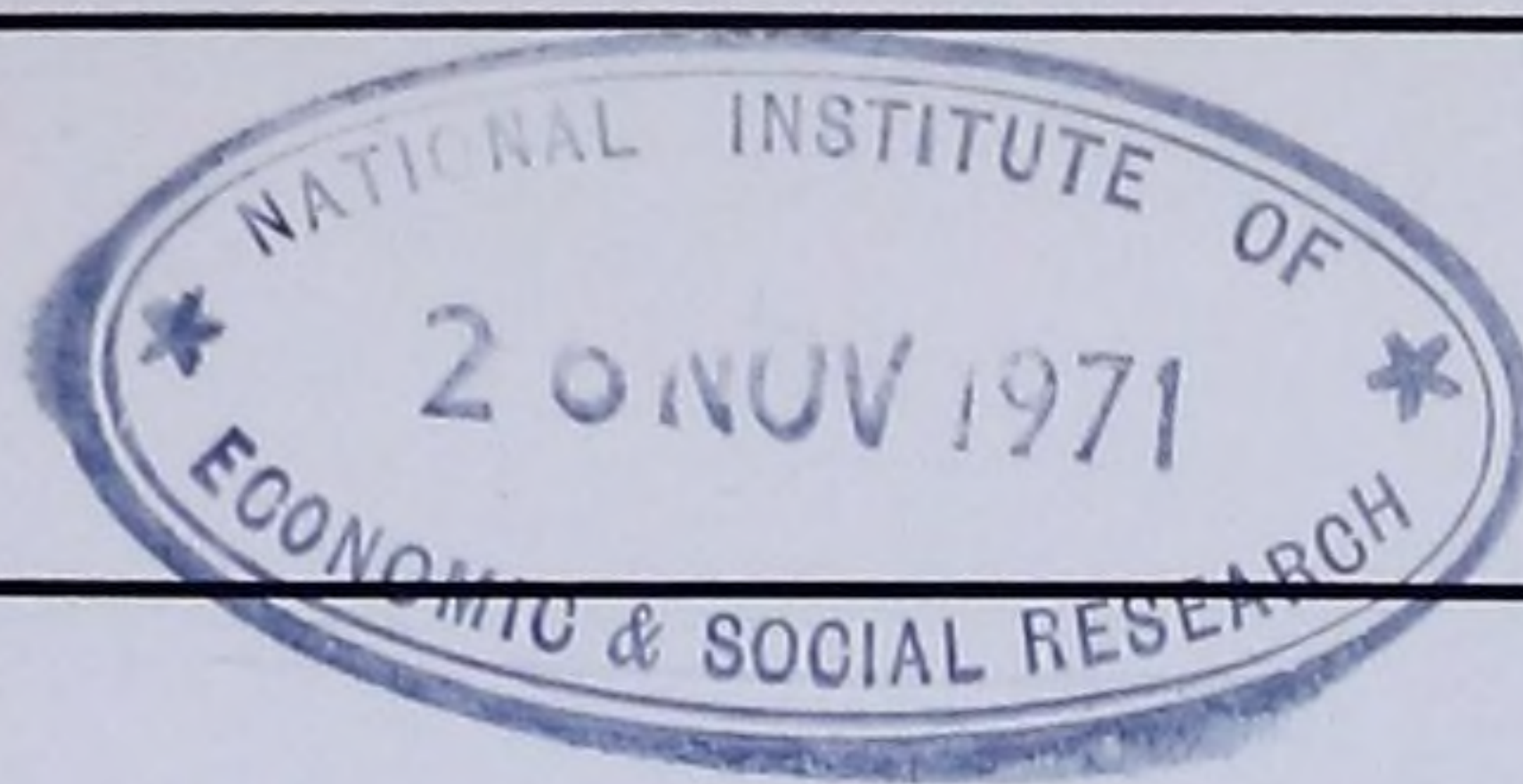


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CSO

AUGUST 1971

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# STATISTICAL NEWS

**Developments  
in British Official  
Statistics**



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# Note by the Editor

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The aim of *Statistical News* is to provide a comprehensive account of current developments in British official statistics and to help all those who use or would like to use official statistics.

It appears quarterly and every issue contains two or more articles each dealing with a subject in depth. Shorter notes give news of the latest developments in many fields, including international statistics. Some reference is made to other work which, though not carried on by government organisations, is closely related to official statistics. Appointments and other changes in the Government Statistical Service are also given.

A full, cumulative index provides a permanent and comprehensive guide to developments in all areas of official statistics.

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

Enquiries about this publication should be addressed to:  
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**Statistical News**

**No. 14**

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LONDON

HER MAJESTY'S STATIONERY OFFICE







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# Survey of handicapped and impaired in Great Britain - the selection of the sample

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## Introduction

A study on the handicapped and impaired has recently been published, and the sampling methods used may be of general interest. The objective of the study was to give reliable estimates of the number of handicapped persons aged 16 and over, living in private households in Great Britain, and to examine what local authority health and welfare services were being made available to assist them, as far as possible, to overcome their disablement.

There were no established criteria for identifying the 'handicapped', nor any comprehensive list of persons who might be so considered, so the first step to be taken was to define what kind of person should fall within the scope of the enquiry. Then it was necessary to take a large sample of the whole, general population in order to identify an adequate number of handicapped and impaired persons. Technically the sample required was that of a 'rare' population and yet the only sampling frames available were those of the general population. From information already available and on the basis of a small pilot survey it was decided that a sample of 100,000 households (of the general population) would be required to produce a large enough sample of the handicapped and impaired in view of the detailed analyses which were required (this will be referred to as Sample A). For what might be termed the 'very rare' population of the severely handicapped even this number would not be enough and a further 150,000 households (Sample B) were approached to identify this group. Thus as an initial step it was necessary to send postal questionnaires to no fewer than a quarter of a million households to establish which households contained a handicapped person; such persons were then to be interviewed.

## The selection process

To obtain a sample of the general population the register of electors in force was used as the frame. At that time (October 1968–February 1969) it covered in

general only those aged 21 and over, whereas for the survey it was necessary to identify persons aged 16 years and over. Regarded as a sample frame for individuals it is of course also deficient owing to migration, and for other reasons, even when it is first issued. However, as a frame of addresses it has been found to be quite comprehensive. (People who moved between the postal phase and the interview stage were if possible traced to their new address.)

Selecting the list of addresses was a two-stage process. The first stage was a systematic selection, with probability proportional to population size, of primary sampling units. In England and Wales the frame for the selection of primary units consisted of the London boroughs, county boroughs, and contiguous groups of other local authority administrative areas (i.e. municipal boroughs, urban districts and rural districts) formed to comprise units comparatively uniform in population size. These units were stratified by the standard regions and within each region the units were arranged by county. (Where a county was contained in two regions, the whole of that county was assigned to the region containing the greater part of the population of the county.) Within counties the primary sampling units were ranked in descending order of population size. A similar procedure was followed in Scotland. This system of stratification ensures that a good geographical spread is obtained covering all types of area. Balancing the desirability of a maximum geographical spread against the costs of interviewing led to the choice of 100 primary sampling units – which covered 384 local authorities. Within these primary units the addresses for Samples A and B were selected. As explained, the former was of approximately 100,000 addresses and the latter of approximately 150,000 addresses. Equal numbers of addresses (about 2,500) were taken, at random, in each primary sampling unit, which brings about the desired result that every address on the frame has an equal chance of inclusion. (No attention was paid to the number of electors registered at each address.)



### Contacting the sample

To ensure correct delivery in the postal phase a full postal address had to be obtained for each household selected from the electoral register. The register does not identify the 'householder' or 'head of household' so a mode of address was necessary to ensure that a responsible person, preferably the head of the household, would accept and open the envelope on receipt. Where an address is clearly defined, then addressing to 'The Occupier' at that address suffices. In other cases, and particularly in some rural areas where an address may be no more than 'The Village', addressing to 'The Occupier' at such a vague address would render the letter undeliverable. No completely satisfactory solution has been found, but for this survey, in such cases, the mail was addressed to, for example, 'Mr. A. Abel or Present Occupier...'. The same procedure was adopted in tenement blocks in Scotland, and at addresses which appeared to contain a large number of households not separately identifiable by, for example, flat numbers. Thus within such an apparent multi-occupied address different surnames were taken as equivalent to different addresses.

