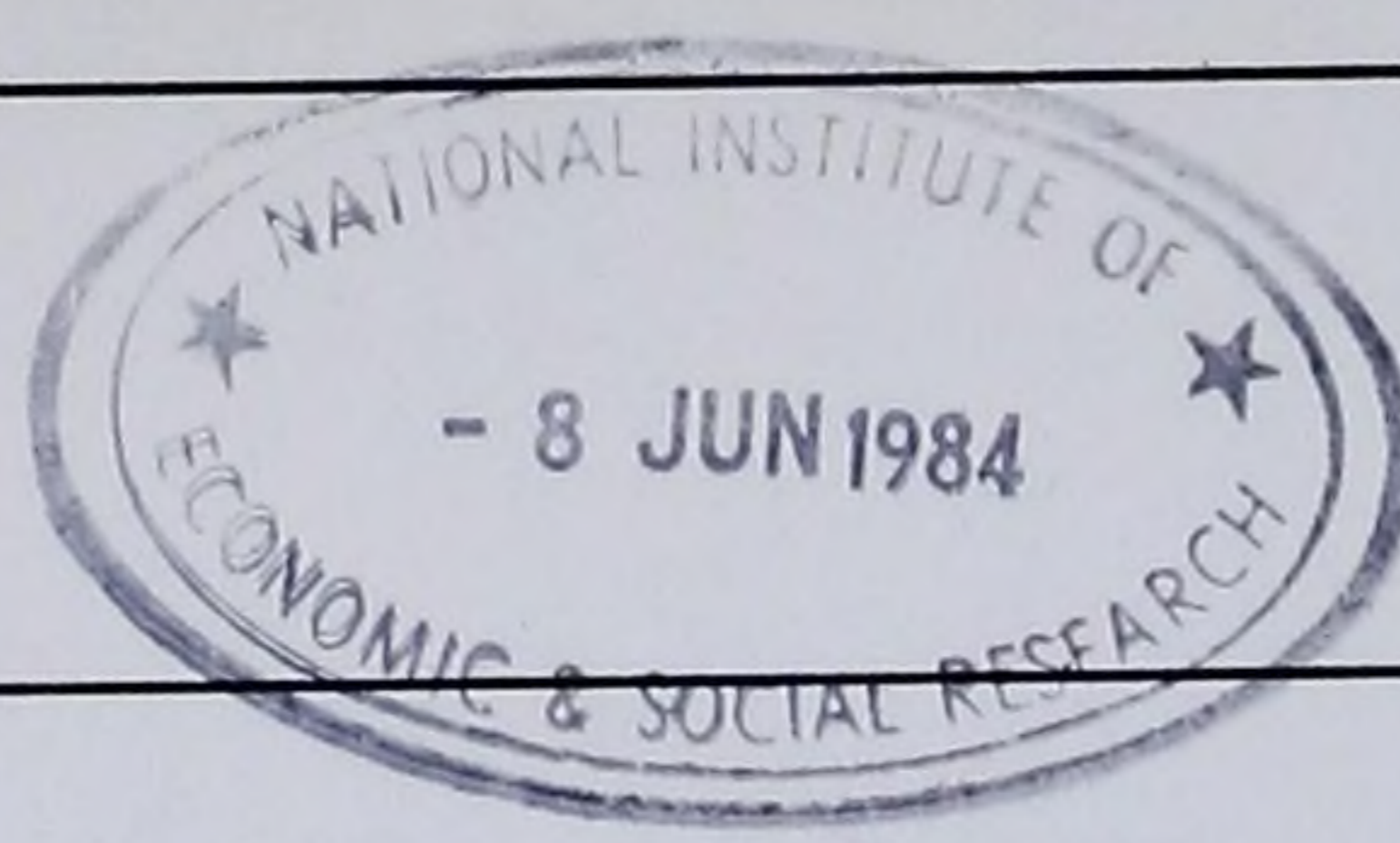


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STATISTICAL NEWS

Developments in British Official Statistics



A publication of the Government Statistical Service

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Government Statistical Service

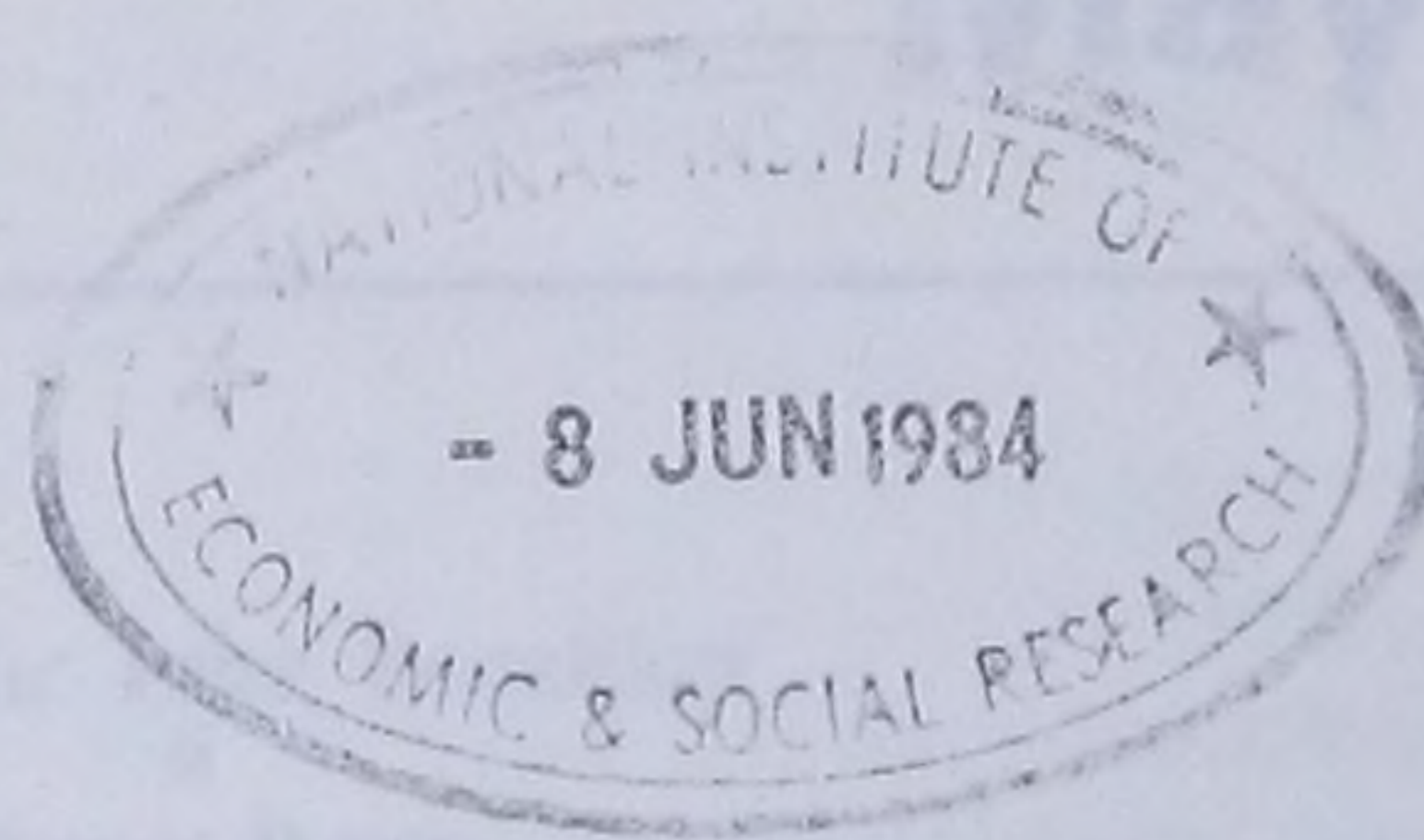
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Developments in British Official Statistics

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The editor is willing to consider for publication letters of interest but cannot enter into correspondence on the matters raised.

Address: The Editor
 Statistical News
 Room 74A/3rd
 Central Statistical Office
 Great George Street
 London SW1P 3AQ

The Central Statistical Office

Sir John Boreham, KCB, Director of the Central Statistical Office and Head of the Government Statistical Service

In the beginning

The Central Statistical Office (CSO) was born in January 1941. Churchill, deciding that it was intolerable that the Cabinet lacked a unique and authoritative source of statistics, had the CSO created to be one. The CSO still has the same objective and has always remained in the Cabinet Office. The Director of the CSO is still answerable directly to the Prime Minister for the scope, production, accuracy and integrity of the statistics produced and the office is independent of all other government departments.

Already in 1941 there were well established statistics divisions in a number of government departments. The Government Statistical Service (GSS) had developed as an uncentralised system with departmental statisticians working in and for their departments. After the CSO had been created they began to take their standards from the centre, having close links both with the CSO and with statisticians in other departments.

Essentially, the CSO's functions have not changed. Operationally, it collects statistics from other departments and elsewhere and does its best to put them into consistent sets. For example it compiles the general briefing report called *Social Trends* and produces the important economic aggregates including Gross Domestic Product (GDP), output indices, balance of payments and financial statistics. The staff also report on the quality and implications of the figures, distribute the reports and figures to Ministers and officials and publish them. Managerially, the office regulates and standardises the work of the statistics divisions in all government departments. The two types of function overlap, of course.

By 1943 there were already 44 people in the CSO but it has never been very large. There are now 200, of whom about 40 are professional statisticians (compared with a total staff of around 5 000 in the statistics divisions of all departments, of whom about 500 are professional statisticians). Among the first people in the new Office was Harry Campion (later Sir Harry) who was to be its Director for the next 25 years. He had come to the middle of Whitehall at the beginning of the war from a readership in economic statistics at Manchester University. He still takes a close interest in government statistics.

During the first years the war dominated so that most work dealt with munitions and other supplies but even then time was found to look more widely. From the

beginning the CSO was estimating the GDP and developing the national accounts. Pioneers in the CSO were breaking new ground and the link with economics existed from the outset. Keynes joined the Treasury in July 1940 shortly after publishing his book *How to pay for the War*, and in 1941 a White Paper was issued by the Chancellor of the Exchequer. Called *An Analysis of UK Sources of War Finance and an Estimate of the National Income and Expenditure in 1938 and 1940*, it contained the first official estimates of national income published which since then have continued annually, comprising the main part of the CSO's effort. Another of the first people in the CSO, Dick Stone, went on to be one of the principal architects of the System of National Accounts (SNA) for the United Nations, which serves as a standard for western economies.



Sir Harry Campion

Another strand in CSO work is to coordinate the UK's input to world statistics. This too began early when Harry Campion spent a year in 1946 and 1947 setting up the Statistical Office of the United Nations in New York.

At the end of the war a full re-appraisal of the statistical services took place. This set the guidelines for the present organisation. A decision had to be made whether the CSO continued at all. In any case most of its staff were due to go back to previous employment or take up new posts. From 1944 onwards staff at the Central Statistical Office were closely involved in the drafting of the proposals in the White Paper on *Employment Policy* and their implementation. A complete review was made of the statistics work which might be needed, the legal and staff requirements, etc. Each individual member of the staff had a personal choice to make whether he or she wished to stay.

Last year's Bradshaw

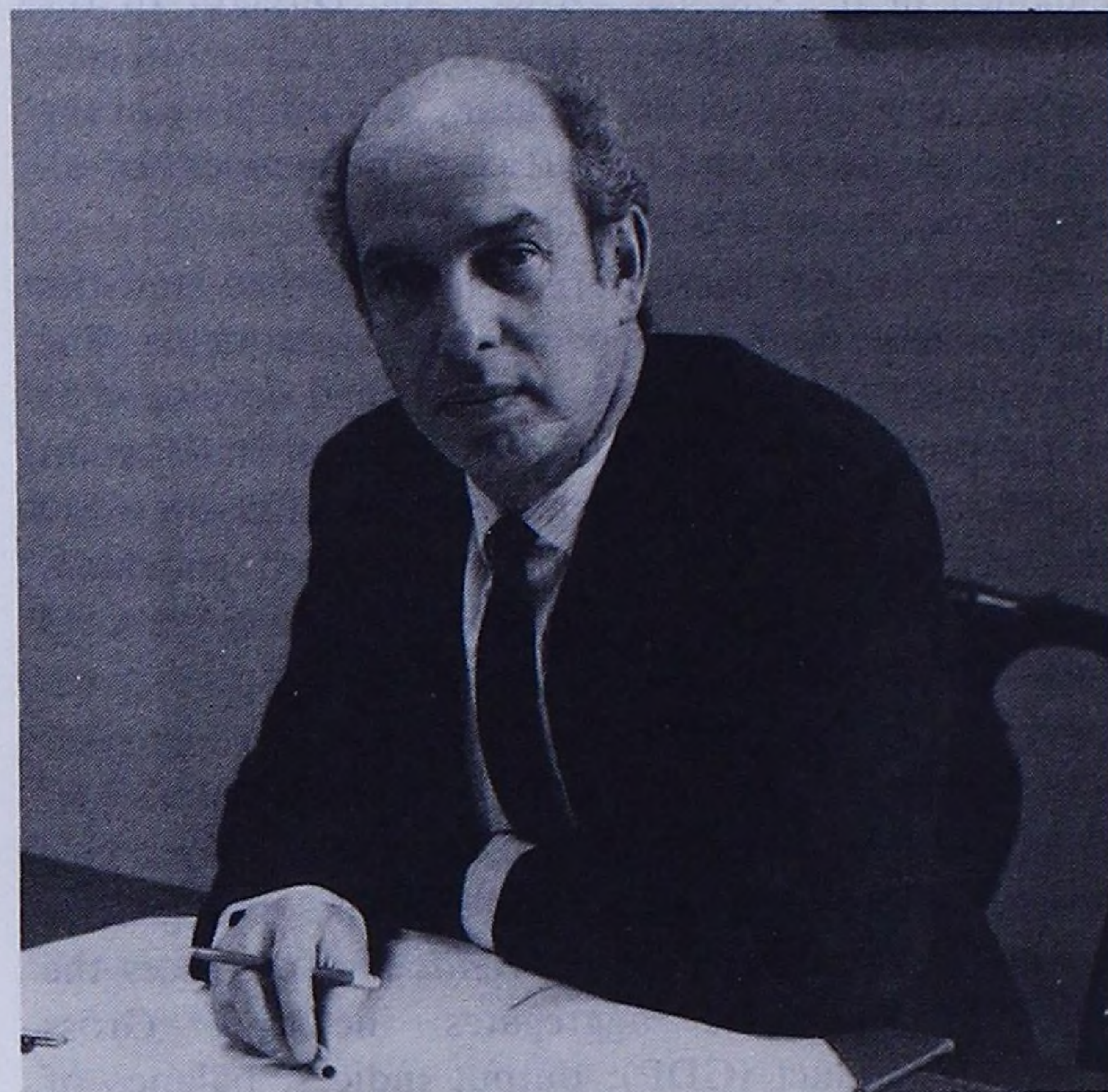
The CSO changed up a gear when, in his 1956 Budget Speech, Harold Macmillan, as Chancellor of the Exchequer, made his famous comment on British economic statistics, that we were 'looking up a train in last year's Bradshaw'. It gave the statistical services the necessary backing and resources for a whole range of improvements, in timeliness, accuracy and scope. For example, it was in this period that quarterly national accounts were introduced and the collaboration began on short term economic forecasting between Treasury economists such as Kit MacMahon and CSO statisticians such as Laurie Berman.

The report of the Estimates Committee in 1966

The *Fourth report of the Estimates Committee* in December 1966 made far-reaching proposals for the GSS. It is a neat and unifying coincidence that all three Directors of the CSO (Harry Campion, Claus Moser and myself) gave evidence, separately, to that Committee. The Committee's proposals were taken up with a will by Claus Moser when he became Director in 1967. He came directly from the London School of Economics where he was Professor of Statistics. He is fluent and delightful, was a much-loved lecturer at LSE, and is also a pianist and musician of very high quality. More to the point, his work on surveys and social statistics had already earned him a world-wide reputation. His arrival at the CSO was the start of a new phase of development and expansion which was to last for ten years. The CSO undertook new functions and grew in influence as well as putting a number of its established functions on to a much firmer footing. The staff designed and produced new reports, notably *Social Trends* and *Statistical News*, and made many significant additions to other compilations. The CSO also became more active in analysing and interpreting statistics, assisted by the power of computers to manipulate data.

The CSO's work on social statistics had never been strong because on the whole this type of data cannot be

articulated in the way that is possible with economic statistics. One notable exception, perhaps on the frontier between economic and social statistics, was the brilliant work of Leonard Nicholson which began in 1956 on portraying in figures the effects of taxes and benefits on the incomes of households of different types and at different income levels. But at the beginning of the 1970s the introduction of *Social Trends* (which proved to be a model for similar publications in other countries) and the development of the *General Household Survey* constituted major developments in central social statistics.



Sir Claus Moser

Important organisational changes outside the CSO were to set up the two major collecting agencies, the Business Statistics Office and the Office of Population Censuses and Surveys, from their antecedent organisations. From the outset some suggested that these two offices should be combined with the CSO but this has not yet happened.

At this time some small units were formed in the CSO to strengthen its regulating and coordinating role. One of these was the Survey Control Unit which vets statistical surveys mainly in order to minimise the burden on respondents but also to standardise and improve survey methodology. Another was the Statistical Computing Liaison Unit – which has had other names – which speeds the adoption of the best information technologies by all statistics divisions. A third, particularly far-reaching and worthwhile, was the Statistician Group Management Unit. The CSO had always recognised, in practice, that one mechanism for raising statistical standards was recruiting, training and

developing the careers of professional statisticians but the creation of the small central Management Unit enabled it to carry out this function even more effectively. Similarly, the Director of the CSO had long been regarded as the unofficial Head of the Government Statistical Service, but Claus Moser was the first to have that title officially.

Although Leonard Nicholson's work had been the first to be computerised (in the late 1950s) it was in the 1970s that a start was made on a comprehensive computerisation of the CSO's work. By the end of the decade a single large computer, serving the Treasury as well as the CSO, with up to 100 terminals, was handling the work of compiling the central economic aggregates, modelling and forecasting the economy and recording the expenditure of all government departments. The war time CSO had a 'Computing Section' of busy clerks. They could not have imagined what was to be possible thirty years later by using a keyboard. Much of what is done now with the aid of computers could simply not be done in any other way.

The 1981 White Paper on the Government Statistical Service

The rapid development in the late sixties and most of the seventies was exciting but the present phase, the beginning of which almost coincided with my own appointment in August 1978, has its own challenges. The White Paper following the *Rayner Review of the Government Statistical Service* recommended pruning statistical activities and reducing staff numbers. In the CSO we took a hard look at the developments of the earlier period, studied their costs and benefits closely, and made decisions about priorities. It was possible to achieve a good deal of streamlining and compression while still providing the same statistical service to government. But we made big reductions in methodological research and in collective briefing on social policies. We also reduced the frequency of income distribution statistics and input/output tables (and stopped all CSO work on the distribution of wealth). By all these changes the size of the CSO was reduced from 263 in May 1979 to 193 at present. At the same time we were able to continue with computerisation and we have reaped benefit from that. Our database is more accessible, we sell data on-line through computer

bureaux, and some of our publications are now produced in camera-ready form.

A notable new feature too has been the introduction of financial budgets for the Government Statistical Service which preceded the Financial Management Initiative in most departments. These are necessary management tools for me and other managers throughout the GSS, revealing the costs of the different parts of our work and enabling us to plan ahead more rationally and to make sure that resources are used in the highest pay-off areas.

Statistics provide answers to questions and statisticians have always tried to anticipate the questions. That activity is even more valuable when resources are strained. Even during the expansion there were always gaps left to fill and priorities had to be set. Now setting priorities is more important than ever. Thus the CSO is very much aware of the need to keep in close touch with all customers in government so that their decisions are firmly based on as good information as we can provide. But we are still independent. The CSO has a central role to play in securing public confidence in the integrity and quality of the Government Statistical Service. That public confidence, and the integrity which must underlie it, are essential if the service to government itself is to be effective.

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Directors and Heads of Branches—Central Statistical Office

From left reading clockwise:

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Demographic projections

Derek Renn, Senior Actuary (A), Government Actuary's Department

Introduction

All planning involves the making of assumptions about the future. The size of the population determines the demand for food, fuel, housing, transport and consumer goods, as well as public services like education and health services. Consequently, assumptions about the future size and composition of the population are needed by many people, and central government has therefore found it necessary to make a series of related projections of the size and distribution of the population, of households and of labour supply (called 'demographic projections' collectively). During the period 1979-82, the Department of the Environment (DOE) financed a small independent survey of public and private organisations to investigate the use made of official demographic projections.¹ One important survey finding was that potential users outside central government departments often did not know about the existing services. This article is designed to increase the awareness of official projections by setting down concisely what is currently available and where. It is the indirect outcome of discussions between a number of people, led by Peter Girling of the Department of the Environment.

