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STATISTICAL NEWS

Developments in British Official Statistics

A publication of the Government Statistical Service

Note by the Editor

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 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.

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The new Registrar General for England and Wales

Mr A. R. Thatcher, C.B. has been appointed Registrar General for England Wales and Director of the Office of Population Censuses and Surveys to succeed Mr G. Paine, C.B. who retired on 14 April. He was previously Deputy Secretary and Director of Statistics in the Department of Employment.

Mr Thatcher, who is 51 years of age, was educated at the Leys School and St. John's College, Cambridge. Following service in the Royal Navy he joined the North Western Gas Board before moving to the Admiralty as an Assistant Statistician in 1952. He spent two years in the Central Statistical Office before being appointed Chief Statistician in the Ministry of Labour in 1963. He became Director of Statistics at Under Secretary level in that Department in 1968 and was promoted to his most recent post with additional responsibilities for the research and planning division in 1972.

Report on seminar on value added

A seminar on value added, was held at the Central Statistical Office on Tuesday 6 December 1977.

It had been organised because there seemed to be a growing interest – both at the macro and micro levels – in value added statistics; the Central Statistical Office had a long-standing interest in the concept because of its central place in national accounting.

The proceedings started with three short talks to previously circulated papers, followed by an informal and wide-ranging discussion. The first speaker was Mr. E. G. Wood, Director of the Centre for Innovation and Productivity, at the Sheffield Polytechnic. He outlined what in his view were the main uses of the value added approach, namely in monitoring performance and in providing an aid to making business decisions. He suggested that there were four main areas of interest; namely the definition of value added, the compilation of statistics on value added, their presentation and their interpretation. On the definitions, apart from the difficulties of dealing with the non-market sector, he thought that the major problem was the treatment of hire charges which are traditionally not provided from value added, causing some discrepancy with the treatment of depreciation on owned capital which of course is provided from value added. He fully encouraged the spreading habit of providing value added statements by businesses, and hoped that this would continue to expand. Although he did not feel that value added statements would replace the conventional profit and loss accounts, he did feel that eventually these accounts should be presented as value added statements so as to put the profits of the business in perspective. He also felt that company accounts, and indeed official figures, should present added value data in the form of useful ratios, for example per employee, per unit of capital, etc. so that the Chairman's reports could be more informative.

The second speaker was Dr. B. Mitchell, from the Business Statistics Office (BSO), who presented a paper* which was a description of the history and current practice of the annual census of production, a useful source for making value added estimates. He confirmed the BSO's interest in supplying relevant information from the census for uses such as the computation of industrial value added estimates, and promised to increase the publication of derived statistics, in the form of ratios based on various aspects of value added; these derived statistics would be circulated next year as ancillary information for respondents to the census. This paper is reproduced in full in the following article.

The third speaker was Mr. P. J. Stibbard of the Central Statistical Office (CSO), who presented a paper which described work that has been done in the CSO following up some comparative calculations on value added made by Dr. F. E. Jones; the paper also demonstrated that the value added concept is fundamental to national accounting, although different terminology was used. Available United Kingdom data do not allow a direct comparison with the Japanese data supplied by Dr. Jones because neither company accounts nor statistical returns provide comparable information in this country. He said that estimates of the disposal of value added had to be made from the basic national income statistics and there were certain problems of estimation, allied with narrowing the definition to the manufacturing sector, taking out unincorporated businesses and public corporations and then separating out from the national accounting aggregate Gross Trading Profits the various appropriations, to get residual figures of 'net profit'. Although a number of assumptions had been made in the calculations and it was acknowledged that the profit figures for the latest two or three years were provisional, he thought that the different presentation did shed some interesting light on the well-known problem of the recent lack of profitability in British industry. He pointed out the need to reconcile the calculations made with figures from the census of production, which are compiled largely independently, and said that it was hoped to continue improving the quality of the estimates.

Following these presentations there was a general discussion of the points raised, and other points allied to the topic of value added. One early point of debate was whether it was better to estimate value added by subtracting bought-in services from turnover or to make independent estimates of the components of value added directly, the so called additive approach. It was generally agreed that both approaches had their advantages, and their disadvantages, and that a choice between them would normally be made on the basis of available information. Although there was a general enthusiasm for the increased use of value added statements, both as an aid to managements and as an

*See page 41.4 of this issue of *Statistical News* invaluable tool for analysis, a cautionary note was voiced by Mr. Carruthers of the Centre for Inter-firm Comparisons. Although he acknowledged that value added was a useful way of describing the performance of firms, he wanted to emphasise that one such measure would not suit all interests. He pointed out that the value added of a firm can increase while the profit of the organisation actually decreased and that it was important to concentrate on profitability which was the salient measure for an organisation operating in the market. He thought that preference should be given to profit as a ratio to capital used as being the best indicator of performance since this was commonly understood, was relevant to the main interest in profits, and had the technical advantage of being a good starting point for analysing factors affecting performance.

Although these points were well taken, they did not assuage the enthusiasm for increasing the use of value added statements, not in place of profit estimates, but rather as supplementary to them. It was pointed out that one advantage of looking at value added and the ratios of value added to employees, to capital employed etc., did have a very useful diagnostic role to play in comparing an individual company with the average performance of the industry to which it belonged. Mr. B. A. Rutherford, of Kent University, suggested that the importance of value added statements should not be over-estimated, since there was a clear disadvantage of pinning too much faith in a single concept. Although at the macro level value added was a useful tool, in the less aggregated case the assumptions required to make the estimates could often be dangerous. In particular there was a problem about the production boundary and which items of expenditure ought to be considered as bought-in services and which allocations out of value added; an example here was expenditure by the firm on employee benefits such as improved canteen services.

In summarising the first period, the Chairman thought that it was necessary to clarify the purposes for which any given value added statement could be used. He drew a distinction between measuring the value added (or wealth created) by a particular set of activities, which might involve different enterprises, and the value added accruing to the enterprise and its employees. Second, he thought it necessary to decide whether all economic activity would be suitable to this kind of analysis; for example should value added statements be made for financial intermediaries, and if so, on what basis? There was also a distinction to be drawn between the different bases of valuation, whether they should be at market prices or factor cost, as well as which the problems of timing would also be important where there were differences in the incidence of expenditure on costs and the receipt of revenues; a good example here was the exploration costs incurred in the North Sea. He went on to pose the fundamental problem of how costs might be measured, whether on a historic or replacement basis.

Most of these points were taken up in the lively debate which constituted the second part of the afternoon. The main theme that came out of the afternoon's debate was that the added value statement was extremely useful as a tool of communication between all those who had an interest in the performance of a particular company or industry. It was helpful for employees to know how much would be available out of value added for their own remuneration, and it was also helpful for shareholders and management to monitor the performance of the company, both with respect to their pay-roll and with respect to their capital, in comparisons within the industry, or indeed for industry at large. The following major points were made in the debate.

Added value presentation should be kept as a supplement to the profit and loss account, and would be a useful addition for describing how the profits arose. Since the main concern was with trends it was more important to keep the assumption on which the added value calculations were based consistent over time than it was to try for the perfect measure. For credibility added value statements ought to tie, definitionally, with the profit and loss accounts.

Dr. F. E. Jones elaborated on some calculations he had been making relating added value per employee with the growth in total added value for a large number of companies. His conclusion, which he presented in the form of a simple graph, was that such companies as had a growing valued added, after adjustment for inflation, rarely had more than 75 per cent of added value going to employee remuneration. Such companies as exceeded the 75 per cent level invariably were declining rather than growing. Furthermore, there was a positive relationship between the percentage of value added not going in employee remuneration and the level of growth in total value added. It was however pointed out that one should interpret these figures with a little caution since cyclical effects might be very important for these ratios as increasingly wages and salary costs are being treated as an overhead, therefore a correction for cyclical distortion needs to be made. Also, during the last three or four years of deep recession, price controls may have had a distorting effect on margins and therefore reduced value added and inflated employee costs as a percentage of the total.

Mr. J. Stephens of the TUC agreed that value added statements were easily understood ways of explaining to employees the determinants of company performance: and that on this basis they could usefully be employed in discussions around wage negotiations within companies. However, he pointed out that historic value added statements were only of limited use during such discussions since other factors like current rate of inflation, the need to attract skilled workers, and the liquidity position of companies, were often more pressing and cogent. He also pointed out that although discussions about the definition and measurement of value added were interesting, they were only a means to another end and that they should not be used as an excuse for delaying an agreed system for measuring the concept.

The single most important problem in using value added to compare performance across companies or industries that was high-lighted during the discussion was the treatment of leased equipment. Where a company owned its plant, then provision for depreciation of that plant had to be met out of value added, whereas if a comparable company hired all or a large part of its capital equipment then those hire charges would be treated as bought in services and would reduce value added by that amount. Any comparison of performance as a percentage of value added between these two companies would therefore be distorted by this difference. It was therefore generally agreed that, since the use of capital was the most important consideration, then hire charges ought really to be treated in an analogous way to depreciation.

Finally, many speakers emphasised how useful they had found value added statements as a way of improving communications within their companies; some had found the value added ratios extremely useful in enhancing debates about how to improve company performance, others had found them extremely useful in wage negotiations. Although everybody was aware that there were some shortcomings in the presentation and that these would continue until the solutions to the definitional problems had been agreed, there was a general acceptance of the usefulness of this tool as a performance indicator.

In summing up the afternoon the Chairman thanked everybody for attending, said that he thought it had been a very useful and informative debate, not least because of the wide range of interests and backgrounds that the participants brought with them. He thought that the main point of agreement that had been reached was the important role to be played by value added statements in communication, but that several problems of definition that had been outlined during the discussion clearly remained to be solved, not the least of which would be whether to use replacement or historic cost in the valuation of assets. Although acknowledging the pitfalls in using value added that existed in comparisons both between companies, and internationally, he concluded that the feeling had been that such comparisons could be extremely useful if interpreted with due caution.

Copies of individual papers are available on request from the editor of *Statistical News.*

Central Statistical Office

Measuring value added from the census of production

Dr. Bernard Mitchell, *Chief Statistician, Business Statistics Office*

This article is based on a paper presented at a seminar on value added held at the Central Statistical Office on 6 December 1977. The seminar was organised because of the growing interest – at both the macro and micro levels – in value added statistics reflected by the wide range of bodies and institutions represented. These included trade associations, the banking and accountancy professions, the trades union movement, universities and industrial undertakings, as well as the Government Statistical Service.

Introduction

The country's first census of production was held in 1907 mainly in connection with questions of Government tariff policy. Subsequent censuses were held for the years 1912 (though the results were never published) 1924, 1930 and 1935. The first post war census was taken in 1946 and in the following year Parliament passed the Statistics of Trade Act, under which the Board of Trade (and now the Department of Industry) was required to take a census of production annually. However, the annual census of production stipulated by the Act was introduced only on a restricted scale in between the full-scale censuses which continued to be held at roughly five year intervals up to 1968. These full-scale censuses asked three groups of questions; about total purchases, total sales, stocks, capital expenditure, employment and wages and salaries; about sales of individual products; and about purchases of individual commodities. The figures collected provided, amongst other things, the information on the structure of industry required for an overall view of the country's economy.

Following the *Fourth Report of the Estimates Committee of the House of Commons 1966–67*[1], which spent two years inquiring into the Government's Statistical Services, the Business Statistics Office was set up in 1969. One of its principal tasks was to introduce a new system of industrial statistics to remedy the deficiencies of the old system, which consisted essentially of large and detailed quinquennial censuses of production augmented by a rather patchy collection of short-term statistics intended to record current trends. The new series of annual censuses of production was introduced for 1970 as one component of the new system of industrial statistics to collect on an annual basis the same kind of structural information that was collected less frequently in the quinquennial censuses, *viz.* total purchases, total sales, stocks, etc. Detailed information about product sales and commodity purchases are obtained in other component inquiries of the new system.

Over the years, the industrial scope of the censuses of production has not changed to any great extent, covering mining and quarrying, manufacturing, construction, and gas, electricity and water industries. The geographical are acovered by the censuses is the United Kingdom, although the collection of data in Northern Ireland has been conducted as a separate operation since 1930. Census results in all years are composed of a mixture of business and calendar year figures following from the option of allowing firms to make returns for their business year where figures for the calendar year could not be given. Early censuses related to all firms regardless of size or whether they were incorporated or unincorporated, or of whether they were in the private or public sector. Since 1958 the reporting burden on smaller firms has been eased and until recently the statistics collected mainly concerned firms employing twenty five or more persons. To meet mandatory requirements, when the United Kingdom acceded to the European Economic Community (EEC) in 1973, the threshold was lowered in the 1973 Census and subsequent censuses to include all firms employing twenty or more persons.

The basic approach used in compiling the industry aggregates for the main variables published in the census reports relies in the first place on the classification of each unit for which information is available to an appropriate industry on the basis of the kind of products it makes. All of the activity of the unit is then accredited to the industry to which it is classified and industry aggregates are formed by adding together the figures for such units including estimates for those units that do not respond or, being below the exemption unit, were not selected. The industry aggregates produced by this method can therefore be made up of figures for individual units that are somewhat dissimilar, depending on the level of disaggregation at which the industry is defined, and of some activity that is more appropriately classified to other industries depending on the diversity of the product mix of the unit. Problems of this kind are inherent in the industry-based approach towards the compilation of economic statistics.

Census net output: general concepts

Right from the start in 1907 it was recognised that one of the most important uses of the information collected in the censuses was to provide estimates of the value of the work done by individual firms which could then be added together to yield estimates of the value of the work done by groups of firms within the same industry. For every major census of production, including the annual censuses of the current series, statistics of the net output of industries, which provide a broad measure of the value of the work done, have been published and have been widely used as indicators of the relative sizes of industries and, in conjunction with employment, of their comparative performance. Net output as used in the censuses of production has never been regarded as an alternative or preferred concept to value added, as defined by economists, but essentially as a proxy for it. To over-simplify a little, it has represented, until the 1973 Census, about the best approximation to value added that could be compiled on a reasonably consistent basis from the basic information collected in the censuses. (Some limitations of the net output statistics available from the quinquennial census of production were discussed by Sorrell in his *Statistical News* article of February 1971[2].)

Whilst the definition of net output has not remained precisely the same in each of the censuses the same differencing approach has been used throughout in which, broadly, the value of the gross output of an industry is reduced by the value of the goods, materials and fuel consumed to yield net output. The major distinction between census net output and value added is that the value of most of the services bought from other businesses and institutions, which lie mainly outside the production sector, is included in net output but excluded from value added, i.e. an important group of expenses is not deducted in forming net output. Thus whilst net output is additive over all industries within the industrial sector without any appreciable duplication, this is not the case with respect to the economy as a whole in view of the double counting of the value of non-industrial services received.