Taking a sample of the general population to identify a sample of a rare population demands an even higher level of response from the initial sample than is usually necessary. This is because there is a greater probability that non-respondents and respondents will differ in ways which are relevant to the survey. For example in this survey there was the possibility of a higher response rate among the impaired than the non-impaired, because non-impaired households would tend to feel that the survey did not concern them. To test this hypothesis a daily check was made on the proportion of replies from the two types of household to see if there was any sign that non-impaired households were taking longer to reply. The proportion remained remarkably constant so it was assumed that non-respondent households did not differ from respondent households as regards whether or not they contained impaired persons. Of course the usual reminders were sent to achieve as high a response rate as possible. Two reminders were despatched at short intervals after the first mailing. The first of these was a letter only; the second comprised a further letter accompanied by a further copy of the questionnaire and a reply envelope. A response rate of about 85.6 per cent was achieved for both Sample A and Sample B.

### The interview stage

In adopting a postal approach to identify a rare population by means of a self-completion question-

naire, that questionnaire must be sufficiently 'all-embracing' to ensure that none of the rare population is excluded. Sometimes this means that people will be included who are not really members of the rare population; provided they are not excessively numerous, this does not matter too much, since they can be eliminated after the interview stage. This occurred in Sample B where, even after editing, it was suspected that the number of severely handicapped individuals was too high; this was confirmed on interview when of the 2,600 persons interviewed 1,500 were found to be ineligible. Another problem arose in Sample A in which more people were stated to be impaired (15,100 in 13,500 households) than it was necessary or possible to interview. Further sampling was necessary. It would be expected that a higher proportion of the elderly than of the younger age groups would be recorded as impaired, and in fact 58 per cent of the individuals so recorded were 65 or over. While there have been a number of studies of the elderly, little was known of 'younger' handicapped, and to conserve interviewing resources only one in four of the over-65's was interviewed, which reduced the number of persons to be interviewed from 15,100 to 8,500.

Both Sample A and Sample B could be analysed independently or, with reweighting, they could be combined to make overall estimates. A full description of the methods and results will be found in the report.

### Summary

The success of the method used to identify the rare population concerned depended on the following factors:

- (i) an adequate frame covering the general population
- (ii) a means of making contact with the sample of the general population
- (iii) a high response rate
- (iv) checks to ensure that any non-response does not lead to a biased sample of the specific rare population
- (v) adequate questionnaires for self-completion which will ensure on the one hand that none of the relevant rare population is missed; and on the other that there is sufficiently fine a sift to exclude most of those who do not belong to the rare population.

### Reference

*Handicapped and Impaired in Great Britain*. Part I. Social Survey Division, Office of Population Censuses and Surveys (HMSO) May 1971 (Price £3.25)



# Notes on current developments

## POPULATION AND VITAL STATISTICS

### 1971 Census of Population – England and Wales

The Preliminary Report giving provisional population counts, by sex, for each local authority area in England and Wales was published in mid-July. The figures are obtained essentially from the summaries made for each enumeration district by the enumerators. They will be superseded in due course by figures derived from the computer processing of the individual census forms. Final counts from the latter source of the enumerated population of each local authority area will be given in the County reports which will be published sequentially from the end of 1971 to mid-1972. Prior to that, some preliminary national tabulations will appear in two publications: an *Advance Analysis* and a volume of statistics derived from an early analysis of a sample of 1 per cent of the Census returns. The *Advance Analysis* will cover certain topics only (sex, age, marital status and country of birth) and will be produced from computer input sheets which enumerators prepared in the field: the enumerators coded answers to selected census questions and entered the codes on the input sheets in the form of machine readable marks.

The commentary to the Preliminary Report describes the first checks which have been carried out on the population figures. A major problem was provided by the return of some 300,000 census forms direct to the main office at Titchfield. This was due partly to a new provision for the confidential return of the forms and partly to an improved method of dealing with dwellings where the enumerator failed to contact the household. One of the checks described was on the receipt of such forms and the other a preliminary analysis of the coverage of dwellings. The revised count of the population of England and Wales raises the preliminary count by over 100,000 persons but is still about one third of a million persons below the population estimate for census day of 49.06 million which is based on the 1961 Census count carried forward to 1971 by reference to figures of births, deaths and net migration. The discrepancy may be due to the difficulties in estimating the balance of net migration.

The revisions have not been applied to the counts of population by local authority areas, and it is noted that these are particularly low in comparison to the estimates in the conurbations. The report notes that

the gaps are unlikely to be entirely closed by revisions of the Census counts, and migration from the central areas of some of the great cities seems to have been considerably more than had hitherto been estimated.

#### Reference

*Census 1971, England and Wales, Preliminary Report* (HMSO) August 1971

### 1971 Census in Scotland

The preliminary report on the 1971 Census in Scotland was published in July, giving a provisional population count of 5,227,706, slightly above the current annual estimate. The tabled corrections for usual residence within Scotland show that more visitors were in the cities than at previous censuses. There were nearly 42 thousand visitors from outside Scotland.

#### Reference

*Preliminary Report on the 1971 Census in Scotland* (HMSO) 1971 (Price 30p)

### Population projections for the United Kingdom

A new booklet will be published shortly by the Office of Population Censuses and Surveys containing the latest official projections of the total population of the United Kingdom and of its constituent countries by sex and age. This booklet is intended to be the first of an annual series and will bring together in a single publication, in common form, descriptions of bases and methods and projection results for the different countries. The projections have been carried out by the Government Actuary after discussion with the three Registrars General in order to obtain agreed bases for the calculations.

The starting figures for the projections are the Registrar Generals' estimates of the total populations of England and Wales, Scotland and Northern Ireland as at mid-1970. The booklet describes in turn the method by which the projections were made and how each of the components of population change was allowed for. There are sections dealing with mortality, fertility and migration, including a fairly detailed account of the analysis of the recent fertility experience in England and Wales and estimates for the future which take account of future marriage rates and legitimate fertility rates building up to a mean com-



pleted family size of about 2.4 children. The projected populations for each year to 2010 for each of the three countries and for Great Britain and United Kingdom aggregates are set out in full in the Appendix. The projected numbers differ very little from the previous year's projections because there has been very little change in the assumptions made then.

Projections are also given of the numbers married and unmarried, and of the underlying proportions, for the two sexes in five-year age groups for the years 1971, 1976, 1981, etc. for England and Wales, Great Britain and the United Kingdom.

The final section of the text describes the changes which have been found necessary from year to year in the bases underlying past projections (since 1955) in order to allow for the changing experience, and warns the reader that the new mid-1970 projections are themselves liable to be changed in future, the greatest uncertainty attaching to the number of persons born after 1970.

### **Mid-1970 based population projections for England and Wales**

*The Registrar General's Quarterly Return No. 489* contains *inter alia*, the latest population projections for England and Wales. These differ only very slightly from the mid-1969 based projections as the assumptions regarding neither mortality nor fertility have been altered. In connection with the latter the upturn in the number of births which occurred in the latter part of 1970 has continued in the first few months of 1971. This is the first time there has been a sustained upturn since the downward trend began in 1965, and suggests that in the short term the fertility assumptions of a year ago may be realised. In these circumstances there seemed to be no good reason for any change in the assumption that the average completed family size for all future marriages will be approximately 2.4 live births.

Some variation however was made in the short-term migration assumption and the remaining difference, as compared with last year's projection, arises because the actual estimate of the mid-1970 population, used as the base of the projection, differs slightly from the projection at mid-1970 given last year. No account has been taken of any possible revision to the population base arising from the preliminary results of the

1971 Census of Population, since the projections were prepared before the latter were available.

#### **Reference**

*The Registrar General's Quarterly Return for England and Wales No. 489. Quarter ended 31st March 1971 (HMSO) August 1971 (Price 22½p)*

### **Population and vital statistics – Scotland**

The Registrar General's first quarterly return for 1971, to be published next month, will contain projections of the Scottish population to 2001, local population estimates by age and sex for mid-1970, and overseas migration for the second half of 1970 in addition to the quarterly tables. The table of deaths by cause (ICD list A) has been extended to show age and sex in cross-classification for each cause.

### **Population living more than 50 miles from the sea**

In June, a Parliamentary Question was raised as to the number of people in Great Britain living more than 50 miles (80.5 kilometres) from the sea. The Office of Population Censuses and Surveys provided an estimate. Using a large-scale map of local authority areas, a ruler and compass, and the mid-1970 population estimates, the answer was approximately 10½ million out of a Great Britain total of 54 million. There was none in Scotland or Wales – measuring distance as the crow flies. The area in England is a very rough oblong, running from Harrogate in the north almost as far as Reading in the south, and including Leeds, Sheffield, Birmingham, Coventry, Northampton and Oxford.