Method of Projection

The projections of the population produced by central government are made by what is known as the 'component' method. The basic approach is to disaggregate the population, on the basis of its age, sex and residential location and then to project the numbers forward one year at a time, thereby ageing the population. Thus, the five year old boys of this year become the six year old boys of next year. In addition, assumptions have to be made about the numbers who are likely, on past experience, to die during the year and about those persons who move into and out of the area. Finally, it is necessary to generate the new number of births to produce the children aged under one next year, by applying fertility rates to the number of women of reproductive age, the live births being divided subsequently between males and females.

All projections are now based on the 'home' population, i.e., the population actually resident in an area. Such a definition is used as customer interest centres on the population for which services have to be provided. Household populations exclude institutional residents, however. The numbers of households are projected by

multiplying the projected population estimates by the proportions of each age and sex group which seem likely to head households. The labour force is defined to include not only those people in work but also those looking for work or prevented from seeking work by temporary illness. Proportions of the population who are thus 'economically active' are applied to the population projections to derive future estimates of the labour force. Figure 1 opposite expresses these relationships.

In the making of the three types of projections, a 'top-down' approach is adopted: projections are made first at national level and these then act as controls to which sub-national projections must sum. Below the national level, projections are produced primarily for standard regions and some local authority areas.

The availability of different types of projection at each level is summarised in Figure 2 on page 65.8. Population projections are also made of District Health Authorities (DHA) in England, by partitioning estimates for non-metropolitan counties, metropolitan districts and London boroughs. This partitioning method is necessary in the absence of sufficiently detailed information about migration for use in the 'component' method of projection for small areas. These DHA projections are a recent innovation and are not shown in Figure 2.

National Projections

The official national projections are the responsibility of the Government Actuary in consultation with the Registrars General. For many years they had been prepared annually but recently it was decided that a mid-1980 based projection would not be made but one for mid-1981 would be made using population estimates based on preliminary Census results. Thereafter the aim is to make population projections biennially, although this target will be modified as circumstances change. Since the assumptions used in the national projections are used as controls for the sub-national projections which in turn provide the basis for the household and labour supply projections, it is likely that all demographic projections will be made approximately once every two years in future.

The national projection results made by the Government Actuary's Department are first published, in summary form, in an OPCS *Monitor* (Series PP2), usually in the autumn following the year from which the

projections commence, giving for selected years the numbers by sex in 5 year age-groups for England and Wales and broader age-groups for Great Britain and the United Kingdom. These *Monitors* are available from OPCS (address on P. 65.14) without charge.

The detailed national results are subsequently published by HMSO in the OPCS series *Population Projections, Series PP2*, for England and Wales; Wales (separately); Scotland; Great Britain; Northern Ireland and the United Kingdom. The projected population change (by sex) is given in terms of the numbers of births, deaths and migrants for each year of the 40-year projection period, together with the annual projected numbers by individual age, totalled into quinary and broader age groups as well. Periodically the projections are published subdivided by marital status; these projections are particularly important in deriving projections of households and labour force.²

Summaries of the projection results are subsequently published as follows:

i. The *Annual Abstract of Statistics* (HMSO) gives, for the United Kingdom as a whole, the numbers of males and females in quinary age groups (and also aged 0, 1, 2 to 4, under 18 and under 21) for the next few

years and for selected years thereafter. Results in the same format for persons only are provided also for England and Wales, Scotland and Northern Ireland;

ii. It is intended to resume early publication of the United Kingdom results in an issue of the *Monthly Digest of Statistics* (HMSO). (The annual *Supplement* states which issue contains them.)

iii. *Social Trends* (HMSO) has given, for the United Kingdom or for Great Britain, numbers of males and females in broad age groups for selected years and total numbers at quinquennial intervals for the next twenty years, together with a table showing projected numbers of births, deaths and migrants over each quinquennium;

iv. Summaries of the results for Scotland, i.e. five-year age/sex groups for selected projection years, appear in both the *Weekly Return* and the *Annual Report* of the Registrar General for Scotland and also in the *Scottish Abstract of Statistics*; (HMSO)

v. The *Digest of Welsh Statistics* (available from the address on page 65.14, price £4 net) gives numbers of males and females in quinary age groups for a few selected projection years; and

vi. The *Northern Ireland Annual Abstract of Statistics* (HMSO) gives the numbers of persons in

FIGURE 1: RELATIONSHIPS BETWEEN THE VARIOUS DEMOGRAPHIC PROJECTIONS AND THE ASSUMPTIONS.

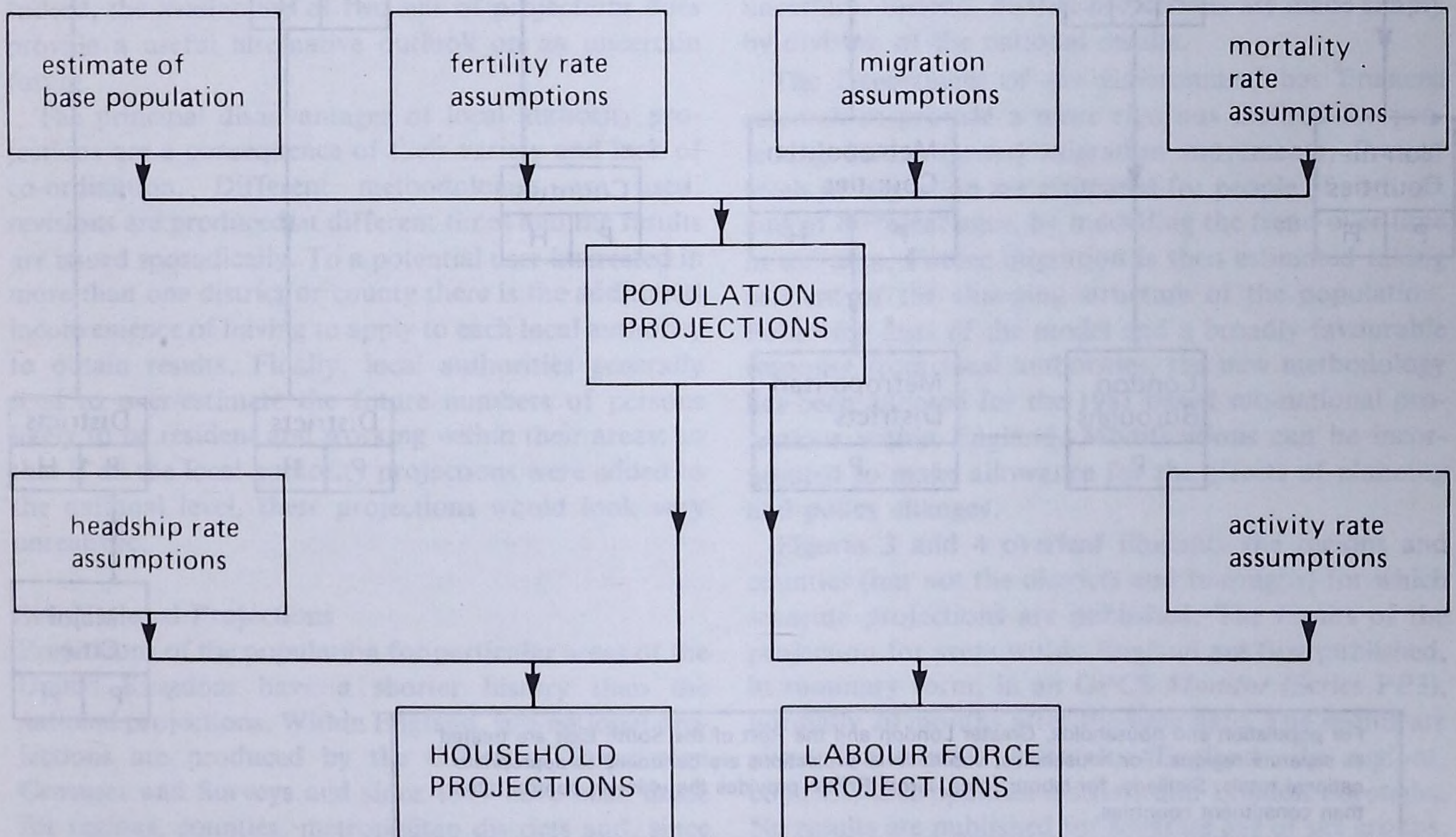
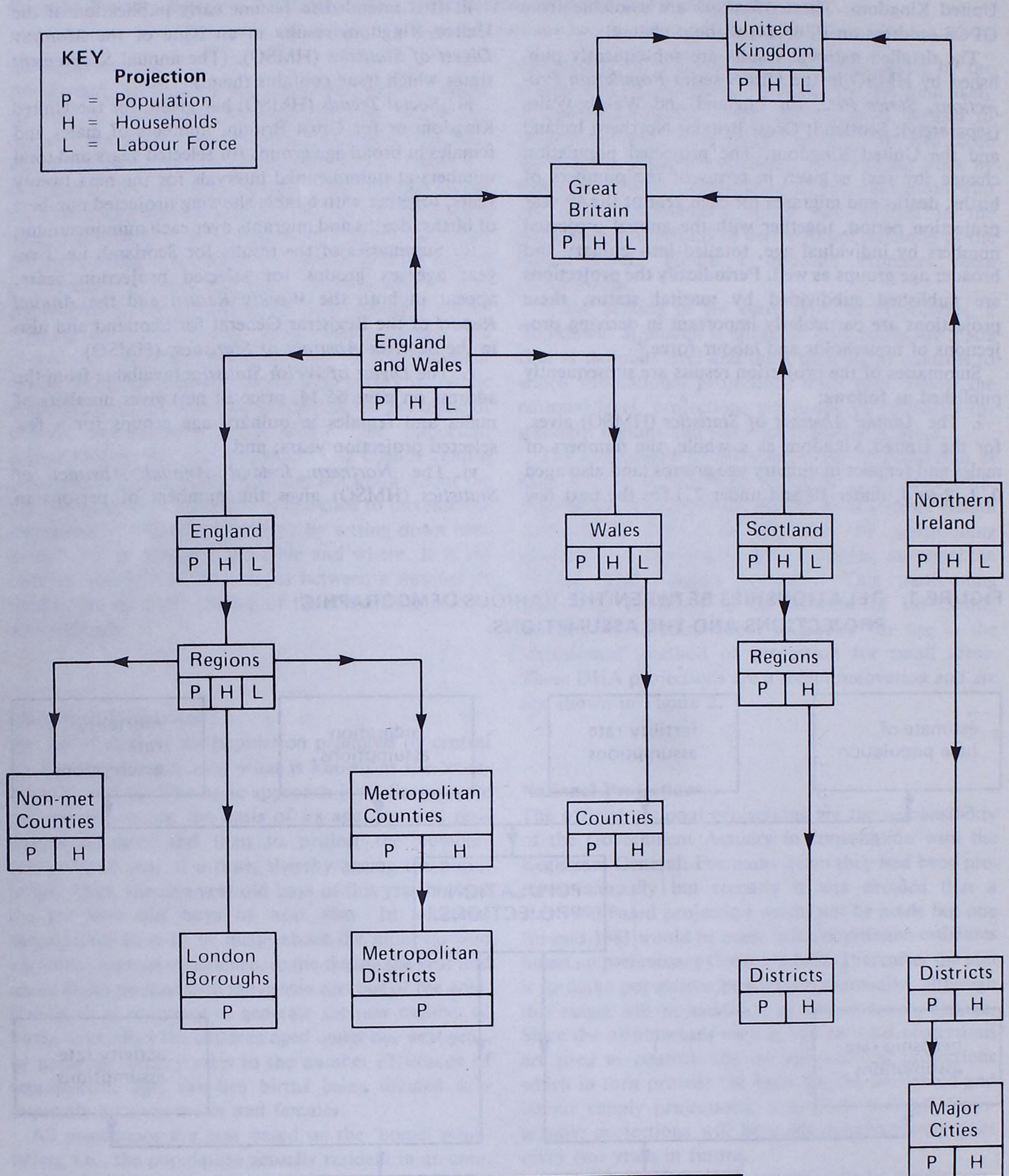


FIGURE 2: PROJECTION TYPES AND AREAS



For population and households, Greater London and the Rest of the South East are treated as separate regions. For households, sub-national projections are controlled to appropriate national totals. Similarly, for labour force, Great Britain provides the ultimate control rather than constituent countries.

quinary age groups at quinquennial intervals for the next forty years.

In addition to the normal mid-year population projections, a separate set is prepared from estimates of the School pupil population at the beginning of each year. Summaries of these projections are published in *Education Statistics for the United Kingdom (HMSO)* and in a Scottish Education Department statistical bulletin—obtainable from address on page 65.23 (Price 50p)

Advantages and disadvantages

The projections produced by central government are often referred to as the 'official' projections. The label 'official' is somewhat unsatisfactory since central government officials are no more privileged in foretelling the future than other projection makers. The main advantage of the central government projections over those produced by others lies in the 'top-down' approach, mentioned earlier. Sub-national projections are usually controlled to agree with the national population projection in total and assumptions for individual areas are determined in a consistent way.

Individual local authorities argue, quite legitimately, that their projections take more account of local conditions. Local authorities can also adopt different projection methods which may be better suited to local circumstances. Unfortunately, there are no hard and fast rules which tell the general user whether to adopt the local government or the central government projections. Both have their advantages and disadvantages. Indeed, the availability of two sets of projections does provide a useful alternative outlook on an uncertain future.

The principal disadvantages of local authority projections are a consequence of their variety and lack of co-ordination. Different methodologies are used, revisions are produced at different times and the results are issued sporadically. To a potential user interested in more than one district or county there is the additional inconvenience of having to apply to each local authority to obtain results. Finally, local authorities generally tend to over-estimate the future numbers of persons likely to be resident and working within their areas; so that if all the local authority projections were added to the national level, these projections would look very unrealistic.

Sub-National Projections

Projections of the population for particular areas of the United Kingdom have a shorter history than the national projections. Within England, sub-national projections are produced by the Office of Population Censuses and Surveys and since 1974 have been made for regions, counties, metropolitan districts and, since

1977 for London Boroughs. For Scotland, the General Register Office for Scotland makes the projection for regions and Islands Areas and, unlike in England, for all districts. The responsibility for producing county projections in Wales lies with the Welsh Office, while district projections for Northern Ireland are made by the Department of the Environment (Northern Ireland). Sub-national projections are usually only published for about 15 years ahead and in quinary age-groups by sex. Migration becomes an increasingly important factor in population change as the area studied becomes smaller and more cross-boundary moves occur.³

Future migration is not only uncertain but the evidence on past trends is limited. This has encouraged central government to consult with local government and other interested bodies to ensure that local circumstances are taken into account in preparing internal migration assumptions. The Department of the Environment, because of its close contact with local planning authorities, is responsible for determining the net migration assumptions within England. The General Register Office for Scotland in consultation with the Scottish Office devises a set of assumptions for regions and districts consistent with the predetermined national controls. The Welsh Office consults with the county authorities to agree collectively a set of assumptions consistent with the national controls. In Northern Ireland the size and population of districts is particularly small. Consequently the adoption of the 'component' method in projecting population is regarded as inappropriate as the migration element is particularly uncertain. Instead, district projections are made simply by division of the national results.

The Department of the Environment has financed research to provide a more rigorous method for projecting future (gross) migration movements. Present levels of migration are estimated for people of each sex and of different ages, by modelling the trend over time in the area. Future migration is then estimated taking account of the changing structure of the population. Following tests of the model and a broadly favourable response from local authorities, the new methodology has been adopted for the 1981 based sub-national projections within England. Modifications can be incorporated to make allowance for the effects of planning and policy changes.

Figures 3 and 4 overleaf illustrate the regions and counties (but not the districts and boroughs) for which separate projections are published. The results of the projection for areas within England are first published, in summary form, in an *OPCS Monitor* (Series PP3), normally 20 months after the base date. The results are given for selected years for England, the regions, counties, metropolitan districts and London boroughs. No results are published for separate age or sex groups.

FIGURE 3: STANDARD REGIONS AND COUNTIES OF ENGLAND AND WALES

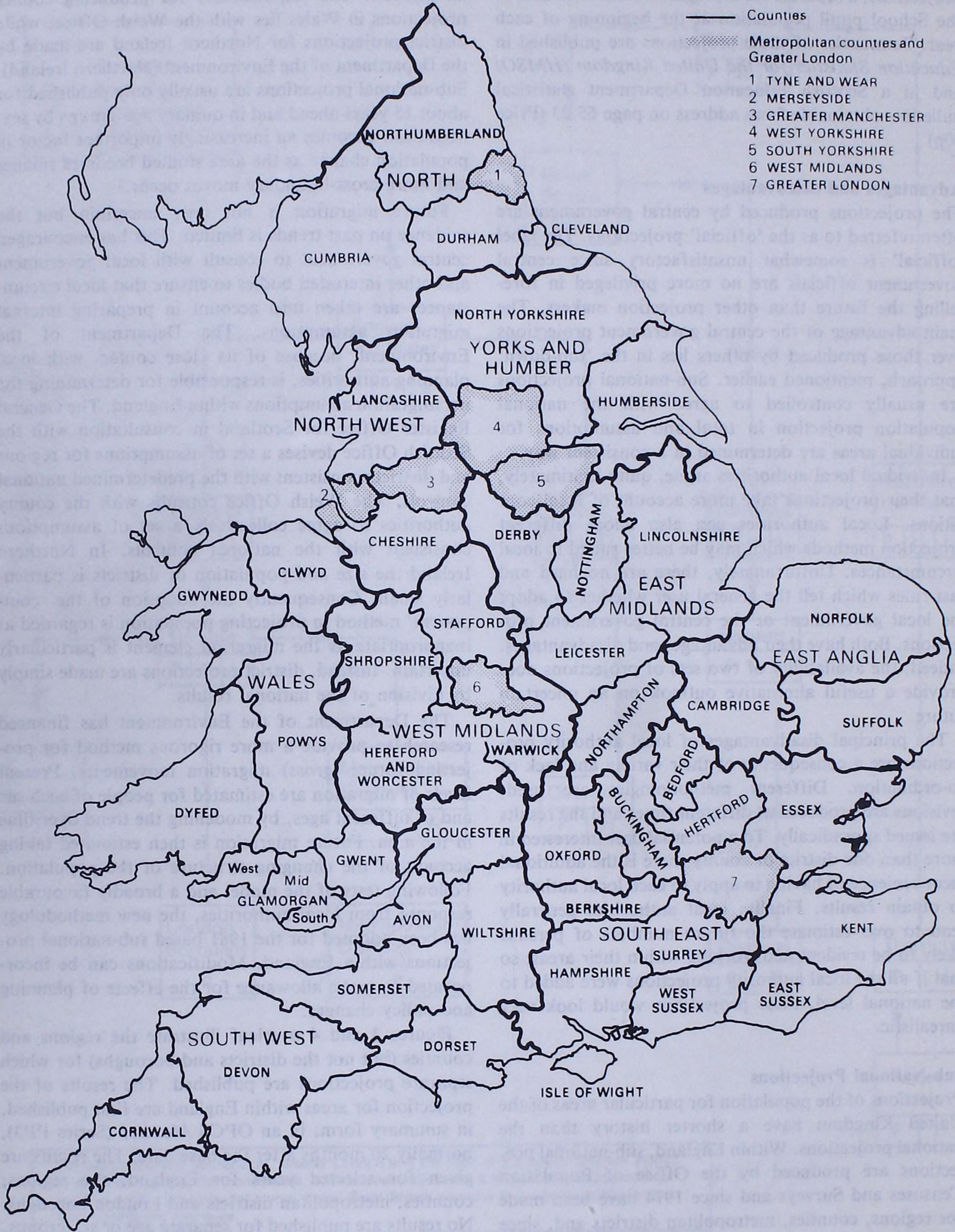


FIGURE 4: LOCAL AUTHORITY REGIONS OF SCOTLAND



The detailed sub-national results are subsequently published by HMSO in *Population Projections: Area (years), Series PP3* for England; regions; counties; metropolitan districts and London boroughs. For the regions (including Greater London) results are given in quinary age-groups by sex. For London boroughs, counties and metropolitan districts broader age-groups are adopted. Projected births, deaths and net migrants are published.

The sub-national projections for Scotland are published by the General Register Office for Scotland (address on page 65.26) in a booklet entitled *Projected Population of Scotland by Area*. This appears about 18 months after the mid-year of the projections base. Information is tabulated for projected population of all persons for each projection year down to the local government district level; and also by quinary age/sex groups at five-yearly time intervals for regions. Results

divided into natural change and migration are also given for regions and Islands Areas and in addition projection results are published for health board areas, and districts.

