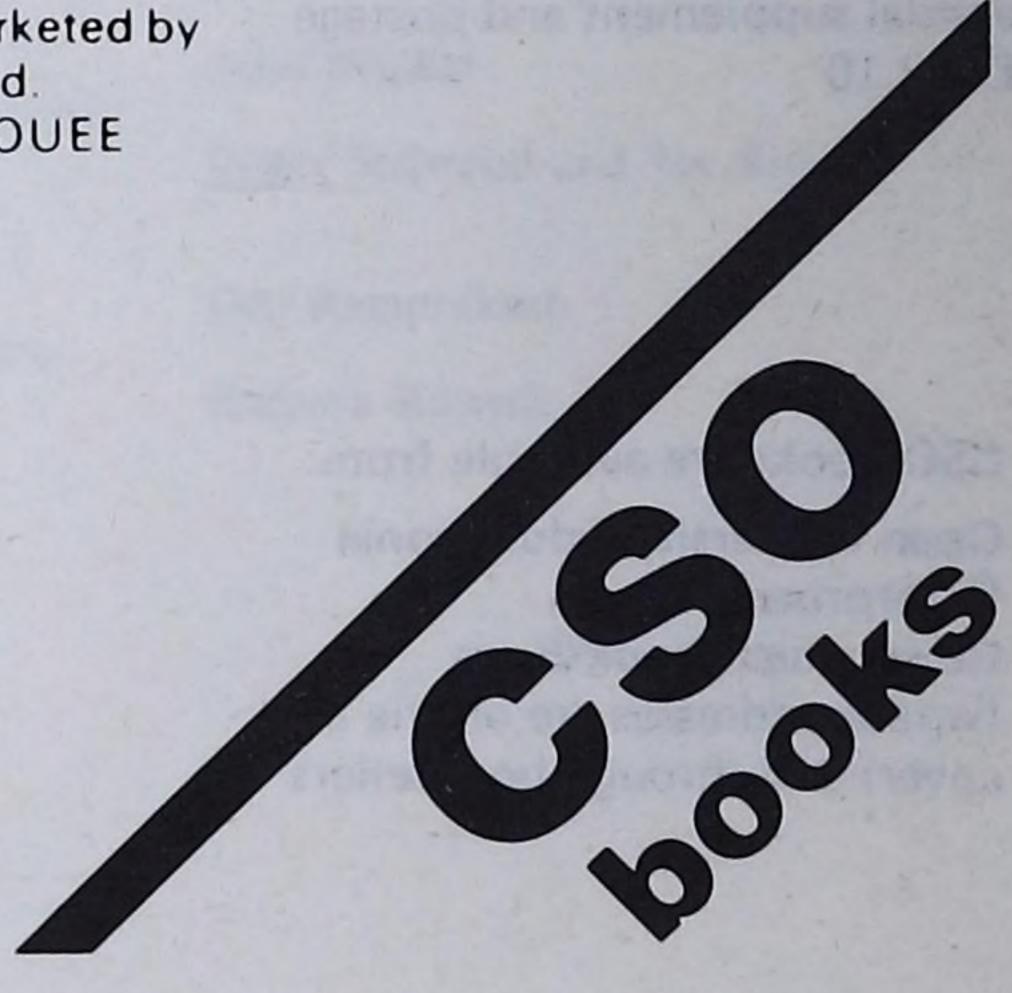
How much does the 'City' contribute to the United Kingdom's overseas earnings? Can the North Sea oil and gas contribution to the balance of payments be identified? What are our total transactions with the rest of the European Community? What are the United Kingdom's overseas assets and liabilities? The answers are all in the Pink Book, United Kingdom Balance of Payments

The Pink Book is the basic reference book for balance of payments statistics. It provides detailed information on visible trade, invisibles, investment and other capital transactions and official financing as well as sections of specific aspects of the balance of payments.

United Kingdom Balance of Payments ISBN 0 11 620054 5

Price £9.95 net

Central Statistical Office publications are published by Her Majesty's Stationery Office and are marketed by Open University Educational Enterprises Ltd. They are obtainable from both HMSO and OUEE



## FACTS AND FIGURES MONTHLY

### **Economic Trends**

Brings together all the main economic indicators, with the data mainly in time series and graphs covering 5 years or so. There are articles which comment on and analyse economic statistics and introduce new series and methodology.