It has not been possible in the censuses to approach the estimation of value added more directly by collecting information about the various items that comprise it – once they have been defined. This would require collecting, *inter alia*, details of profits, which is not permitted by the Statistics of Trade Act, 1947, under which the censuses have been taken over the last 30 years. There has therefore been little option but to use the differencing approach towards the estimation of value added in the census instead of the technically simpler method of synthesising it from its component parts.

In using and interpeting the figures of net output available from the censuses it is important to bear in mind that with a few minor exceptions they are based on the establishment as the standard reporting unit. For censuses up to 1957 the establishment was defined as comprising the whole of the premises under the same ownership or management at a particular address (e.g. factory or mine). For 1958 the definition of the establishment was extended to include ancillary activities (such as merchanting, canteens, packing) whether or not these activities were carried on at the same address as the works, unless they were conducted by a separate company or a separate department with a separate set of accounts. Since 1968, following the revision of the Standard Industrial Classification (1968)[3], the establishment has been defined as the smallest unit which could provide the information normally required for an economic census, e.g. employment, expenses, turnover and capital formation. Establishments have been asked to exclude from their returns as far as possible particulars relating to any department not engaged in production, although head offices mainly engaged on the administration of production units have themselves been regarded as production units coming within the scope of the censuses.

In concept the establishment represents the smallest industrial unit for which net output figures can be compiled and as such is better suited than other possible units, such as the company, for compiling analyses of net output for finely defined sectors of industry, say at the level of the Minimum List Heading of the Standard Industrial Classification. Use of the establishment as the basic unit in the censuses does however entail collecting information about transactions between establishments within the same company, which can give rise to some arbitrariness in the valuation of semi-finished goods 'sold' by one establishment to another in a vertically integrated process of manufacture. Furthermore, by opting for the smallest practicable unit more double counting is introduced into the industry aggregates of total sales and gross output than would arise with the use of a larger business unit. Both these factors have an important bearing on the gross output and gross input figures published in the censuses. They are, however, of little relevance to the net output results in which all double counting within the manufacturing sector of industry is eliminated as, in principle, is any arbitrariness in the pricing of goods transferred from one establishment to another in the same company. It is perhaps worth noting that for many of the main census variables collected from establishments such as employment, stocks and capital expenditure the problem of double counting does not arise when forming industry aggregates as the figure for each establishment is not likely to include contributions appropriate to other establishments.

For some purposes the establishment is not the ideal choice of unit. For example a larger business unit than the establishment may be preferable for collecting information about services bought such as advertising, market research and commercial insurance premiums. Information of this kind is likely to be more readily available at head offices than to those establishments belonging to large enterprises. In most quinquennial censuses in the past some figures have been collected on expenses of this kind, usually by means of supplementary inquiries addressed to head offices for those expenses likely to have been incurred there. In the new series of annual censuses of production such information was not collected until the 1973 Census when, to meet EEC requirements, it was decided, following a small feasibility trial, to ask larger establishments to provide information about business expenses as part of the main census operation.

Net output in the annual censuses

It is now appropriate to consider in a little more detail the definitions of net output used in more recent censuses of production. The one in current use, which has remained unchanged since the 1973 Census is:

Sales of goods produced
+receipts for work done and industrial services rendered
+value of capital goods produced for own use
+sales of goods merchanted or factored
+receipts for non-industrial services rendered
+increase in value of stocks of goods on hand for sale
+increase in value of work in progress

=Gross output

—purchases of materials for processing and packaging, and fuel
—purchases of goods for merchanting or factoring
+increase in value of stocks of fuel and raw materials
—payments for industrial services received (including for work given out)
—net amount of any duties, etc. payable

=Net output

All of the items listed above are explained in detail in the reports of the censuses, which should be consulted for precise definitions. It is sufficient here to consider only their more important features. Sales, for the purposes of the censuses, means deliveries on sale of goods made by establishments in the United Kingdom as well as sales of goods made by outworkers or by other establishments from materials given out and of waste products. The valuation of sales is required to be 'net selling value' defined as the amount charged to customers whether on an ex-works or delivered basis *less* VAT, trade discounts, agents' commissions, etc. Figures for work done and industrial services rendered represent the amount charged for work carried out on materials supplied by a customer and receipts from repairs and maintenance, installation work and technical research and studies rendered to other organisations. Capital goods produced for own use includes all work carried out during the year by the establishment's own staff for their own use, which was of a capital nature. Non-industrial services rendered cover items such as rents received for commercial and industrial buildings, amounts charged for hiring out plant machinery and other goods and revenue from staff canteens. The increase in value of stocks of goods on hand for sale represents the difference between the value of such stocks, including goods held for merchanting or factoring, at the beginning and at the end of the year, valued on the basis of the same accounting convention such as 'first in, first out' or 'last in, first out', etc. It should be noted that the data on stock changes available from the censuses, being based on commercial accounting data, reflect changes in both volume and price. Work in progress relates to materials which have been partially processed, but which are not usually sold or transferred to another establishment without further processing.

Purchases include the cost of materials and components bought for use in processing; water, fuel and electricity; packaging materials; workshop and office materials; materials for repairing the establishment's own buildings, and goods for merchanting and factoring. With the exception of purchases of materials for the construction of capital assets for an establishment's own use, which are sometimes charged to capital account, all purchases of capital goods are excluded (but of course featured elsewhere). Purchases are required to be valued on the same basis as that used for sales; stocks of fuel and raw materials are valued on the same basis as stocks of finished goods and of work in progress. For some industries, such as tobacco, products attract excise duty. When these are sold on a duty-paid basis establishments are asked to value sales inclusive of duty in these circumstances. To facilitate adjustment to a factor cost basis (i.e., exclusive of all taxes, duties, levies, subsidies, etc.) details are sought separately from such establishments of the total amount payable to HM Customs and Excise and the total amount of drawbacks, allowances receivable, to yield the net amount payable, which is then deducted to arrive at net output.

The definition of net output set out above is a little different from that used in the first three of the annual censuses, for 1970–1972, which, in all essentials, was the same as the one used previously in the 1963 and 1968 Censuses. The changes, which in practice were fairly marginal, arose from the United Kingdom's accession to the EEC in 1973, which naturally entailed commitments to meet the various statutory EEC obligations that were in force at the time. There were two such statutory instruments that concerned annual industrial statistics; one, EEC directive (64/475) specified requirements for capital expenditure data and the other, EEC directive (72/221), set out more general requirements for annual data on industrial activity. It was necessary to modify the annual censuses for 1973 onwards to bring them into line with obligations to the EEC. One modification – lowering the general exemption limit – has already been mentioned. Another modification introduced was to use a standard length form for larger establishments with 100 or more employees with a shorter form for establishments with 20–99 employees. There were also changes to the questionnaires which, for larger establishments required to supply the full range of data, represented quite a significant increase in the burden of form filling.

Efforts were made to contain the increase as far as possible, by, for example, using data from other sources as a basis for estimation, and by pruning detail not required for EEC purposes. In this latter category, canteen takings and amounts payable to other organisations for transport which previously had each been the subject of a separate question, became, in 1973, components of wider-ranging questions. In the case of canteen takings this change of practice had no effect on the definition of net output, but in the case of transport expenses, whereas they had been previously deducted in the derivation of net output, from 1973 onwards they became a component of 'other non-industrial services' and have not been deducted in forming net output. (In the Report of the 1973 Census net output for 1970, 1971 and 1972 has been recalculated on the new basis.) Other changes having a bearing on the definition of net output arose from the EEC requirement to distinguish between industrial and non-industrial services and rearrangement of the boundaries of the two questions previously asked on these topics. Whilst the two new questions together covered essentially the same items as before, they were accompanied by more detailed notes that included items not previously listed, i.e. repairs and maintenance in industrial services and revenue from the rent of industrial buildings in non-industrial services. It must be presumed that the net output figures for 1970–72 did not include these items. Similarly, amounts payable for repairs and maintenance must be presumed omitted from the figures for the cost of industrial services received in the censuses for 1970–72. To summarise, net output for 1973 differs from that of previous years in that transport costs have not been deducted and, of less significance, that receipts for repairs and maintenance and revenue from rents for industrial buildings are included, and amounts payable for repairs and maintenance have been deducted.

Gross value added in the annual censuses

Gross value added is calculated by deducting from the definition of net output given earlier the cost of non-industrial services received and other expenses. Specifically, it is derived from information supplied in the censuses by the following calculation:

net output

$$\left.\begin{array}{l}\text{—amounts payable for rents of buildings,}\\ \quad\text{hire of plant and machinery}\\ \text{—commercial insurance premiums}\\ \text{—bank charges}\\ \text{—cost of other non-industrial services}\end{array}\right\}\begin{array}{l}\text{payments}\\ \text{for}\\ \text{non-}\\ \text{industrial}\\ \text{services}\end{array}$$

—cost of licensing motor vehicles

—rates (excluding water rates)

= Gross value added at factor cost

It became possible to calculate gross value added for the first time in the 1973 Census as a result of including in that census, to meet statutory EEC obligations, questions about payments for the cost of non-industrial services received. There was some doubt about whether the kind of information required could be supplied by establishments in view of the presumption that such information would only be available at a higher level in large undertakings. Soundings were made of selected establishments to assess whether there would be any difficulty in providing the required information and as a result it was decided to include the questions in the main census operation rather than conduct a supplementary survey addressed to head offices as had been done in the 1963 and 1968 Censuses. Experience to date is encouraging but, inevitably, doubts remain as to whether all such expenditure is being gathered by the census.

The definition of gross value added set out above is that stipulated by the EEC and census practice has been aligned to meet the United Kingdom's obligations to provide figures on this basis. The term gross value added is used, in line with EEC practice, to indicate that no deduction has been made for the consumption of capital goods. In EEC national accounts net value added is equal to gross value added *less* depreciation of capital goods. It is worth noting in connection with the various items deducted from net output to yield gross value added that interest is excluded from bank charges. Other non-industrial services include a miscellany of services such as professional services, postal, etc. services, transport and royalties. As defined in the censuses, gross value added constitutes the fund from which wages, salaries, employers' insurance and welfare contributions, taxes, interest on loans, capital expenditure (depreciation) and profits have to be met. It should be noted that there is no universally accepted definition of value added. The treatment of hire charges of different kinds is a topic of particular contention, in which the census practice of excluding from gross value added amounts payable for rents of buildings and for the hire of plant and machinery whilst including depreciation and interest on bank loans has been questioned. However, as figures for renting and hiring are shown separately in the census results they can be added to gross value added if desired.

Gross value added results published in the censuses may be used in conjunction with other results to derive operating ratios providing measures of performance and efficiency. Of particular interest is the ratio gross value added per head which is derived by dividing gross value added by the average number of persons employed (full and part time) in all activities covered by the census, including operatives, administrative, technical and clerical employees and working proprietors, but excluding out-workers; figures for this ratio are published in the census reports. Another useful ratio is the share of gross value added accounted for by wages and salaries, which can be readily calculated from census results. Mr. E. G. Wood in his book *British Industries; a comparison of performance*[4] has made widespread use of ratios of this kind, using the censuses of production as source material. In April 1978 the BSO circulated to each contributor to the census of production a simple guide showing how he could work out gross value added per head and other potentially useful ratios for his business from the information he is required to supply in the census. By way of illustration and for the purpose of comparison, ratios based on the provisional results of the 1976 Census for the industry to which the contributor's establishment is classified, were also circulated (see this issue of *Statistical News*, page 41.37).

Published results

Results of the annual censuses of production are published by HMSO in three stages in the Business Monitor series; firstly provisional results followed by final industry results in some 160 or so separate industry reports and, finally, a summary volume containing, *inter alia*, results for enterprises. Since 1971 the Business Monitors presenting census results have used the code PA (Production, Annual) followed by a number indicating for the industry reports, the Minimum List Heading or sub division of Minimum List Heading of the Standard Industrial Classification (revised 1968) [3]. Provisional results are published in a Business Monitor with the code PA 1000, and the code PA 1002 is used for the summary volume. Provisional results for 1976[5], published in March 1978, included for the first time estimates of gross value added; hitherto the information collected about payments for non-industrial services, had not been sufficiently validated to justify publishing such preliminary estimates. Table 1 of each of the industry reports presents the detailed industry aggregates of output and costs, and shows how gross output, net output, net output per head, gross value added and gross value added per head are derived from the basic information collected in the censuses. Table 4 of the industry reports presents an analysis of the main industry aggregates, including net output and gross value added, by size of establishment. Table 5 gives a regional analysis of net output for those establishments whose net output can be attributable to a region.

Final results for 1974 and 1975 are currently being compiled in parallel, with the intention of publishing them together later this year in the same industry report. An example of the information to be presented in Table 1 of these industry reports, illustrating the derivation of gross value added, is shown in Figure 1.

References

(1) *Fourth Report from the Estimates Committee of the House of Commons, 1966–1967*, Government Statistical Services; (HMSO) 1968

(2) *Statistical News* No. 12 (February 1971). (HMSO) Some Pitfalls in the Use of Net Output Statistics" (A. A. Sorrell)

(3) Standard Industrial Classification, Revised 1968 (HMSO) 1968 (Price 85p net)

(4) *British Industries: A Comparison of Performance* (E. G. Wood) McGraw-Hill, 1976

(5) Business Monitor PA 1000, 1976; Census of Production, Provisional Results (HMSO) 1978 (Price £2·00 net)

Fig. 1.