Welsh county projections are published by the Welsh Office (address on page 65.14) in a booklet entitled *Home Population Projections for the Counties of Wales*. Information is tabulated by quinary age/sex groups at five-yearly time intervals for each county.

District projections for Northern Ireland are not published.

Summaries of the sub-national projections results are subsequently published elsewhere as follows:

- i. *Regional Trends* (HMSO) gives for English regions the numbers of males and females in broad age groups for selected years. The Regional Profiles section also gives percentage changes in the projected population for English regions and Counties, Welsh Counties and Scottish regions.
- ii. *Social Trends* (HMSO) gives, for English regions, metropolitan counties and the Central Clydeside conurbation, projections for all persons at selected years;
- iii. Summaries of the results within Scotland are published in *Scottish Health Statistics* (HMSO) by the Common Services Agency of the Scottish Health Service; and
- iv. The *Digest of Welsh Statistics* (available from the Welsh Office address on page 65.14, price £4 net) gives the numbers in quinary and broad age/sex groups for selected years for Welsh counties.

Household Projections

The Department of the Environment is the government department with overall responsibility for housing in England. It makes projections of the numbers and types of households both at a national level and sub-nationally for regions and counties but not yet for districts or London boroughs. It also produces household projections, on behalf of the Welsh Office, for Wales as a whole and for Welsh counties. For Scotland, the Scottish Development Department produces and publishes its own projections at a national level, for regions and, unlike in England and Wales, for districts. National and district projections in Northern Ireland are made by the Department of the Environment for Northern Ireland. These projections are usually made for 15 years from the base date.

A summary of the household projection results prepared by DOE are published by HMSO, about two years after the starting date of the projections in the annual issue of *Housing and Construction Statistics* (HMSO). The results are given for:

- England and Wales
- Wales (separately)
- English regions

For each of these areas, results are tabulated by household type for the base-year and at five-yearly intervals to the end of the projection period.

In the past, the same information has been made available somewhat earlier to interested users, together with results for English counties, a description of the methodology and an analysis of the main results. Projection results by age of head of household are also provided for England and Wales together. The Welsh Office releases similar information for Wales in total.

For Scotland, household projection results are summarised in one of the issues of *Scottish Housing Statistics*. Tabulations for Scotland and its regions and Islands Areas are similar to those for England and Wales.

Household projections for districts and the main towns in Northern Ireland are not published.

Labour Force Projections

The Department of Employment makes projections of the labour force for Great Britain as a whole and for English regions, Wales and Scotland. For Northern Ireland, the responsibility for preparing labour force projections rests with the Department of Economic Development. Because labour force projections require a view to be taken of future economic conditions, the projections cover a shorter period than either the published sub-national population or the household projections. They have been revised less frequently (about every four years) in the past but are likely to be revised more frequently during the 1980s, using the results of the Labour Force Survey.

The results of the projections of the labour force for Great Britain as a whole are published by HMSO, between two and three years after the base year of the projections, in one of the monthly issues of the *Employment Gazette* (HMSO). Results are given for each projection year in broad age groups of males, females in total, married females, non-married females (when available) and for all persons; the regional projections are published in a later issue of the *Gazette*, for males and females separately, showing past and projected numbers for selected years, of both the civilian labour force and activity rates. The figures for the civilian labour force, together with the activity rate assumptions, are reproduced in *Regional Trends*. Labour force projections for Northern Ireland have not been published so far although there is a possibility that summaries of results may be included in future issues of *Regional Trends*.

Projections for other Types of Area

The projections discussed so far are produced for local authority areas and for groups of areas, notably economic planning regions. However, projections are made for some other types of administrative areas.

Within England, population projections have been prepared, but not published, for Regional Health Authorities. As the statutory health areas are defined in terms of whole counties, metropolitan districts or London boroughs, the projections are derived directly from the projections for local authority areas. Projections for District Health Authorities are similarly prepared. In Wales, health area and county boundaries are coterminous. Projections for Health Districts are not prepared in England and Wales at present. In Scotland, population projections are prepared and published by the General Register Office (Scotland) for Health Board Areas and Districts. The Boards are coterminous with regions and Islands Areas except that Strathclyde is divided into four. Population projections for the four Regional Health Boards in Northern Ireland are produced by amalgamating the results for district council areas. At the district level, only projections for all persons are made. For the Regional Health Board areas, projections by age and sex are made simply by allocating the national results by age and sex in proportion to the district figures for all persons in each region.

Variant Projections

A single 'Principal' projection, although a useful starting-point for population-related planning, may be too rigid. At a national level, future fertility is usually the most uncertain but important of the assumptions made. Consequently variant projections are frequently made incorporating plausible alternative courses of future fertility. These additional projections provide an indication of the sensitivity of the results to the assumptions made and thus enable users to appreciate the wide range of possibilities.

Unpublished Results and Special Projection Services

More detailed results for each area by single years of age can be obtained from the appropriate departmental address given below. A charge is made to cover any processing and administrative costs.

Population Projections

The Government Actuary's Department may be able to project populations at a national level using alternative assumptions regarding the base population, and future fertility, migration and mortality provided by the customer. It must be clearly understood that these are not official or alternative projections: it is for the customer to defend the assumptions he has made, and to pay the costs of processing.

The Office of Population Censuses and Surveys (OPCS) provides a projection service for areas within England. Usually the results required amount to the summation of local authority areas but if, say, the areas required are defined as proportions of counties (specified by the customer) then it should be noted what

implicit assumptions are being made. Firstly, the age and sex composition in the part of the local authority will be the same as for the area as a whole. Secondly, the pattern of fertility and mortality will be assumed to be the same throughout the area. Thirdly, and perhaps most importantly, simple *pro rata* methods of proportioning results imply that there is zero net migration between the area the customer is interested in and the rest of the local authority area. Alternatively, the required projections can be made using the actual projection model. In this case, the customer needs to supply OPCS with assumptions about the starting population disaggregated by age and sex, future fertility, mortality and migration.

In both approaches, the onus is on the customer to do most of the work although OPCS may provide guidance or undertake clerical work on the customer's behalf, subject to staff availability. A charge will be made for this service, based on the amount of computer time used, the amount of data preparation necessary, the type of output required, the amount of guidance and consultation involved and, if relevant, the work OPCS have to do for the customer to generate the assumptions.

The General Register Office for Scotland has in the past prepared *ad hoc* projections for customers for standard areas only, but using the customers' own migration assumptions. Variations in mortality and fertility rates also have been possible. Subject to the availability of resources, similar work may be undertaken in future at a charge.

Household Projections

The Department of the Environment offers customers a household projection service covering England and Wales whereby results can be produced on alternative assumptions to those used in the official projections. A charge is made to cover operating costs. The customer is asked to provide for each projection year estimates of the 'home' and private household population in his or her area in broad age/sex groups. Depending on the area, appropriate regional or county headship rates are applied to derive the household projections. In Scotland, Scottish Development Department offer a similar service to that of DOE, whereby household projections can be prepared using the customer's own assumptions.

Labour Force Projections

The Department of Employment produce projections of the civilian labour force, separately for men and women, for Scotland, Wales and English regions. Projections for smaller areas are not prepared as the Department consider that the Labour Force Survey estimates of activity rates below regional level would be too unreliable a base for future activity rate assumptions. However, the Department will be preparing county labour force estimates for the

Statistical Office of the European Community which can be made available on request. These estimates use information from the 1981 Census of population to derive county activity rates from the Labour Force Survey estimates of regional activity rates. A similar process could be used to derive projected county activity rates from the regional activity rate projections. Applied to projected county populations these would provide a rough guide to the future size of the local labour force. In Northern Ireland, the Department of Economic Development produce projections of the

civilian labour force for men and separately for women by marital status, and hope to be able to disaggregate these to district level in future.

References

1. Girling, P. D. and White, R. T. 'The Use of Official Sub-National Population Projections in England', *Social Sciences Information Studies* 1, No 5. 1981. (Butterworth) (Price £14.40 net)
2. Daykin, Chris and Leete, Richard, 'Projections of the Population by Marital Condition', *Statistical News* 44 (HMSO February 1979).
3. Girling, Peter and Morrey, Chris, 'Migration Assumptions for sub-national Population Projections', *Statistical News* 48 (HMSO February 1980).

Addresses of Government Departments according to responsibility for demographic projections.

Population Projections

National

All countries Government Actuary's
Department (B2)
22 Kingsway
London WC2B 6LE
(Telephone: 01-242 6828 ext 345)

England and Wales Social Statistics Unit, OPCS
Room 630, St Catherines House
10 Kingsway, London WC2B 6JP
(Telephone 01-242 0262 ext 2168
or 2169)

Scotland Population Statistics Branch
GRO Scotland
New Register House
Edinburgh EH1 3YT
(Telephone 031-556 3952 ext 24)

Northern Ireland General Register Office
Oxford House
49-55 Chichester Street
Belfast BT1 4HL
(Telephone 0232 235211)

Sub-National

England Regional Demography Unit
OPCS
Room 601, St Catherine's House
10 Kingsway, London WC2B 6JP
(Telephone 01-242 0262 ext 2180
or 2171)

(Migration assumptions for
Metropolitan districts and
London boroughs)

DPRP3
Department of the Environment
Room C5/03, 2 Marsham Street
London SW1P 3EB
(Telephone 01-212 3434)

Scotland

Address as above

Wales

Economic and Statistical Services
Welsh Office, Cathays Park
Cardiff CF1 3NQ
(Telephone 0222-825087)

Northern Ireland

DOE for Northern Ireland
Town and County Planning
Services (Headquarters)
Commonwealth House
Castle Street, Belfast BT1 1GU
(Telephone 0232-221212 ext 313)

Household Projections

England and Wales Household Projection Service
Department of the Environment
Room N13/01, 2 Marsham Street
London SW1P 3EB
(Telephone 01-212 8555)

Scotland

HSIU
Scottish Development Department
Room 220, 83 Princes Street
Edinburgh EH2 2HH
(Telephone 031-556 8501 ext
2111)

Northern Ireland: as for sub-national projections

Labour Force Projections

Great Britain Statistics C5 Division
Department of Employment
Caxton House, Tothill Street
London SW1H 9NA
(Telephone 01-213 7499)

Northern Ireland

Department of Economic
Development
Statistics Branch
Netherleigh, Massey Avenue
Belfast BT4 2JP
(Telephone 0232-63244 ext 426)

Revised Northern Ireland Construction Output Data

**R. Beckett, Principal Economist and D. Glass, Senior Assistant Economist,
Department of Finance and Personnel, Northern Ireland**

Introduction

Each quarter in January, April, July and October an inquiry is carried out by the Policy Planning and Research Unit (PPRU) in the Northern Ireland Department of Finance and Personnel (DFP) into new orders received by and the employment and output of employers and public authorities engaged in construction work in Northern Ireland (NI). The output data is the basis of the NI index of construction. For some time it has been clear that all was not well with the index and the inquiry on which it is based. As a result DFP has recently conducted an extensive review of this inquiry.

The review covered all aspects of the inquiry including register maintenance, sampling methodology, form design and data processing. It has resulted in a number of changes which will make the inquiry more efficient and effective and improve the quality of data available. Remedial action taken has included the introduction of register updating procedures, a simplified sampling procedure, simplified form design and the adoption of improved administrative procedures – particularly with regard to the checking of returns. This article reports on the reasons for these changes, outlines the new procedures and gives the revised index for NI construction.

The Register

The availability of a comprehensive up-to-date register is of critical importance to the conducting of a reliable survey, but prior to 1983 the construction inquiry register was derived from incomplete 1966 information on firms with more than five employees, augmented by sporadic updates. A comparison of the census of employment register, initially for 1978 and more recently for 1981, with the construction inquiry register not only served to identify and remedy the deficiencies in the construction inquiry register but also ensured consistency of application of the definition of construction. In future the construction inquiry will be based on the census register, for which regular updates will be available from the 1984 Census onwards.

The register is stratified, using the number of employees in a firm as an indicator of its 'size'. Previously there were seven strata based on the number of employees recorded in the construction inquiry, but this has been reduced to five based on 1981 census of employment data. The strata are <5, 5-19, 20-49, 50-199, 200+ and until further information becomes available from the 1984 census of employment it is being

assumed that the first three strata contain the same number of firms as in 1981. Any changes to the number of firms in the other two strata will be readily apparent.

Sampling

In the old inquiry there were two stages of sampling. In the first stage all firms employing twenty or more employees and a 20 per cent rotating sample of those employing between five to nineteen employees were sampled for new orders and repair and maintenance. The population of projects notified on the new orders forms, stratified by type of work category and according to the quarter in which the contract was recorded as having started, was used in the second stage of sampling and all those projects remained in the sample until their completion. Thus firms were only surveyed in the second stage if they reported a new order at the first stage.

In revising the sampling procedure it was decided to have only one stage of sampling with the selected firms recording all work done each quarter. On the assumption that employment is a good indicator of 'size', the sample size was calculated so that, with a full response, the estimate of the construction index would be accurate to ± 2 per cent with a probability of at least 0.95. Because of their importance and relatively small numbers (only 50 firms) all firms in the 50-199 and 200+ strata were sampled. Allocating the sampling error equally among the three remaining strata gives sampling fractions of 1 in 27 for those with <5, 1 in 4 for those with 5-19 and 1 in 3 for those with 20-49 employees.

To the extent that employment is not a good indicator of 'size', and there is not a full response rate the index will be less accurate than planned.

Form Design

The old inquiry made use of three different types of forms for collection of data. Two questionnaires were sent to private contractors – the first asked for information on wages, employment, new orders for work, small orders, and employment and output on repair and maintenance; the second asked for information on employment and output on individual projects taken from the new orders details returned in previous quarters on the first questionnaire. All local authorities, government departments and quasi-government bodies known to engage labour directly for construction work

were required to complete a third 'Public Authority' form which asked for information on employment and value of output.

This method of collecting the data from private contractors was unnecessarily complex not only because of the use of two forms but also because of the layout of the forms. The survey double counted some output by nominated sub contractors, and because of ambiguities and errors in the guidance notes either failed to include output on projects started in the quarter the contract was awarded or included it in the wrong quarter.

By removing questions no longer required and by rationalising the way in which information on repairs and maintenance, new orders and on-going projects was requested it was possible to combine the two questionnaires and ensure all output was recorded. The guidance notes were improved, layout simplified, the definition of small orders revised, and provision was made to allow revision to previously supplied data. The new form was first used for the second quarter of 1983. Information on man days spent on each project during the quarter, (not previously collected) was requested on a trial basis. Following assessment of the trial this data will in future be collected on a separate shuttle card for a small number of selected projects from some firms. Some further minor changes are to be made to guidance notes in the light of experience over the last two quarters; notably it has been identified that data supplied can relate to a period other than that for which it is requested, and provision will be made for each firm to specify the precise period to which their data relates.

Data Processing

Processing contractors' returns was a complex manual operation. Grossing up of private contractors' returns to allow for sampling and non response was done separately for each firm size for repair and maintenance; for new large projects the analysis was further disaggregated by type of project and by quarter in which the project started. No allowance was made for non coverage of employers with less than five employees. Coverage of public authority output was considered to be comprehensive, but was not completely so.

Using appropriate deflator's for each work type the data was then converted from current to constant prices and aggregated for comparison with the base year, giving the construction index. Because of the level of detail the calculations were error prone and sensitive to the high level of non-response. Other consequences of the time consuming complex calculations were the inability to utilise returns after a cut-off date, to ensure the accuracy and timeliness of data provided, and to follow up non-response.

Grossing up procedures have now been computerised and simplified e.g. private contractors data is grossed

up only by size of firm and by project type with fewer size ranges than was formerly the case. This has now made it possible to utilise late returns and allows adequate time for quality checks on data and for assisting employers who have difficulties in completing their returns. The improved contact with employers has already resulted in improved data quality and response rate. Further improvements can be expected.

Even with a full response rate there would be a need to allow for late response and to produce an index five to six weeks after the end of the quarter it is planned, in the first instance, to estimate returns for late responders by reference to their previous returns. Account will also be taken of the precise period for which data has been provided.

Revised Index

Of the problems already mentioned the incomplete register, complex and detailed manual calculation, double counting and poor response would in themselves give cause for concern about the quality of the Northern Ireland index. With the additional problem of incorrect allowance for non-response the index can have no credibility.

The extent of the problem with the index is evident from a comparison of the index and Department of Economic Development employment data. Between Q3 1975 and Q3 1982 the index rose marginally from 99 to 102 whilst employees in employment fell by 39 per cent – an apparent 69 per cent increase in productivity compared with an 18 per cent increase in the United Kingdom during the same period.

Because the old series is clearly misleading the data has been reworked as far as possible to remove the identified errors. This was possible back to 1980, but earlier returns were no longer available and alternative methods of estimating the index pre-1980 had to be used.

Based on the new register and using the new method of stratification of contractors output on new projects, from Q1 1980 to Q4 1983 data was collated for nine categories of new work on housing, industrial and commercial split by public and private sector and roads; small orders; repair and maintenance – for the strata 20-49, 50-199 and 200+. Data for the <5 and 5-19 strata was not used, being unreliable because of the way in which these firms had been surveyed and because of the lack of homogeneity within these strata – some firms with few employees are in fact quite large, making extensive use of labour only and other sub-contractors. To allow for double counting of nominated sub-contractor output data for Q2 1983 was recalculated excluding the duplicated data and the ratio of this second figure to the first for Q2 1983 was used to adjust the figures for earlier quarters.

The value of public authority output, by category of

work, previously recorded was increased by five per cent to allow for a deficiency in the register.

Aggregate current price output by type of work could now be produced, and this was converted to 1980 prices using the various GB construction price deflators calculated by the Department of the Environment. Adjustment to each quarters' output for variation in the number of working days was made and the index calculated as the ratio of a quarters' constant price adjusted output to the average quarterly level for 1980 (table 1)

Table 1
Post-1980 Revised Index

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Average
1980	131	108	88	73	100
1981	78	78	59	71	72
1982	83	78	85	91	84
1983	85	89	72	66	78

In constructing a pre-1980 historical index four methods were examined for the period 1977-1980 to see which of them, if any, could be used to give a reliable series. As these methods rely on annual rather than quarterly data, the pre-1980 index is not available on a quarterly basis.

The first method used the Annual Census of Production (ACOP) (construction) figures for gross output *minus* industrial services received, deflated using the all new construction deflator and grossed up by the ratio of the census of employment employees figure to ACOP employees figure to allow for undercoverage of ACOP.

In the second method the Gross Domestic Product (GDP) figures for construction were used. These were grossed up using the ratio of gross output (*minus* cost of industrial services) to gross value added (GVA) in ACOP and deflated using the all new construction deflator.

The third method involved using employment figures. An index for employees and self employed based on 1980 equal 100 was calculated and adjusted to allow for observed productivity changes in GB. In the fourth method the ratios of NI GDP in construction to UK GDP in construction was used to calculate the NI share of UK construction.

The four indices are shown in table 2, and allowing for problems in 1978 ACOP coverage (affecting index 1 for that year), 1980 ACOP gross value added data

Table 2
Pre-1980 Indices produced by a number of different methods

Year	Index 1	Index 2	Index 3	Index 4
1977	112	133	112	114
1978	107	138	118	118
1979	107	120	107	106
1980	100	100	100	100

(affecting the base year calculation in index 2) and the availability of suitable deflators, there is reasonable agreement between them. Because of the problems with indices 1 and 2 the choice lay between the use of index 3 or 4 and 4 was chosen as it used full year rather than point in time data. Using this method the yearly index was calculated back to 1971 (Table 3).

Table 3
Northern Ireland - Index of Construction

1971	119	1980	Q1	131
1972	117		2	108
1973	115		3	88
1974	109		4	73
1975	113	1981	Q1	78
1976	114		2	78
1977	114		3	59
1978	118		4	71
1979	106	1982	Q1	83
1980	100		2	78
1981	72		3	85
1982	84		4	91
1983	78	1983	Q1	85
			2	89
			3	72
			4	66

Indices for recent quarters may be subject to subsequent revision

Seasonal Adjustment

The run of quarterly data for the new index since Q1 1980 is not sufficient at present to permit seasonal adjustment. A seasonally adjusted series will be produced when sufficient data becomes available.

Conclusion

This paper has highlighted a number of changes that have been made to the construction inquiry in order to make it more efficient and effective and improve the quality of data available. However, there are still two problems - low response and imperfect stratification particularly with regard to smaller firms - which require further attention. The combined effect of these is that there is no reliable estimate of total construction output or of the relative importance of different types of construction, and the revised index is not as accurate as intended.