## **HEALTH**

### **Survey of handicapped people in Great Britain**

The most detailed picture ever produced of impaired and handicapped people living in the community was published in May 1971 by the Office of Population Censuses and Surveys. It shows that some 1¼ million people aged 16 and over living in private households in Great Britain have some physical handicap.

This picture emerges from a large-scale survey covering a quarter of a million households and involving 11,100 personal interviews carried out in 1968 and 1969 by the Office of Population Censuses and Surveys. (See the article in this issue (14.1) on the selection of the sample.) The research was sponsored by the Department of Health and Social Security in conjunction



with the Department of Education and Science, the Department of Employment, the Department of the Environment, the Welsh Office and the Scottish Home and Health Department. It covered people of 16 and over living at home in Great Britain and was designed to discover the causes of their impairment, their housing conditions, their social life and leisure activities, and their ability to work. (The problems of handicapped children under 18 were examined and reported on in 1970 by the National Children's Bureau in their book *Living with Handicap*).

The survey defines impairment as lack of part or all of a limb or having a defective limb, organism or mechanism of the body. More than 3 million adults have an impairment of this kind. Disablement is defined as the loss or reduction of functional ability as the result of impairment, and handicap is defined as the disadvantage or restriction of activity caused by disablement. About 1½ million adults are handicapped.

On these definitions the survey estimates that Wales and Yorkshire have the highest proportion of impaired men; London and South-East the lowest. The highest proportion of impaired women is found in the South-West. It is estimated that in private households there are 25,000 people, mainly elderly women, so handicapped as to need constant care during the day and usually some care at night; 130,000 people, again mainly elderly and predominantly women, who cannot be left alone for long during the day; 360,000 people who are severely handicapped and 600,000 who are appreciably handicapped. This gives a total of 760,000 women and 370,000 men who are handicapped, 70 per cent of them aged 65 and over.

#### *Other points from the survey:*

One in every five handicapped persons is living alone.

Half of the very severely and severely handicapped are seen regularly, usually once a month, by their family doctor. The rest send for or visit him when necessary.

About 18 per cent of the very severely handicapped are registered with a local authority, as are 11 per cent of the severely handicapped and seven per cent of the appreciably handicapped. This does not, however, mean that the unregistered do not receive local council health and welfare services. Three out of four of the most handicapped are helped by at least one of the health and welfare services, as is one in three of the other very severely handicapped.

There are 488,000 impaired housewives living at home, who are prevented by disability from doing household chores.

Three-quarters of all impaired persons are able to get out of the house and their disability does not prevent their going wherever they wish.

Of all impaired people, 95 per cent have access to radio and 90 per cent have access to television.

A third of impaired persons are retired. It is estimated there are 697,000 impaired men and women in the national labour force, 554,000 of whom are actually working.

In general, the accommodation of impaired people is no older or more modern than that of the general population, and only 23 per cent of people in the sample had had at least one adaptation made to their homes to make life easier for them.

#### Reference

*Handicapped and Impaired in Great Britain. Part 1. Part II Work and Housing of Impaired Persons in Great Britain.* Social Survey Division, Office of Population Censuses and Surveys (HMSO) May 1971 (Price Part I £3.25, Part II £2.25)

## **PUBLIC CLEANSING**

### **Refuse disposal**

A report by an independent working party, appointed by the former Minister of Housing and Local Government, and whose work continued under the auspices of the Department of the Environment, was published in April 1971.

Among other matters, the report deals with the quantities and nature of refuse. It evaluates present practices for disposal in relation to each other and to the changing character of refuse.

Statistical information for the report was obtained by questionnaire from local authorities; replies covered about 95 per cent of the population of England.

#### Reference

*Report of the Working Party on Refuse Disposal*, Department of the Environment (HMSO) April 1971 (Price £1.15)



## EDUCATION

### The school curriculum and the deployment of teachers

The second of two volumes giving results of an enquiry into the curricula of pupils and teacher deployment in secondary schools, undertaken in the autumn 1965, was published in July 1971 as *Statistics of Education, Special Series No. 4*.

Although conducted as a single undertaking, the original enquiry in effect comprised two separate sample surveys. The first survey related to the qualifications, training and deployment of teachers by their subjects of professional training and teaching timetables. Its main findings were published in *Statistics of Education, Special Series No. 1* (see *Statistical News* 2.19). The second survey related to the subjects taught in schools, the structure of pupils' curricula and the sizes of teaching groups, and provides the main content of the volume that has just been published. This second volume also contains some additional information about teacher deployment.

The two volumes on the enquiry contain a total of over 220 pages of statistical tables and between them present a broad documentation of pupils' curricula and teacher deployment in secondary schools, providing a source of information in their own right and a starting point for further research into particular aspects of secondary education. Although a considerable delay has occurred between the collection of the information and the publication of the second volume, the analyses are a unique source of information not covered in the regular annual statistics of schools and should still be generally relevant to the structure of secondary education.

Both surveys were based on the timetables of a sample of 13,500 teachers. From this source were derived the curricula of 219,000 pupils, and the groups in which they were taught. The information obtained has been analysed by subjects taught, sex and year of course of pupils and types of school. In its introductory section the volume includes comments that are intended to give guidance to the use of the tables.

#### Reference

*Statistics of Education, Special Series No. 4* (HMSO) July 1971 (Price £2.50)

### Northern Ireland education statistics

The latest information (1969/70) about education statistics in Northern Ireland, which relates mainly to schools, pupils, teachers, scholarships and awards, is

contained in *Northern Ireland Education Statistics No. 11*.

Comparison with the previous year shows increases in every sphere – for example the total school population at January 1970 was almost 344,000, which was about 8,000 more than in 1968/69. Enrolments in primary schools increased by about 4,000 to 208,000 and in secondary schools by some 3,000 to over 132,000. The number of full-time teachers more than kept pace with the increased enrolments: the total of 14,200 at January 1970, an increase of nearly 500, meant that the pupil/teacher ratio was 24.2 compared with 24.4 in January 1969. Also, compared with 1968/69, grammar school scholarships increased by 800 to over 39,700, university scholarships by 542 to 7,025 and further education scholarships by 174 to 1,915.

Teacher training scholarships awarded to new students in 1969/70 totalled 1,657 compared with 1,494 in the previous year. The total number of teacher training scholarships held in 1969/70 was 3,868 of which 2,673 were tenable at colleges and other institutions in Northern Ireland and 1,195 in Great Britain.

#### Reference

*Northern Ireland Education Statistics No. 11* (HMSO) April 1971 (Price 87½p)

## MANPOWER AND EARNINGS

### Scientific and technological manpower in Great Britain

A new study entitled *Persons with Qualifications in Engineering, Technology and Science 1959 to 1968*, No. 3 in the series *Studies in Technological Manpower*, was recently published by the Department of Trade and Industry. This was the most comprehensive study ever prepared of the numbers, employment and migration of persons with qualifications in engineering, technology and science (QSE's) in Great Britain. It gathers together data from the triennial manpower surveys and the census of population into an inter-related system of stocks and flows.

The report is in four parts, the first consisting of charts and summary tables which show the changes in the national stock of qualified manpower, the numbers in employment overall and the main sectors of the economy in which they are employed.

The second part describes the flows of QSE's and estimates the most likely value of total stock in Great Britain in the years 1959, 1962, 1965 and 1968, given



the two census points 1961 and 1966. The conceptual basis of the analysis and the procedures used to obtain estimates of new supply, migration and deaths are also described, and an analysis is given of the net changes in the numbers of QSE's over the period.

The third part describes the statistical procedures adopted to link the data derived from the population census of people with scientific and technological qualifications with those from the employer-based surveys. It gives a series of employment statistics for twelve groups of manufacturing industries and for eleven other sectors of the economy. Additional tables are included to show the way that these qualified persons are distributed over the economy, the growth in employment between 1959 and 1968 and the numbers per 100 employees ('density') industry by industry.

The fourth part is devoted to the 1968 employer-based manpower survey. It describes the survey methodology and grossing-up procedures, the results being given in 27 detailed tables. One separate set of tables is devoted to employment in all sectors; the other two give details for manufacturing and for public corporations. Statistics of technicians are also given. The appendix describes how the coherent system of statistics provides the basic data for a set of manpower flow models for the 400,000 QSE's in Great Britain.