Economic Trends is the prime publication for the quarterly national accounts and balance of payments articles.

Included in the annual subscription or available separately, the invaluable Annual Supplement is the ideal provider of long runs of data for the key economic indicators with about half the tables spanning 25 years or more

Price £10.75 net ISSN 0013 0400

Annual subscription, including annual supplement and postage £149.10

Open University Educational
Enterprises Ltd and
Government bookshops
(whose addresses are on the back
cover) and through booksellers

#### Financial Statistics

Is the prime source for Britain's financial and monetary statistics including UK quarterly financial accounts and all recorded financial flows between sections of the economy.

It has up-to-date information on government accounts, public sector borrowing requirement, money stock, domestic credit expansion, company liquidity, interest rates and security prices.

Price £8.25 net ISSN 0015 203X

The annual subscription of £115.00 includes postage and an explanatory handbook of notes and definitions which adds to the understanding of the tables and explains the relationship between them.

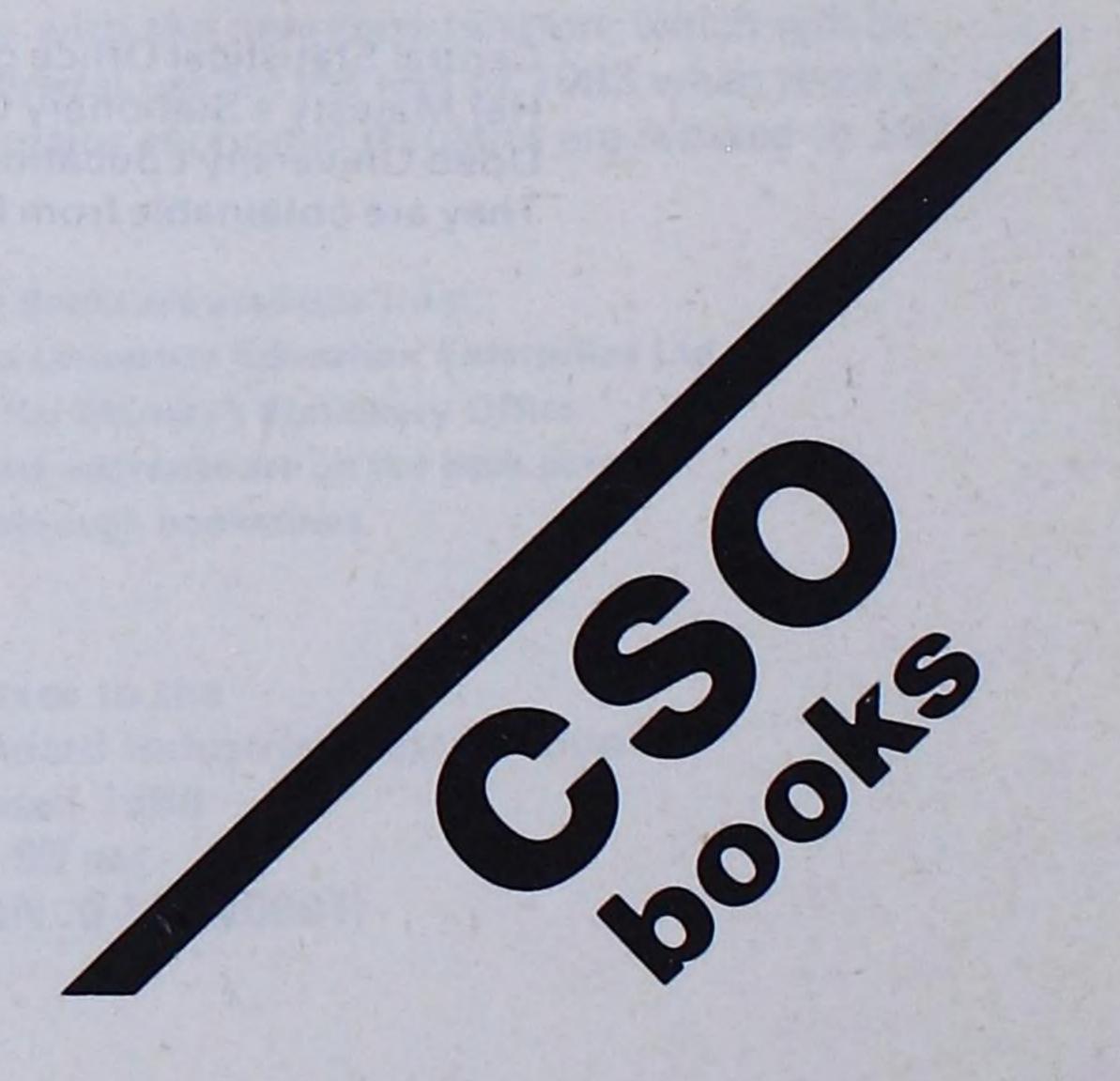
## Monthly Digest of Statistics

Gives the facts on population, employment and prices, social services, production and output, energy, engineering, construction, transport, trade, finance and the weather — 20 subjects together.

The Digest has runs of monthly and quarterly figures for at least 2 years in most tables and annual figures for much longer.

Price £5.75 net ISSN 0308 6666

The annual subscription of £79.35 includes postage, a supplement of definitions and explanatory notes for each section and an index of sources.



#### Articles in recent issues of Statistical News

No. 53 May 1981

White Paper on Government Statistical Services New financial transactions accounts The work of the Survey Control Unit in 1980

New road traffic censuses (Great Britain)

No. 54 August 1981

The Rayner Review of the Government Statistical Service The all stocks index Environmental pollution statistics: availability and use A computer model for capital transfer tax Developments in local authority comparative statistics

No. 55 November 1981

Progress in medical statistics for defence Agricultural land losses in the United Kingdom

No. 56 February 1982

Mode of appearance: A new classification for freight transport statistics An international comparison of industrial energy prices carried out by the NEDC Energy Task Force

No. 57 May 1982

The family expenditure and food survey feasibility study The work of the Survey Control Unit