CENSUS OF PRODUCTION

Footwear industry (MLH 450): output and costs, 1974 and 1975

	Unit	*1974*	*1975*
Enterprise	Number	561	555
Establishments	..	643	636
Sales of goods produced, work done and industrial services rendered	£ thousand	414,599	479,682
Capital goods produced for establishments' own use	..	262	277
Non-industrial services rendered	..	3,885	3,349
Goods merchanted or factored	..	45,600	47,427
Total sales and work done	..	464,347	530,734
Increase during the year, work in progress and goods on hand for sale	..	10,300	4,040
Gross output	..	474,647	534,774
Purchases of materials for use in production, and packaging and fuel	..	199,502	219,419
Purchases of goods for merchanting or factoring	..	37,730	37,482
Increase during the year, stocks of materials, stores and fuel	..	1,047	1,123
Cost of industrial services received	..	7,784	7,295
Net output	..	228,584	271,700
Total employed	Thousands	85·5	83·0
Net output per head	£	2,674	3,273
Payments for non-industrial services			
Rents, hire of plant, machinery and vehicles	£ thousand	6,203	7,753
Commercial insurance premiums	..	1,507	1,881
Bank charges	..	511	425
Other non-industrial services	..	11,492	13,391
Licensing of motor vehicles	..	79	87
Rates, excluding water rates	..	2,152	2,822
Gross value added at factor cost	..	206,641	245,341
Gross value added at factor cost per head	£	2,417	2,956

Social accounting matrices and developing countries

C. C. Greenfield, *Chief Statistician, Ministry of Overseas Development*

Most statisticians seem not to know what a social accounting matrix (SAM) is. The few that one has encountered with some apparent notion of the concept have normally reacted with scepticism and even mirth when it has been mentioned that a SAM might be estimated for a developing country. The usual comment has been that SAMs are too sophisticated for developing countries, or more rarely, that they have not been shown to be useful. The most widely publicised format for a SAM is Table 2.1 of the United Nations *A System of National Accounts*(1) in which the matrix is presented as an ultimate summary of the complete system of national accounts. If the reactions that one has encountered have been based on a knowledge of this presentation then they are understandable, because it is complex, but I hope to demonstrate that the concept is essentially simple and that SAMs are potentially valuable tools in economic planning. Current activities of the Ministry of Overseas Development in this field will also be covered briefly.

An illustrative SAM

There are many possible variations in the basic design of a SAM and Table 1 is simply an illustration of one possible format, although it is a format that has been used in practice. The matrix represents transactions in an imaginary country expressed in money values for a given accounting period, invariably one year. It covers all flows in the economy, viewed in the light of the classifications chosen as being of importance. The only things that are missing for it to represent a complete picture are opening and closing real and financial assets together with any revaluations of these during the time period; but few, if any, countries could produce reliable estimates of such items.

The matrix is divided into current and capital accounts in which rows represent receipts and columns represent payments (or more strictly, incomings and outgoings, respectively). Corresponding row and column totals are equal by definition.

The basic logic of the system is that factors of production: labour, capital and entrepreneurship, derive income by hiring their services to production activities, for the most part, and this is shown in the rows for factors. The income so derived is then channelled to the institutions which own the factors: households, enterprises and government, as shown in the columns for factors. Basically, labour income is channelled to households whilst operating surplus and depreciation, representing the returns to capital and entrepreneurship, are channelled to enterprises and government. Besides production activities, factor income is also derived from central government (rows 01 and 02 against column 09) in the form of wages and salaries, and from the rest of the world, in the form of net receipts from unskilled migrant workers who are still considered as residents of the reporting country (the entry of 1 in row 01 by column 13) and net profits, undistributed or remitted by foreign branches and subsidiaries of domestic enterprises (the entry of 5 at the intersection of row 03 and column 13).

Some transfers of the gross income that institutions have received from the productive activity of factors then occur. These are shown in the sub-matrix at the intersection of the rows and columns for institutions. For example, low income households received 3 in, say, gifts, from other households (row 05 by column 06), 1 in, say, social security payments from government (row 05 by column 09) and 2 in gifts from abroad (row 05 by column 13).

Other households receive interest, dividends, self-employment entrepreneurial income from enterprises and also transfer income from government (row 06 by columns 07, 08 and 09). Government receives direct taxes from households and enterprises (row 09 by columns 05 to 07). The remaining income of institutions is solely in respect of government, which receives indirect taxes from institutions (row 09 by columns 10 to 12) and transfer income, say grants in aid, from the rest of the world (row 09 by column 13).

The gross income of institutions is then shown in their row totals. The disposal of this income is given in the corresponding columns. For example, low income households had a gross income of 28, which was allocated as follows: 1 was paid in direct taxes, 8, 6 and 5 was spent on the output of domestic industry, 6 was spent on the imports of goods and services and 2 was saved. The interpretation for the remaining institutions' expenditure is similar, the only point to note being that enterprises do not spend on the output of production activities and imports; such expenditure is regarded as being incurred by the production activities which they own. The expenditure of government relates only to central and local government. Business activities owned by government, such as the postal services, are included in production activities. The reasons for this relate to the manipulation of the matrix which one cannot go into here.

Production activities obtain income through selling their output to institutions on current account, for current consumption expenditure, and capital account, for capital formation including change in stocks (rows 10 to 13 by columns 14 to 18). They also sell to one another as shown at the intersection of the production activities rows and columns, a sub-matrix traditionally referred to as the input-output matrix, and the balance of their production is exported (rows 10 to 12 by column 13). Their expenditure, including operating surplus and depreciation, has already been covered, apart from expenditure on imported goods and services shown at the intersection of columns 10 to 12 and row 13.

The current accounts for the rest of the world, which are in fact the current account balance of payments estimates have been covered as the need arose in the above, apart from imports of capital equipment, shown at the intersection of row 13 with columns 14 to 18, and the external current account balance of +2 (row 13, column 22) and —5 (row 22, column 13) which will be explained below in the paragraph on financial claims.

In the capital account, savings of institutions are shown at the intersection of the institutions' capital accounts rows with their current account columns whilst investment, or capital formation, is shown at the intersection of the institutions' capital account columns with the production activities and rest of the world current account rows. The remaining entries in the capital account are financial transactions, both domestic and external, and are commonly referred to as the flow of funds sub-matrices.

The balancing of the capital account rows and columns is based on certain identities in economic theory. Firstly, savings must equal investment, overall, where savings are defined as domestic saving plus the current account balance of payments deficit (or minus a surplus). This holds in Table 1, where domestic savings equal 16 (2+5+2+3+4) and the balance of payments shows a surplus of 7 [+2 – (—5)] giving a net saving of 9, which is the total of investment (in rows 10 to 13 by columns 14 to 18). For any sub-sector, however, this identity may not hold and a surplus of saving over investment will be matched by net lending internally or abroad, whilst a deficit must be matched by net borrowing, equivalently. Thus low income households have savings of 2 (row 14 by column 05), but no real investment. This surplus of 2 is disposed of by the acquisition of currency and deposits (row 19 by column 14). Other enterprises, however, have savings of 3 (row 17 by column 08) as against real investment of 5 (column 17 by rows 10, 12 and 13). Their deficit is financed by borrowing 2, shown at the intersection of row 17 with column 21.

The financial claims must balance because any increase in financial assets held by a particular sector will be exactly matched by an increase in liabilities of another sector of sectors, either domestically or externally. In reading the entries for financial claims, an increase in assets and an increase in liabilities are shown as positive. Entries for the rest of the world are shown from their point of view (as is the case throughout the matrix) so that an increase in, say, financial liabilities of the rest of the world is equally an increase in financial assets of the reporting country held with the rest of the world. The entries of +2 and —5, already referred to, for the rest of the world, simply represent one way of showing the current account balance with the rest of the world. Normally, one would show a single figure for this balance (+7 at the intersection of row 13 and column 22, deleting the entry for —5 in row 22 by column 13). The method employed, however, shows how the balance of payments surplus of the reporting country was allocated between net change in financial assets with and net change in financial liabilities to the rest of the world. The interpretation of the entries is then: the rest of the world had a current account balance of payments deficit of 7 with the reporting country; they financed this by reducing their holdings of assets with the reporting country by a net 2, and by increasing their liabilities to the reporting country by a net 5.

This completes the description of Table 1. It will be appreciated that classifications given in it are purely illustrative. One can have as many, or as few, classifications as are required and feasible for the purposes for which it is intended to use the matrix. A SAM was recently produced for Botswana[(2)] which employed the basic design of Table 1, but labour income was sub-divided into six classifications, households were sub-divided into nine categories which were related to income level, and so on.

The sophistication of a SAM

The suggestion that SAMs are too sophisticated for developing countries may imply that this is so from the point of view of understanding and using them or as regards data requirements for estimating them. It is true that the format of a SAM can be so complex that understanding it is difficult (not that this matters only for developing countries), but this does not have to be so. It is suggested that Table 1 could easily be followed by a layman once he has become accustomed to interpreting the matrix form of presentation and that it would be much easier to teach this than, say, understanding of a conventional set of national accounts. Equally, a SAM can be used in conjunction with very sophisticated techniques, but again, this is not essential and it is equally true of most types of data.

As regards data requirements, the major requirements of Table 1 would tend to be available in any case from regular employment and establishment surveys supplemented by periodic household surveys. Some of the items, such as inter-household transfers, might not be available, requiring new questions in future surveys, and would have to be left blank in a first SAM that was prepared for the country. The only major section that would not be available for most developing countries is the input output sub-matrix, at the intersection of the production activities rows and columns, although the marginal totals of this sub-matrix would often be available as a guide. The seriousness of this omission would depend upon the complexity of the economy and the uses for which the SAM was intended. In the case of Botswana, for example, no input-output table had been prepared prior to the arrival of a team to produce a SAM, and this was consequently one of the tasks that had to be undertaken. Without wishing to understate the amount of work that was involved, it proved possible for one team member to estimate the input-output sub-matrix in a period of six weeks. This proved possible because Botswana has a relatively simple economy, characterised by a small number of major businesses from which one could obtain the necessary information on their transactions. Production activities were sub-divided into only 17 sub-classifications, which is small by the normal standards of input-output tables; but even so, there were many blanks and small entries in the input-output sub-matrix because the extent of inter-industry dependence is relatively slight, as is typical of an economy at Botswana's stage of development. In a more complex economy, the task would be more formidable, except that, in a more complex economy, it is likely that more data would be available.

In conclusion, one cannot agree that data requirements are 'too sophisticated' for developing countries.

The uses of SAMs and ODM involvement

At the minimum, a SAM presents a summarised but comprehensive picture of an economy, showing the interrelationship between different aspects of economic transactions in production, consumption, investment and other real and financial flows. The actual picture given, in the form of a set of accounting identities, is from the point of view of the classifications chosen. Recent interest in SAMs has largely centred on their use in considering questions of income distribution and, consequently, classification of households and factors has tended to use categories that are correlated with income level; but other classifications, say by region, could equally be employed. The availability of such a summary, alone, is potentially very valuable to those concerned with economic policy and, to a certain extent, social policy.

But one can go further than this, and, instead of regarding the SAM simply as a set of accounting identities, it can also be employed as a model of the economy which can be manipulated alone, or in conjunction with other types of model, such as econometric models, to forecast orders of magnitude of the effects of changes in policy or other events, such as changes in indirect taxation, wage rates, export demand, or whatever. Full consideration of this would require a separate paper, but it should be mentioned that the Botswana SAM, for example, has been and is being used for such purposes.

The Statistics Division of the Ministry of Overseas Development has been promoting the concept of SAMs in recent years because:

i. it is believed that they represent a valuable additional tool for planners;

ii. given this, then they also represent a way of making use of much of the statistical data produced by government statistical offices. All too often one has the impression that statistical offices in developing countries are churning out data that is scarcely used in their own countries;

iii. related to this, one frequently has the impression that there is little contact between government statisticians and planners. A SAM should provide one means of remedying this to their mutual benefit;

iv. in employing data from a wide variety of sources the SAM provides a consistency check that will frequently reveal conflicting results. In doing this, it may also provide clues as to which results are more likely to be correct, but as a minimum it makes one conscious of errors in data and the need to explore these further. It also provides a good guide for future statistical development, at least in the field of economic statistics since there is little, if any, information required by it that is not required for other purposes also.

To date, ODM have participated in producing two SAMs – one for Swaziland and one for Botswana.

Both were produced in co-operation with Warwick University where a Research Associate is financed by the Ministry purely for practical and academic work on SAMs. The Swaziland SAM was undertaken as a research project, to test the feasibility of the approach in a developing country in Africa; but the Botswana exercise was undertaken as a practical operation for which further assistance will be given in 1978 to update the results. It is anticipated that assistance will also be given to Kenya, later this year, as a part of the same programme.

References

(1) *A System of National Accounts.* Studies in Methods, Series F, No. 2, Rev. 3, United Nations, New York, 1968.

(2) *Social Accounting Matrix, Botswana, 1974/75.* Ministry of Overseas Development, Statistics Division, Economic Planning Staff, London, November, 1977

Table 1: Illustrative Social Accounting Matrix

				CURRENT													CAPITAL									
				FACTORS				INSTITUTIONS					PRODUCTION ACTIVITIES			REST OF WORLD	INSTITUTIONS					FINANCIAL CLAIMS (Liabilities)			REST OF WORLD	TOTAL
				01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CURRENT	FACTORS	Labour: Unskilled	01					–	–			1	2	8	10	1										22
		Labour: Other	02					–	–			2	4	1	5	–										12
		Operating surplus	03					–	–			–	5	1	1	5										12
		Depreciation	04					–	–			–	1	1	1	–										3
	INSTITUTIONS	Households: Low income	05	16	6	–	–	–	3	–	–	1				2										28
		Households: Other	06	6	6	–	–	–	–	2	4	1				–										19
		Enterprises: Financial	07	–	–	4	1	–	–	–	–	–				–										5
		Enterprises: Other	08	–	–	6	1	–	–	–	–	–				–										7
		Government	09	–	–	2	1	1	2	1	–	–	1	2	3	2										15
	PRODUCTION ACTIVITIES	Agriculture	10					8	6	–	–	2	–	2	1	–	–	–	–	1	–					20
		Manufacturing	11					6	1	–	–	3	2	1	4	1	–	–	1	–	–					19
		Other	12					5	2	–	–	–	3	2	1	13	–	–	–	2	1					29
		Rest of world	13	–	–	–	–	6	–	–	–	1	2	1	3	–	–	–	1	2	1				+ 2	19
CAPITAL	INSTITUTIONS	Households: Low income	14					2	–	–	–	–										–	–	–		2
		Households: Other	15					–	5	–	–	–										–	–	1		6
		Enterprises: Financial	16					–	–	2	–	–										1	–	–		3
		Enterprises: Other	17					–	–	–	3	–										–	–	2		5
		Government	18					–	–	–	–	4										–	–	–		4
	FINANCIAL CLAIMS (Assets)	Currency and deposits	19														2	6	–	–	–				–3	5
		Securities	20														–	–	1	–	2				–1	2
		Other	21														–	–	–	–	–				2	2
		Rest of world	22													– 5						4	2	–1		0
		TOTAL	23	22	12	12	3	28	19	5	7	15	20	19	29	19	2	6	3	5	4	5	2	2	0	

Note: The detailed headings of columns are the same as those given for the corresponding rows

The Department of Industry's investment intentions surveys

Miss M. O'Connor, *Statistician, Department of Industry*

This article is based on a paper prepared for the Trade Union Research Unit seminar on business statistics held at the Department of Industry on 6 February 1978. It outlines the basis of these surveys and the methods used to derive from them the estimates of industry's investment which are published by the Department three times a year. A list of references to more detailed, generally more technical, papers is given at the end. A copy of a questiônnaire is at Annex 1.