#### References

Studies in Technological Manpower No. 3. *Persons with Qualifications in Engineering, Technology and Science 1959 to 1968* (HMSO) March 1971 (Price £2.25)

*Sample Census 1966, Great Britain. Scientific and Technological Qualifications* (HMSO) May 1971 (Price £1.15)

#### Index of wages and salaries per unit of output in manufacturing industry

The Department of Employment has recently introduced an experimental *monthly* index of wages and salaries per unit of output in the manufacturing sector. This has been derived by combining three seasonally adjusted component indices for this sector as follows:

$$\frac{\text{average earnings} \times \text{employees in employment}}{\text{manufacturing production}}$$

This crude index is then smoothed and constrained so that the average of the 12 monthly values in each calendar year from 1963 onwards agrees with the published annual series of wages and salaries per unit of output in the manufacturing sector which the Central

Statistical Office compiles using data from the national accounts. Details of the new experimental monthly series are given on page 360 of the April 1971 issue of the *Department of Employment Gazette*: the latest figures are published in the *Gazette* each month.

#### Seasonal adjustment of unemployment series

In 1968 it was found that the method of seasonal adjustment then being used for the unemployment series was overadjusting so that the adjusted series appeared to be rising or falling when in fact the underlying trend was substantially flat. The Research and Special Studies Division of the Central Statistical Office was invited by the Department of Employment to investigate what had happened and to suggest an improved method. An account of the research was issued last month in *Studies in Official Statistics: Research Series No. 4* and is available from HMSO, price 50p.

The employment series has both a constant and a trend dependent seasonal component and a regression method was used to estimate a mixture of additive and multiplicative monthly seasonal components. A detailed investigation was therefore undertaken into the use of such methods of seasonal adjustment and associated problems. In the course of the work attention was given to the estimation of trend. It was decided to do this in two stages. A 12-month centred moving average was used as the first trend estimate from which preliminary seasonal factors were estimated and a preliminary seasonally adjusted series calculated. Another moving average of this preliminary seasonally adjusted series was then taken to give an improved trend estimate which was then used for the final estimation of the seasonal factors. Instead of estimating the monthly additive and monthly multiplicative seasonal factor separately, it was proposed to estimate the amplitudes of the corresponding Fourier sine and cosine waves: this permitted the use of a stepwise regression program to give the significant amplitudes, that is, to give a smoother estimate of the seasonal variation than would be the case if all of the amplitudes were estimated and used. Another point to which attention was given was the modification of extreme values, which may occur because of severe weather or strikes, so as to reduce bias of the estimated seasonality.

When these various developments were put together in a computer program and tried on the series it was found that recent observations were still being over-adjusted, although less so than before. This pointed to an unusually large change in the seasonality of the



series round about 1967. Scrutiny of the results suggested that the pattern of seasonality before and after 1967 had changed marginally, if at all, during the historical period examined. It was therefore decided to estimate the pattern of the seasonality using a 10-year base with the seasonals prior to 1967 scaled to correspond to the post-1967 amplitude. At the same time a local amplitude scaling factor was introduced to make an estimate of the amplitude of the seasonality using the last two years of the data. This factor serves two purposes. First, it monitors the current behaviour of the series and is used to estimate the prior scaling factor in the 10-year base. Second, it is used to effect a final correction to the seasonal amplitude when adjusting current observations.

The method as developed in this work was adopted officially in April 1970 and has since been applied to component series differentiated by sex, by industry and by region. It has also been used for the national series for vacancies and may prove to have wider applications.

#### Reference

*Seasonal adjustment of unemployment series*, Studies in Official Statistics: Research series No. 4 (HMSO) July 1971 (Price 50p)

## PRODUCTION

### Census of Production: Post-census inquiry

A new series of annual censuses of production has been launched by the Business Statistics Office as part of the new system of industrial inquiries<sup>(1)</sup>; the first of these censuses is now being taken for 1970. To investigate firms' reactions to the census, accounting conventions followed, and methods of estimation used in completing the census return, an informal post-census inquiry is being conducted. This is the first post-census survey into a production census in this country. Members of the Government Statistical Service concerned with production statistics, in the Business Statistics Office, the Central Statistical Office and in statistics divisions of government departments are visiting a random sample of respondent firms to interview those responsible for completing the questionnaires. A report on the post census inquiry will be published in due course.

<sup>(1)</sup>See 'The Development of Industrial Statistics', J. Stafford, *Statistical News* No. 1, May 1968

## Comparable input-output tables for 1954 and 1963

An article on developments in input-output statistics in the February 1971 issue of *Statistical News* (12.2) noted that the Department of Applied Economics, Cambridge, with the aid of finance provided by the Central Statistical Office, had taken on the major task of expanding and re-classifying the input-output tables for 1954 so that they would be, as far as possible, comparable with the tables published for 1963. The results of this analysis are now available on request, either from the Department of Applied Economics, Cambridge, or the Central Statistical Office.

The published input-output tables for 1954 distinguished 46 industries and were based upon the 1948 Standard Industrial Classification. Hence, to ensure comparability with the 1963 tables, it was necessary to expand the 1954 tables to distinguish as many as possible of the 70 industry groups published for 1963 and to bring the figures on to the basis of the 1958 SIC. In practice, it was only possible to expand the 1954 tables to 68 separate industries, because there were not sufficient data available to analyse separately the purchases and sales of the two non-ferrous metal industries and the two transport industries. Another limitation is that the reworked absorption matrix for 1954 does not distinguish in detail between imported and home produced commodities; in other words it is comparable with the sum of Tables B and C of the 1963 Study. Consequently, the data for 1963 have been regrouped by the CSO to correspond, as far as possible, with the expanded data for 1954, so that 'make' and 'absorption' matrices are available for 68 industry groups on the 1958 SIC for both 1954 and 1963. These regrouped matrices for 1963 are available on request from the CSO.

The work on the 1954 tables was carried out by V. H. Woodward and O. T. Hooker and is described in an unpublished paper by V. H. Woodward which is available from the Department of Applied Economics, Cambridge.

### Reorganisation of industrial statistics

The new system of quarterly sales enquiries will be extended in the third quarter of 1971 to cover the following 22 industries:

Milk and Milk Products—MLH 215†  
Soap and Detergents—MLH 275\*  
Dyestuffs and Pigments—MLH 277\*†  
Polishes—MLH 279/1\*



Photographic Chemical Materials—MLH 279/7\*  
 Photographic and Document Copying Equipment—  
 MLH 351\*  
 Watches and Clocks—MLH 352\*  
 Surgical Instruments and Appliances—MLH 353  
 Scientific and Industrial Instruments and Systems—  
 MLH 354\*  
 Locomotives and Railway Track Equipment—MLH  
 384†  
 Railway Carriages and Wagons, and Trams—MLH  
 385†  
 Cutlery, Spoons, Forks, and Plated Tableware, etc.—  
 MLH 392\*  
 Jewellery—MLH 396 (Part)\*  
 Production of Man-made Fibres—MLH 411  
 Spinning and Doubling on the Cotton and Flax  
 Systems—MLH 412  
 Weaving of Cotton, Linen and Man-made Fibres—  
 MLH 413  
 Woollen and Worsted—MLH 414  
 Carpets—MLH 419\*  
 Narrow Fabrics (not more than 30 cm wide)—MLH  
 421\*  
 Household Textiles and Handkerchiefs—MLH 422/1  
 Textile Finishing—MLH 423  
 Refractory Goods—MLH 461/1

†These enquiries replace existing monthly enquiries into: production of ice cream and water ices, and condensed milk and milk powder (MLH 215); dyestuffs (Dyestuffs Office) (MLH 277); the locomotive industry (MLH 384); railway carriages and wagons (MLH 385).

\*These enquiries replace existing quarterly enquiries into: soap and scouring preparations, and synthetic detergents and surface active materials (MLH 275); colour makers (MLH 277); polishes (MLH 279/1); photographic, xerographic and document copying equipment (MLH 279/7 and 351); watches and clocks (MLH 352); optical instruments, scientific and industrial instruments and apparatus, and systems, control and instrumentation (MLH 354); cutlery, spoons and forks, and safety razor sets and blades (MLH 392); jewellery (MLH 396); carpets and rugs (MLH 419); elastic goods and narrow fabrics (MLH 421).