Whilst the response has been improving as a consequence of a simplified form and improved contact with employers, there is still substantial room for further improvement. Consideration needs to be given to what action(s) can achieve this improvement.

Lack of homogeneity amongst firms with < 5 and with 5 - 19 employees will need to be catered for before data from these strata can be used with confidence in the index calculation. This could be either by substantially increasing the sample size in these strata or by using an improved method of stratification based on turnover data obtained from a periodic enquiry to all firms or from an administrative source such as VAT records.

An interactive microcomputer approach to the purchase of naval equipment spares

John Parrett, Statistician and Ray Hurley, Executive Officer, Ministry of Defence

Introduction

Nearly half of the £16,000 million a year Defence budget is expended on equipment, a large proportion of which goes on the purchase of spare parts. Statisticians in the Ministry of Defence provide advice to management responsible for this expenditure on the use of statistical methods to determine the timing and quantity of purchases. This article describes one such approach developed by a branch of the Defence Statistics Organisation situated at Bath alongside Naval Stores management.

Background

Statistical methods have long been applied in the inventory control field to determine the timing and quantity of purchases. Such methods, which involve regular comparisons of possible future demands with assets (stocks of goods on hand or due in from manufacturers and repairers) are used extensively throughout MOD. In general they operate satisfactorily for the great majority of the inventory but do not fully meet the needs of management responsible for the logistic support of missiles and torpedoes. For the expensive repairable major components of these weapons (units) sufficient data are available to provide an improved service. For these units a simple model has been developed as a flexible management tool.

For every weapon (missile/torpedo) a number are deployed in ships of the Royal Navy and others are held in readiness at Royal Naval Armament Depots (RNADs). To ensure operational reliability all weapons undergo regular tests at the RNADs. Stores management will have a long term test schedule derived from knowledge of their weapon purchase programme, test intervals etc. The numbers of tests will initially be low but increase as the weapon becomes more widely fitted in the fleet and then decline as the weapon is phased out of service. It is this testing procedure which detects faulty units and leads to repair activity.

In general a weapon consists of a small number of major units each of which can cost some tens of thousands of pounds. The repair system or logistic loop for these units is represented in simple diagrammatic form opposite.

That part of the life of a weapon with which we are concerned begins with its arrival (either from the Fleet or from a serviceable store of weapons) into the RNAD test rooms. Where a unit is found to be defective on test it is replaced by a non-defective unit from the service-

able store. The defective unit will return to the maker or other repair agency for repair and subsequent return to the RNAD serviceable store. A small proportion of units sent for repair may be seriously damaged and not be repaired; they will be disposed of as being beyond economic repair.

The model

The stores manager is concerned with his performance in terms of having serviceable items available to replace defective items when required. He continually monitors his asset levels i.e. the numbers of items distributed around the logistic loop, e.g. in serviceable store or at the repair agency. The model has been designed to calculate the performance either currently or in the future which corresponds to his current asset level. The calculated performance measure, adequacy, is defined as the probability of having at least one item in the serviceable store when required, i.e. an adequacy of 95 per cent means that on 95 out of 100 occasions stock is present when required. This calculation is dependent not only on the expected failure rates, lead times, beyond economic repair rates and varying test schedules which are inputs to the model but also on assumptions about the statistical distributions of these inputs. Previous work in similar areas indicated the use of poisson and lognormal distributions to be satisfactory.

The model is simple in approach and requires minimal data input. There are two types of input, viz test parameters and repair parameters:

a. Test Parameters

- (1) Span of Years – This is the span of years over which the model is to be run, i.e. the number of years you wish to provision for.
- (2) Expected Number of Tests – This is the expected number of tests for each given year of span.
- (3) Failure Rate – This is the proportion of items that when tested are certified to be defective.

b. Repair Parameters

- (1) Repair Lead Time (RLT) – The RLT is the average time/delay (in months) experienced by an item between being sent for repair and being returned to the store of serviceable items.
- (2) Administration Lead Time (ADLT) – The ADLT is the average time/delay (in months) experienced by an item between being dis-

covered to be defective and being despatched to the repair agency.

(3) Beyond Economic Repair Rate – The BER rate is the proportion of items sent to repair that are found to be beyond economic repair.

The principal output is a table of adequacy for each year specified resulting from varying asset levels, see example overleaf (this output is displayed on the screen and can also be printed out).

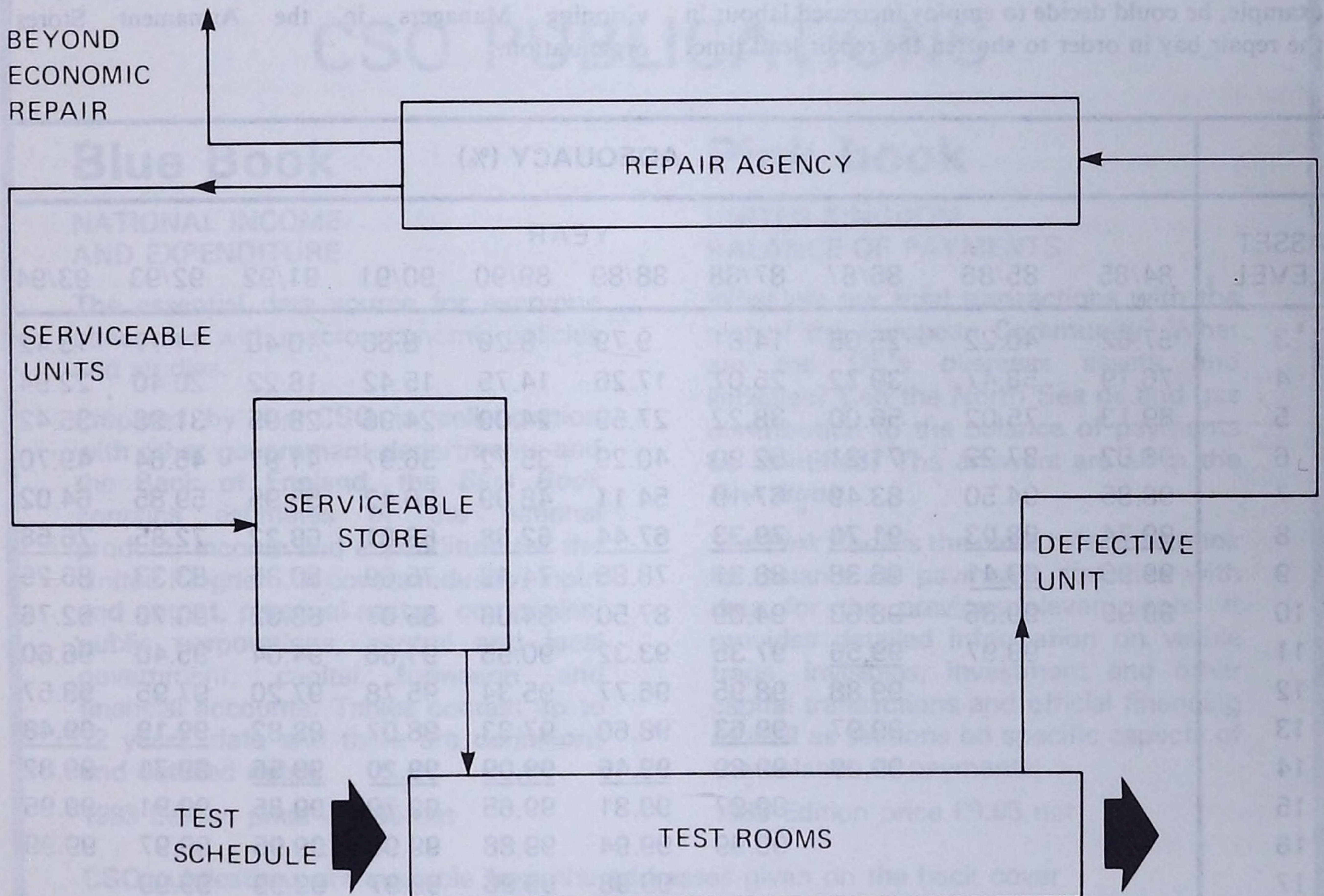
The output can be used in two ways – either to assess the performance (in terms of adequacy) of a given level of assets now and in the future or to establish asset levels (and consequently size and timing of purchase) to maintain a given level of performance. In the example output overleaf eight assets would yield a respectable 99 per cent adequacy in 1984/85 but (because for example of an increase in testing and losses of units due to beyond economic repair) a quite unacceptable performance within a few years. To achieve say 99 per cent adequacy throughout without further provisioning would require a current level of 14 assets. Management

will use this table in conjunction with their knowledge of procurement lead times to arrange purchases accordingly.

The Microcomputer Approach

The model was initially developed using a link to our mainframe computer bureau and was run by ourselves for several weapon applications taking input data from stores management and returning results to them in batch fashion. This allowed us to make certain technical improvements but we saw the main potential as making the program freely available to managers of individual weapons for interactive use. We were aware that weapon managers were shortly to acquire their own microcomputers and decided to produce a version of the model for operation on these machines. The model was recently launched under the name ASPRO (Armament Stores Provisioning program).

One improvement afforded by ASPRO is the facility to take a long term view. In general inventory control systems look ahead only a lead time. In the



missile/torpedo world with relatively small numbers of weapons and major units involved long term testing programmes are worked up and this knowledge is utilised by the model. Although it is arguable that purchase decisions need not be made more than a lead time ahead, awareness of the extent to which current assets may be in surplus but will be required later in the life of a weapon and also the peak level of asset requirements is extremely useful background knowledge.

The major advantage of ASPRO over the existing system is its interactive approach. No matter how sophisticated a statistical technique a provisioning manager will pay scant attention to recommendations based on data in which he has little faith. The micro-computer program allows the manager to explore the effect of varying his basic data – it runs in a matter of seconds and further runs based on alternative data are easily obtained. For example, management may be aware that the historic value of failure rate on test for a particular unit is no longer appropriate because of a modification to that unit, they are therefore able easily to test the effect of lower value failure rates on asset requirements. Interactivity also enables the manager to test the effect of other decisions under his control, for example, he could decide to employ increased labour in the repair bay in order to shorten the repair lead time.

The resulting reduced level of assets required could then easily be assessed.

ASPRO is just one illustration of the scope which greater availability of microcomputers in the normal working environment affords for the application of statistical methods to assist executive staff in their decision making processes. It enhances their ability to use their own skills and experience to determine purchases by using a statistical tool under their own control and which does not take away their responsibility for their actions.

Software description and availability

The model described here was developed and programmed on our EQUINOX microcomputer, it is coded in BASIC and some 500 lines long. The Armament Stores organisation use SYRIUS micro computers but despite apparent compatibility problems, for example, we use eight inch floppy discs compared with the five inch discs on the SYRIUS and different operating systems on the EQUINOX and SYRIUS, program transfer was achieved without difficulty.

Copies of the ASPRO program and user guide are now available as an aid to individual weapon provisioning Managers in the Armament Stores organisation.

ASSET LEVEL	ADEQUACY (%)									
	YEAR									
	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
3	57.62	40.22	25.08	14.81	9.79	8.26	8.66	10.40	11.77	13.42
4	76.19	58.47	39.72	25.07	17.26	14.75	15.42	18.22	20.40	22.94
5	89.13	75.02	56.00	38.22	27.59	24.00	24.96	28.95	31.98	35.42
6	96.02	87.22	71.31	52.90	40.29	35.72	36.97	41.97	45.64	49.70
7	98.85	94.50	83.49	67.19	54.11	48.99	50.42	55.95	59.85	64.02
8	<u>99.74</u>	<u>98.03</u>	<u>91.70</u>	<u>79.33</u>	<u>67.44</u>	<u>62.38</u>	<u>63.81</u>	<u>69.22</u>	<u>72.85</u>	<u>76.58</u>
9	99.95	<u>99.41</u>	96.38	88.31	78.85	74.42	75.69	80.35	83.33	86.25
10	99.99	99.86	98.63	94.09	87.50	84.06	85.07	88.62	90.76	92.76
11		99.97	<u>99.56</u>	97.35	93.32	90.95	91.66	94.04	95.40	96.60
12			99.88	98.95	96.77	95.34	95.78	97.20	97.95	98.57
13			99.97	<u>99.63</u>	98.60	97.83	98.07	98.82	<u>99.19</u>	<u>99.48</u>
14			99.99	99.89	<u>99.46</u>	<u>99.09</u>	<u>99.20</u>	<u>99.56</u>	99.71	99.82
15				99.97	99.81	99.65	99.70	99.85	99.91	99.95
16				99.99	99.94	99.88	99.90	99.95	99.97	99.99
17					99.98	99.96	99.97	99.99	99.99	
18						99.99	99.99			

Conclusion

The objective of the model is to provide a quick and easy aid for use by the provisioner in his task of formulating, modifying and assessing provisioning decisions for major repairable units. As such the model has been constructed to require minimal inputs and to provide speedy outputs in an easily digestible form. The provisioner can adopt an interactive approach thereby testing alternative options and assessing the effect of inaccurate parameters.

Acknowledgement

The authors acknowledge the assistance rendered by Ms Jenny Keyzor in development and programming of the model.

Note:

Any enquiries should be addressed to:

Defence Statistics (E)2
Room 123
Block D
Ministry of Defence
Bath BA1 5AB
Avon

CSO PUBLICATIONS

Blue Book

NATIONAL INCOME AND EXPENDITURE

The essential data source for everyone concerned with macro-economic policies and studies.

Prepared by the CSO in collaboration with other government departments and the Bank of England, the *Blue Book* contains estimates of the national product, income and expenditure for the United Kingdom. It 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 and there are definitions and detailed notes.

1983 Edition price £13.95 net

CSO publications are available from the addresses given on the back cover

Pink book

UNITED KINGDOM BALANCE OF PAYMENTS

What are our total transactions with the rest of the European Community? What are the UK's overseas assets and liabilities? Can the North Sea oil and gas contribution to the balance of payments be identified? The answers are all in the *Pink Book*.

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

1983 Edition price £9.95 net

Recently available statistical series and publications

The following publications containing social statistics have recently, or will soon become available during April – June quarter of 1984. 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*.

Office of Population Censuses and Surveys

Census 1981

Economic Activity, Great Britain

Economic Activity: microfiche, Avon

Economic Activity: microfiche, Greater London

Other country reports will be published throughout the period May – September

Ward and Civil Parish Monitors (complete series is now available from OPCS Information Branch, St Catherine's House, 10 Kingsway, London, WC2B 6JP.
Evaluation of the 1981 Census: demographic comparison OPCS Monitor CEN 84/1

OPCS Monitors

Live births 1983 FM1 84/1

Births by birthplace of parent 1982 FM1 84/2

Births by birthplace of mother 1982: local authority areas FM1 84/3

Final 1981 and revised 1971-80 population estimates for local government and health areas of England and Wales PP1 84/2

Adoptions 1983 FM3 84/1

Sudden Infant Death Syndrome, 1981 and 1982 DH3 84/1

Annual Reference Volumes

Local authority vital statistics 1982 VS No 9

Mortality statistics: area 1982 (microfiche) DH5 No 9

Mortality statistics: childhood 1981 DH3 No 10

Mortality statistics: childhood 1982 DH3 No 11

Mortality statistics 1982 DH1 No 13

Population projections 1981-2021 PP2 No 12

Population projections: area 1981-1991 PP3 No 5

Hospital In-Patient Enquiry, Main tables 1981: microfiche MB4 No 18

Social Survey Reports

Women in employment: a lifetime perspective (produced jointly with the Department of Employment)

Women in employment: technical report (available only from OPCS Social Survey Division)

Museum Visitors SS 1147

Studies on Medical and Population Subjects

Immigrant mortality in England and Wales 1970-78 SMPS 47

Department of Education and Science

Statistical Bulletin 17/83: *Higher Education in Great Britain*

Statistical Bulletin 1/84: *Pupil/Teacher Ratios for each Local Education Authority in England – January 1983*

Statistical Bulletin 2/84: *Education Statistics for the United Kingdom 1983 Edition*

Statistical Bulletin 3/84: *Student Awards – Figures for 1981-82*

Statistical Bulletin 4/84: *Pupils under Five Years in each Local Education Authority in England – January 1983*

Statistical Bulletin 5/84: *Enrolments on non-advanced courses of further education*

Statistical Bulletin 6/84: *Statistics of Schools in England – January 1983*

Statistical Bulletins are available free of charge from the Department of Education and Science, Room 1/28, Elizabeth House, York Road, London SE1 7PH

Statistics of Schools 1982

Statistics of School Leavers, CSE and GCE, England 1982

Statistics of Further Education, November 1982

Statistics of Teachers in Service in England and Wales 1982

Statistics of Finance and Awards 1981-82

Further information and copies of the above can be obtained from the Department of Education and Science, Room 337, Mowden Hall, Staindrop Road, Darlington DL3 9DG.

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

Department of Employment

Employment Gazette, published towards the end of each month, regularly contains recent data and time-series on employment, unemployment, earnings, prices, family expenditure and other indicators. In recent months articles have appeared on retail prices in 1983 and the 1984 revisions to the RPI weights, on labour costs and the earnings and hours of manual workers, on homeworkers and outworkers, unemployment flows, registered disabled staff in the public sector, and international comparisons of industrial stoppages. *Employment Gazette* is published monthly by HMSO, price £2.75 net per issue. Annual subscription inclusive of postage £32.76.

Department of the Environment

Housing and Construction Statistics fourth quarter 1983: Part 1 No 16 and Part 2 No 16

Local Housing Statistics Issue 69, figures for fourth quarter 1983

The following information is issued in statistical bulletins 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, planning applications and decisions: England, renovations*

Half yearly: *Homeless households*

Annually: *Slum clearance*

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

Department of Transport

The following statistical bulletins are issued on a regular basis:

Quarterly: *Traffic in Great Britain fourth quarter 1983*

Road Accident and Casualties in Great Britain fourth quarter 1983

Quarterly Transport Statistics fourth quarter 1983

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

Scottish Education Department

Statistical Bulletins on the following subjects:

Placing Requests in Education Authority Primary and Secondary Schools

Changes in the Pattern of School Leaving and Post-School Activity

Pupils and Teachers in Education Authority Primary and Secondary Schools

Special Schools

First Destination of University First Degree Graduates

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

Residential Accommodation for the Elderly and Certain Other Adults 1982

Copies of the above bulletins may be purchased (price 50p post paid) from:

The Library

Official Publication Sales

Scottish Office

Room 2/65

New St Andrew's House

Edinburgh

EH1 3TG

Telephone: 031-556 8400 Ext. 5901

Scottish Home and Health Department

Statistical Bulletins on the following topics are:

No 1/1983 *Court proceedings 1981*

No 2/1983 *Recorded Crime in Scotland 1982*

No 3/1983 *Recorded Crime in Scotland January to June 1983*

No 1/1984 *Survey of Fine Defaulters*

Copies of these bulletins may be obtained from:

Scottish Home and Health Department

Criminal Statistics Unit

Room 324B

St Andrew's House

Edinburgh

EH1 3DE

Telephone: 031-556 8501, Ext. 3144

Scottish Development Department

Statistical Bulletins

HSIU No. 3 *Sales of Public Sector Houses*

HSIU No. 4 *Housing Trends in Scotland: quarter ended 30 June 1983*

Statistical Bulletins price 50p may be obtained from:

Housing Statistics and Intelligence Unit

Scottish Development Department

Room 303

St Andrew's House

Edinburgh EH1 3DD

Telephone: 031-556 8501 Ext. 3191

Home Office

Control of immigration statistics United Kingdom 1982
Report of the Police Complaints Board 1983
Report of the Gaming Board 1983
Report of the work of the Equal Opportunities Commission 1983
Report of the Parole Board 1983
Report of the Commissioner of Police of the Metropolis 1983

Statistical Bulletins:

Immigration from the Indian Sub-continent, United Kingdom 1983
Statistics of deaths in Police Custody in England and Wales 1983
Statistics on the prevention of terrorism (Temporary Provisions) Acts 1974 and 1976 1st quarter 1984
Control of immigration statistics United Kingdom 1st quarter 1984
Statistics on the operation of Sec 62 Criminal Law Act 1977 England and Wales, 1983
Notifiable offences recorded by the Police, England and Wales 1st quarter 1984
Coroners Statistics, England and Wales 1983

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

Welsh Office

Residential Accommodation for the Elderly, Younger Physically Handicapped and Blind. Year Ended 31/3/83
Key Statistical Indicators for National Health Service Management in Wales No. 2 1983
Activities of Social Services Departments. Year Ended 31/3/83
Farm Accounts in Wales 1982/83

The above publications are available only from:

Publications Unit
 Economic and Statistical Services Division
 Welsh Office
 Cathays Park
 Cardiff CF1 3NQ
 Telephone: 0222-82 5054