The surveys, which cover manufacturing industry and the distributive and service industries, were started in 1955. They are conducted three times a year, on a voluntary basis, with forms being sent to about 2,600 reporting units (groups of companies, companies, company divisions or producing units). These units probably account for 60 per cent or more of capital expenditure by manufacturing industry and about 40 per cent of expenditure by the distributive and service industries but the coverage of the returns received in time to be used in the calculations is generally around 45 per cent and 30 per cent respectively for the two groups of industries.

Each survey asks for expected capital expenditure in two calendar years so that there are six inquiries in respect of each year. For 1977, for example, there was a preliminary inquiry in November/December 1975, a further inquiry in April/May 1976, a 'first main' inquiry in August/September 1976, a 'second main' inquiry in November/December 1976, an updating of this in April/May 1977 and a 'third main' inquiry in August/September 1977. The preliminary and the three main inquiries for each year are purely quantitative, firms being asked to give forecasts in £ value. The April/May inquiries were originally completely qualitative, firms being asked to state whether their intentions for each of the two years were the same, more or less than those given in the previous November/December survey. Since 1968 for manufacturing and 1975 for distribution, large firms have also been asked for a quantitative forecast and increasing emphasis is being placed on this as more experience is gained.

Broadly speaking, the intentions given by respondents are grossed up to produce totals for a number of industry groups within manufacturing and within the distributive industries by, in effect, linking with actual capital expenditure by the same respondents in the most recent year available. Detailed descriptions of this procedure have been published elsewhere[(1), (2)]. The method at present used has been applied retrospectively back to 1961. This procedure gives what is known as the 'grossed up intentions' for each group of industries and, by aggregation, for manufacturing as a whole and the distributive and service industries as a whole. This cannot be taken as a direct forecast of capital expenditure in the year to which it relates, as experience has shown that there are systematic biases in the grossed up intentions. These vary between each of the surveys (preliminary, etc.); and for manufacturing, even in the third main inquiry, the grossed up intentions exceed outcome by an average of 9 per cent. The biases are more variable in the earlier than the later surveys for each year and within a survey (say 'first main'), the size and direction (above and below outturn) of the biases depend on a number of factors, particularly the stage reached in the 4–5 year investment cycle. Thus the estimates which are published and used within government make allowance for the probable bias in the grossed up intentions based on the relationships between intentions and outcome in the past. In making the estimates, use is made both of formal methods involving regression equations and of more informal, less mechanistic, methods involving examination of the pattern and trend of the biases.

Because the variability of the biases is greater the lower the level of aggregation, estimates for particular assets or industries are less reliable than for the two broad aggregates of all manufacturing and all distributive and service industries. In the final stage, the estimates for individual industries and assets are constrained to the total for manufacturing as a whole and the distributive and service industries as a whole. Because they are less reliable, estimates of the volume of investment at finer levels of details are generally given in qualitative terms rather than quantitatively.

Originally forecasts were published in current price terms, but from 1967 official forecasts of price changes were used to convert them into volume before publication. Sample inquiries were subsequently used to check the price basis of firms' replies and most respondents were found to reply in terms of expected future prices. For some inquiries from late-1972, and now for all inquiries, firms are asked to state the rate of price increase allowed for (whether specifically or not) in their forecasts. The replies are weighted by their intentions to give an overall expected price increase for each industry and the industry estimates are weighted by the grossed up intentions to give figures for all manufacturing and all distributive and service industries. These are used to deflate the estimates to constant price (volume) terms. Although some respondents cannot distinguish their price allowance, the response is sufficiently high to give a reasonably reliable indication. The few respondents replying in present day prices are included as 0 per cent price increase.

There has so far been a tendency for respondents to underestimate price rises, particularly in 1974/5 when the rate of price increase was accelerating (for example in 1975 the price deflator for all capital expenditure for manufacturing industry rose by 28 per cent but as late as the August/September 1975 survey respondents were estimating 22 per cent). By 1977 the underestimation was, at most, 2 per cent.

Certain assumptions have to be made in using the price information. Firstly, we have to assume that respondents are giving, as requested (see questionnaire at Annex 1), the expected price increase which underlies their forecasts of expenditure rather than an unrelated price forecast. Secondly, some assumption has to be made about the price elasticity of forecast expenditure, that is, the effect of a price change different from that expected. In the formal regression equations now used, the assumption is made that elasticity = 0 (firms maintain the volume of expected expenditure), which has been found to give better results than assuming maintenance of value (elasticity=—1). In the more informal methods also used to examine relationships between grossed-up intentions and outcome, weight is still given to figures unadjusted for price changes as well as to those adjusted by respondents' price expectations, so that allowance is made for behaviour between these two extremes.

The relationship between intentions and outcome, whether the comparison is between the value of grossed-up intentions and expenditure at current prices or between grossed-up intentions deflated by respondents' price assumptions and expenditure at constant prices, has become more variable in recent years, in part due to the higher rates of price increase. This makes interpretation more complex. A factor affecting both the manufacturing and the distributive and service industry results in recent years has been the rapid growth of leasing which, because all figures are on an ownership basis, is included in the distributive and service industry figures. It also affects the manufacturing figures as a significant proportion of the leased assets are leased to manufacturing companies, (possibly by now representing the equivalent of an addition of up to 10 per cent to their own capital expenditure).

A table comparing published results of the intentions inquiries for manufacturing with actual outturn over the last few years is attached (Annex 2). The comparison will of course be affected by changes outside the control of, and not foreseen by, contributors, which take place between the time of the survey and the year forecast.

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(4) Lund P. J. and Neifield M.: 'The Price Basis of the UK Department of Industry's Investment Intentions Inquiries'. (Paper presented at 12th CIRET Conference, Stockholm, June 1975)

IN CONFIDENCE

CEF/3/77

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Telephone: 01 - 215 3654/4275 Telex: 8811074/5

26 October 1977

CAPITAL EXPENDITURE DURING 1978 AND 1979

Dear Sir

I am writing to ask you to let me have an updated estimate of your company's expected capital expenditure during the calendar year 1978 and if possible a first estimate for the calendar year 1979. We need this information to assess prospects for industry's investment.

It would be particularly helpful if you could arrange to send the figures by the end of November but a later return will still be valuable.

Our interpretation of previous estimates has been greatly improved by knowledge of the underlying price assumptions, and this factor remains important. Therefore I should be grateful if you would also indicate below the rates of price increase between 1977 and 1978 and between 1978 and 1979 which are allowed for in your estimates. I realise that you may not be making specific provision but may be using a contingency allowance covering various uncertainties, including price changes, or may be adopting prices already quoted for your 1978 and 1979 projects.

If our requests raise difficulties we shall of course be pleased to help if possible.

Yours faithfully

Roy L Woods

R. C. WOODS
Chief Statistician

Please record below the expected capital expenditure, during the calendar years 1978 and 1979, of your company and all subsidiaries in the United Kingdom; exclude any companies which are not included in your quarterly capital expenditure returns for 1977. If you are unable to make an estimate please endorse the appropriate column or columns "not available". BEFORE COMPLETING THIS FORM PLEASE READ NOTES OVERLEAF. DO NOT DEDUCT GRANTS.	Expected Expenditure during 1978 F/2/78	Expected Expenditure during 1979 F/0/79
	£	£
Land and buildings		
1. New building work	....	....
2. Acquisition of land and of existing buildings	(a)	(a)
3. Proceeds of land and buildings disposed of	(a)	(a)
Vehicles		
4. New and second-hand acquisitions	....	....
5. Proceeds of vehicles disposed of	(a)	(a)
Plant machinery, etc		
6. New and second-hand acquisitions (See Note 10)	....	....
7. Proceeds of plant, machinery, etc disposed of	(a)	(a)
(a) *Exclude these items.*		

Price increase between expenditure incurred in 1977 and expected expenditure to be incurred in 1978	%
Price increase between expected expenditure to be incurred in 1978 and expected expenditure to be incurred in 1979	%

Activity to which this return relates .... Signature ....

PLEASE COMPLETE AND RETURN THIS FORM IF POSSIBLE BEFORE THE END OF NOVEMBER

Name of company (or group) ....

Address ....

....

....

Postal Code .... *Telephone No.* ....

Date ....

FOR OFFICIAL USE ONLY		
K	E	C

P.T.O.

IN CONFIDENCE

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NOTES

GENERAL

1. INCLUDE except as stated in 2 below:

   (a) all expenditure expected to be incurred during the period and to be charged to capital account together with any amounts not so charged but which rank as capital items for taxation purposes:

   (b) any expected capital expenditure at any establishments belonging to the company where operations have not yet begun:

   (c) capital items expected to be bought on hire purchase (excluding interest payments):

   (d) constructional work, new building work or other capital items expected to be produced by you for use in the business covered by the return:

   (e) any expenditure expected to be incurred during the period on additions to capital assets which is temporarily to be carried forward under other headings, eg work in progress on capital assets in course of construction, or deposits or other payments on account of capital assets in process of acquisition:

   (f) expected expenditure on replacing capital assets destroyed in circumstances, eg fire, which have given rise to an insurance claim:

   (g) any expected expenditure on the replacement of major capital assets where, in lieu of depreciation, these renewals are charged against a provision for renewals created out of revenue:

   (h) goods acquired or made for letting out on hire or leasing when these items are charged to capital account.

2. EXCLUDE

   (a) the value of any assets expected to be acquired in taking over an existing business or disposed of in selling part of your business as a going concern:

   (b) expected expenditure on intangible assets such as goodwill, patents and trade marks:

   (c) expected transfers to capital account during the period of expenditure brought forward under other headings from previous periods: (see 1(e) above)

   (d) expected expenditure on assets for installation or use outside the United Kingdom:

   (e) deductible VAT (VAT on passenger cars is not deductible (see Note 8 below)):

   (f) the capital value of goods held on lease and payments of leasing and similar charges not associated with purchase.

3. **MAKE NO DEDUCTIONS** for depreciation, amortization or obsolescence.

4. **DO NOT DEDUCT** any amount expected to be received in grants and/or allowances from the Government and/or the Government of Northern Ireland or any statutory Board or local authority.

LAND AND BUILDINGS

5. Include against heading 1 in the form overleaf, expected expenditure on the construction of new buildings, the extension or improvement of old buildings (including fixtures, eg lifts, heating and ventilation systems), and on site preparation and other civil engineering work. Include the cost of any newly-constructed buildings to be purchased.

6. Include anticipated architects' and surveyors' fees and any legal charges, stamp duties, agents' commissions, etc.

VEHICLES

7. Include against heading 4 overleaf, expected expenditure on ships, aircraft and railway rolling stock as well as on motor vehicles.

8. Include against heading 4, VAT and special tax expected to be paid on passenger cars, but exclude deductible VAT on other vehicles.

9. Exclude vehicles such as fork lift trucks used within warehouses, factories, etc, and mobile powered equipment such as earth movers, excavators, levellers, mobile cranes, etc.

PLANT, MACHINERY AND OTHER EQUIPMENT

10. Include against heading 6 overleaf, expected expenditure on plant, machinery and all other capital equipment (eg office machinery, furniture, mechanical handling equipment and mobile powered equipment); **AND JIGS, DIES, PATTERNS, MOULDS, LOOSE TOOLS AND/OR SPECIAL TOOLS IF THIS EXPENDITURE IS INCLUDED IN YOUR QUARTERLY CAPITAL EXPENDITURE RETURNS.**

Annex 2

Comparison of published results of intentions inquiries and actual expenditure outcome at constant prices
Manufacturing industry 1970 onwards

Year of expenditure	Intentions inquiry results as published — Percentage change on previous year unless shown otherwise: Preliminary inquiry	1st April/May update	1st Main inquiry	2nd Main inquiry	2nd April/May update	3rd main inquiry	Actual change: As published at time*	1977 Blue Book
1970	Upward movement will continue	A further increase	in the region of +10	about +10	no change since previous inquiry	of order of +2 or +3	+ 8·7	+ 7·7
1971	not possible to give an estimate of probable magnitude of increase	no change since previous inquiry	no large change	about —2	about —6 to —8	of order of —6 to —8	— 7·7	— 6·5
1972	little change	little change	little change/ rise during year	about —3	about —3	—7	—10·0	—12·7
1973	might be a rise	no specific comment	range of +2 to +5	range of +2 to +5	about +5	+6	+ 7·0	+ 0·8
1974	strong increase	strong increase	strong increase of order of +15	some +12 to +14	about +5	about +5	+10·8	+15·7
1975	little change	little change	increase of less than +5	—7 to —10	of order of —15	—11 or —12	—13·3	—14·0
1976	Further reduction	of same order	fall of order of 5	—5 to —8	—6 (5 to 8)	—4 to —5	— 5·0	— 4·9
1977	large increase	of order of +15	+15 to 20	+10 to 15	+6 to +10	+7		
1978	strong increase to order of magnitude of 1970 or 1974	confirm strong increase – could be 20 per cent or more	+12 to 17					

*i.e. the figure published at the time of the provisional 1st quarter estimate for the following year.

Factors affecting the output of Crown Court centres

H. D. Mitchell, *Statistician*, **G. Croft**, *Senior Assistant Statistician and*
E. J. Ainsworth, *Higher Executive Officer, Lord Chancellor's Office*

The Statistical Unit of the Lord Chancellor's Department arranges the collection and analysis of data relating to those courts for which the Lord Chancellor has responsibility. Much of the information arises from the administrative process* and its collection is largely a matter of routine. Additional surveys of one kind or another are conducted from time to time, however, to investigate or explain particular aspects of court procedure.

During recent years rising work-loads in the Crown Court have become a matter of some concern, and disquiet has been expressed about the lengths of time which sometimes elapse between committal and eventual trial. Some indication of the problems facing the Crown Court can be seen in Table 1 below, which sets out the number of cases received and dealt with in recent years. Also shown are the number of cases outstanding at the end of those years and also the number of weeks work they represented.