In each of the above industries the enquiry will cover all establishments with 25 employees or more, except for Jewellery and Surgical Instruments and Appliances where coverage will be 11 employees or more. The results of these enquiries will be published on a regular basis, subject to safeguards on confidentiality, in the Business Monitor series.

The following short-period enquiries will continue:  
 Milk and Milk Products—MLH 215  
 Monthly return by the Association of Butter Makers,  
 Blenders and Packers  
 Monthly enquiry into stocks of home produced  
 cheese  
 Monthly enquiry into stocks of condensed and pow-  
 dered milk  
 Soap and Detergents—MLH 275  
 Monthly enquiry into the production of soap and  
 scouring preparations (the section on the usage  
 and stocks of oils and fats in soap-making will in  
 future be collected quarterly)  
 Monthly sales enquiry into synthetic detergents  
 Dyestuffs and Pigments—MLH 277  
 NEW monthly enquiry into total sales  
 Production of Man-made Fibres—MLH 411  
 Monthly return to the Man-made Fibres Producers  
 Committee  
 Woollen and Worsted—MLH 414  
 Monthly enquiries sponsored by the Wool Industry  
 Bureau of Statistics

Carpets—MLH 419  
 Monthly enquiry into orders and sales of carpets  
 and rugs  
 Refractory Goods—MLH 461/1  
 Monthly enquiries sponsored by the National Fed-  
 eration of Clay Industries

Further information on government enquiries can be obtained from:

Department of Trade and Industry

a. Economic and Statistics Division 3, Dean Bradley House, Horseferry Road, London SW1 (Tel. 01-799 5688 Ext. 17) for enquiries into MLH's 351, 352, 353, 354, 384, 385, 392 and 396.

b. Economic and Statistics Division 3, 1 Victoria Street, London SW1 (Tel. 01-222 7877) for enquiries into MLH's 275, 277, 279/1, and 279/7 (Ext. 3655); for MLH's 411, 412, 413, 414, 419, 421, 422/1 and 423 (Ext. 3160); and for MLH 461/1 (Ext. 3466).

Ministry of Agriculture, Fisheries and Food, Statistics Division 1, Great Westminster House, Horseferry Road, London SW1 (Tel. 01-834 8511 Ext. 6418) for the enquiry into milk and milk products.



The following industries can now be added to those reported earlier where discussions between government statisticians and industry interests, on the reorganisation of industrial statistics, have already commenced:

Sugar—MLH 216

Synthetic Resins and Plastics Materials—MLH 276/1

Formulated Adhesives, Gelatine etc.—MLH 279/2

Explosives and Fireworks—MLH 279/3

Aluminium and Aluminium Alloys—MLH 321

Copper, Brass and Other Copper Alloys—MLH 322

Other Base Metals—MLH 323

Rope Twine and Net—MLH 416

Other Textile Industries—MLH 429/2

Miscellaneous Manufacturing Industries—MLH 499/2

### Review of construction statistics

The Standing Consultative Committee on Construction Statistics of the National Consultative Council of the Building and Civil Engineering Industries held its second meeting on 27 May 1971.

A working group which had investigated the various methods of measuring construction output reported that the current method—deflating a value series—appeared the most suitable and that any further work should concentrate on improving this method.

A second working group which had been examining the compilation of construction price indices—for use, among other things as a deflator for the output series—presented an interim report to the effect that work should be undertaken to make further use of unit price data from bills of quantities and of regression techniques. A programme of future work to attain these ends is to be prepared for the next meeting of the Committee on 23rd November 1971.

A third working group is to be set up to examine the requirements for statistics of the construction industries. There will be a fundamental review of construction statistics which will cover all aspects including the basis of the contractors' register, the content, frequency and design of enquiry forms, the sampling, collection and computational procedures.

The Committee is now chaired by Mr. J. T. Redpath, Director General (Housing and Construction), Department of the Environment, and includes representatives of trade and professional associations and of the Government Statistical Service.

### Electricity supply industry statistics: Standard review periods

For many years it has been apparent that the use of the Gregorian calendar for statistical management information causes interpretative difficulties. These are due to the irregular number of days in a month and the changing composition of a month due to the incidence of working days. More recently, the use of computers for data handling has increased the need for a systematic coding of weeks and other standard periods. Various organisations have produced such systems but not all are compatible.

During the past two years the electricity supply industry in Great Britain has moved towards a common system. This system has operated from 1st April 1971, and although it initially applies to only part of the industry's activities it is planned to extend it. The basic unit of the standard is the week and all other review periods are exact multiples of the week. The year is normally 52 weeks but, in order to accommodate the odd day in each year (2 in a leap year), is occasionally 53 weeks. The Industry's need for an approximation to the Gregorian quarter leads to a 13-week period which is composed of two 4-week periods followed by one 5-week period. This sequence was chosen because a larger proportion of public holidays occurs at the end of a quarter and the resulting fall in economic activity counter-balances the effect of the extra week.

The standard agreed by the electricity supply industry is that:

- (a) a week shall commence at 00.01 hours Monday and consist of  $7 \times 24$  hours periods,  
(b) week number 1 of a year shall be the first week containing four days or more of the new year;
- (a) month 1 and quarter 1 will begin at the same time as week 1,  
(b) the month shall consist of 4 or 5 standard weeks,  
(c) the quarter shall consist of a cycle of 3 monthly periods of 4, 4 and 5 weeks;
- The annual period will normally consist of the aggregate of 52 weeks but in certain instances it may be 53 weeks.

The multiplicity of statistical returns to be covered by this Standard is such that compliance with definition



1(a) above is not possible in certain cases. However the variations are small in effect. The occasional 53rd week may also be excluded from standard months or quarters depending on the purpose for which the statistics are required.

The British Standards Institution have recently issued a draft standard on the numbering of weeks (BS 4760). This is based on the recommended international standard. The Electricity Supply Industry Standard conforms with the suggested British Standard and goes further in that it defines months and quarters. Further details of the Electricity Supply Industry Standard can be obtained from the Electricity Council, Commercial Department, 30 Millbank, London SW1.

## **DISTRIBUTION**

### **Census of Distribution for 1966**

Volume 2 of the *Report on the Census of Distribution and other Services 1966* is due for publication this month. Provisional results of the Census were published in the *Board of Trade Journal* on 23 February 1968, and Volume 1 of the *Report* which gave the main results of the census was published in March 1970. Volume 2 includes the results of two inquiries conducted after the main census but also for 1966, one relating to the operation of goods vehicles by retailers and their general transport costs and the other relating to an inquiry in which floorspace figures and self-service and check-out information were collected.

Tables showing goods vehicles operated by retailers, by type of licence and vehicle weight for the 25 kinds of business distinguished in the census, are presented for the first time. Retailers' transport costs are analysed within their various cost components by kind of business and are also calculated on a per vehicle basis.

The floorspace group of tables provide for the first time estimates of turnover per square foot of selling space by kinds of business and by the turnover size of shops within six types of shopping centre aggregates distinguished in the report. The tables also include numbers of establishments broken down into thirteen sizes of the turnover per square foot ratio.

Among the special methods of trading which the report covers, that of self-service trading is analysed in some detail for grocery shops; tables are given for turnover per square foot and turnover per check-out and comparisons are made with counter service shops

in terms of turnover per person engaged, stock-turn ratios and gross margins. This section also includes tables on mail order businesses, automatic vending machine operators, mobile shops and credit traders calling on customers.

The report also presents tables which give the standard errors calculated for a number of the main variables appearing in the tables published in Volume 1.

#### **Reference**

*Report on the Census of Distribution and Other Services 1966*, Vol. 2 (HMSO) August 1971 (Price £1.20)

### **Commodity analysis of the turnover of large retailers**

A new analysis of the commodities sold by large retailers (with a turnover exceeding £1m. in 1966) was published in *Trade and Industry* on 30 June 1971. This information is derived from the 1967-1969 Annual Inquiries into the Distributive and Service Trades conducted by the Business Statistics Office and from the 1966 Census of Distribution.

A number of interesting developments are disclosed. The value of sales of tobacco and of alcoholic drink by large retailers increased by 50 per cent and over 60 per cent respectively between 1966 and 1969, a period during which total consumers' expenditure on tobacco increased by 13 per cent and on alcoholic drink by 20 per cent. These changes are reflected in the commodity mix of sales by large grocers: tobacco accounted for 1.3 per cent of their sales in 1966 and nearly 5 per cent in 1969; the comparable figures for alcoholic drink being 2 per cent and 4 per cent respectively.