New surveys assessed by the Survey Control Unit (continued from page 65.25)

LIST OF ABBREVIATIONS

General

DIY Do it yourself
 LA Local authority
 NI National insurance
 YTS Youth Training Scheme

Sponsors

COI Central Office of Information
 DEM Department of Employment
 DOE Department of the Environment
 DTI Department of Trade and Industry
 ETB English Tourist Board
 IDS Industry Department for Scotland
 MAFF Ministry of Agriculture, Fisheries and Food
 MSC Manpower Services Commission
 OFT Office of Fair Trading
 SED Scottish Education Department
 STB Scottish Tourist Board
 WO Welsh Office

Location

E England
 EW England and Wales
 GB Great Britain
 NW North West England
 S Scotland
 SE South East England
 SW South West England
 UK United Kingdom
 W Wales
 YH Yorkshire and Humberside

Frequencies

A annual
 AH ad hoc
 C continuous
 M monthly
 Q quarterly

New surveys assessed by the Survey Control Unit December 1983 to February 1984

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 December 1983 to February 1984

Title	Sponsor	Those approached	Approximate number approached	Location	Frequency
Business surveys					
Company Training and recruitment: effects of new technologies	DEm	Manufacturers and distributors	1,560	GB	AH
Young workers scheme internal survey	DEm	Employers	100	GB	C
Job release scheme replacement survey 1984	DEm	Employers	160	GB	M
Enterprise allowance: follow-up in control areas	DEm	Self-employed	123	E	AH
Promotion of high technology in the North West	DTI	High technology manufacturers	90	NW	AH
Metalaxyl resistant brassica downy mildew	MAFF	Farmers	1,100	EW	AH
New technology and demand for skills: study of skill level analysis in SE	MSC	Manufacturers	100	SE	AH
Survey of YTS providers	MSC	Employers	1,060	GB	AH
Industrial relations training	MSC	Employers	5,000	GB	AH
Manufacturers and traders guarantees and extended warranties	OFT	Manufacturers and distributors	440	GB	AH
Inward acquisitions, mergers and their impact on the Scottish economy	IDS	Manufacturers	50	S	AH
Survey of industrial wastes and by-products in South Wales	WO	Waste producers	9,000	W	AH
Local authority surveys					
Review of slum clearance activity	DoE	Housing departments	60	EW	AH
Community programme sponsors survey	MSc	LA and voluntary organisations	450	GB	AH
Statistics of adoption applications	SED	Courts	49	S	Q
Return of recorded pupils	SED	Education authorities	12	S	A
Other surveys					
Enterprise allowance scheme research	COI	Unemployed	600	GB	AH
1982 final year undergraduates – careers survey	COI	Male undergraduates	877	GB	AH
National insurance numbercard research	COI	Adults	937	GB	AH
Inland Revenue public attitude survey	COI	Taxpayers	650	GB	AH
NI numbercard research awareness check	COI	Adults	1,300	GB	AH
Mental illness/mental handicap nursing as a career: advertising research	COI	Youths	100	SW	AH
Right to buy target market research	COI	Council house tenants	75	UK	AH
1984 career choice among final year undergraduates	COI	Final year undergraduates	900	GB	AH
Army nursing officer qualitative research	COI	Nurses	85	GB	AH
Home Office crime prevention 1983 evaluation omnibus	COI	Owner occupiers	700	GB	AH
Long-term unemployment amongst 18-24 year olds	DEm	Unemployed youths	3,360	GB	AH
Study on follow-up techniques applying to footwear accidents	DTI	Patients	300	EW	AH
Indepth study accidents involving DIY and electrical gardening equipment	DTI	Patients	500	EW	AH
British home tourism survey 1984	ETB	Adults	24,000	GB	A
Education training and employment of 16-18 year olds: Scotland	MSC	Youths	4,000	S	AH
Education training and employment of 16-18 year olds: Sheffield	MSC	Youths	3,000	YH	AH
Guarantees and extended warranties: consumer survey	OFT	Consumers	600	GB	AH
Consumer prepayments	OFT	Consumers	10,000	GB	AH
Marketing follow-up survey 1984	STB	Tourists	1,600	UK	AH
Enveloping: monitoring in Rhondda	WO	Tenants and owner occupiers	149	W	AH

For list of abbreviations see page 65.24

POPULATION AND VITAL STATISTICS

1981 Census results

People in Britain

The first two of a new series of wallcharts (measuring approximately 85 cm × 70 cm) illustrating some of the main findings from the 1981 Census of Population are now available.

People in Britain: 1—Population shows the distribution of the population of Great Britain in 1981 and some of the changes that have taken place since the first census in 1801, including the recent slowing of population growth, regional and district gains and losses 1971-81 and post-Second World War changes in the age structure of the population.

People in Britain: 2—Pensioners shows the distribution of people of pensionable age in Great Britain at the time of the 1981 Census, and changes that have occurred this century, including changes in the counties with the highest and lowest proportions of pensioners in the population in 1921 and 1981, the proportions of pensioners who are owner occupiers or who have cars in metropolitan and non-metropolitan areas, changes in the numbers of pensioners during this century, and post-Second World War increases in numbers of pensioners living alone.

These wallcharts feature large maps of Great Britain produced by OPCS computer mapping methods developed specially to handle and plot data for single and aggregated census enumeration districts: for the particular variable being plotted, each point represents the combined value of those enumeration districts with centres falling within a 2.5 × 2.5 kilometre square. The point may represent a single enumeration district or a group of enumeration districts.

Economic activity statistics on microfiche

The first of a series of Economic Activity reports – containing data from the 1981 Census of Great Britain was published in April 1984. Each report (one for each county in England and Wales) will consist of explanatory notes as well as an index to the four tables of statistics which will be contained on microfiche.

The tables provide analyses of the resident population aged 16 and over for each county, county district, city centre and New Town, by economic position, employment status, occupation and socio-economic group; and of the working population in these areas, by economic position, employment status and industry.

A further report covering more detailed analyses at the national and standard regional levels was published in April by HMSO separately, in paper copy format.

Each microfiche report will be published by HMSO at £4 (plus VAT) and the complete set of 54 reports will be complete around July 1984.

References

OPCS *People in Britain: 1 Population* Wallchart (OPCS 1984) and *People in Britain: 2 Pensioners* Wallchart (OPCS 1984) (Price £2.00 per chart from: Information Branch (Dept SN), OPCS, St Catherines House, 10 Kingsway, WC2B 6JP. An additional charge of £1.00 plus VAT will be made per invoice if payment is not sent with the order.)

OPCS *Census 1981 Economic Activity: microfiche* (HMSO 1984) (Price £4.00, plus VAT, per county)

OPCS *Census 1981 Economic Activity, Great Britain* (HMSO 1984) (Price £17.70 net)

1981 Census – Scotland

Scottish Reports timetable

The *Gaelic Report, Migration Volume 2 (100%)* and *Scottish Summary Volume 2* were published in December 1983; *Housing and Households*, and *Migration Volume 1 (100%)* in February 1984; and *Migration Volume 3 (10%)*, and *Workplace and Transport to Work* in March 1984. It is hoped that the rest of the reports for Scotland will be published as follows:

<i>Economic Activity (occupation, industry, socio-economic group)</i>	April 1984
<i>Economic Activity Tables for Local Government Areas; these will be on microfiche</i>	April 1984
<i>Urban Areas</i>	May 1984
<i>Household and Family Composition</i>	May 1984
<i>Migration Volume 4 (10%)</i>	July 1984

10 per cent 1971 reformatted small area statistics (SAS) Tables are available on magnetic tape and microfiche for standard areas and localities.

1981 Census postcode based workplace/transport tables The 10 per cent and 30 per cent tables are available on magnetic tape and microfiche.

1981 Census Enumeration District(ED) Reference Table To permit aggregation of SAS for Enumeration Districts to most non-standard areas, an ED reference table has been prepared containing codes for Health Board Areas, Health Board Districts, New Towns, Civil Parishes, Urban/Rural types, Localities, Local Employment Office Areas and District Wards. The table is available on magnetic tape for each region and on two microfiches for the whole of Scotland.

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

Census Customer Services
GRO (S) Ladywell House
Ladywell Road
EDINBURGH
EH12 7TF.

Population Trends

The latest edition of *Population Trends*, the quarterly journal of the Office of Population Censuses and Surveys, was published in March and contained the following articles:

Fertility and family background: some illustrations from OPCS Longitudinal Study

The OPCS Longitudinal Study is based on a one per cent sample of the usually resident population of England and Wales enumerated in the 1971 Census. Since that year, details of births occurring to women in the sample have been linked to census records. This article, by Barry Werner of OPCS Population Statistics Division, presents some illustrations of how such linked data can be used to provide information about possible associations between women's family backgrounds and their fertility histories at younger ages.

Suicides 1950-82

Although suicides account for under one per cent of deaths in any year in England and Wales, the loss of life due to this cause arouses much social concern and such deaths continue to make headlines in the newspapers. In an earlier review of suicides (in *Population Trends 2*) the effects of the Suicide Act 1961, which abolished the criminal aspect of suicide, were examined for deaths in the period 1961-74. In the present article, Lak Bulusu and Michael Alderson of OPCS Medical Statistics Division, examine suicides since 1950 to up-date the earlier review and to set the recent data against the background of the earlier trend.

Minimal household units

For many social policy analyses, the family, rather than the individual or household, is the most appropriate unit for analysis because families are assumed to pool their resources and to make joint decision about housing and financial matters. As families are of different types and as there is a variety of possible relationships between household members, particularly in large households, the analysis of data on individuals, families and households can be difficult. This article, by Elizabeth Overton and John Ermisch of the Policy Studies Institute, describes a system for analysing household formation by identifying the basic building blocks—the minimal household unit—from which households are formed.

Patterns of migration from the 1981 Census

The 1981 Census included a question about whether a person's usual address was the same as, or different from, that of one year previously, and where the address had changed, the address a year before had to be given. John Brant of OPCS Census Division describes how this is an important source of

information on the scale and nature of internal migration in Great Britain.

Population estimates 1961-81: a new series

The 1981 Census also provided a new base for the Registrar General's annual population estimates and led to a discontinuity with the estimates for earlier years, in part because of a change in definition of who should be included and in part because the Census showed up errors which had crept into the estimates over the decade. As a result a revised series of population estimates has been prepared for the period 1961-80.

References

Population Trends 35 Spring 1984 (HMSO 1984) (Price £4.50 net)
Population Trends 2 Winter 1975 (HMSO 1975)

Birth statistics

The number of live births occurring in England and Wales during 1983 was 628 thousand, just 0.4 per cent higher than the previous year, but since the population of women of childbearing age is estimated to have increased by a larger proportion than this between 1982 and 1983, the overall level of fertility (as measured by the total period fertility rate) is estimated to have fallen from 1.76 to 1.75. A recent OPCS Monitor shows the annual figures of live births over the period 1977-83 and recent quarterly changes in the number of births, the crude birth rate, the general fertility rate and the total period fertility rate in England and Wales, as well as live birth registrations for each county in 1982 and 1983.

Details of births in England and Wales by birthplace of both parents, and by birthplace of mother only for local authorities, for 1982 were published in two further OPCS Monitors in March. And in the most recent OPCS annual reference volume, detailed analyses of births in England and Wales for the year 1981, were published in April.

References

OPCS Live births during 1983 OPCS Monitor FM1 84/1 (OPCS 1984)
OPCS Births by birthplace of parent 1982 OPCS Monitor FM1 84/2 (OPCS 1984)
OPCS Births by birthplace of mother 1982: local authority areas OPCS Monitor FM1 84/3 (OPCS 1984)
(OPCS Monitors are available free from OPCS Information Branch at the address on page 65.22)
OPCS Birth statistics 1981 Series FM1 no. 8 (HMSO 1984) (Price £7.40 net)

Mortality statistics

HMSO continue to publish the Registrar General's review of mortality in England and Wales for the year 1982 in three recent OPCS reference volumes on mortality from accidents and violence, mortality by local authority and health area, and a summary volume for the year.

The series of 1981 reports was concluded with the recent publication of childhood mortality volume and the corresponding report for 1982 will shortly be available to conclude the series for that year.

References

- OPCS *Mortality statistics 1982: accidents and violence* Series DH4 no. 8 (HMSO 1984) (Price £5.20 net)
- OPCS *Mortality statistics 1982: area* Series DH5 no. 9 (HMSO 1984) (Price £6.50 plus VAT)
- OPCS *Mortality statistics 1982* Series DH1 no. 13 (HMSO 1984) (Price £4.70 net)
- OPCS *Mortality statistics 1981: childhood* Series DH3 no. 10 (HMSO 1984) (Price £6.80 net)
- OPCS *Mortality statistics 1982: childhood* Series DH3 no. 11 (HMSO 1984) (Price forthcoming)

Population projections: mid-1981 based

The size of the home population of England and Wales is projected to increase at a slow rate over the next few decades. Starting from a figure of 49.6 million in 1981, the number of persons in the population is projected to change very little in the first half of the 1980s then to rise to 51.4 million by the year 2001 and 53.0 million in the year 2021, increases during the successive 20-year periods of 4 per cent and 3 per cent respectively. Over the 40-year period 1981 to 2021 as a whole, the average annual rate of increase in the size of the population is below 0.2 per cent. In the longer term, these projections lead to the size of the population stabilising at around 54 million by the middle of next century.

The age structure of the population is projected to change. In the medium to longer term future, the main increase in the size of the population is projected to occur in the number of people over age 45. This number starts from 18.7 million in 1981 and increases only slowly over the coming decade, but then rises to 19.9 million by the year 2001 and 22.6 million by the year 2021; the rates of increase during the successive 20-year periods are 6 per cent and 14 per cent respectively. The population of those aged 75 years and over is however projected to show the particularly rapid rate of increase of 21 per cent over the coming decade, from 2.9 million people in 1981 to 3.5 million in 1991.

The projected numbers in the younger age-groups fluctuate over the next few decades, as the effects of variations in numbers of births work their way up the age distribution. But in total the population under 45 years of age is projected to remain around 31 million throughout the whole of the period.

The population used as the basis for these 1981-based projections which have been published in a recent OPCS reference volume and Monitor is the home population (revised definition), covering all persons usually resident in England and Wales.

The biennial volume produced jointly by OPCS and the Government Actuary Department gives full details of the method of making the projection; the base population used; the mortality, migration and fertility assumptions made; and includes a section on projections resulting from applying variant fertility and mortality assumptions. The detailed tabulations (presented on 13 microfiche) give projected figures of

population, births, deaths, natural increase, migration and total increase for single years 1981-2021 by sex and single years of age for the principal projection as well as summary statistics for the fertility and mortality variants. Some projections to the year 2051 are also presented. Data is given for the United Kingdom and constituent countries.

References

- OPCS/GAD *Population projections 1981-2021* Series PP2 no. 12 (HMSO 1984) (Price £7.50 plus VAT)
- OPCS *Population projections: mid-1981 based* OPCS Monitor PP2 83/1 (OPCS 1983) (Available free from OPCS Information Branch at the address given on page 65.22)

Vital statistics – Scotland

Vital Statistics tables relating to the fourth quarter of 1983 appeared in the *Register General's Weekly Return* from WR8/84. Provisional annual statistics for 1983 have also been published.

Population estimates – Scotland

Annual estimates of the population of Scotland to Region and Local Government District level were published in the *Registrar General's Weekly Return*, WR6. Age and sex tables will be published in the Spring.

SOCIAL STATISTICS

Social Security Statistics 1983 Edition

This is the eleventh issue of the annual *Social Security Statistics* compiled by the Department of Health and Social Security. It provides tables covering each of the social security benefits, National Insurance contributions, finance and relative movements on contributions, benefits and prices and earnings. Tables showing trends over several years are included and detailed analyses are provided for the most recent year available.

The tables are grouped in sections according to benefit or subject and relate to Great Britain unless otherwise stated. A brief descriptive note of the main features of the relevant benefit, as they currently apply, appears as a prologue to each section. These notes do not purport to cover all the conditions for entitlement to benefit or payment of contributions, nor do they give a history of the various changes which have occurred over the years. If more information is required on a particular subject, a copy of the appropriate explanatory leaflet should be consulted, and a list of these is given in Appendix 1. Other appendixes give the sources of the statistics, description of social security regions and description of standard regions.

Any enquiries, or requests for further information, regarding statistics about social security should be sent to:

Department of Health and Social Security
Statistics and Research Division
HQ Division SR8
Room A2111
Newcastle Central Office
NEWCASTLE UPON TYNE NE98 1YX
Telephone: Newcastle (0632) 79 7373.

Reference

Social Security Statistics 1983 (HMSO 1983) (Price £13.50 net).

Criminal Justice Act 1982: Receptions into prison department establishments of young offenders

The Home Office has recently published a bulletin which provides information on the receptions of young offenders under sentence since Part 1 of the Criminal Justice Act 1982 came into effect on 24 May 1983, and make comparisons with receptions in the early part of 1983 and in previous years. The information is analysed by type of custody, sex, age and length of sentence and there is discussion of the effect of the changes in the sentencing structure on the prison population.

Reference

The Criminal Justice Act 1982: Receptions into prison department establishments of young offenders, Home Office Statistical Bulletin 3/84, 13 March 1984 (Price £2.50 net), available from the address given on page 65.24.

Domestic proceedings in magistrates' courts

This first bulletin gives results from a new system for collecting statistics of domestic proceedings in magistrates' courts. It gives information on the operation of the Domestic Proceedings and Magistrates' Courts Act 1978 which came into operation on 1 February 1981. Estimates are given for the first half of 1982 and the first half of 1983. The figures cover applications for maintenance, custody/access, guardianship and affiliation; applications for the variation, revival or revocation of orders; proceedings for enforcement of payments of maintenance and attachments of earnings orders.

Reference

Statistics of domestic proceedings in magistrates' courts, Home Office Statistical Bulletin, Issue 1/84, 19 January 1984, (Price £1.50 net)

Scottish criminal statistics

Court proceedings 1981

Analyses of persons against whom charges were proved in Scottish courts in 1980 and 1981 classified by age, the main crime or offence proved and the main sentence imposed are given in this bulletin.

Recorded crime in Scotland 1982

Comparisons of the numbers of crimes and offences recorded by the Scottish police in 1972, 1977 and 1980-1982 are made in this bulletin, which also analyses detection rates.

These two bulletins, which update some of the figures in *Criminal Statistics Scotland 1979* were the first in a series of statistical bulletins on topics in the Scottish

criminal justice systems using statistics collected by the Scottish Home and Health Department.

Subsequent issues are:

Recorded crime in Scotland January to June 1983.

This gives figures on crimes and offences recorded by the Scottish police for the first half of 1983 with comparisons with earlier years.

Survey of fine defaulters

This bulletin presents the results of a survey of fine defaulters (persons given custodial sentences for failing to pay fines) released from Scottish penal establishments in 1979. It gives information on default rates, outstanding fines and the extent to which defaulters exercised the option to pay the outstanding fine to secure release, rather than serve the sentence imposed.

Copies of these bulletins may be obtained from:

Scottish Home and Health Department
Criminal Statistics Unit
Room 324B St Andrew's House
Edinburgh EH1 3DE
Telephone: 031-556 8501, Ext. 3144.

Residential accommodation for the elderly and certain other adults 1982 – Scotland

This bulletin, published by the Social Work Services Group of the Scottish Education Department, is the fifth in a series of publications giving information on residential accommodation for the elderly and certain other adults including the physically handicapped, mentally handicapped and mentally ill. The information, which is compiled from returns completed by local authority social work departments and homes run by voluntary organisations or private individuals and registered by local authorities in terms of Part IV of the Social Work (Scotland) Act 1968, relates to residents and places as at 31 March 1982.

For details of availability and price of the above bulletin see page 65.23.

Sales of public sector houses – Scotland

A Statistical Bulletin issued by the Scottish Development Department in February gives details of sales to sitting tenants of local authority, New Town Development Corporation (New Towns) and Scottish Special Housing Association (SSHA) houses in the period between October 1980, when the 'right to buy' provisions of the Tenants' Rights Etc (Scotland) Act 1980 came into effect, and the end of 1982.

Comment and tables cover the distribution of sales by district; type, size and age of dwellings; average valuations and selling prices; discounts and source of finance.

Statistical Bulletins price 50p can be obtained from the address given on page 65.23.

HEALTH

Hospital In-patients Enquiry (HIPE)

Following the recent publication of the summary tables of the 1981 HIPE report, the main analyses were published in April as an OPCS microfiche booklet, continuing the format established with the 1980 report (see *Statistical News* 63.23).