Table 1

Year	*Number of cases* Received(1)	Dealt with(1)	Cases outstanding at end of year	Weeks work represented by cases outstanding(2)
1972	39,400	37,324	8,810	12
1973	40,231	40,747	8,294	11
1974	44,366	43,452	9,126	11
1975	50,451	48,501	11,076	12
1976	54,576	51,705	13,947	14

(1) Excluding cases transferred between centres
(2) Calculated by dividing cases outstanding by cases dealt with during the year and multiplying the result by 52 to convert to weeks.

In only one year since 1972 has the number of cases dealt with equalled or exceeded the number of cases received, i.e. in 1973 when receipts were 40,231 and disposals 40,747. The number of cases outstanding, therefore, has risen almost continuously year by year, as has the number of weeks' work they represent. Increases in resources available (judges, courtrooms, staff) have helped only to contain this excess not to reduce it.

The England and Wales totals mask regional variations; Table 2 demonstrates the regional position at the end of 1976.

Table 2
Committals for Trial during 1976 – by Circuit

Circuit	*Number of cases* Received(1)	Dealt with(1)	Cases outstanding at end of year	Weeks work represented by cases outstanding
Midland and Oxford	8,886	8,687	1,568	9
North Eastern	9,101	8,890	1,307	8
Northern	6,892	6,658	1,486	12
South Eastern	21,095	19,153	8,054	22
Wales and Chester	3,552	3,414	721	11
Western	5,050	4,903	811	9

(1)Excluding transfers between centres.

As a measure of output, gross figures tend to be of little comparative value unless they are related to resources to produce a *per capita* rate of output. Table 3 shows for each circuit an annual 'disposal rate' obtained by calculating the number of cases dealt with per 100 court sitting days.

Table 3
Comparative disposal rates: Committals for trial dealt with per hundred sitting days

Circuit	1972	1973	1974	1975	1976
Midland and Oxford	135	127	126	123	117
North Eastern	132	130	136	139	154
Northern	111	114	114	114	111
South Eastern	76	76	77	76	75
Wales and Chester	101	99	94	102	99
Western	95	96	95	97	94
England and Wales	96	96	96	97	97

This table not only demonstrates circuit differences in the rate at which cases are cleared, but also suggests a remarkable degree of stability in most circuit rates over a period of time. Similar differences and stability are found between individual centres within circuits.

Such differences in disposal rates between centres and, less obviously perhaps, between circuits are to be

*Some idea of the range of information collected can be seen in the annual publication *Judicial Statistics* (HMSO) (Price £2·50) expected. In addition to cases committed for trial the Crown Court receives committals for sentence and appeals. Each type of work constitutes a proportion of total case load that may vary from centre to centre and circuit to circuit. Also, and in practice of far greater significance, the proportion of defendants committed for trial who plead guilty may vary from area to area. Examination of disposal rates has shown that the guilty plea rate is generally the largest single determining factor. This plea rate also tends to be relatively stable over time as indicated in Table 4.

Table 4

Circuit	Proportion of pleas of guilty (percentages) 1972	1973	1974	1975	1976
Midland and Oxford	66	68	69	67	64
North Eastern	66	66	66	68	70
Northern	59	57	56	56	57
South Eastern	48	48	49	49	48
Wales and Chester	59	59	56	57	56
Western	59	61	62	61	55

The reasons a defendant pleads guilty are undoubtedly many. Apart from the obvious one of the degree of conscience, local circumstances, the nature of the offence and advice received – professional or from friends and relatives – must all play a part.

Figures published by the Home Office in *Criminal Statistics England and Wales 1976* (HMSO – Price £7·15 net) suggest that plea rate is associated with type of offence and that the propensity to particular types of offence varies from region to region. Table 5, in brief terms, demonstrates these relationships.

Table 5

Type of offence	Crown Court guilty plea rate England and Wales	Proportion of all indictable offences recorded as known to the police in each circuit (percentages) Midland and Oxford	North Eastern	Northern	South Eastern	Wales and Chester	Western
Violence against the person	56	5	4	3	3	4	3
Sexual offences	72	1	1	1	1	1	1
Burglary	88	24	28	27	22	26	20
Robbery	71	0·4	0·3	0·4	1	0·3	0·2
Theft and handling	61	59	57	59	62	58	63
Fraud and forgery	71	5	5	4	7	5	7
Criminal damage	64	4	5	4	4	4	4
Other	58	0·5	1	1	0·2	1	0·3

It can be seen from this table that together cases of 'burglary' and 'theft and handling' form more than 80 per cent of the offences known to the police. By the time cases are committed to the Crown Court this proportion has fallen to about 55 per cent. As burglary appears to have a very high guilty plea rate and theft and handling a relatively low guilty plea rate the relationship between the proportions of these two offences may be one of the key factors entering into a court's overall plea rate and hence determining its disposal rate.

Another significant factor affecting disposal rates is the time taken to deal with a defendant who pleads 'not guilty', i.e. the hearing times of trials. Records show that trial hearing times average consistently around four hours in some courts, whilst in others the average is as much as eight or ten hours. Even regional averages show considerable variation as Table 6 shows.

Table 6

Average hearing times (hours)

Circuit	All Committals for trial	Not guilty pleas	Guilty pleas
England and Wales	3·9	8·2	0·8
Midland and Oxford	3·2	7·7	0·7
North Eastern	2·1	6·1	0·6
Northern	3·1	6·5	0·6
South Eastern	5·5	9·7	0·9
Wales and Chester	3·7	7·4	0·8
Western	4·0	7·4	1·0

Identification of the causes of theses difference is an essential pre-requisite to any action that might be contemplated in an attempt to reduce them. As part of this identification process a survey was carried out early in 1977 at two third-tier †Crown Court centres chosen to represent the extremes of the range of disposal rates.

Table 7 shows the disposal rate, the guilty plea rate and the average trial hearing time for each of the two courts.

Table 7

	Court A	Court B
Disposal rate	171 cases per 100 days	84 cases per 100 days
Guilty plea rate	70 per cent	52 per cent
Average trial hearing time	5·3 hours	8·8 hours

†Only Circuit Judges and Recorders sit at these centres

The emphasis of the survey was placed upon the hearing times of trials. These times are likely to differ between courts in the same way as the guilty plea rate and for similar reasons; e.g. the type of offence, any consistent differences in the characteristics of defendant and local population (witnesses and jury), and the influence of prosecuting and defence counsel, will all play a part.

Table 8 sets out, for the two sample courts, average hearing times for each type of offence tried during the survey period: in each case the defendant concerned pleaded not guilty. A measure of the weight of the cases is indicated by the average number of pages of depositions. (Statements to the police by witnesses.)

Further investigation was limited to cases involving the offence of 'theft and handling'. Table 9 analyses the make-up of this type of case at each of the two courts. To improve the comparison, cases where the judge directed an acquittal or where a re-trial took place have been omitted.

This table shows that apart from the number of defendants the data for Court 'B' exceeds those for Court 'A' in each of these particulars.

Whilst the data examined suggests that the length of a trial hearing depends on the type of offence and the weight of a case (as measured by pages of deposition) – and this might be considered obvious – the manner in which time is allocated during a trial might suggest other more particular characteristics. Table 10 analyses the time spent on the various stages of a hearing at each of the two courts.

Table 8

Offence	*Court A* Number	Percentage	Average pages of deposition	Average hearing time (Hours)	*Court B* Number	Percentage	Average pages of deposition	Average hearing time (Hours)	*Court A and Court B* average hearing time (Hours)
Violence against the person	30	23	12·2	5·4	10	8	29·6	10·1	6·6
Sexual offences	4	3	17·0	8·4	5	4	16·2	7·3	7·8
Burglary	10	8	15·0	3·1	5	4	17·4	7·9	4·7
Robbery	–	–	–	–	–	–	–	–	–
Theft and handling	57	42	11·5	5·4	66	50	15·5	7·3	6·4
Fraud and forgery	–	–	–	–	4	3	47·3	13·4	13·4
Criminal damage	10	8	7·0	4·2	6	5	20·5	5·2	4·6
Motoring offences	11	8	8·8	4·3	9	7	21·0	9·1	6·5
Burglary and theft	–	–	–	–	10	8	34·5	9·9	9·9
Combinations of one or more of the above	12	9	20·3	7·1	14	11	43·8	15·7	11·7
Others	–	–	–	–	4[1]	3	26·0	9·3	9·3
Total	134	100	12·3	5·3	133	100	22·9	8·8	7·0

[1] Drug offences 2
Conspiracy 1
Taking currency out of country 1

The number of cases is in some instances rather small but this table does suggest a greater diversity of type of offence at Court 'B', and considerably more pages of deposition. These figures also suggest that different types of offence are associated with different lengths of hearing.

Table 9
Theft and Handling

	Court A	*Court B*
Number of cases	45	57
Average hearing time	5·8 hours	7·1 hours
Average pages of deposition	9·8	15·9
Average number of defendants	1·4	1·2
Average number of witnesses called	4·1	4·8
Average number of witnesses read[1]	0·4	0·6
Average number counts on indictment	1·8	2·0
Average number exhibits	4·3	4·6

[1] Statements read in the absence of witnesses.

Some particularly interesting points arise from this table. Although the 57 cases heard at Court 'B' appear to have considerably more weight than the 45 cases heard at Court 'A', the components of the trials in which local people were *not* involved, i.e. opening speeches, legal submissions, closing speeches, summing up and sentencing had the almost identical average times of 135 minutes at Court 'A' and 136 minutes at Court 'B'. The total difference between the two Courts therefore is accounted for by the time counsel took to examine and cross examine witnesses and defendants and the time taken by the jury to consider its verdict.

It can be argued that if a case involves more pages of deposition, then it will obviously take longer to examine witnesses and the jury will have more evidence to consider. However, if this were a significant con-

Table 10
Theft and Handling

	Court A (45 cases)		*Court B* (57 cases)	
	Average time (minutes)	Percent-age of time	Average time (minutes)	Percent-age of time
Opening to start of arraignment	10	3	4	1
Start of arraignment to prosecution opening	10	3	13	3
Opening speeches	11	3	12	3
Witnesses xd and xxd(1)	105	30	136	32
Witnesses read(2)	2	1	2	1
Defendants xd and xxd(1)	50	14	67	16
Legal submissions during trial	13	4	14	3
Prosecution closing speech	14	4	13	3
Defence closing speech	27	8	27	6
Summing up	44	13	46	11
Jury out	55	16	85	20
Mitigation and sentencing	6	2	7	2
Total	347 (5·8 hrs)	100	426 (7·1 hrs)	100

(1) xd = examined
xxd = cross examined
(2) Statements read in the absence of witnesses

sideration one might perhaps correspondingly expect closing speeches and the judges' summings up also to be longer. Perhaps the greater time which tends to be taken in Court 'B' is due less to its cases being weightier than to its tolerated pace of events.

This study has not considered the problems of listing, nor the data made available to the Court to facilitate it. It has dealt solely with the use of the time during which the Courts sat. Within that limitation it would seem from this first study that the disposal rate of a Crown Court centre is largely dependent upon (i) the plea rate and (ii) the length of hearing of trials. The former may in turn be dependent upon the types of offence involved and the latter may in part reflect the type of offences, the volume of depositions put before the Court, and the differences in the time habitually absorbed by examination and cross examination of witnesses. It is, however, unwise to generalise on the basis of a fairly low-level study involving only two courts and further work is in hand to test these interim findings.

Recently available statistical series and publications

The following publications containing social statistics have recently, or will soon, become available during the April–June quarter of 1978. Unless otherwise specified, copies may be purchased from Her Majesty's Stationery Office. A list of release dates of economic series is published monthly in *Economic Trends*.

Department of Education and Science
Statistics of Education, Volume 5, 1976: Finance and Awards, 1975–76.

Department of Employment
Employment Gazette, published towards the end of each month, contains indicators on earnings, unemployment and prices. Issues due in the second quarter will contain articles on the 1977 Family Expenditure Survey results for the third and fourth quarter.

Department of the Environment
Housing and Construction Statistics, Issue 24: figures for the fourth quarter 1977
Local Housing Statistics, Issue 44: figures for the fourth quarter 1977

Home Office
Control of Immigration Statistics 1977
Report on the work of the Equal Opportunities Commission, 1977
Report of the Police Complaints Board 1977
Report of the Commissioner of Police for the Metropolis 1977
Report of HM Chief Inspector of Constabulary 1977
Report of the Parole Board 1977
Report of the Charity Commissioners for England and Wales
Report on the work of the Commission for Racial Equality, 1977

Office of Population Censuses and Surveys
Population Trends No. 10
OPCS Monitors, available free from the Office of Population Censuses and Surveys include:

Births and Deaths	VS	Weekly
Deaths from Accidents	DH4	Monthly
Legal Abortions	AB	Monthly
Adoptions	FM3	Quarterly
Infectious Diseases	MB2	Quarterly

Scottish Office
Prisons in Scotland, Report for 1976
Criminal Statistics for Scotland 1977
Housing Return for Scotland, fourth quarter 1977
Scottish Housing Statistics, first quarter 1978
Scottish Mental Hospital Inpatient Statistics, 1976

Welsh Office
Welsh Local Government Financial Statistics

In addition to the above, the following analyses in the Department of Health and Social Security statistical series have recently become available. Extracts and summaries from these will eventually be published in *Social Security Statistics*

Further information can be obtained from:
Mr. R. J. McWilliam,
Department of Health and Social Security,
Room 128, Friars House,
157–168 Blackfriars Road,
London SE1 8EU.