Non-food shops increased their share of the sales of food by large retailers from 12 per cent in 1966 to 13 per cent in 1969. This increase is reflected in the proportion of all sales by clothing and footwear shops accounted for by their food departments which increased from 9 per cent to 11 per cent between these years.

The co-operative societies' share of all sales of food by large retailers fell from 28.5 per cent in 1966 to 25.1 per cent in 1969. But as a proportion of the large co-operative societies' total sales, food sales increased from 57.3 to 58.8 per cent.

Between 1966 and 1969 the sales by large retailers of goods and services other than food, alcoholic drink and tobacco, increased by 18 per cent. Of this increase nearly two-thirds may have been attributable to price



changes. The proportion sold by food shops increased from 2.4 per cent in 1966 to 2.7 per cent in 1969, a modest rise compared with the rapid growth in the sales of non-food shops recorded by all food shops between the 1961 and 1966 census, when the share increased from 1½ per cent to 2½ per cent.

## **FOOD AND AGRICULTURE**

### **Food consumption levels**

Revised estimates of food consumption in the United Kingdom, together with detailed nutritional analysis for the period 1967 to 1970 were published in *Trade and Industry*, 15 July 1971.

The estimates relate to total supplies of food moving into consumption (after deductions for exports, waste and non-food uses) divided by the estimated population to give average consumption per head. They are the only available figures for the total food consumption of the population as a whole, and enable the overall food position to be compared over different periods of time.

Estimates of the consumption of alcoholic drinks are included in the tables. They are based on statistics collected by HM Customs and Excise of the quantities of spirits, beer and wines retained for use in the United Kingdom.

### **Farm finance in England and Wales**

Part of the data necessary for a full understanding of the economic conditions and prospects of any industrial sector or individual firm cover:

(a) the sources of funds for capital formation and (b) the composition and relationships of assets and liabilities. Information about the sources and composition of investment funds guides the formation of fiscal and industrial policy decisions while facts about indebtedness help lenders in their decision making.

In industry generally, where most activity originates with large public companies, these data exist, since balance sheets of quoted companies have by law to be published and filed with the Registrar of Companies. Sources of funds and business ratios can then be calculated, both by investment analysts and financial statisticians (see *Trade & Industry*).

In agriculture, both the government, with its policy of encouraging a healthy rate of capital formation, and farm management advisers need such information. However, only a tiny part of the agricultural industry constitutes public quoted companies such as J. B. Eastwood. For this reason the available published statistics about the balance sheets of agriculture are negligible.

Recently the opportunity was taken in England and Wales to begin to fill this gap by collecting from farmers samples of balance sheets, as well as trading accounts. Farm trading or operating accounts have been collected since the mid 1930's in the Farm Management Survey. Currently the survey comprises some 2,500 accounts annually which may be compared with a total of 140,000 full-time farms in England and Wales. It is carried out by the staff of university departments of agricultural economics. Farmers provide the information voluntarily and the results for any individual farm are confidential to the university. The accounts are analysed by the Ministry of Agriculture, Fisheries and Food to provide (for the Annual Review of farm prices and other policy considerations) information on levels of net income and trends in output and expenses by type of farm and size of business. The accounts are collected generally by means of several field-visits a year, and over the years the farmer is encouraged to keep better records and comes to trust the investigator.

Most private individuals, not least farmers, are traditionally reluctant to disclose details of their debts and cash holdings, but the relations of mutual confidence established between farmers and the universities have made it possible to collect in 1970 comprehensive statements of assets and liabilities for a subsample of 550 farms in the Survey. These 550 were drawn from the whole of England and Wales, but the methodology of the enquiry owes much to pioneering work which has been carried out in the South West by Exeter University over a number of years.

Among the more important problems dealt with were:

- (a) A balance sheet appropriate to farm businesses had to be drawn up, the items defined and the mechanics of reconciling the changing liabilities over the year with the trading account had to be agreed with the Universities.
- (b) The amount of resources that could be devoted to the project had to be decided on, and additional training had to be given to the field staff, in the form of instructions and a seminar.



(c) It was feared that many of the 2,500 farmers might not wish to supply this information. Thus it was decided not to seek it from all, but only from those who were most likely to co-operate. This may have impaired the representativeness of the information.

(d) Since many farmers are tenants, renting their land and buildings, the composition of their own assets differs markedly from that of owner occupiers who own their farms. It was therefore decided to analyse the balance sheets for these groups separately.

The data subsequently collected have been analysed by type of tenure, type of farming and size of business. Throughout, averages have been obtained by weighting sample results by the total number of holdings in England and Wales in each category of tenure, type and size.

The items collected in the balance sheets refer only to the farm business and every effort was made by the field staff to eliminate private (or domestic) liabilities or assets. Because of the judgement needed in valuing certain assets, in particular land and buildings, and because only one year's data are available, the absolute levels of some of the figures have a margin of error. It is important to note also that, since most farm accounts have years ending in December or March, the balance sheet figures relate on average to early spring and may not therefore give a representative picture of the average financial position, particularly as regards the relationship between current physical and liquid assets and the level of bank overdrafts. This is because cropping farmers and many livestock farmers can naturally be expected to have more of their working capital in cash and a smaller part in physical form at the start of the growing season.

Some of the chief results of the figures when analysed were that owner-occupiers had a higher ratio of assets to debts than tenants, and small farms had a much higher ratio of liquid assets to debts than larger farms. From the data it was possible to identify the various sources of funds for investment during the year 1969/70 and the disposition of these funds between the various categories of asset both physical and financial.

In the same year 1969/70, a second special investigation was carried out for all the 2,500 farms in the Survey in order to collect detailed information about additions to fixed assets (or gross capital formation). This study measured the gross additional investment per farm in land, buildings, works, houses, machinery and equipment in schemes or parts of major schemes physically

completed during the 1969/70 trading year. Investment expenditure included all fees and charges, site preparation and the value of all labour paid and unpaid; but repair and maintenance costs were excluded. Figures for the capital investment survey have similarly been analysed by type of tenure, type of farm and size of business.

Further details of both investigations and the main results have been published in the *Farm Incomes Report 1969/70*.

#### Reference

*Farm Incomes Report 1969/70* (HMSO) March 1971 (Price £1.25)

### Yields of laying fowls in England and Wales

A new series now available from the Ministry of Agriculture, Fisheries and Food is that of yields of laying fowls on agricultural holdings in England and Wales. The figures, which are the results of the Ministry's Egg Yields Survey, give estimates of the proportions of the national laying flock kept under each of the three main systems of management (battery, deep litter and free range), the average yield of birds under each system and the overall average yield. Results will be published annually as a press notice in about October; the first press notice, for 1969/70, was published in March 1971 to coincide with the publication of a paper giving a series of results from 1960 to 1969, together with some earlier figures. Copies of this paper – 'Surveys of Egg Yields in England and Wales, 1948–69' by C. R. Orton, *British Poultry Science* No. 12, 1971 – are available from the Ministry of Agriculture, Fisheries and Food, Agricultural Census Branch (Room A622), Government Buildings, Epsom Road, Guildford, Surrey, price 15p (post free).

### BALANCE OF PAYMENTS

#### Inventory of UK external assets and liabilities

The Bank of England have this year advanced by several months publication of the United Kingdom's estimated external assets and liabilities, which are given for the end of 1970 in the June issue of their *Quarterly Bulletin*. Detailed tables showing the relationship between the transactions recorded in balance of payments accounts and changes in UK external assets and liabilities will continue to be published as Annex 1 to the annual Balance of Payments Pink Book.



## **NATIONAL ACCOUNTS**

### **National and sector balance sheets**

*Economic Trends* for May 1971 contained an article by J. Revell and A. Roe describing the results of a project partly financed by the Central Statistical Office, and carried out by a team working at the Department of Applied Economics, Cambridge, on updating Professor Revell's pioneer work on national balance sheets. Estimates have been compiled covering the period 1957-66 and the article describes these, attempting to pinpoint some of the trends which they indicate. Since the purpose of national balance sheets is the explanation of economic behaviour, the most appropriate general valuation for application to economic units on the basis of their continuing activity is the price level current on the day of valuation. An attempt has therefore been made to value all assets and liabilities on a market value basis. Aggregated balance sheets for five broad sectors and ten asset/liability categories are shown in the tables. They result from combining the balance sheets of all the independent units comprising a sector. These units are households and non-profit organisations serving persons which comprise the personal sector; the group of companies under common ownership in the financial company and industrial and commercial company sectors; and the central government, local authorities and public corporations in the public sector. The effect of combining balance sheets of units within a sector is that all financial links between independent units are shown, both between units in the same sector and between units in different sectors. Intra-sector assets and liabilities are not cancelled out except in the case of the central government. The article also refers to the more detailed work underlying the estimates, which provide information about the balance sheets over the ten-year period for 34 sectors and 56 asset/liability categories.