References

- OPCS/DHSS/Welsh Office *Hospital In-patients Enquiry 1981: summary tables* Series MB4 no. 17 (HMSO 1983) (Price £6.20 net)
OPCS/DHSS/Welsh Office *Hospital In-patients Enquiry 1981: main tables (Microfiche)* (HMSO 1984) (Price £9.00 plus VAT)

Mental illness and mental handicap in-patient statistics

The latest annual report on in-patient statistics from mental illness and mental handicap hospitals and units in England was issued by the Department of Health and Social Security in February 1984. This 1979 report contains detailed tables on admissions, discharges, deaths and resident patients and some information on trends from 1970. Statistics on the legal status of in-patients and for the Special Hospitals are included in separate sections of the report. Corresponding material for 1980, 1981 and 1982 is in preparation.

Reference

- In-patient statistics from the mental health enquiry for England 1979*, DHSS Statistical and research report series no. 25 (HMSO) (Price £6.75 net)

Scottish health

Scottish Health Statistics

The twenty-fifth edition of *Scottish Health Statistics (SHS)* was published in February. It is the most comprehensive set of detailed statistics on the National Health Service (NHS) in Scotland. The issue contains new tables on perinatal mortality trends; immunisation rates by health board area; and the workload of diagnostic radiologists and radiographers.

The volume contains statistics on births; infant and child health; morbidity and mortality; hospital inpatient statistics; hospital, community, family practitioner and central health services; abortion statistics; and staffing and costs of the NHS.

Health in Brief (HIB), the pocket companion to *Scottish Health Statistics*, was published at the same time. A wide range of detailed publications is also produced—these are listed in appendices to *SHS* and *HIB*.

Scottish Hospital Inpatient Statistics 1981

The twenty-first in the series, was published in January. It contains information on patients discharged from Scottish hospitals (except for mental illness, mental deficiency, and maternity hospitals and units). Analyses include discharges, bed days and stay by age, sex and

diagnosis; and by area of residence and diagnosis. Cases, mean stay, waiting list cases and mean wait are shown by area of treatment and operation. Detailed analyses are shown on microfiche: these include discharges and mean stay by specialty, age and diagnosis/operation.

Medical and Dental Staff in Scotland: Hospital and Community Services at 30 September 1983

This volume will be published in May 1984. The statistics, collected by a census, analyse staff by grade, age, sex, specialty and health board area. The booklet has been revised and has twenty-five tables; amongst the new ones are analyses of units of medical time, domiciliary consultations, and permanent vacancies by grade and specialty. Distinction awards are analysed by specialty.

General Medical Services at 1 October 1983

This volume will also be published in May 1984. It presents statistics showing the type of practitioners, services provided, practice structure, and list sizes analysed by health board areas and for Scotland.

Hospital Utilisation Statistics and Hospital Bed Resources—year ending 31 March 1982

These volumes will be published in April 1984. The first gives data on hospital beds, bed use, waiting lists, and outpatient attendances, analysed by specialty. The second contains data on the numbers of available beds by hospital and specialty.

Laboratory Statistics for the year ending 31 March 1983

The four booklets (pathology, haematology, microbiology, and clinical chemistry) have information on staffing and workload for each laboratory and were published in March 1984.

Copies can be obtained from:

Information Services Division
Common Services Agency
Scottish Health Service
Trinity Park House
South Trinity Road
Edinburgh EH5 3SQ.

Telephone: 031-552 6255 Ext. 2707

References

- Scottish Health Statistics 1982* (HMSO 1984) (Price £14.95 net)
ISBN 0 11 887428 4

Available from address above:

- Health in Brief 1982* (Price £1.00 net)
Scottish Hospital In-Patient Statistics 1981 (Price £7.50; with Microfiche £10.00)
Medical and Dental Staff in Scotland—Hospital and Community Services 1983 (Price £4.00)
General Medical Services 1983 (Price £4.00)
Hospital Utilisation Statistics 1982 (Price £4.00)
Hospital Bed Resources 1982 (Price £5.00)
Laboratory Statistics 1983 4 volumes (*Pathology, Haematology, Microbiology, and Clinical Chemistry*) (Price £7.50 per volume)

EDUCATION

Higher education

Department of Education and Science (DES) Statistical Bulletin 17/83 *Higher Education in Great Britain* provides information about the numbers of full-time and part-time students participating in all advanced courses provided by universities (including the Open University) and by institutions of further education. It updates 1981-82 figures in Bulletin 9/82 and includes figures for the academic year 1982-83.

The Bulletin analyses the movement of home and overseas students in higher education, mostly over the five year period up to 1982-83. The numbers of full and part-time students and of full-time first year students are analysed by qualification aim and the type of institution. Diagrams of participation rates are included; also, tables showing the number of degrees awarded and the main subjects of study.

Copies of DES Statistical Bulletins are available, free, from

Department of Education and Science
Statistics Branch
Room 1/28
Elizabeth House
York Road
LONDON SE1 7PH
Telephone: 01-928 9222 Ext. 2776

Education statistics – Scotland

Placing requests in education authority primary and secondary schools

This statistical bulletin gives information on the number of placing requests received by education authorities during the period 1 August 1982 to 31 July 1983 under the Education (Scotland) Act 1981, which conferred upon parents the right to make a request nominating the school which they wished their children to attend.

Changes in the pattern of school leaving and post-school activity

Early analyses from the 1983 National School Leavers Survey (Scotland) are contained in this bulletin, which gives information on the 1981-82 school leavers; these leavers had the lowest post-war level of employment and the highest rate of full-time participation in post-school education.

Pupils and teachers in education authority primary and secondary schools

Published annually, this bulletin gives the number of pupils and teachers in education authority primary and secondary schools, and the number of schools at September 1982 and September 1983 (provisional).

Information is given for Scotland as a whole, and for regions and islands authorities: separate figures are provided for Roman Catholic schools where appropriate.

Special schools

This bulletin gives information derived from the school census returns of September each year from 1979 to 1982 about pupils, teachers and instructors in education authority and grant-aided special schools. It shows, for example, that in 1982 there were 10,870 pupils in special schools of whom 74 per cent were mentally handicapped.

First destination of university first degree graduates

A statistical bulletin, published with the agreement of the Department of Education and Science and the University Grants Committee, which records the first destination of first degree graduates from Scottish Universities in each of the years 1977 to 1982. The bulletin concentrates on Scottish domiciled graduates from Scottish universities, particularly those remaining in Scotland. Information given includes the numbers who, between their graduation and the following December, were known to have gained permanent employment, undertaken further academic study or research or are believed unemployed.

Copies of the above bulletins may be purchased (price 50p post paid) from:

The Library
Official Publication Sales
Scottish Office
Room 2/65
New St Andrew's House
Edinburgh
EH1 3TG
Telephone: 031-556 8400 Ext. 5901

Centre for Statistical Education

The Centre is the result of a unique cooperation between a polytechnic (Sheffield City) and a university (Sheffield). It draws on the expertise of both institutions in the area of statistical education. The University of Sheffield was the base of the Schools Council Project in Statistical Education and this was followed by the current Statistical Education Project (16-19). *Teaching Statistics* began publication in 1979 and the editorial offices are at the University. Sheffield City Polytechnic has been involved with initial and in-service courses in statistical education for many years and in 1979 set up a Regional Centre for Statistical Education for the Schools Council Project. Staff at both the University and Polytechnic are on national and international committees for statistical education and both institutions have produced publications for teachers.

With this combined background it seemed sensible to found a joint centre. For this first year, in premises supplied by the Polytechnic, the University has provided funds for a part-time director and secretarial assistance. The Director, Peter Holmes, is also currently director of the Statistical Education Project (16-19). The two co-

chairmen of the centre are Professor Vic Barnett of the Department of Probability and Statistics at the University, and Dr Warren Gilchrist, the head of Department of Mathematics, Statistics and Operation Research at the Polytechnic. For 1983-84 Dr Gilchrist has been seconded to work at the centre.

The Centre aims to support the development of statistical education at all levels, and in particular to help teachers make statistics more relevant to their students. This will include the following:

- developing teaching methods and materials appropriate to the needs of pupils and society;
- strengthening the links between education and industry in the development of statistics courses and the use of statistics;
- advising on syllabus and course improvement and the best methods of assessment;
- running in-service courses for teachers;
- being a resource centre for national and international materials on statistical education;
- providing a base for study and research, by visitors and staff, into the teaching and learning of statistics; and
- initiating new projects and coordinating the work of current projects in statistical education.

The Centre is developing a suite of programs in A-level Statistics for the BBC to supplement their television series 'A-level Statistics' to be first broadcast in summer 1984. These programs, for the BBC micro-computer, will be published by the BBC later this year.

The following publications are available through the Centre:

Project Work in A-level Statistics. (Price 35p including postage).

Mathematics in Sport (which contain useful statistical material as well).

No. 1 *Soccer Goals* No. 2 *Soccer Pitches* No. 3 *Soccer Attendances* No. 4 *The Decathlon* No. 5 *Test Match Cricket*

(Price 35p per copy including postage, with reduction for more than 20 copies).

Statistical Education and Training for 16-19 year olds (£3 including postage).

Teaching Statistics (3 issues a year). (1984 Subscription rate £4.75 in the United Kingdom. For overseas rates and price of back issues please write for details).

Proceedings of the First International Conference on the Teaching of Statistics Volumes I and II (£10.50 including postage).

Cheques for the first three items should be made payable to the Centre for Statistical Education.

For the last two items to Teaching Statistics.

Address for orders: CSE, 25 Bromsgrove Road, Sheffield S10 2NA.

MANPOWER AND EARNINGS

Labour force outlook for Great Britain

An article presenting estimates and projections for the civilian labour force in Great Britain up to 1991 was published in the February edition of *Employment Gazette*. The projections are based on the 1981 Labour Force Survey, and on the Government Actuary's Department's 1981-based population projections, adjusted by the Department of Employment to be consistent with the latest mid-1981 population estimates. The article examines factors influencing the labour force: in particular, those affecting women's economic activity rates are discussed in some detail, drawing on the results of recent research. The projections are based on a working assumption about the future demand for labour; the sensitivity of the projections to varying these assumptions is also shown. Regional labour force estimates and projections, consistent with these national figures, are currently in preparation.

It is estimated that over the period 1977-1981, when the population of working age increased by over three-quarters of a million, the labour force grew by less than 300,000. The main reasons were earlier retirement amongst men and a halt in the rising trend in female activity rates.

Continued growth in the population is expected to lead to a rise of three-quarters of a million in the labour force between 1981 and 1991. Virtually all of this growth should occur before 1988, after which both the population of working age and the labour force are expected to be roughly stable. Most of the increase up to 1988 is expected to be in the number of working women – the projection is for a rise of around half a million, about twice the growth in the male labour force. For both sexes the increases over the decade to 1991 are expected to be confined to the 20-54 age range; in the 16-19 and 55+ age ranges numbers will decline.

Reference

Employment Gazette, February 1984, pages 56 to 64 (HMSO) (Price £2.75 net)

Unemployment flows

An article in *Employment Gazette*, February 1984 provides the latest information on the flows into and out of unemployment, and about the duration of unemployment, which has become available following the introduction of the computerised count of unemployed claimants. Previous articles were published in the August and November 1983 editions of *Employment Gazette*, pp 351-358 and pp 470-474 respectively.

The latest results reflect the slackening in the inflow of claimants to unemployment benefits and an increase in the outflow. This is associated with the flattening of the underlying trend in unemployment.

Among the various analyses, an additional one for the year up to October 1983 shows that the longer a person is unemployed, the less is his or her likelihood of ceasing to be unemployed. However for those women and older men unemployed for 12 to 15 months, there is an increased outflow from the unemployment count of claimants who have exhausted their entitlement to unemployment benefit and are not entitled to or have not claimed supplementary allowance.

Reference

Employment Gazette August and November 1983 (HMSO) (Price £2.35 net each)
Employment Gazette February 1984 (HMSO) (Price £2.75 net)

Women and employment – a lifetime perspective

The report of a major study of the importance of employment in women's lives, undertaken jointly by the Department of Employment (DE) and Office of Population Censuses and Surveys (OPCS), will be published in May by HMSO. The research had two main aims: firstly, to establish what factors determine whether or not women work and the degree to which domestic factors shape women's lifetime labour market involvement; secondly, to examine women as workers by collecting information about types of work, pay, conditions of employment and labour market behaviour – the latter with particular reference to leaving jobs and looking for work. As part of the examination of women as workers the study also set out to determine the importance of work to women, and their job priorities. Fieldwork was conducted in 1980 by Social Survey Division of OPCS amongst a representative sample of women of working age resident in Great Britain. Although women were the main focus of the survey, a sub-sample of husbands/partners was also included. Interviews were conducted with approximately 5,600 women and 800 men.

An innovative feature of the survey was the collection of detailed work histories covering the working lives of female respondents since leaving full-time education; for older women, work histories covered some 40-45 years. For each job women were asked to describe their occupation, industry, length of time in the job and whether they were working full or part-time. Reasons for leaving jobs, not working, and returning to work were also asked. Another important feature of the survey was the inclusion of questions to explore women's attitudes to working, and men's and women's attitudes to women's roles at work and home.

The report contains a description and analysis of the main results of the survey together with tables and diagrams; topic areas include: occupational segregation, patterns of full and part-time working, the variations in women's pay and fringe benefits, trade union activity, the share of domestic work between wives and husbands, lone parents and employment, occupational

mobility, lifetime moves in and out of employment, unemployment and job search, and job priorities, attitudes and satisfaction.

The main report is being published as *Women and Employment – a lifetime perspective*. A subsidiary technical report is due to be published separately by OPCS. In addition, a number of articles related to the study are planned for publication in the *Employment Gazette* in the months May to July 1984. Two DE research papers based on further analyses of the data will also be published shortly, as will a third research paper based on a follow-up study of unemployed women identified in the main survey.

The survey data have also been deposited at the Economic and Social Research Council (ESRC) Data Archive at the University of Essex since July 1982 and are available to the research community for further analysis. Two projects are underway; the first, funded by the Equal Opportunities Commission, is based at the Institute of Employment Research at the University of Warwick, the second is being carried out by researchers at the Department of Sociology, University of Surrey. In addition, Dr Shirley Dex is collaborating with researchers using comparable American data with a view to conducting comparative analysis of the labour market participation and experience of British and American women. The Archive is planning a seminar and workshop on 8 June for potential users of the data.

References

- Jean Martin and Ceridwen Roberts *Women and Employment – a lifetime perspective*, Social Survey Report SS 1143 (HMSO 1984) (Price forthcoming)
Jean Martin and Ceridwen Roberts *Women and Employment: Technical report*, Social Survey Report SS 1143 (OPCS 1984) (Price forthcoming)
Heather Joshi *Women's participation in paid work: further analysis of the Women and Employment Survey* Department of Employment Research Paper No 45 (London 1984)
Shirley Dex *Women's work histories: an analysis of the Women and Employment Survey*, Department of Employment Research Paper No 46 (London 1984)
A Cragg and T Dawson *Unemployed women: a study of attitudes and experiences*, Department of Employment Research Paper No 47 (London 1984)

Copies of DE research papers can be obtained, free of charge, on request from – Department of Employment, Research Administration, Steel House, Tothill Street, London SW1H 9NF (Telephone: 01-213 4662)

Manual earnings by skill level

An article in the *Employment Gazette*, March 1984 gives information on earnings at different skill levels in the engineering and chemical industries in recent years, using data from the New Earnings Survey to update the results of the former June surveys of earnings in these industries.

A technical note discusses the comparison of skill level analyses in earnings by occupation surveys and the New Earnings Survey.

Reference

Employment Gazette March 1984 (HMSO) (Price £2.75 net)

Women in Engineering

The Equal Opportunities Commission and the Engineering Council have designated 1984 as 'Women into Science and Engineering (WISE) Year'. A report *Women in Engineering* has been recently published by the Engineering Industry Training Board as a contribution to the WISE initiative of 1984. It sets out the facts about women in the engineering industry, describes some recent trends in education and training and details the success and effects of the specific initiatives already undertaken. Although the Report covers women in the whole engineering industry, it concentrates on the professional and technical occupations. Appendices to the Report include statistics on education, employment and training related to women and the engineering industry.

Reference

Women in Engineering - EITB Occasional Paper No 11 (Price £4.00 including postage) is available from EITB Publications, PO Box 75, Stockport, Cheshire SK4 1PH.

Indices of basic wage rates

The figures for December 1983 on basic national wage rates and normal weekly hours of manual workers were published in the February *Employment Gazette* these cover the last month for which these indices will be calculated as announced in the Rayner Review of the Department of Employment's statistical services (*Employment Gazette*, May 1982, page 219).

If any further retrospective revisions are required after the table (5.8) last appeared in April 1984, the details will be given in *Employment Gazette*.

Although the calculation of the indices of basic wage rates and hours is now ending, information on basic wage rates and weekly hours of work (together with details on holiday entitlement, over-time rates and other conditions of employment) for over 200 particular national collective agreements and wages orders made by statutory Wages Boards and Councils will continue to be published in the Department of Employment's publication, *Time Rates of Wages and Hours of Work*. This is available on annual subscription of £37.50 and provides monthly sheets of updated information linked to a loose-leaf binder which enables the position on each agreement to be regularly monitored. Summaries are also provided periodically on the wage rates of young workers, overtime rates of pay and holidays with pay. Copies can be obtained from:

Department of Employment
Statistics Division A4
Orphanage Road
Watford
Herts, WD1 1JP
Telephone: Watford 28500, Ext. 417.

Registered disabled people in the public sector

An article in *Employment Gazette* for February, continuing the series started in 1976, showed figures at about mid-1983 for a wide cross-section of public sector employers. These figures are an incomplete guide to the employment of disabled people since they only recognise the employment of those disabled people who choose to register as such, and their number has declined in recent years. Government departments; county, district, Greater London area, and Scottish regional, islands and district councils; regional and district health authorities; Scottish health boards; other bodies within the national health service; nationalised industries and public authorities; electricity boards and regional water authorities are covered.

Reference

Employment Gazette February 1984 (HMSO) (Price £2.75 net)

Earnings and hours of manual workers

The February 1984 *Employment Gazette* contained an article giving results of the voluntary annual survey of the earnings and hours of manual workers in the United Kingdom in October 1983. The survey is one of the main sources of such information at detailed industry level.

The figures presented in the article are based on the 1968 Standard Industrial Classification, the same basis as those of earlier surveys. Future surveys will be based on the revised 1980 Standard Industrial Classification (SIC 1980), and the results of the present survey will be re-analysed in terms of SIC 1980 and presented, together with the results for October 1984, in next year's article. This will facilitate linking time series of average earnings between the two systems of classification.

Reference

Employment Gazette February 1984 (HMSO) (Price £2.75 net)

AGRICULTURE

Annual Review of Agriculture 1984

The White Paper *Annual Review of Agriculture 1984* (Cmnd 9137) published in February sets out the data considered during the Annual Review of the economic conditions and prospects of the United Kingdom agricultural industry.

The statistical tables in the appendix cover largely the same ground as those in last year's White Paper except that:

- i two new Tables (Nos. 23 and 24) present the information formerly included in Table 23 (Income, net product and labour productivity) in a more comprehensive way;
- ii two new Tables (Nos. 26 and 27) present the information formerly included in Table 25 (Farm accounts: net incomes for different types of farm) in

- a more comprehensive way;
- iii a new base year, 1980, has been introduced in those tables presenting indices, and for the constant price series, presented in Table 20;
- iv two graphs have been included based on Table 23 showing economic indicators at current prices and in real terms.

Where there has been no change in the basis of the tables, some of the figures differ from those in previous Annual Review White Papers because of later information, changes in the scope and nature of available data and improvements in statistical methods. In particular, some of the figures for 1981 have been revised more than would usually be expected in order to incorporate final *Overseas Trade Statistics* which were not available at the time of completion of the tables last year. The forecasts for 1983 generally reflect the position up to the end of the year, as seen at November 1983.

Reference

Annual Review of Agriculture 1984, Cmnd. 9137 (HMSO) (Price £6.00 net)

Results of the Scottish June agricultural census for 1983

The results of the June 1983 Scottish agricultural census are available on request from the Economics and Statistics Unit, Room 703, The Department of Agriculture and Fisheries for Scotland, Chesser House, 500 Gorgie Road, Edinburgh EH11 3AW.

Provisional results of the Scottish sample agricultural census for December 1983

The provisional results of the Scottish sample agricultural census for December 1983 were published as a Scottish Office Press Notice on 5 March 1984 (Press Notice No 216/84).