Unemployment benefit
Quarterly analysis of decisions of Insurance Officers, quarter ended 31 March 1978
Monthly analysis of claims by sex and region:
5 weeks ending 4.2.78
4 weeks ending 4.3.78
4 weeks ending 1.4.78

Death Grant
Analysis of grants paid by sex of deceased, age and date of death, country, amount, reason for deduction and whether incapacitated – quarter ended 30 September 1977

Adjudication
Quarterly analysis of appeals and references to local NI and II appeal tribunals – quarter ended 31 March 1978

Family Income Supplement
Monthly analysis of numbers and characteristics – December 1977, January 1978, February 1978

Attendance allowance
Quarterly analysis of allowances current and awards and cessations in period by age, cause and area separately for higher and lower rates – quarter ended 31 March 1978

Guardian's allowance/Child's special allowance
Quarterly analysis of children for whom allowance is in payment, quarter ended 31 March 1978

New surveys assessed by the Survey Control Unit

December 1977 to March 1978

For further information on the surveys listed, the appropriate departmental contact may be obtained from Mr R. C. Ponman (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 1977 – March 1978

Title	*Sponsor*	*Those approached*	*Approximate number approached*	*Location*	*Frequency*
Business Surveys					
Study of why Firms Refuse to Appear in BSO Classified Lists	BSO	Manufacturers	27	GB	AH
Retail Shops Inquiry for 1977	BSO	Retailers	4,000	GB	AH
Research on Publicity Needs of Industrial Research Establishments	COI/DI	Managers	700	GB	AH
Evaluation of Youth Opportunities Programme	COI/MSC	Employers	440	GB	AH
Public Corporations' Sources and Uses of Funds – Annual and Quarterly Inquiries	CSO	Public corporations	15	UK	A/Q
Public Corporations' Selected Current Assets and Liabilities	CSO	Public corporations	15	UK	Q/M
Impact of Legislative Measures on Employers' Labour Practices	DEM	Manufacturers	300	UK	AH
Impact of Employment Legislation on Small Firms	DEM	Employers	300	GB	AH
Study of Potential Use of Stone in New Buildings	DOE	Quarrying companies/ Construction companies	240	GB	AH
Census of Tourist Accommodation in the High Pennines	ETB	Hoteliers	250	N	AH
Pesticide Usage – Commercial Grain Stores	MAFF	Grainstorers	125	GB	AH
Pesticide Usage – Flour Mills	MAFF	Flourmillers	104	UK	AH
Rainbow Trout Costings Survey	MAFF	Fishfarmers	40	GB	AH
Banks Examination	PC	Banks	16	UK	AH
Road Haulage Examination	PC	Transport companies	1,200	GB	AH
Survey of the Use of Debt Recovery Enforcement Laws known as 'Diligence'	SDD	Sheriffs officers	50	S	AH
Review of Creditors Policies Towards Courts and Debt Recovery	SDD	Institutions granting Credit	100	S	AH
The Impact of the Coatbridge ASDA on Other Retailers	SDD	Retailers	240	S	AH
Study of Goods Transport Requirements	TRRL	Managers	4,000	E	AH
Local Authority Surveys					
Local Authority Loans for House Purchase and Improvement	SDD	Housing departments	56	S	AH
Homeless Household Case Return	SDD	Housing departments	60	S	C

New surveys assessed December 1977 – March 1978—continued

Title	Sponsor	Those approached	Approximate number approached	Location	Frequency
Other Surveys					
Validation of Noise Nuisance Indices	BRE	Households	300	SE	AH
Job Release Scheme Extension – Exploratory Advertising Study	COI/DEM	Adults	25	SE	AH
New Pension Advertising Test	COI/DHSS	Employees	400	E	AH
Trade and Industry Journal – Research among Lapsed Enquirers	COI/DI	Readers	111	UK	AH
Attitudes to Waste Recycling	COI/DI	Housewives/Booklet Applicants	14,250	GB	AH
Seat Belt Campaign Evaluation 1977/78	COI/DTP	Drivers	16,000	GB	AH
Seat Belt Pre-test	COI/DTP	Drivers	200	SE	AH
Drink and Drive Pre-test	COI/DTP	Drivers	200	SE	AH
Research into a Cinema Film on Two-Wheeler Safety Training	COI/DTP	Youths	100	E	AH
Seat Belts Evaluation Work	COI/DTP	Households	2,000	GB	AH
Child Pedestrian Campaign Development 1978/79	COI/DTP	Children	72	E	AH
Fire Prevention: Mobile Heaters: Test of Final Film	COI/HOME	Housewives	48	YH	AH
Equal Opportunities Commission – Advertising Concept Research	COI/HOME	Women	45	E	AH
Research into Metrication Conversion Charts	COI/METB	Adults	745	E	AH
RAF Officer Advertising Research 1978	COI/MOD	Men	15	GB	AH
Royal Naval Officer Advertising Post Test	COI/MOD	Youths	20	E	AH
Royal Naval Officer Recruitment Advertising Research	COI/MOD	Youths	350	E	AH
Role and Function of Geriatric Day Hospitals	DHSS	Patients/Relatives/ Ambulance drivers	330	GB	AH
Interaction between Social Workers Involved in Child Care	DHSS	Children/Social workers	N/K	SE	AH
Income and Expenditure of Families with Handicapped Children	DHSS	Disabled	500	E	AH
Children Living off the Ground – Household Survey	DOE	Parents/Children	30	E	AH
Housing Experience Survey – Feasibility Test on National Childrens Bureau Cohort	DOE	Youths	800	GB	AH
Skateboard Accidents	DPCP	Parents/Patients	500	EW	AH
Vehicle Excise Duty Evasion – Scrappage Follow-up	DTP	Car owners	600	GB	AH
In-Depth Study of Car Owners Travel Motivation and Behaviour	DTP	Car owners	210	WM	AH
Holidaytakers' Attitudes and Opinions of Weston-super-Mare	ETB	Households	500	GB	AH
'England Holidays '78' Brochure Evaluation Study	ETB	Adults	630	GB	AH
'England Holidays '78' Brochure Readership Survey	ETB	Households	2,000	GB	AH
1978 Holiday Intentions Survey	ETB	Households	2,806	GB	AH
Lump Sum Payment to Outgoers Project	MAFF	Ex-Farmers	35	WM	AH
Working Life (EEC)	OPCS	Adults	2,000	UK	AH
Adult Dental Health in the UK	OPCS	Adults	7,500	UK	AH
Privately Rented Accommodation	OPCS	Tenants	4,500	E	AH
Proxy Interviewing – Pilot	OPCS	Households	130	EW	AH
Public Attitudes to Deafness – Feasibility Study	OPCS	Adults	290	GB	AH
Survey among ODM Study Fellows from Developing Countries	OPCS	Students	900	GB	AH
Opinions on Music, Art, PE and Drama in the Primary Diploma Course	SED	Teachers	1,630	S	AH
Summerston Housing Management Co-Operative Social Survey	SDD	Households	1,000	S	AH
Road Safety Leaflet for the Elderly Survey	TRRL	Elderly	250	SE	AH
Children and Traffic	TRRL	Headteachers	900	GB	AH
Welsh Rutex Monitoring Surveys	TRRL	Passengers	100	W	AH
Gwent Sunday Bus Surveys	TRRL	Passengers	1,500	W	AH
Second Ripon On-Bus Survey	TRRL	Passengers	150	SW	AH
Lorry Drivers' Awareness of Lorry and Bridge Heights	TRRL	Lorry drivers	500	E	AH
Harwell Travel-to-Work Survey	TRRL	Commuters	5,000	SE	AH
Impact of the New Metro and Associated Transport Changes in Tyneside	TRRL	Travellers	20,000	N	AH

Abbreviations used

General

N/K – Not Known
ODM – Ministry of Overseas Development
PE – Physical Education
RAF – Royal Air Force

Sponsor

BRE – Building Research Establishment
BSO – Business Statistics Office
COI – Central Office of Information
CSO – Central Statistical Office
DEM – Department of Employment
DHSS – Department of Health and Social Security
DI – Department of Industry
DOE – Department of the Environment
DPCP – Department of Prices and Consumer Protection
DTP – Department of Transport
ETB – English Tourist Board
HOME – Home Office
MAFF – Ministry of Agriculture, Fisheries and Food
METB – Metrication Board
MOD – Ministry of Defence
MSC – Manpower Services Commission
OPCS – Office of Population Censuses and Surveys
PC – Price Commission
SDD – Scottish Development Department
SED – Scottish Education Department
TRRL – Transport and Road Research Laboratory

Location

E – England
EM – East Midlands
EW – England and Wales
GB – Great Britain
N – Northern England
NW – North West England
S – Scotland
SE – South East England
SW – South West England
UK – United Kingdom
W – Wales
WM – West Midlands
YH – Yorkshire & Humberside

Frequency

A – Annual
AH – *Ad Hoc* (or single time)
C – Continuous
M – Monthly
Q – Quarterly

Notes on current developments

POPULATION AND VITAL STATISTICS

Population Trends

The latest edition of *Population Trends*, the journal of the Office of Population Censuses and Surveys was published in March. The first article concerns marriage and birth patterns among the New Commonwealth and Pakistani population living in England and Wales. A significant decrease over recent years in the average family size of West Indian-born women is among the conclusions drawn. The numbers of births to women born in the West Indies fell from 12,500 in 1971 to 7,200 in 1976. Of legitimate live births in 1976 to these women, 22 per cent were fourth and later children compared with 41 per cent in 1971. As there was little change in the estimated number of West Indian born women of childbearing age the figures suggest that the average family size fell substantially. In contrast there is no clear evidence that average completed family size declined among women born in the Indian sub-continent.

The editorial is devoted to a preview of the 1977 demographic review sponsored by the Registrars General for England and Wales and for Scotland which considers the current demographic situation, the history of population change over the last 30 years and some implications for the future.

Another article contains some findings from a recently published survey on the elderly and the relationship between age and the quality of life. A correlation between declining living standards and increasing age is considered.

There are two medical articles. The first on regional mortality 1969–73 summarises the differences in mortality between the regions of England and Wales emphasising the well known North/South gradient. The second article discusses the voluntary reporting system on congenital malformations and shows how it can be used at national and local levels.

The fifth article gives the results of the classification of 1971 census enumeration districts with an example from the Wirral. The very different types of area can be summarised and the complex pattern of similarities and differences studied.

The regular series of tables continues, brought up-to-date with the latest available figures.

Population Trends 12 is due for publication in June 1978.

References

Population Trends 11 (HMSO) March 1978 (Price £2·25 net)

Population Trends 12 (HMSO) due in June 1978 (Price £2·25 net)

New series of population estimates

In the August 1977 issue of *Statistical News* it was mentioned that changes in the method of making population estimates were to be introduced. The revised method would produce a new series of population estimates at the National, Local Authority and Health District levels for each year starting from mid-1971.

The new series of National estimates by age and sex for the United Kingdom, Great Britain and England and Wales have been completed. At the national level changes were small and by mid-1976 the new estimates showed a decrease of only 42 thousand which is about 0·1 per cent. Some of the data have been published and more details given in *Population Trends* 10 and 11, in the OPCS Monitor series and in the *Monthly Digest of Statistics*.

The new local government population estimates from mid-1971 to mid-1976, together with the mid-1977 set of estimates based on the new series of estimates, are near completion. The changes in the mid-1976 population seem likely to range, at the local authority level, from a decrease of 4·0 per cent to an increase of 3·7 per cent. Most are a good deal less and 278 of the 403 local authority areas are within 1·0 per cent of the previous figure.

The all ages population estimates for each area will be published in an OPCS Monitor shortly while more detailed information by age and sex will be published in an OPCS Annual Reference Volume (Series PP1) later in the year. For further information please contact Population Estimates Unit, OPCS, St. Catherines House, 10 Kingsway, London WC2.

One of the changes in method enables much improved Health area estimates to be produced. These will also be available shortly and can be obtained by writing to Mrs. J. Dainty, DHSS, 42–46 Weston Street, London SE1 3QW.

The 1976-based projections booklet

The main results of the 1976-based national population projections, including short and long-term variant projections, together with a detailed account of the

GRO(S) census test

A voluntary census test was carried out in October 1977. Response was disappointing at just under 80 per cent, compared with over 85 per cent for the Labour Force Survey and the census tests in October 1972 and April 1974. The test will be used to evaluate the completeness of cover of the electoral register, local authority valuation rolls and postcode 'delivery points' in addition to new wording for some census questions and public preference for broadsheet or booklet forms.

GRO(S) publications

Recent publications include:
Annual Report for 1976 – Part 1 Mortality Statistics November 1977 (£11·50).
Annual Report for 1976 – Part 2 Population and Vital Statistics November 1977 (£6·50).
Second Quarterly Return for 1977 November 1977 (90p).
Third Quarterly Return for 1977 January 1978 (£1·50).

The fourth quarterly return, which also contains provisional annual statistics for 1977, will be published this summer.

SOCIAL STATISTICS

General Household Survey

The General Household Survey 1975 was published in March 1978.

This edition of the Survey results presents 1975 data for topics such as housing, employment, education, health, and household composition, already published for 1971–74. In addition, the 1975 report includes a description of the new sample design which was operative from the beginning of 1975.

The General Household Survey is a continuous survey based on a voluntary random sample of some 15,000 households throughout Great Britain. It is produced by the Social Survey Division of the Office of Population Censuses and Surveys under the sponsorship of the Central Statistical Office. The main purpose of the survey is to provide at regular intervals a general picture of social conditions related to social policies and their evaluation.

A detailed account of the survey's methodology was given in the first report published in July 1973, *The General Household Survey – Introductory Report*.

References
The General Household Survey 1975 (HMSO) (Price £7·50 net)
The General Household Survey – Introductory Report (HMSO) (Price £1·80 net)

Family Expenditure Survey

The 'Layman's Guide to the Family Expenditure Survey' which was notified in the February issue of *Statistical News* as appearing in the *Department of Employment Gazette* for January 1978 was unavoidably delayed until the February issue. It was published under the title 'Family Expenditure – A Plain Man's Guide to the Family Expenditure Survey'. The first in the new series of articles giving quarterly results from the survey, covering the second quarter of 1977 back to the beginning of 1976, and annual data for 1975 and 1976 was also deferred to the February issue of the Gazette.

The annual article giving results of the Family Expenditure Survey for the year ended June 1977 and the weights to be used in 1978 for the General Index of Retail Prices appeared in the March issue of the Gazette. The article gives more detail about how weights for the index are derived from FES results than has been included in previous similar articles.

References
Department of Employment Gazette, February 1978 (HMSO) (Price £1·25 net)
Department of Employment Gazette, March 1978 (HMSO) (Price £1·25 net)

Scottish Housing Statistics

The first issue of *Scottish Housing Statistics*, a new quarterly publication of Scottish housing data relating to the first quarter of 1978 will be published in June 1978.

Scottish housing data have in the past been available from a variety of sources including the Quarterly Return and Rent Return produced by Scottish Development Department, and *Housing and Construction Statistics* produced by the Department of the Environment and the Scottish and Welsh Offices. The new publication provides in one volume the essential data from all of these sources, together with additional articles, tables and charts. It will replace both the Quarterly Return and the Rent Return.

The publication consists of a preliminary section containing a short article on Scottish Household Projections followed by tables of key indicators and a district summary. There is a main core of quarterly tables and charts and less frequent supplementary tables which will be published when the information is available. The main tables are grouped into four sections – Housebuilding, Improvements, Finance and Rents. The layout has been designed to make the publication both readable and comprehensible with comparative region, district and New Towns data contained on single pages and the inclusion of charts to highlight the main series.

Future issues will be of similar format and will include periodic reports giving explanatory text and statistics on the working of, for example, new legislation affecting Scottish housing as well as the regular tables and charts.