### **Wages and salaries**

Hitherto, it has been the practice in the National Income and Expenditure Blue Book to publish separate estimates of wages and salaries for individual industries within manufacturing and for all industries combined. It has been decided that, as the distinction is difficult to make and is somewhat arbitrary, it will be dropped from the 1971 Blue Book which will be published in early September. Separate estimates, consistent with earlier ones, will however be calculated comparable with the 1971 Blue Book and will be available on request to the National Accounts Section of the Central Statistical Office.

## **INTERNATIONAL**

### **Conference of European Statisticians**

The nineteenth plenary session of the Conference of European Statisticians was held in Geneva from 14-18 June 1971. Participating at the Conference were representatives from twenty-four member countries of the Economic Commission for Europe, as well as Canada, and representatives of several international organizations. The United Kingdom was represented by Professor C. A. Moser, Director of the Central Statistical Office, and by Mr. J. N. C. Hancock, also of that Office.

At the opening session the Executive Secretary drew attention to Resolution 1 (XXVI) by which the Economic Commission for Europe requested each Principal Subsidiary Body to join its efforts with those of other subsidiary bodies, and the Commission as a whole, to develop mutually supporting policy-oriented activities by proposing the organization of joint meetings and drawing attention to projects which would benefit from the combination of general and sectoral view-points. The Commission had set up new Principal Subsidiary Bodies in two of its priority fields namely, environment and science and technology. Subsequently, the Conference agreed that the new bodies should be invited to join in the joint sponsorship of the statistical work in these two fields, upon which the Conference had already started. The Executive Secretary also said that he intended to recommend to the Inland Transport Committee that work on transport statistics carried out by the Working Party on Transport Statistics should be conducted under the joint auspices of the Committee and the Conference. He further suggested that the Conference should consider intensification of its work on demographic statistics by taking up migration statistics, and projections of households and families, in preparation for the Regional Population Conference which had been proposed for 1973, but on which no decision had yet been taken by the Commission. The Conference included these two subjects in its work programme.

The agenda for the nineteenth session of the Conference was broadly divided into (i) general frameworks for integrating statistics, (ii) statistical programmes in individual fields, (iii) organizational and operational subjects, (iv) co-ordination of statistical activities, (v) the five-year programme of work of the Conference. Under (i) and (ii) above, the discussion was centred on reports of meetings of Working Groups which had been held since the eighteenth session of the Conference in 1970 on a wide range of statistical subjects. The main ones related to national accounts and balances, a system



of demographic and social statistics (including social indicators), classifications (external trade, commodity, and education), agricultural, industrial, energy, chemical and productivity statistics and statistics of science and technology. Discussions took place on aspects of electronic data processing which included the development of an integrated statistical information system and also international statistical data banks and the way in which national statistical offices can have access to them. The co-ordination of statistical activities (iv) above, related to the statistical work of the Economic Commission for Europe and also to the statistical work of other international organizations in Europe. The programme of work for 1971/72 takes account of the requests of the Economic Commission for Europe mentioned above, for joint efforts among various subsidiary bodies of the Commission, and also includes a programme of meetings on statistics and indices of prices and quantity, the distribution of income, consumption and wealth, the system of demographic and social statistics, a correspondence key between United Nations Standard International Trade Classification and the classification of foreign trade used by East European countries, statistics of science and technology, statistics for environmental studies and policies, statistics of tourism and various aspects of electronic data processing.

A feature of this session of the Conference was a discussion paper prepared by Poland on the cycle of large-scale statistical enquiries during a decade, including both industrial enquiries and, particularly, population censuses, in view of recent experiences of countries in holding such censuses.

#### **OECD overseas development aid: Report of the Group on Statistical Problems**

This sub-committee (with a UK representative as the Chairman), which is now a permanent part of the DAC organisation, presented a further Report (DAC(71)28) to the full Development Assistance Committee on 26 May 1971.

The Group had been particularly concerned with the examination of flows to developing countries having the character of aid but not heretofore recorded as such. On one of the principal cases, that of grants by private voluntary organisations (the development and welfare activities of missionary societies, charitable foundations and the like) the Group had reached a state of agreement in principle and also on techniques of measurement. These flows are now to be reported

by donor countries. They would amount, for the UK, to about £20 million a year.

Agreement had also been reached in principle that the administrative costs of the aid programme should also be included, since they amounted to a resource cost on the part of the donor country, but suitable definitions and appropriate methods of measurement were still under consideration.

Discussions on a number of other technical questions of measurement (relating, for example, to food aid and flows through subsidiary companies) were also reported.

#### **United Nations Statistical Office**

Mr. P. J. Loftus, who has been Director of the United Nations Statistical Office for nearly 10 years, has left, and from 1 July 1971 Mr. Abraham Aidenoff became the Acting Director of that Office.

## **PUBLICATIONS**

### **Guide to statistics**

The need for a new and comprehensive guide to statistics has been felt for some years. As an interim measure the Central Statistical Office has started work on preparing a new list of principal statistical series and publications to replace the *List of Principal Statistical Series Available* (Studies in Official Statistics, No. 11) which was published in 1965 and is now substantially out of date. At the same time work is proceeding on the longer-term objective of producing a guide with much the same degree of detail as the pre-war *Guide to Current Official Statistics*.

### **New Business Monitors**

#### *Production series*

Two new monitors for brushes and brooms and for plastics products have been published in the Business Monitor series under references P25 and P95 respectively. The monitors present the first results of new quarterly inquiries into manufacturers' sales and provide a breakdown of product detail designed, in consultation with representative trade associations and individual manufacturers, to meet industry's needs for management and marketing purposes. The monitor for brushes and brooms supersedes an earlier monitor with the same title and maintains a high degree of



continuity with it in product coverage; in addition, it includes export and import statistics. No official short period statistics have hitherto been available for plastics products.

#### *Service and Distributive series*

Two new monthly monitors entitled 'Instalment credit business of finance houses' and 'Instalment credit business of retailers' are now available under references SD6 and 8 respectively. These monitors contain detailed statistics on new credit extended by and repaid to finance houses and retailers, the change in debt outstanding and instalment credit sales by broad groups of shops; these statistics were previously published in *Trade and Industry*.

#### *Miscellaneous series*

A new monitor has been published on acquisitions and mergers of companies (reference M7). It contains tables analysing, acquisitions by industry group, previously published in *Trade and Industry*, and distinguishing acquisitions represented by sales between company groups from acquisitions of independent companies.

The above monitors are obtainable from Her Majesty's Stationery Office, PO Box 569, London SE1 9NH, for an annual subscription of 37½p each for P25, P95 and M7 and £1 each for SD6 and SD8.

### **Scottish statistical publications**

The latest volume of the *Digest of Scottish Statistics* (published July 1971) will be the last of the series which was begun in 1953. It will be replaced by two rather different types of publications designed to fill gaps in the provision of Scottish statistics which it is felt currently exist.

The first of the new publications is the *Scottish Economic Bulletin*, which will be published in January and July each year, the first having appeared in July this year. The *Bulletin* is intended to show recent trends in the Scottish economy. There is a commentary on the current economic situation in Scotland and on trends over the last decade. A comprehensive coverage of the various statistical indicators of Scotland's economic performance is given, with the emphasis where possible on graphical presentation. The first issue contains estimates of Scottish gross domestic product in the 1960's together with notes on the sources and methods used. The estimates show that while GDP per capita in Scotland has risen in recent years relative to the UK it is still considerably below the UK level.

The *Scottish Abstract of Statistics* is the second of the two new publications. The first issue will appear in the autumn this year, and it is intended to publish annually thereafter at that time of year. The *Scottish Abstract* is intended to be a comprehensive reference volume of Scottish statistics. As such there will be an increased amount of information relating to social conditions in Scotland – which hitherto have been but briefly described in the *Digest*. It is intended to give the details of source and related volumes and to include explanatory notes on points where this is felt to be of value. In this way it is hoped to provide a useful guide to the large number of publications containing official statistics relating to Scotland.