No. 58 August 1982

Disseminating statistics – the CSO experience Industrial Economic Indicators: A successful experiment in the use of computerised databases for industrial statistics The Statistical Services in District Audit: Current developments

No. 59 November 1982

Information technology policy in the United Kingdom Improving the dissemination of CSO computer – readable data The computer simulation model for forecasting and costing corporation tax in the United Kingdom New developments in statistics at CIPFA New developments in statistical computing in the Departments of Environment and Transport – the DISC Project

No. 60 February 1983

A new method for estimating the trend in the fertility rate The Körner review of health services information-a progress report The Department of the Environment's Census Unit

A manpower data base for the Manpower Services Commission

No. 61 May 1983

OECD benchmark definition of foreign direct investment Planning statistics: development control and local authority 'performance': recent initiatives

No. 62 August 1983

International conferences International comparisons of public expenditure statistics on social programmes: some questions of definition and measurement

Allan G. Tansley Pat Kilbey D. E. Allnutt

Martin Stevenson Peter MacCormack and Colin Bell Mrs E. A. Tadd Chris Griffin

Bruce Oelman and Ben Wilders Arnold Baines and Philip Lund

P. Turnbull

National Economic Development Office

R. Barnes and R. Redpath F. Johnson and P. Kilbey

H. P. Lumsden

John Imber Roger Sellwood

A. R. D. Norman and D. A. T. Rayfield Graham Giles

Richard Eason Roger Sellwood and Chris Griffin

P. Dowdeswell Michael J. Janes

Barry Werner J. A. Rowntree and Miss P. W. Annesley Roger Sellwood and Anne Wheatcroft

John Walker

Roger Sellwood and Joe Rooney

Deo Ramprakash

Barbara Roweth

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 provides a permanent and comprehensive guide to developments in all areas of official statistics.

Central Statistical Office publications are published by Her Majesty's Stationery Office and are marketed by Open University Educational Enterprises Ltd. They are obtainable from both HMSO and OUEE.

Government Bookshops

49 High Holborn, London WC1V 6HB 13A Castle Street, Edinburgh EH2 3AR Brazennose Street, Manchester M60 8AS Southey House, Wine Street, Bristol BS1 2BQ 258 Broad Street, Birmingham B1 2HE 80 Chichester Street, Belfast BT1 4JY 9

Open University Educational Enterprises Ltd 12 Cofferidge Close Stony Stratford MILTON KEYNES MK11 1BY

and through booksellers.

£3.95 net (Annual subscription £16.70 including postage)