The publication is designed for anyone with an interest in Scottish housing affairs; it provides an up-to-date picture of the Scottish housing scene and will keep the reader regularly informed of any changes and developments.

For further information, please contact:

A. J. Harvey,
Statistician,
Scottish Development Department,
Housing Statistics Branch,
83 Princes Street,
Edinburgh EH1 1DL.
Telephone: 031 226 3781 Extension 233.

Reference
Scottish Housing Statistics (HMSO, forthcoming)

HEALTH AND SOCIAL SERVICES

Smoking and professional people

A report on this subject contains the results of a survey carried out on behalf of the Department of Health and Social Security among eight professional groups (hospital doctors, pharmacists in retail outlets, midwives and health visitors, general medical practitioners, general dental practitioners, secondary school teachers, primary school teachers, hospital nurses) in 1975. It investigated their smoking habits; knowledge of the health hazards of smoking; their attitudes to anti-smoking education and the extent to which each group would be prepared to take part in such anti-smoking education.

Reference
Smoking and professional people (HMSO) (Price £1·00 net)

Wheelchairs and their users

A survey was carried out for the Department of Health and Social Security among a sample of users of National Health Service wheelchairs in England and Wales. The fieldwork took place between November 1973 and January 1974. The purpose of the survey was to establish the characteristics of wheelchair users and to ascertain their attitudes to wheelchairs and the operation of the wheelchair service.

The survey was therefore concerned with a particularly small minority group in the population; there were just over 100,000 adult users of wheelchairs at the time of the survey. The average age of this group was found to be high and there were twice as many women as men in it. In general the survey showed that very few of the users were dissatisfied with their wheelchairs or the service but a number of aspects of both were identified as requiring review.

Reference
Wheelchairs and their users (HMSO) (Price £3·65 net)

Infant feeding

An enquiry has been carried out for the Department of Health and Social Security into the infant feeding practices among the mothers of a sample of babies born in 1975. The report shows the proportion of mothers who start breast feeding and the length of time for which they continue to do so, providing baseline statistics against which future information can be compared. Some of the factors influencing a mother's choice of feeding method are discussed and the report also considers common practices which were found to be associated with mothers giving up breast feeding in the early weeks after the birth.

Reference
Infant feeding 1975: attitudes and practice in England and Wales (HMSO) (Price £7·00 net)

Pre-school children and day care

An enquiry was undertaken for the Department of Health and Social Security to find out the extent, kinds and degrees of need for day care (i.e. day nurseries, playgroups and child minders) amongst children under five. In addition to showing the proportions of children in need of day care of nursery education according to different criteria, the report considers the feasibility of locating most of those with the greatest need from information which might be routinely available to health and social service workers. The percentages of all those for whom day care was wanted by their mothers are also given. The report was based on information from interviews with the mothers of a representative sample of children under five living at home in England and Wales.

Reference
Pre-School Children and the Need for Day Care (HMSO) (Price £4·00 net)

Army welfare

A survey was carried out in June/July 1975 on behalf of the Army Welfare Inquiry Committee (Ministry of Defence). Interviews were carried out with single, young married and older married soldiers and married officers on various welfare matters, including the extent of the movement of soldiers and consequent separation from their families.

Reference
Army Welfare (HMSO) (Price £2·25 net)

The elderly

A survey, *The Elderly at Home*, was published on 14 February 1978. It was carried out by Audrey Hunt of the Office of Population Censuses and Surveys for the Department of Health and Social Security. It covers many aspects of the lives of people aged 65 and over living in the community, including income and outgoings; housing and amenities; mobility, health and ability to look after themselves; employment; transport and accessibility; social contacts; interests, hobbies and attitudes to life.

The findings of the survey show that most of the disadvantages of old age do not make themselves acutely felt for most people before the age of 75. Physically the 65–74 year olds are, as a group, not much more severely disadvantaged than the age group immediately below their own. They appear at least as likely as younger people to have hobbies, interests and social contacts and their housing conditions and amenities are not greatly inferior. Their incomes are lower on average than those of the working population, but much less so than those of the older age group. There is a progressive decline with increasing age in many things: mobility, health, ability to perform personal and domestic tasks, favourable attitudes to life, having hobbies and interests, standards of housing and amenities. Some of the higher material standards of the younger elderly may well be a consequence of the better incomes and conditions enjoyed by the working population in recent years and may therefore be carried over into their later lives. Other adverse conditions, such as ill-health and widowhood, however, are likely to afflict the older elderly of the future.

The report contains the results of a survey carried out on behalf of the DHSS during 1976 among people aged 65 and over living in the community. The findings of the survey provide evidence that physical old age does not begin at 65 for the majority of people. The report includes chapters on demographic characteristics, economic situation, accommodation, employment, mobility, health, social contacts, transport, interests and material circumstances. The purpose of the survey was to provide information to help ensure that those health and social services which are heavily used by the elderly are used to the best effect, and designed to meet the needs of those most requiring help.

Reference
The Elderly at Home (HMSO) (Price £7·00 net)

Royal Commission on Civil Liability

The report of the Royal Commission on Civil Liability and Compensation for Personal Injury contains in its second volume (Cmnd. 7054 – II), a compilation of statistical material relating to personal injuries. Information is given about compensation provided through social security, the tort system, and in other ways. The volume contains reports on a number of surveys carried out specially for the Commission, including a survey of injured persons in a sample of households carried out by the Office of Population Censuses and Surveys, and a survey of insurance claims for personal injury carried out by the British Insurance Association with the co-operation of Lloyd's.

Reference
Report of the Royal Commission on Civil Liability and Compensation for Personal Injury, Volume II (Cmnd. 7054 – II) (HMSO) (Price £3·60 net)

MANPOWER AND EARNINGS

Census of employment: size analysis of the units for which information is obtained

'How big is British business', the headline to an article in the January 1978 issue of the *Department of Employment Gazette*, may seem to promise more than is provided, but the analysis of the number of employees covered in each of some one million units for which separate information is collected in the annual census of employment in Great Britain goes some way to answer this topical question.

These census units do not necessarily represent complete firms or workplaces, and their numbers and sizes can vary from one year to another because of administrative changes. Nevertheless, provided that the qualifications to the figures are borne in mind, the analyses are of considerable interest, particularly because they cover such a large part of the economy.

Reference
Department of Employment Gazette, January 1978 (HMSO) (Price £1·25 net)

Survey of labour costs
1975 results

The main results for Great Britain of the survey of employers' total labour costs in Index of Production industries in 1975 were published in the September and December 1977 issues of the *Department of Employment Gazette*. This survey and a similar one conducted in Northern Ireland by the Department of Manpower Services were made under a Regulation of the Council of the European Communities (*Statistical News* 27.14 and 29.26). Analyses of the survey data for the United Kingdom as a whole have been forwarded to the Statistical Office of the European Communities for publication in the EUROSTAT series. There was a similar survey of 1973 costs in the United Kingdom and 1972 costs in the original six Community countries (*Statistical News* 20.42 and 31.34).

Reference
Department of Employment Gazette; September and December 1977 (HMSO) (Price £1·20 net)

Future surveys

The Council of the European Communities has adopted Regulations on the organisation, by the Commission, of further surveys of labour costs and of the structure and distribution of earnings in Index of Production industries (manufacturing, mining and quarrying, construction, gas, electricity and water supply), wholesale and retail distribution, banking, finance and insurance. The necessary surveys in the United Kingdom will be conducted by the Department of Employment in Great Britain and the Department of Manpower Services in Northern Ireland, on behalf of the Commission.

The form of these surveys has been determined by the Statistical Office of the European Communities following consultative discussions in a working group in July 1977 with representatives of governments, employers and trade unions. The Department of Employment, the Confederation of British Industry, the Retail Consortium, the British Bankers Association and the British Insurance Association participated.

Community surveys of the structure and distribution of earnings are conducted at approximately six-year intervals. Previously the surveys in production and service sectors were made in different years. It has now been decided that they should be synchronised, although member states will be able to use either October 1978, April 1979 or October 1979 as the reference periods for the forthcoming survey. The United Kingdom participated in the previous 1974 community survey in distribution, banking and insurance (*Statistical News* 25.30 and 31.34) but did not participate in the 1972 survey in production industries.

In order to minimise the form-filling burden on employers and in view of the fact that the New Earnings Survey is already carried out annually in Great Britain and Northern Ireland for national purposes, it has again been arranged that the obligations under the earnings survey Regulation will be met by the provision of data obtained from the New Earnings Survey 1979, without increasing the size of the sample but with the addition of supplementary questions. The survey sample in the United Kingdom will consequently be considerably smaller than in other EEC countries.

Labour costs surveys are conducted at approximately three-year intervals. There were surveys of 1975 costs in Index of Production industries and of 1974 costs in service industries, in which the United Kingdom participated (*Statistical News* 24.25, 27.14, 29.26, 34.33 and 41.00). These surveys are also being synchronised. The forthcoming survey will relate to costs in either the calendar year 1978 or, if more convenient to a firm in the sample, a 1978/9 accounting 12-month period.

Information is to be obtained from samples of manufacturing establishments and of undertakings in other industries, employing ten or more employees. Those selected in the sample have been notified.

Reference

Regulations (EEC) Nos. 494/78 and 495/78 of the Council of 6 March 1978; *Official Journal of the European Communities*, No. L68 10 March 1978 pages 1 to 4, English edition obtainable from HMSO (Price 60p net)

New Earnings Survey 1977

The six-part publication of results of the New Earnings Survey 1977 has been completed (*Statistical News* 39.27). Analyses based on the special question on types of incentive payments schemes were included in Part F.

Reference

New Earnings Survey, 1977, Parts A to F (HMSO) (Price £2·00 net each)

New Earnings Survey 1978

In the New Earnings Survey 1978, information is again being obtained from employers about the earnings and hours for one pay-period and the characteristics of a one per cent random sample of employees in employment of all kinds in Great Britain. The survey questions are essentially the same as in 1977 except that the 1977 survey question about types of incentive payments schemes is replaced by a question on types of voluntary collective bargaining arrangements, if any. This will distinguish those at the national level only, those at local level only and those at both levels.

INCOME AND WEALTH

Estimates of accumulated and inherited wealth

In a paper delivered to a sessional meeting of the Institute of Actuaries on 27 February, Mr. Elfryn Jones, F.I.A. presented the results of some work he had carried out on models of wealth saved from income, and of inheritance. This work had been done for the Royal Commission on the Distribution of Income and Wealth and results were published recently in the Commission's Report No. 5. The meeting took place in Staple Inn Hall and was attended by about 80 members of the Institute and guests. The paper and proceedings will appear in the Journal of the Institute of Actuaries.

In its first report, the Royal Commission drew a distinction between wealth accumulated out of lifetime savings and wealth that results from inheritance. This theme was taken up in Report No. 5 and in Mr. Jones's paper. Three sources of wealth are distinguished: savings out of earnings from employment and self-employment, transmitted wealth (inheritances, gifts inter vivos and non-dutiable settled property), and other wealth including entrepreneurial fortunes, accumulated from investment income and financial windfalls. Inequality in the distribution of wealth may be expected because most individuals save over their working life so that accumulated savings are related to age. But the observed distribution of wealth is more unequal than that which would arise, it is thought, simply from 'life cycle' effects. The paper constructs models in an attempt to quantify the likely magnitude of the three types of wealth.

A savings model makes various assumptions about how much different groups save and, assuming a steady state population that reflects the demographic features actually observed, it calculates the distribution of wealth that would result from these assumptions. The model distinguishes six socio-economic classes for each sex so that differences in earnings and mortality rates can be taken into account. Marital status and related economic activity rates are also taken into account, as well as the spread of earnings within age groups. Four different assumptions about savings were considered – three based on a flat percentage of income saved and one on a sliding scale with the proportion of income saved increasing with income. Dissaving is assumed to take place at a constant rate on retirement and men becoming unemployed are assumed to consume part of their savings to date. The distributions of wealth from accumulated savings in a steady state and based on these assumptions are tabulated and compared with other published models.

The inheritance model uses information from estate duty sources, and assumptions regarding the average 'length' of time for which an inheritance is held, in order to estimate the total stock of inheritance ever received by the living persons. The assumptions concern the age and sex of the donors, and recipients and are based on a survey of bequests. The parts of the population in each sex and age group are assumed to hold the inheritance they received for a given period and this enables the author to calculate the total amount of inheritances received from a historical series of estates passing on death. The calculations are done at constant prices to avoid the problem of assets appreciating in value after they have been received, and not being comparable with inheritances received in other years. Age at receipt of a bequest is shown to be of crucial importance in determining the total stock of inherited wealth. Inheritances were estimated to comprise 20 per cent of total wealth in 1973 using the model, a proportion which should be increased to about 25 per cent to take account of gifts *inter vivos* made more than seven years before death and of non-dutiable settled property.

By comparing the distribution of wealth given by the model for accumulated savings with the distribution of all wealth based on the Inland Revenue's estate multiplier method (after adjustment to balance sheet totals), and taking account of the estimated size of inherited wealth, the author is able to derive estimates of the importance of the three sources of wealth. Savings are thought to account for 60 per cent of the total, transmitted wealth 25 per cent and other wealth 15 per cent, although for the top percentiles the proportion due to accumulated savings is much lower – perhaps only 25 per cent for the top one per cent of wealth holders.

The approach illustrated by the paper is capable of further development and the author hopes to integrate the two models so that inheritance is taken into account in the savings model. But without further data, developments in the form of further assumptions may give an impression of refinement and accuracy that is illusory.

Discussion at the meeting centred on the suitability of the savings model and the adequacy of the statistical material. Speakers felt that the paper was an excellent first step towards a greater understanding of the importance of inheritance and saving in the wealth of the nation, but that a greater knowledge of what motivated people to save and how saving varied with age, level of income and family grouping was necessary.

Wider aspects of savings and wealth were discussed. Some speakers referred to the recent work on personal sector balance sheets done for the Royal Commission by the Central Statistical Office and the changing pattern of wealth that they showed. Some speakers wondered about the political implications of the work of the Royal Commission, although Mr. Jones was able to assure them in his reply to the discussion that the Royal Commission had taken a purely fact-finding approach in its work on this subject.

Reference

Royal Commission on the Distribution of Income and Wealth, Report No. 5, 3rd report on the standing reference, Cmnd. (6999); (HMSO) (Price £4·65 net)

Inland Revenue publications

The main results of the *Survey of Personal Incomes 1975–76* have been published in a booklet pending full publication later in the year.