### **Family Expenditure Survey 1970**

The form of the *Family Expenditure Survey Report for 1970*, to be published shortly, is broadly similar to earlier reports. Quantiles of the distributions of income and expenditure are included. There is a new analysis of expenditure in which households are classified by range of expenditure, as distinct from range of household income. Analyses of income, by source, of the various groups of households are separated from the corresponding analyses of expenditure. The analysis of expenditure of households classified by type of administrative area and analyses by region, which were given in condensed form for broad commodity groups only in recent reports, are presented in full detail. The section of the report on comparisons between household expenditure and income as measured in the survey has been expanded.

### **Insurance Business Statistics**

A new volume on the insurance business was published in May 1971. It contains statistical and other information based on insurers' annual returns to the Board of Trade – now the Department of Trade and Industry – for the accounting years 1 September 1966 to 31 August 1967 and 1 September 1967 to 31 August 1968. This volume follows the publication on the insurance business that appeared in August 1969, containing data for the two accounting years between 1 September 1964 and 31 August 1966 (see *Statistical News* 7.38).

#### **Reference**

*Insurance Business Statistics, September 1966 to August 1968* (HMSO) May 1971 (Price £13)

### **OECD Financial Statistics**

This new periodical publication provides detailed and comparable financial information on 17 countries



which are members of the Organisation for Economic Cooperation and Development (most West European countries, United States, Canada and Japan). First issued in June 1970, it is the result of the efforts of the OECD's *ad hoc* group of financial statisticians to perfect financial statistics and improve their international availability. Representatives from the United Kingdom Central Statistical Office and the Bank of England have participated in the work of the group.

The tables are in three sections comprising tables for each country, tables on the international market and comparative tables. The tables for each country and in the two general sections are accompanied by extensive notes on definitions, sources, and on any departures from the internationally standardised concepts. The principal table in the country section gives for each country a summary statement of the capital transactions of each sector of the economy and of the financial flows between the sectors, distinguishing sources and uses of funds (Table 1A/17 for the United Kingdom, giving annual data for 1964 and the three most recent years). Other tables in the country section give annual and quarterly data on interest rates and on security issues, and annual data on the supply and demand for capital on the security market and on the value of outstanding securities (where available). Tables in the section on the international market show yields on international bonds (quarterly) and international issues of bonds (annual). The comparative tables include security issues expressed in US dollars and as a percentage of gross national product.

*OECD Financial Statistics* will be published twice annually and updating supplements will appear every two months. The United Kingdom will be making regular contributions to the publication programme. Future work of the *ad hoc* group of financial statisticians will include the publication of more detailed annual tables on the financial operations of the various sectors, notably the central government, financial institutions, and industrial and commercial companies.

#### Reference

*OECD Financial Statistics*. Organisation for Economic Cooperation and Development. Available from HMSO (Annual subscription £9).

#### National Institute Economic Review

The May 1971 issue of the *National Institute Economic Review* contains an article about the rise in imports of manufactures into industrial countries and shorter notes concerned with the likely effects on productivity of the projected removal of SET and with international statistics on labour costs and unemployment rates in industrial countries.

The article on imports of manufactures (by Mrs. A. D. Morgan, assisted by Mrs. D. Martin) examines relationships between domestic demand and imports for seventeen countries over the period 1955–69. It shows that the ratio of the growth of imports of semi-manufactures and finished goods to the growth of income or other domestic variables is similar across countries but tends to be higher and more irregular in Britain than elsewhere. Though some other large countries show a like tendency, income and price elasticities calculated for seven countries confirm the view that Britain is import-prone. A cross-country regression of imports on population, income per head and tariffs suggests, moreover, that this is not due to any kind of move to a 'normal' level of imports.

The note on SET (by J. D. Whitley and G. D. N. Worswick) questions the argument in the Reddaway report that the abnormal improvement in productivity in retailing between 1965 and 1968 can reasonably be attributed to the introduction of the tax. It is shown that the same method of calculation yields very similar productivity effects for manufacturing, and it is suggested that it is in any case unlikely that genuine changes in retail organisation for which the tax was responsible will be reversed completely when it is removed.

The note on manpower costs (by F. K. Jones, of the Treasury), outlines some of the problems in measuring short-run changes and lists some of the statistical sources now available. The note on unemployment (by S. Hays and L. F. Campbell-Boross) draws attention to the wide differences of definition between one country and another. It uses material published by the US Department of Labour to show that on United States definitions (under which, for example, people who are not available for work because of illness are still treated as unemployed) the figures for Great Britain would, for some years past, have been about 50 per cent higher than the official figures.

## GOVERNMENT STATISTICAL SERVICE

### Organisation of statistical and economic work in the Department of Trade and Industry

The statistical and economic work of the Department of Trade and Industry has been organised in seven Divisions reporting to the Director of Statistics and the Chief Economic Adviser, and taking over duties formerly performed by the Board of Trade and Ministry of Technology. The duties and the senior staff of the Divisions are:



	<i>Responsibilities</i>	<i>Head of Division</i>
BSO	The collection, processing and publication of business statistics, and compilation of registers of businesses.	M. C. Fessey
EcS1	Economics of shipping, civil aviation, regional policy, competition and commercial policy.	T. A. Kennedy
EcS2	Economics and statistics: fuel and energy, and iron and steel.	C. I. K. Forster
EcS3	Economics and statistics of manufacturing industries sponsored by the Department.	G. Penrice
EcS4	Economics and statistics: home economy, capital expenditure and distributive and service trades: regional statistics.	T. S. Pilling
EcS5	International trade and balance of payments: economics and statistics.	T. Paterson
EcS6	World economic affairs: statistics of civil aviation and shipping, financial statistics, and statistics relating to scientifically and technically qualified manpower and research and development.	A. G. Carruthers

The Chief Economic Adviser of the Department is Mr. F. J. Atkinson to whom Divisions EcS1, EcS2 and EcS4 report. The remaining Divisions, BSO, EcS3, EcS5 and EcS6, report to Mr. J. Stafford, the Director of Statistics.

Mr. Stafford and Mr. Atkinson will be the professional heads of the statisticians and economists respectively, and will work closely together in matters of substance affecting each other's discipline.

#### **Business Statistics Office**

Copies of 'Vetting of industrial survey questionnaires by computer', by M. Richardson and A. D. Cunning-

ham, are available from the Business Statistics Office. This paper was a BSO contribution to a conference on data-editing organised by the Royal Statistical Society (General Applications Section) which took place at the University of Kent, Canterbury, in April. Details are given of automatic editing methods used in the last decade, together with an analysis of cost factors related to a practical example.

#### **Standing Committee of Statistics Users**

Following the successful experimental Statistics Users Conference held in October last year (see *Statistical News* 12.31) a Standing Committee of Statistics Users has been set up under the auspices of the Social Science Research Council. This will sponsor a conference on social statistics to be held in October and a conference on business statistics to be held next spring. Participation is by invitation of the Committee.

Membership of the Standing Committee on Statistics Users is as follows:

- Dr. B. Benjamin (Chairman)—Social Science Research Council
- Professor G. A. Barnard—Social Science Research Council
- Mr. E. Barnsley—Industrial Marketing Research Association
- Mr. L. S. Berman—Central Statistical Office
- Mr. A. F. Brazier—Society of Business Economists
- Mr. E. J. Davis—Institute of Statisticians
- Miss H. K. Elliott—Confederation of British Industry
- Mrs. C. M. Firth—Greater London Council
- Mr. P. J. Menneer—Market Research Society
- Professor P. G. Moore—Royal Statistical Society
- Dr. S. Rosenbaum—Royal Statistical Society
- Mr. D. K. Stout—National Economic Development Office
- Professor M. Zinkin—Confederation of British Industry

#### **Appointments**

The post of Director of the Central Statistical Office and Head of the Government Statistical Service held by Professor C. A. Moser has been upgraded to Permanent Secretary. Professor Moser was promoted to that grade on 1 May 1971.

#### **DEPARTMENT OF TRADE AND INDUSTRY**

*Dr. J. R. L. Schneider* has been promoted to an additional Chief Statistician post in the Board of Inland Revenue.

*D. S. S. Hutton, OBE* has been promoted to an additional Chief Statistician post in the Department of Health and Social Security.



# Alphabetical Index

The index to *Statistical News* covers the last nine issues. Page numbers are prefixed by the issue number e.g. 11.31 signifies issue number 11, page 31.

Generally speaking articles relating to 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.

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

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