INDUSTRIAL STATISTICS

Index of industrial production for Scotland

A press release published recently shows quarterly output indices from quarter one of 1978 to quarter three of 1983 for twenty-one industry groups and five market sector groupings. The Index has been rebased on to 1980=100 and converted to the 1980 Standard Industrial Classification. A press release is issued regularly each quarter and the figures can also be found, along with other statistics and articles relating to the Scottish economy in the *Scottish Economic Bulletin* which is published twice yearly by HMSO. The first results for the rebased and reclassified index will be found together with a related article in the issue of the Bulletin to be published in mid-1984. Copies of the press release are available from:

Industry Department for Scotland, Room 5/31
New St Andrew's House, Edinburgh EH1 3SX

Business Monitors – Annual Census of Production 1982

Readers of *Statistical News* are made aware of the results of the 1982 Census of Production as the Business Monitors become available. A list of the first of these Monitors to be published is given below:

Business Monitor Number	Description	Standard Industrial Classification 1980 Group
PA 140	Mineral oil processing	140
PA 231	Extraction of stone, clay, sand and gravel	231
PA 239	Extraction of miscellaneous minerals (including salt)	233/239
PA 248	Refractory and ceramic goods	248
PA 257	Pharmaceutical products	257
PA 329	Ordnance, small arms and ammunition	329
PA 341	Insulated wire and cables	341
PA 347	Electric lamps and other electric lighting equipment	347
PA 353	Motor vehicle parts	353
PA 362	Railway and tramway vehicles	362
PA 365	Miscellaneous vehicles	365
PA 372	Medical and surgical equipment and orthopaedic appliances	372
PA 374	Clocks, watches and other timing devices	374
PA 415	Fish processing	415
PA 416	Grain milling	416
PA 420	Sugar and sugar by-products	420
PA 426	Wines, cider and perry	426
PA 429	Tobacco industry	429
PA 432	Cotton and silk industries	432
PA 435	Jute and polypropylene yarns and fabrics	435
PA 466	Articles of cork and plaiting materials, brushes and brooms	466
PA 471	Pulp, paper and board	471
PA 492	Musical instruments	492

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 J Dowsell
Business Statistics Office
Government Buildings
Cardiff Road
NEWPORT
Gwent
NPT 1XG
Telephone: Newport 56111 (STD Code 0633) 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: Newport 56111 (STD Code 0633) Ext. 2973

Business Monitor PA1003 – Analysis of United Kingdom manufacturing (local) units by employment size

A further Business Monitor in the PA1003 series was published in April. It presents analyses of the register of United Kingdom manufacturing units maintained by the Business Statistics Office and is based on register details held in August 1982, at which time most employment data for the units covered in the analyses related to 1980. In the previous Monitor both the latest employment data and the count of units related to 1979.

The analyses are based for the first time on Divisions 2 to 4 of the 1980 revision of the Standard Industrial Classification. Units with less than 20 employment have been excluded because they are of doubtful reliability. The Monitor includes tables showing the number of manufacturing units in various employment size groups by industrial classification by area and the total number of persons employed in each category, with further limited analyses of manufacturing units under foreign ownership.

For further information and availability see item above.

Census of Production – Northern Ireland

The Report on the Census of Production and Construction of Northern Ireland 1980 was published in March 1984 by HMSO on behalf of the Department of Economic Development (NI): Price £6.80 net.

Business starts and stops: assisted area analyses

The regions of Great Britain show markedly diverse patterns of businesses in the various sectors of trade. Coupled with the uneven occurrence of the types of assisted areas in different regions, this led to the stocks of Vat-registered businesses in each type of assisted area having quite different sectoral profiles. A *British business* article assesses the impact of such sectoral profiles on the starts and stops of firms in the assisted areas.

Previous articles in *British business* (covered in *Statistical News* 56.29, 57.26, 58.32, 59.45, 61.24, 63.36 and 64.29) have provided regional analyses of the stocks of business and of births and deaths of firms in the United Kingdom based on VAT data. The last article and the current one extend the range of information to the sub-regional level.

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

Mr Pom Ganguly
Small Firms Division, DTI,
Room 214, Ashdown House
123 Victoria Street, London, SW1E 6RB

Reference

British business 10 February 1984 (HMSO) (Price £1.10 net)

Developments in the Engineering Industry Training Board's (EITB) statistics

During the past few months there has been a considerable expansion in the quality and scope of the statistics which can be provided by the EITB Research Division. Employment data, based mainly on the EITB's statutory returns, is available analysed by industrial sector of engineering and by region. This data is available free or at a reasonable cost.

Throughout last year government statistical series were gradually changed to the new 1980 Standard Industrial Classification. While this has made British statistics more comparable with statistics from other countries, particularly Europe, it involved some major changes from the previous industrial classification. For example, the electronics industry is more easily identifiable than before, with most of the electronic instruments manufacturers removed from the instrument engineering category. The change has caused some discontinuity in time series data. EITB has recoded its data and a consistent time series is available for the period 1978 to 1983.

The employment data can be analysed on a regional basis, showing, for a particular region, the number of employees in each engineering sector or the number of employees in each occupational category. The analysis can be at a standard statistical region level, at a county level or at an even more detailed level. However, at a more detailed level some data may have to be suppressed to preserve confidentiality.

The employment data can also be analysed by industrial sector showing the numbers in each occupational category or in each standard statistical region. The data can also be analysed by size of establishment. Some data on training is available on a sectoral basis.

Research Division is beginning to produce brief reference papers on the different sectors of engineering which provide an overview of the economic, employment and training trends and prospects for each sector. The first two of these will be on motor vehicles and parts industry and on foundries. These are available at a reasonable price.

They are also producing an update of RP/2/83 on *Manpower in engineering*. This is a survey of the employment and training trends in the engineering industry as a whole.

For further information on or requests for these data or reports, contact the Manpower Studies Section, Research Division, EITB, 54 Clarendon Road, Watford, WD1 1LB.

DISTRIBUTION

Services industries

An article in the February 1983 *Economic Progress Report* published by HM Treasury discusses the importance of service industries in the economy.

The article provides a description of, and some possible reasons for, the long-term growth in the service sector. A comparison is also drawn between United Kingdom and international experience over the last twenty years. Some problems in measuring service industry output are discussed.

Reference

Economic Progress Report No. 165, available free from Publications Division, Central Office of Information, Hercules Road, London SE1 7DV

TRANSPORT

Transport Statistics Users' Conference

The Proceedings of the annual Statistics Users' Conference (on Transport Statistics) held in November 1983, have now been published. The Proceedings run to some 250 pages, including 16 papers by Government statisticians and users covering all aspects of transport statistics and a transcript of the discussion following the papers. The papers and discussion review current developments in transport statistics and provide pointers on future developments.

The Conference was held at the Royal Society in London and attracted over 150 delegates from all sectors—industry, commerce and the universities. *Statistical News* February 1984 included an article on the Conference by A K Pepper.

These Conferences are an annual event, a different subject being chosen each year. This year was the first time transport statistics have figured in the lists and given the range of topics to be covered it is unlikely they will re-appear again this century!

The value of these Conferences as a forum for the exchange of views between Government statisticians and users was well illustrated by the observation from the floor that there should be some form of permanent users' committee just for transport statistics alone. This suggestion has been taken up and the Statistics Users' Council is now actively engaged in bringing the interested parties together.

Further information on the proposed Transport Statistics Users' group and copies of the Proceedings (price £25) are available from the Secretary of the Statistics Users' Council:

Ian Maclean, IMAC Research
Lancaster House, More Lane,
Esher, Surrey KT10 8AP,
Telephone: 0372 63121.

Scottish Transport Statistics No. 4

Scottish Transport Statistics No. 4 is a compilation of transport statistics relating to Scotland. The volume contains over 40 tables, some of which have not been published elsewhere, dealing with all modes of transport in Scotland. There are major sections on vehicle licensing and registration, public service vehicles, road freight, British Rail, car availability and travel to work, toll bridges, public road lengths, injury road accidents, air transport, water transport and public expenditure on transport.

This volume contains more information than in previous years, in particular on air transport, British Rail and water transport. It is in the process of being revised to provide more detailed information; it is hoped that future editions will provide a thoroughly comprehensive range of statistical information on transport in Scotland.

Copies of the volume (Price £1.00 including postage) can be obtained from:

Scottish Office Library
Publications Sales Section
Room 2/65
New St Andrew's House
Edinburgh
EH1 3SX

Road conditions

The National Road Maintenance Condition Survey, conducted annually since 1977 provides a unique source of evidence on changes in the state of the nation's roads. The survey is conducted jointly by the Local Authority Associations and the Department of Transport.

The survey consists of visual inspection of about 9,000 one hundred metre sites distributed amongst all highway authorities in England and Wales. Information about visible defects (e.g. cracking and potholes) is recorded and a summary 'defects index' calculated to assess overall trends. On 'A' roads the visual inspection is supplemented by measurement of 'deflection'—the amount the road 'gives' when a heavy axle of specified weight passes slowly over. This measurement provides a direct assessment of road strength and a forecast of residual life before strengthening will be needed. Motorways which are the subject of special assessment procedures, are not covered by the survey.

A Report of the survey is published annually: the 1983 report was published in March, price £3.00 (cash with order) available from:

Department of Transport
Room A233
Romney House
43 Marsham Street
London
SW1P 3PY

NATIONAL ACCOUNTS

The national accounts treatment of index-linked bonds

An article by M. J. G. Lockyer in the February issue of *Economic Trends* is a slightly revised version of a paper presented by the author to the Eighteenth General Conference of the International Association for Research in Income and Wealth, held at Luxembourg in August 1983.

While much attention has been given in recent years to possible shortcomings of the conventional definitions of income and saving while price levels are changing, there has been little discussion internationally of the related problem of how to record within the national accounting framework some of the economic transactions which are already index-linked. The example considered in the article is the treatment of bonds and other securities where a low coupon interest is offered in conjunction with a guarantee that the purchasing power of the principal will be maintained in terms of a specified price index. The question addressed is how to account for increases in the money value of the bond.

The article describes how index-linked securities are treated in the national accounts of the United Kingdom, and the reasons why they are treated in this way.

Reference

Economic Trends, February 1984, No. 364 (HMSO) (Price £11.25 net). See the inside back cover for details of how to obtain copies of the article.

HOME FINANCE

The Government's Expenditure Plans 1984-85 to 1986-87

The annual White Paper on the Government's expenditure plans (Cmnd. 9143) was published in February 1984 in two volumes.

Volume One has comment, tables and charts on planned expenditure, at aggregate level, by programme, economic category and spending authority. The main changes in planned expenditure since the previous White Paper (Cmnd. 8789) are summarised by programme and economic category. Public sector capital spending, public expenditure in cost terms by programme and manpower targets to 1 April 1988 are also shown.

Volume Two contains Parts 2 to 5 of the White Paper. Part 2 sets out the individual programmes and includes text highlighting the important features in each area.

Part 3 deals with the nationalised industries' capital requirements and financing. Figures are given for each industry and the total external financing limits for each industry showing the outturn for 1982-83, the estimated outturn for 1983-84 and the forecast for 1984-85 are shown.

Part 4 contains additional analyses commencing with a functional analysis of United Kingdom public expenditure. A summary of differences from the previous White Paper by programme in 1984-85 follow. Then comes public expenditure by main programme and spending authority distinguishing current and capital expenditure in 1984-85; capital expenditure, in the planning total and on construction; financing requirements of List I and II and capital requirements of List III public corporations; special sales of assets; debt interest and Part 4 concludes with a list of direct tax allowances and reliefs showing the estimated cost for 1983-84.

Part 5 consists of explanatory and technical notes and includes changes in definition and classification since the last White Paper.

References

The Government's Expenditure Plans 1983-84 to 1985-86 Cmnd. 8789-1 and 8789-11 (HMSO February 1983) (Price Volume I £5.10 net: Volume II £9.75 net).
The Government's Expenditure Plans 1984-85 to 1986-87 Cmnd. 9143-1 and 9143-11 (HMSO February 1984) (Price, Volume I £5.65 net: Volume II £11.50 net).

Financial Statement and Budget Report 1984-85

The Financial Statement and Budget Report 1984-85 (FSBR) was published on March 13 1984.

Part 1 'The Budget Proposals' summarises the main proposals, these are described in detail in Part 4. A table shows the direct effect of the Budget proposals on public sector transactions.

Part 2 'Medium-term Financial Strategy' sets out the framework within which the Government's policy operates. Comment, tables and charts cover—recent financial conditions: monetary policy; fiscal policy; public expenditure; revenue; public sector borrowing; comparison with the 1983 revenue and expenditure projections; and conclusions.

Part 3 'The Economy: Recent Developments and Prospects to mid-1985' deals with: the world economy; the exchange rate and the balance of payments; inflation; demand and activity; forecast and outturn (compared with the main elements of the forecast published in the 1983 FSBR); short term economic prospects; and ends with an indication of the error margins. A table shows constant price forecasts at 1980 prices seasonally adjusted of expenditure, imports and gross domestic product to first half 1985.

Part 4 'The Budget Proposals in Detail' describes the proposals for Inland Revenue, Customs and Excise, Vehicle Excise Duty and the National Insurance Surcharge. A table at the end of this part shows the direct effects of the proposed changes. It also includes the direct effects of proposed changes in taxation which were announced prior to the Budget for inclusion in the 1984 Finance Bill. Some of these were not enacted last year because of the General Election and others were announced subsequently.

Part 5 'Public Expenditure' this part relates the Budget figures to the Government's expenditure plans for 1984-85 to 1986-87 published in the White Paper – see item above.

Part 6 'Public Sector Transactions' provides further information on the transactions of the public sector in 1983-84 and 1984-85. The data shown elaborate the rounded and summary figures for those years shown in Parts 2, 3 and 5. The forecasts incorporate the effects of Budget measures. The basis of the tables and the relationship between them is outlined.

References

Financial Statement and Budget Report 1983-84 (HMSO March 1983) (Price £4.70 net)

Financial Statement and Budget Report 1984-85 (HMSO March 1984) (Price £5.35 net) ISBN 0 10 230484 X

Public expenditure and taxation into the 1990s

A Green Paper *The Next Ten Years: Public Expenditure and Taxation into the 1990s* was published on 13 March 1984. It is concerned with the longer-term fiscal prospects for the years up to 1993-94. It does not record decisions by the government either on public expenditure programmes or on taxation. It attempts, rather, to set out reasonable and defensible assumptions about how the economy as a whole might develop and to derive from them a framework within which to conduct the discussion of expenditure and taxation. Both the *Government's Expenditure Plans 1984-85 to 1986-87* (Cmnd. 9143) and the *Financial Statement and Budget Report 1984-85* (see items above) deal with shorter-term prospects.

The paper which contains tables and charts is in five parts – Public expenditure – past trends; Taxation – past trends; Public expenditure – future prospects; Future prospects for the tax burden; and Conclusion. There are also four annexes dealing with Definitions: Public expenditure by programme 1978-79 to 1983-84; Growth in the long term; and Tax and debt interest calculations.

Reference

The Next Ten Years: Public Expenditure and Taxation into the 1990s, Cmnd. 9189 (HMSO) (Price £4.55 net) ISBN 0 10 191890 9

Regional accounts

The June issue of *Economic Trends* will include an article on UK regional accounts. It is intended to publish provisional estimates by region of gross domestic product and personal income in 1982, and estimates of GDP for the counties of England and Wales and the local authority regions of Scotland in 1981. The tables include analysis of regional GDP by industry and by factor income. The income measure of GDP is used both for regions and at county level and the figures are at factor cost.

Estimates of general government gross domestic fixed capital formation by purpose of government are also included for the years up to and including 1981.

Reference

Economic Trends No 368 (HMSO) June 1984 (Price £11.25 net). See the inside back cover for details of how to obtain copies of the article.

Sectoral distribution of financial assets and liabilities

A new series of sector balance sheet tables is included in the February 1984 issue of *Financial Statistics*. These tables update the information on the sectoral distribution of financial assets and liabilities published in the article 'National and sector balance sheets for the United Kingdom' in the November 1980 issue of *Economic Trends*. Separate tables give data for the public sector in total, its component sectors (central government, local authorities and public corporations), the monetary sector, the non-bank private sector as a whole and the overseas sector for the end of each year from 1975 to 1981. It is planned to update these tables annually.

Further details of the financial assets and liabilities of the non-bank private sector, including figures for the component sectors (other financial institutions, industrial and commercial companies and the personal sector) are published in a regular table in the March, June, September and December issues of *Financial Statistics*. The table in the March 1984 issue gives a long run of data for the end of each quarter from December 1975 to September 1983, thus covering the period of the new all-sectors series.

Reference

Financial Statistics (HMSO, monthly) (Price £8.25 net)

Insurance business

Business Monitor MA 16 Insurance business statistics 1980 was published by HMSO in March 1984 for the Business Statistics Office.

The Monitor, the fourth in an annual series, lists all insurance companies authorised under Section 3 of the Insurance Companies Act 1974 to carry on one or more classes of insurance business in Great Britain on 31 December 1982. Companies which have had their authorisation revoked during 1980 or 1981 are also listed. All figures are taken from returns made under the Insurance Companies Act 1974 and relate to accounting years ending during the calendar year 1980. Details given include total net premiums and total assets, by company, and classes of insurance written by each company.

Reference

Business Monitor MA 16 Insurance business statistics 1980 (HMSO March 1984) (Price £8.95 net)

Public sector bank deposits: redefinition of the public sector borrowing requirement and the money stock

With effect from the start of the 1984/85 financial year, the public sector borrowing requirement (PSBR) is being redefined so that changes in the public sector's holdings of bank deposits and certain other liquid assets are treated as 'financing' the PSBR rather than 'contributing' to it. In other words, increases in these deposits and liquid assets will no longer lead to increases in the PSBR, and falls will no longer reduce it. The Chancellor of the Exchequer informed Parliament of this decision on 10 February, along with the parallel decision to exclude the public sector's bank deposits from the sterling M3 and M3 measures of the money stock. In an article in February *Economic Trends*, the reasons for the redefinition are discussed, along with details of the impact of the revisions and sources of data. Several tables and charts compare the PSBR and the quarterly money stock on the bases of old and revised definitions.

Reference

'Public sector bank deposits: redefinition of the public sector borrowing requirement and the money stock' by Paul Luke *Economic Trends* No 364 February 1984 (HMSO) (Price £11.25 net). See the inside back cover for details of how to obtain copies of the article.

FTSE 100 Share Index

A new financial index the Financial Times-Stock Exchange 100 Index (FTSE 100) has recently been established. It is a computerised real-time index changing automatically minute by minute and so providing a market measure which is comprehensive and up to the minute. The base level is 1000 at December 30 1983 and the 100 shares are taken mostly from among the biggest companies listed on the Stock Exchange. The index is weighted by the companies market value and there will be a quarterly review of the constituents. Two other indices of prices on the Stock Exchange are the FT Industrial Ordinary Share Index and the FT-Actuaries All-Share Index.

OVERSEAS FINANCE AND TRADE

Changes to the treatment of gold in the balance of payments accounts

Analysis of recent years' data on UK residents' international transactions in gold, using information from both official and private, commercial sources, was making it increasingly apparent that existing treatment of such transactions in the United Kingdom balance of payments accounts was not completely satisfactory. As a result certain changes have been agreed and implemented in published figures relating to 1980 onwards. Within the balance of payments accounts changes have been made in the current account to visible trade and in the capital account to external borrowing and lending by UK residents outside the monetary sector and

London Gold Market. Minor consequential revisions have also been made to the expenditure measure of UK gross domestic product in the national accounts.

The treatment of gold, in any part of the national accounting system, has always posed a problem; the same material can be either a financial asset or a commodity used in manufacturing, and it can change from one to the other. The *IMF Balance of Payments Manual* recommendation is that the definition of financial gold should be restricted to that held by the monetary authorities, but there is some discrepancy between the *IMF Manual* and internationally recommended practices for compilation of the national accounts, where the treatment is more in line with that which has now been adopted. Holdings of gold within a country's official reserves are clearly a financial asset and have always been regarded as such within the national and balance of payments accounting frameworks. Other gold holdings – whether in the public sector (e.g. the Royal Mint) or the private sector (companies and individuals) – are less easily categorised as either financial or commodity gold and estimating transactions in each of these two categories is usually difficult. The practical problems of definition and estimation exist in all countries but are of far greater importance here, where the dealings of the London Gold Market (LGM) reflect international transactions in both types of gold and where many transactions are conducted without physical movement of gold into or out of the country (or *vice versa*).

In compiling the United Kingdom balance of payments accounts there is a long-standing principle of distinguishing between transactions in commodity gold (recorded in the current account) and transactions in financial gold (recorded in the capital account). The United Kingdom has always regarded the holdings of gold bullion (though not coin) by the London Gold Market and banks as consisting of financial gold. Correspondingly, it has been our practice up to now to regard transactions by UK residents outside the London Gold Market and the rest of the banking sector as being wholly in commodity gold and thus all within the scope of the current account. While exchange controls were in force this did not result in undue distortion of the visible trade account as net transactions in gold in any given period were generally small. Since then, the position has been rather different and it has been decided that, in order to avoid large volatile changes in the current account arising from movements in gold, the definitions of commodity and financial gold should be amended in order more closely to reflect the use to which gold is put. In future only gold which is used for industrial purposes (e.g. jewellery, or the manufacture of proof coins) will be treated as a commodity; other gold, even when held by UK residents apart from banks and the LGM, will be

regarded as financial. These financial holdings will include, for example, bullion and coin, but exclude jewellery and proof coins (as opposed to bullion or ordinary coins – the distinction being that proof-quality coins, sold at a premium, may be regarded as collectors' items or works of art). Transactions in commodity gold as defined in this narrower way will continue to be included in the current account while transactions in financial gold based on the wider coverage will appear in the capital account. Revised figures for the visible trade balance were published by the Department of Trade and Industry on 29 February. Those for the capital account of the balance of payments were published by the Central Statistical Office on 8 March. The complete balance of payments accounts also appear in the March 1984 issue of *Economic Trends*.

References

Economic Trends March 1984 (HMSO) (Price £11.25 net)
International Monetary Fund Balance of Payments Manual, 4th edition (Washington DC 1977)

Book-value of Overseas Direct Investment

Estimates of the book value of overseas net direct investment by and in the United Kingdom at the end of 1981 were published in *British business*, 2 March 1984. The figures included oil and banking, and for the first time the insurance industry. The information was obtained from a regular, though infrequent inquiry; the previous one was in respect of 1978.

The inquiry into the book value of UK direct investment overseas was again collected on a statutory basis, the previous inquiry being the first conducted in this way. Because it is outside the scope of the Statistics of Trade Act information on overseas direct investment in subsidiaries and associates in the United Kingdom was collected on a voluntary basis.

More detailed results will be published in April or May in *Business Monitor MA4 1981 Supplement, Census of Overseas Assets 1981*.

References

British business, 2 March 1984, pages 422-426 (HMSO) (Price £1.10 net)
Business Monitor MA4 1981 Supplement, Census of Overseas Assets 1981 (Available on standing order from HMSO; separate copies from the Librarian, Business Statistics Office, Newport, Gwent NPT 1XG).

Overseas trade classification

The *Guide to the Classification for Overseas Trade Statistics 1984* was published by HMSO for HM Customs and Excise on 6 March 1984, price £17.00 net.

INTERNATIONAL

International comparisons of stoppages

Employment Gazette for March 1984 contains the latest annual article in a series which compares the incidence of working days lost in the United Kingdom with that for other countries; firstly using data for all industries

and services and secondly using data for selected industries, as compiled by the International Labour Office.

Reference

Employment Gazette (HMSO) (Price £2.75 net)

PUBLICATIONS

Statistical and survey analysis software

The Study Group on Computers in Survey Analysis published a listing of software for statistical and survey analysis in late 1983, compiled by David Cable (CSO) and Beverley Rowe (International Statistical Institute). The register contains 119 items of software, and brief details on facilities, hardware/software environment where available, distributors and number of sites are given for each package. The listing is available at £2.50 from David Cable, GSS Computing Liaison Unit, Central Statistical Office, Great George Street, London, SW1P 3AQ (cheques should be made payable to 'SGCSA').

Database systems for statistical applications

In mid-1983, the Civil Service College published through HMSO a handbook entitled *Database systems for statistical applications*, price £5.00 net (ISBN 0 11 630469 3), prepared by George Hext, Alex Gray and Steve Clark.

The handbook is based on presentations of seven systems (CAFS, RAPPORT, SIR, P-STAT, RAPID, IDMS and PACKAGE X) given at a College seminar held in September 1981.

Individual chapters are devoted to the facilities available in each of the seven systems (updated to reflect developments since the seminar took place), and a final chapter entitled 'a framework for appraisal' attempts to draw general conclusions about each system's role in statistical computing.

Bank of England Quarterly Bulletin

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

The business of financial supervision

This reprints the Joseph Travers Lecture given by the Deputy Governor in which he discusses the need for supervision in financial markets. There has been a veritable explosion of competition and innovation in financial markets and this ferment seems likely to continue. Against this background, the case for financial supervision is explained and the various forms it may take discussed.

Changing boundaries in financial services

In a speech concerned with changes that are in progress in financial markets, the Governor describes the cur-

rents that are eroding, and in some areas sweeping away, traditional barriers between different types of financial services. Competition for personal savings and in housing finance has already made an impact. More recently, change is proceeding apace in the major City markets of Lloyd's and the Stock Exchange. The Governor describes the implications of the changes taking place for supervision and regulation of these markets, and the authorities' attitude towards foreign involvement in them.

The scope for industrial expansion

In a speech to the Birmingham and Midlands Institute of Bankers, the Deputy Governor describes the impressive way in which British industry has responded to the pressures put upon it over the last four years to emerge in a notably stronger position. Fundamental to a sustained recovery will be an expansion in investment, and he charts the causes and consequences of the long-run underlying decline in investment which began well before the present recession. Looking ahead at ways we may exploit the more cheerful economic environment, the Deputy Governor outlines the roles of government, industry and the banks.

The international banking markets in 1983

This article, which continues an annual series, describes how debt servicing of a number of countries continued to preoccupy international banking markets in 1983. Some twenty countries rescheduled debt, with most arrangements made in conjunction with IMF programmes. The marked slowdown in the growth of international bank lending continued in 1983, and the market became more segmented. The interbank market continued to grow – but only modestly. Gross issues of bonds and floating rate notes were a little higher than in 1982, and banks increasingly purchased floating rate notes, in an attempt to increase the liquidity of their international assets. The United States ceased to be the dominant net supplier of new funds to the euromarkets but London remained the largest centre for international business.

Changes to monetary aggregates and the analysis of bank lending

A note explains some minor adjustments to the measurement of the target monetary aggregates. Public sector deposits are being excluded from sterling M3, and MO, the wide monetary base, is being measured as monthly averages of amounts outstanding on each Wednesday (instead of at single mid-month dates). The note also introduces a revised analysis of bank lending based on the 1980 Standard Industrial Classification.

Other items

There are shorter speeches on 'International debt – thinking about the longer term' and on the role of non-executive directors. Also, there is a note updating an article in the December *Bulletin* on the

financial structure and operations of the IMF.

The Bank's *Quarterly Bulletin* (at £7.50 per copy) may be obtained from:

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

National Institute Economic Review

The latest issue of the *National Institute Economic Review* includes the following special article:

Public and private sector pay: a partly disaggregated study

This article, by N. Foster, S. G. B. Henry and C. Trinder, examines pay since 1963 in four sectors of the economy: private manufacturing; private non-manufacturing; public corporations; and central and local government. New quarterly estimates of earnings per head are derived by combining annual data from the National Accounts with the Department of Employment's monthly index of average earnings. The article provides an econometric analysis of sectoral earnings inflation. The objectives are to investigate the determination of pay in each of the main sectors of the economy, and also to assess the role of effects from other sectors – the directions, lags and magnitudes. The exercise finds important differences between the sectors and evidence for intersector effects. In particular, public corporations appear to lead, and not be led by, other sectors.

Reference

National Institute Economic Review No 107, February 1984, available from the National Institute of Economic and Social Research, 2 Dean Trench Street, Smith Square, London, SW1P 3HE (Price £8.50 including postage)

Social Science Research Council (SSRC) Data Archive Bulletin

The January 1984 issue of this Bulletin contains a report from the Director covering the Archive's future developments in view of the latest proposals to SSRC for a renewal of its contract.

Notes on Government Data Sets available, include details of Small Area Statistics compiled from the 1981 Census. Recent additions to the Archive's holdings are listed in the Appendix and selected data files are described in the New Acquisitions section.

A software bulletin is included, also notes on related articles and on recent meetings; dates of computing seminars and workshops to be held and there is a section of book reviews.

Reference

SSRC Data Archive Bulletin, No 27 January 1984, available free from: SSRC Data Archive University of Essex, Colchester CO4 3SQ

Skelmersdale New Town

Population and Social Survey 1983, Skelmersdale New Town was published recently. The Report presents the results of the latest annual Population and Social Survey carried out by Skelmersdale Development Corporation. Consistency has been maintained in the presentation of demographic information to assist year by year comparison, but presentation of social information varies from year to year to reflect current issues. In addition to the Population and Social Survey, the publication includes the seventh annual survey of school-leavers and for the first time, a survey of Skelmersdale College leavers.

Reference

Population and Social Survey 1983, Skelmersdale New Town (price £3.50) is available from: The Librarian, Skelmersdale Development Corporation, Pennylands, Skelmersdale, Lancashire WN8 8AR.

Local government trends

The latest edition of the Chartered Institute of Public Finance and Accountancy's (CIPFA) publication *Local Government Trends* has recently been published. It is obtainable from CIPFA, 1 Buckingham Place, London SW1, price £17.00.

Engineering Industry Training Board (EITB) publication

The latest issue of the EITB *Economic and Industry Monitor* which analyses the economic situation from the point of view of engineering was recently published. It contains sections which cover the British and world economy; production; trade; productivity; costs and prices; employment; and training needs. The monitor is issued three to four times a year.

Reference

Economic and Industry Monitor No 15 March 1984. Available from EITB, Research Division, 54 Clarendon Road, Watford, WD1 1LB.

Guide to Government department and other libraries

The twenty-sixth edition of the *Guide* has now been published by the British Library, Science Reference Library.

Government department and other relevant libraries willing to assist serious external enquirers are listed. There are over six hundred entries arranged in a subject sequence. Entries give title of institution, address, telephone number, departments, staff contacts, hours of opening, publications produced and stock.

Reference

Guide to Government Department and Other Libraries 1984 (British Library, Science Reference Library) (Price £10.00 plus postage) ISBN 0 7123 0709 5

International publications

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

United Nations

Department of International Economic and Social Affairs

Supplement to World Economic Survey 1983, price £7.20 net.

Economic and Social Commission for Asia and the Pacific

Foreign Trade Statistics of Asia and the Pacific, Vol XIV Series B 1978-1981, price £11.25 net: Vol XIX Series A 1980 and Vol XX Series A 1981, price £15.75 net each.

Economic Commission for Europe

Statistics of World Trade in Steel 1982, price £8.55 net.

The Steel Market in 1982, price £15.75 net.

UNESCO

Statistical Yearbook 1983, price £45.00 net.

Food and Agriculture Organisation (FAO)

FAO Agricultural Series

No 15 *The State of Food and Agriculture 1982. World Review—Livestock Production: A World Perspective*, price £12.80 net.

FAO Economic and Social Development Papers

No 31 *World banana economy, statistical compendium*, price £3.20 net.

No 33 *Community-level statistics*, price £3.20 net.

FAO Statistics Series

No 47 *1982 FAO Production Yearbook*, Volume 36, price £12.00 net.

No 49 *1982 FAO Trade Yearbook*, Volume 36, price £14.40 net.

International Monetary Fund

International Financial Statistics Supplement Series
No 5 *Supplement on Money*, price £4.80 net.

Council of Europe

Population Studies

No 6 *Structure and Composition of the Population of Urban Areas. 1. Southern Europe*, price £4.75 net.

No 7 *Structure and Composition of the Population of Urban Areas. 2. Northern and Central Europe*, price £4.75 net.

No 8 *The demographic prospects of Southern European countries and Ireland*, price £2.75 net.

OECD

Long Term Outlook for the World Automobile Industry, price £7.60 net.

OECD Science and Technology Indicators. Resources Devoted to R & D, price £13.50 net.

Uranium. Resources, Production and Demand. A Joint Report by the OECD Nuclear Energy Agency and the International Atomic Energy Agency. December 1983, price £16.00 net.

1983 Review. Development Co-operation, Efforts and Policies of the Members of the Development Assistance Committee, price £12.00 net.

Department of Economics and Statistics

National accounts, main aggregates. Vol. 1
1953-1982, price £5.80 net.

International Energy Agency

Annual Oil and Gas Statistics 1981/1982, price
£20.00 net.

Energy Statistics and Main Historical Series
1981/82, price £8.00 net.

Statistical Office of the European Communities (SOEC)

Agriculture Price Statistics 1971-1982, price £11.60
net.

Analytical Tables of Foreign Trade Nimex 1982,
Exports and Imports 24 volumes: *Country products*
exports and imports 2 volumes, price £15.00 net each
volume or complete set £223.00 net.

Annual Investments in Fixed Assets in the industrial
enterprises of the member countries of the European
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C. A. O'Muircheartaigh.

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A. Moser.

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the Implications of Knowledge and Attitudes for
Fertility in Costa Rica by J. Mayone Stycos

Further information about these and other WFS pub-
lications can be obtained from:

Publications Office

International Statistical Institute

428 Prinses Beatrixlaan

PO Box 950

2270 AZ Voorburg

Netherlands.

CONFERENCES AND MEETINGS

International Time Series Meetings (ITSM) 1985

Prospective authors should write immediately for
details on submitting abstracts and papers. Details
from: O. D. Anderson, 9 Ingham Grove, Lenton
Gardens, Nottingham NG7 2LQ, England. Please
attach a self-addressed adhesive label.

GOVERNMENT STATISTICAL SERVICE

Obituary

Readers will learn with regret of the deaths on 13 March
1984 of *Mr Basil Townsend*, Central Statistical Office,
an Associate Editor of this publication and Editor of the
Guide to Official Statistics; and on March 22 of *Mr*
W. J. (Jim) Brooks formerly a Principal in the Central
Statistical Office Statistician Group Management Unit.

Appointments and changes

Mr B. A. Wainwright, Chief Statistician, Department of Employment retired on 28 January 1984.

Mr D. L. Pearce, Senior Principal, Office of Population Censuses and Surveys was temporarily promoted to Head of Census Division on 6 February 1984.

Mr G. Jenkinson, Temporary Chief Statistician, Department of Trade and Industry since 1 December 1983 has now had his promotion made substantive.

Miss R. Morton-Williams, Head of Social Survey Division, Office of Population Censuses and Surveys retired on 25 January 1984 and was succeeded by *Mr R. Barnes*, Office of Population Censuses and Surveys on substantive promotion to Chief Social Survey Officer 'A' with effect from 26 January 1984.

Reviews of regular surveys

Annual Census of Production

The Annual Census of Production is the latest Department of Trade and Industry survey to be reviewed by the Department in collaboration with the Survey Control Unit of the Central Statistical Office as part of the programme of regular reviews of business inquiries outlined in *Statistical News* 61.33. In summary, the report accepts the government need for the information collected in the census. The report also accepts that more detailed information is needed every five years for the rebasing of the Index of Production and the national accounts, for compiling input-output tables and as a benchmark for the Purchases Inquiry. To meet these needs a 'benchmark' inquiry, entailing a more complete coverage of production industry than in 'slimline' years, is recommended for 1984. In intervening years, the census should remain in its present form. It is estimated that the 1980 census cost government around £1.5m and industry around £0.6m at 1982 prices.

The recommendations of the report have now been accepted by Ministers and work is in hand at the Business Statistics Office to prepare for a 'benchmark' inquiry to be taken in respect of 1984.

Copies of the joint Business Statistics Office/Survey Control Unit Report of the Review of the Annual Census of Production are available (price £1.50 including postage) from the Librarian, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent, NPT 1XG, Telephone: Newport (0633) 56111 Ext. 2399.

Review of International Road Haulage Statistics

The Department of Transport has recently completed a full review of Statistics of International Road Haulage. The Review covered two related surveys carried out by the Department—the survey of International Road Haulage (IRHS) and the Quarterly Survey of Roll-on

Roll-off Goods Vehicle Traffic (QRORO). Costs and burden on respondents were examined and all known uses of the survey results were taken into account. The report concludes that there is a need for these data and that the surveys should continue in parallel with further examination of the possible alternative sources of data identified in the review. These conclusions have been endorsed by the Minister of State.

This review was carried out in accordance with a procedure set up, following the Review of the Government's Statistical Services, to examine all regular surveys to businesses and local authorities every five years. A similar review, concerning the Department of Transport's Continuing Survey of Road Goods Transport (CSRGT), was reported in the May 1983 issue of *Statistical News* (61.33).

The IRHS is a continuing survey, collecting information about tonnes, tonne-kilometres, commodities and countries for international road haulage, similar to the statistics for domestic road haulage obtained from the CSRGT. However, the IRHS, surveying around 5,000 journeys per annum, is considerably smaller than the CSRGT. The QRORO is a survey of roll-on roll-off ferry companies making quarterly returns of their carrying of road goods vehicles and trailers. This is used to monitor traffic but it is also essential for grossing up results of the IRHS.

The IRHS was set up in 1979 to meet the requirements of EC Directive 78/546. This is one of three Directives requiring member states to collect statistics of freight transport for Community purposes. Apart from the European Community (EC) as a customer, there has always been a wide variety of users for statistics of international road haulage. A major role of the survey results is in support of UK negotiating positions for international road haulage. Most users were satisfied with the information being obtained but several areas were identified for possible improvement. Examples of these are the coverage of traffic to and from the Republic of Ireland and a need for additional information about unaccompanied trailers.

Alternative systems of data collection were examined to see how well they might meet the needs which had been identified. Those offering the best prospect appeared to be (i) record sheets used in connection with the administration of international road haulage permits and (ii) data currently or potentially available from customs documents of international trade. None of the alternatives was able to meet present requirements as comprehensively as the IRHS and QRORO and the report recommended that the surveys should continue in broadly their present form until one or the other potential sources of data is able to meet existing needs at a lower annual cost.

The cost of the two surveys taken together is about

£130,000 per annum; it has fallen in real terms over the past three years. As a result of possible improvements identified in the Review the surveys are likely to run with less manpower in future, a particularly advantageous development being the computerisation of the QRORO which eliminated a manual clerical operation. This work is being taken on at the Department's in-house computer bureau.

The Review report has been approved by the CSO Survey Control Unit and the Minister of State for Transport has agreed for the surveys to continue until 1988.

Further information is available from:

R. Davies
Department of Transport
Room A626
Romney House
43 Marsham Street
London SW1P 3PY

Other surveys

Set out below is the name of a recently completed category B review of a regular statistical survey. It has been subject to an internal departmental review and a report monitored by the Survey Control Unit. Any enquiries should be made to the departmental contact given below.

Surveys of Research and Development

J. R. Bowles

Department of Trade and Industry

Millbank Tower

Millbank

London

SW1 4QV

LATE ITEMS

Statistical Handbook 1983-4

The Department for National Savings has now prepared a handbook of statistics which is available on application. The handbook contains details of business transacted in all National Savings products – Savings Certificates, both index-linked and fixed-interest, Income Bonds, Deposit Bonds, Investment Account and Ordinary Accounts with the National Savings Bank, Premium Bonds and Save As You Earn. It also contains information from the National Savings Stock Register.

The eighty or so tables in the handbook are intended to amplify information currently provided in the Department for National Savings Annual Reports.

Copies of the handbook may be obtained from:

Statistics Branch
Department for National Savings
Charles House
375, Kensington High Street
LONDON W14

UK seaborne trade

Analysis of seaborne trade with individual countries by flag of vessel appeared in the annual Business Monitor *MA8, Nationality of vessels in UK seaborne trade 1980-82*. There are tables of the flag shares of UK trade with individual countries, on the proportion of trade carried by principal flags on major commodities such as petroleum and lumber, and also on average length of haul.

An article in *British business* 24 February 1984, the latest in an annual series, provided a commentary on the patterns in UK seaborne trade and presented a summary of the information to be found in the Business Monitor which was published by HMSO on 10 April 1984, price £9.50 net.

British businesses by turnover size

British business, 13 April 1984, contained an article, 'Analyses of businesses by turnover size: 1983'. The article shows, for Great Britain, the number of records held on the register which the Business Statistics Office maintains largely from information obtained by HM Customs and Excise in the administration of VAT.

The industrial classification used is based on the VAT trade classification (Vtc) which is aligned to the 1968 revision to the standard industrial classification, SIC(1968). The coverage of the production industries (mining and quarrying, public utilities and manufacturing industries) in these tables, however, is similar to that of divisions 1 to 4 of the 1980 revision to the standard industrial classification SIC(1980).

In addition to overall distributions by size of turnover and by industrial grouping, there are separate turnover size analyses for sole proprietorships, for partnerships and for corporate businesses, general government and non-profit-making bodies. There is also a comparison for all businesses between the 1982 and 1983 counts. The basic information in the tables relates to mid-1983 when the turnover figures held on the register for most records related to a period close to the calendar year 1981.

Reference

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

Alphabetical Index

The index to *Statistical News* covers the last nine issues. Page numbers are prefixed by the issue number, e.g. 64.18 signifies number 64, 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 indicated, 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.

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