The tables in the booklet are similar to those in the publication of 1974–75, except that most of the tabulations are ranged by 'total income' rather than 'total net income', the main difference between the two measures consisting of mortgage interest.

The booklet contains distributions of personal income before and after tax and distributions by marital status, size of family and type of income. There is also a summary table showing incomes allocated to the regions and metropolitan areas of the United Kingdom.

Tables in greater detail will be published later in the year.

A further booklet, *Estimated Wealth of Individuals in the United Kingdom 1975*, was produced pending publication of Inland Revenue Statistics 1977 in February 1978.

It is in similar form to the Wealth booklet for 1974 and the tables include distributions of holdings of various assets and classification of property by range of total estate, and a wealth concentration analysis of identified wealth owners. There is also a table showing the wealth distribution among the adult population.

The tables appear in greater detail in the main volume.

Reference

The Survey of Personal Incomes 1975–76, (Price 70p net)

Estimated Wealth of Individuals in the United Kingdom 1975 (Price 50p net)

Both booklets are obtainable, post free, from:

Board of Inland Revenue,
The Public Enquiry Room,
Room 8, New Wing,
Somerset House,
Strand,
London WC2R 1LB.

ENERGY

Expenditure on fuels by household

In April the Economics and Statistics Division of the Department of Energy published a document on this subject which is now available free of charge from the Department of Energy Library. The information on expenditure on individual fuels and fuel as a whole in the 1976 Family Expenditure Survey has been converted into tables and charts, with the addition of a commentary to explain and pin-point the main features. In this report many interesting facets of fuel expenditure are brought to light, for example, despite the recent large rise in the prices of most fuels, expenditure on energy in 1976 was $5\frac{3}{4}$ per cent of total household expenditure on goods and services compared with $6\frac{1}{4}$ per cent in 1970, and the most recent low point of $5\frac{1}{4}$ per cent in 1974. Expenditure on fuels for motor vehicles accounted for a further $3\frac{1}{2}$ per cent of total expenditure. Households with low incomes are shown to have spent about 12 per cent of their total weekly outlay on fuels, three times the proportion spent by high income households. The households in the survey are also analysed according to the type of dwelling, the household composition and the geographical region. Expenditure on fuels by pensioner households and by households with central heating are also examined in separate sections.

Reference

Family Expenditure Survey 1976: Expenditure on fuels. Obtainable, free of charge, from:

Department of Energy Library,
Thames House South,
Millbank,
London SW1P 4QJ.

INDUSTRIAL STATISTICS

Business Monitors – annual census of production 1973

Lists of the Business Monitors reporting the results of the 1973 census of production which had been published appeared in *Statistical News* issue numbers 36–40. Those published since then are listed below.

Business Monitor Number	*Description*	*Standard Industrial Classification Minimum List Heading*
PA 104	Petroleum and natural gas	104
PA 219	Animal and poultry foods	219
PA 262	Mineral oil refining	262
PA 271.1	Inorganic chemicals	271/1
PA 271.3	Miscellaneous chemicals	271/3
PA 275	Soap and detergents	275
PA 279.2	Formulated adhesives, gelatine, etc.	279/2
PA 279.3	Explosives and fireworks	279/3
PA 335	Textile machinery and accessories	335
PA 339.5	Scales and weighing machinery and portable power tools	339/5 and 6
PA 339.7	Food and drink processing machinery and bottling machinery	339/7 and 8
PA 339.9	Miscellaneous (non-electrical) machinery	339/9
PA 341	Industrial (including process) plant and steelwork	341
PA 370	Shipbuilding and marine engineering	370
PA 381.1	Motor vehicle manufacturing	381/1
PA 381.2	Trailers, caravans and freight containers	381/2
PA 384	Locomotives, railway track equipment, railway carriages, wagons and trams	384, 385
PA 392	Cutlery, spoons, forks and plated tableware, etc.	392
PA 399.1	Metal furniture	399/1
PA 411	Production of man-made fibres	411
PA 414	Woollen and worsted	414
PA 415	Jute	415
PA 416	Rope, twine and net	416
PA 417.1	Hosiery and other knitted goods	417/1
PA 417.2	Warp knitting	417/2
PA 418	Lace	418
PA 421	Narrow fabrics	421
PA 601	Gas	601
PA 602	Electricity	602
PA 603	Water supply	603

Copies of these Business Monitors can be obtained on Standing Order from Her Majesty's Stationery Office, PO Box 569, London, SE1 9NH (telephone 01-928 6977), or through any Government Bookshop. They are not, however, included in the global subscriptions arrangements of the Business Monitor series.

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

Mr. R. J. Egerton,
Business Statistics Office,
Cardiff Road,
Newport,
Gwent NPT 1XG,
Telephone: Newport 56111 (STD Code 0633) Ext 2455.

Annual census of production – operating ratios

In response to the recent increase in interest in using operating ratios for measurement of the economic performance of industrial firms, the Business Statistics Office distributed in April 1978 to all contributors to the annual census of production in mining and quarrying, manufacturing industries, the water supply industry and the construction industry, explanatory material. This showed how, from the data which they reported to the census, recipients could calculate for their own firm important ratios such as gross value added per head, net output per head, wages and salaries as a proportion of gross value added, net capital expenditure per head and net capital expenditure as a proportion of gross value added. Some 41,000 production establishments with 20 or more employees in 159 industries were included in this despatch. These received details of operating ratios for their own industry, which the Business Statistics Office calculated from the provisional results of the 1976 census. It is hoped that this initiative will stimulate wider interest in the use of census data and demonstrate to form-fillers the value of the census results to which they contribute.

More details about this project, together with operating ratios for all manufacturing and construction industries were published in an article in *Trade and Industry* on 14 April 1978. The article 'Measuring value added from the census of production' by B. Mitchell in this issue of *Statistical News* contains information about the compilation of census estimates of gross value added, on which several of the most imporatnt operating ratios are based. Further information about operating ratios or the census of production generally can be obtained from:

Annual Census of Production,
(Planning and Analyses),
Business Statistics Office,
Cardiff Road,
Newport,
Gwent, NPT 1XG.
Telephone: Newport 56111 (STD Code 0633)
Ext 2455.

Reference

Trade and Industry (HMSO) (Price 40p net)

Engineering sales and orders

A new Business Monitor containing statistics of engineering sales and orders in hitherto unpublished detail is expected to appear in May 1978. It will contain, for each of the 36 industries within mechanical, instrument and electrical engineering (Standard Industrial Classification Orders VII, VIII and IX), quarterly, seasonally adjusted volume indices of total, home and export sales, orders-on-hand and net new orders – nine series for each industry. This new Monitor will complement the existing one, PM 33–36, which has long given similar information for total engineering and for the three broad engineering sectors at SIC Order level.

Publication of the statistics in greater industry detail follows on the programme of improvements in the processing of information obtained from the monthly inquiry to engineering establishments. The improved series were last year incorporated into the engineering components of the index of production, as described in *Statistical News* Number 37. Following further work on the derivation of orders-on-hand and net new orders, the sales and orders series were also revised. With the improved quality of the data, it was felt that publication of the individual industry series was warranted, and this should be of great value to those who are interested in the behaviour of the separate industries rather than the broad sectors.

The reference and title of the new Monitor are: PQ 33–36 Engineering (volume indices of sales and orders). Subscription enquiries should be addressed to HMSO, PO Box 569, London SE1 9NH, and enquiries on the contents to:

Miss P. A. Tunnell,
Department of Industry,
Dean Bradley House,
52 Horseferry Road,
London SW1P 2AG.
Telephone: 01-212 6044.

Recent improvements to output statistics

The measurement of changes in production (HMSO, 1976, price £1·05 net), No. 25 in the series *Studies in Official Statistics*, described the Index of Industrial Production and the output-based measure of gross domestic product as compiled at mid-1975. A number of subsequent changes in methodology were set out in *Statistical News*, February 1977, pages 36.30 to 36.32, November 1977, pages 39.31 to 39.33 and February 1978, pages 40.44 to 40.45. Further improvements have been made as follows:

Index of industrial production

For MLH 370, 'Shipbuilding and marine engineering', the monthly indicator based on employment data is now supplemented by a quarterly indicator of work done. A paper detailing the improvements is in preparation. (Further information is obtainable from Mr. P. Coulson, Central Statistical Office, Great George Street, London SW1P 3AQ. Telephone: 01-233 7239.)

For MLH 500, 'Construction', the series has been revised as a result of methodological improvements to the deflators used in arriving at the constant price values. For further details see the Department of the Environment Press Notice 134 of 8 March, 1978.

Gross domestic product

Outside the index of industrial production improvements have been made to the indicators used within Order XXII, *Transport and Communication* for MLH 705, 'Sea Transport'. The new indicators and weights are shown below.

Series		*Weight per 1,000*
Dry cargo	– Freight receipts on imports, exports and cross-trades of UK vessels deflated by indices of freight rates	2·8
	– Deflated UK vessel charter receipts	0·3
Tankers	– UK-owned and operated vessels' effective tonnage	4·2
	– UK vessels on time charter effective tonnage .	0·2
Passengers	– International passenger receipts of UK shipping deflated by travel price index	0·6
Total MLH 705 'Sea Transport'		*8·1*

Effective tonnage is the total tonnage available *and used* during the period. The annual tanker indicators are interpolated quarterly using deflated freight receipts. The quarterly indicators for passenger movement remains the number travelling between the United Kingdom and abroad, taken from the International Passenger Survey.

General

The preceding paragraphs summarise Paper No. 6 in a series of occasional papers which updates and supplements *The measurement of changes in production*. Papers Nos. 1, 3 and 4 include the information given in the issues of *Statistical News* referred to. Paper No. 2 discusses the impact of changing holiday patterns on the monthly index of industrial production. Paper No. 5 is a background note on the Index of Industrial Production presented by the Central Statistical Office to a seminar held on 6 February 1978 at the Department of Trade and Industry and organised by the Trade Union Research Unit. These papers are available from:

Branch 5,
Central Statistical Office,
Great George Street,
London SW1P 3AQ.
Telephone: 01-233 7239.

New price indices for capital expenditure of the manufacturing, distributive and service industries

An improved series of figures on the volume of investment in the manufacturing, distributive and service industries has been published in *Trade and Industry*.

This follows the decision by the Department of the Environment, announced on March 8, to adopt its newly developed price indices for the cost of new construction.

They replace the single CNC index which is based on current costs of materials and labour but was being used as a proxy for prices for all types of new building work. The increase in information available about tender prices has made it possible to produce new and more appropriate deflators described as 'outturn tender price indices'. Separate deflators are now calculated for five different types of work. Further information on the new price indices will be provided on application to the Statistics Construction Division of DoE at 2 Marsham Street, London SW1P 3EB (telephone: 01-212 8406).

The Department of Industry has discontinued the use of the CNC index and adopted the two most appropriate of the new price indices for the deflation of expenditure on new building work by manufacturing industry and the distributive and service industries from the first quarter of 1970. The revised constant price series are given in the accompanying table (which also incorporates the consequent amendments in seasonal adjustment). An indication of the effect of the revisions for new building work on the estimates of total capital expenditure is given by the following year-to-year percentage changes on the old and new bases:

Total fixed capital expenditure at 1970 prices (all assets)
Percentage Change from previous year

	Manufacturing Industry		*Distributive and service industries (excluding shipping)*	
Year	Previous	Revised	Previous	Revised
1971	— 7	— 7	+ 7	+ 7
1972	—13	—13	+ 7	+ 6
1973	+ 1	+ 1	+17	+17
1974	+16	+14	—	— 3
1975	—14	—14	—16	—16
1976	— 5	— 4	— 3	— 1
1977	+ 6	+ 8	+ 5	+ 9

The estimated increase in expenditure between 1976 and 1977 is therefore raised significantly but this is due to big differences between the old and new 1976 figures, especially for the distributive and service industries (excluding shipping); changes for the latest quarters and for 1977 as a whole are minimal, as shown below:

£m, 1970 prices seasonally adjusted

		1976	*1977**		
			3rd Qtr.	*4th Qtr.**	*Year**
Manufacturing industry	Old	1659	454	454	1761
	New	1633	456	455	1762
Distributive and service (excluding shipping) industries	Old	1974	527	531	2075
	New	1900	529	531	2067
Shipping industry	Old	203	58	58	243
	New	202	58	59	242

*Provisional

The implied reduction between 1976 and 1977 in the volume of expenditure on new building work done is reduced from 13 per cent to 3 per cent for the distributive and service industries and for manufacturing an increase of 7 per cent is now estimated.

The development and use of the new price indices for new building work was announced in a Press release by the Department of the Environment on 8 March. The revised capital expenditure figures were published in *Trade and Industry* of 10 March.

The usual Press notice giving revised estimates for the fourth quarter of 1977, reflecting the incorporation of later returns, was released on 22 March; these results were published in *Trade and Industry* of 31 March.

Reference
Trade and Industry (HMSO) (Price 40p net)

Quarterly capital expenditure: adjustment of provisional estimates

The provisional results of the quarterly inquiry into capital expenditure carried out by the Department of Industry are published within two months of the end of the quarter and further estimates are published (i) four weeks later (revised) and (ii) with the provisional results for the next quarter (latecomers). The incorporation of additional returns into the results should ensure that the two later estimates are more firmly based.

For a number of years the provisional estimate for manufacturing industry has generally been below both the 'revised' and 'latecomers' estimates with the bias varying both by quarter and over time. With the exception of the second quarter of the year the bias has been least for the first quarter and increasing in subsequent quarters. In the case of the second quarter the bias can be positive or negative and averages out at nil.

Although the relationship between the successive estimates for a particular quarter is not consistent year by year it was felt that some attempt should be made to anticipate the movement if the published provisional results were to be the best possible estimate of investment in that quarter. Over the past ten quarters, therefore, most of the provisional results have been adjusted by amounts of up to three per cent in the light of the past relationships. Only occasionally has adjustment to the 'revised' figures been considered necessary. The adjustments have proved to be always in the right direction and often close to the correct amount.

Somewhat similar adjustments are applied to the estimates of capital expenditure by the distributive and service industries.

Inquiries to:
Department of Industry EcS6B,
Room 218 Sanctuary Buildings,
Great Smith Street,
London SW1P 3DB.
Telephone: 01-215 3175/3345/3176.

Construction industry statistics: revision of constant price output series

The constant price construction output series from 1970 to 1977 have been revised, following the introduction of improved 'deflators' – the indices of estimated changes in the prices paid by clients for construction output, which are used to convert current price output into constant (1970) terms.

For contractor's new construction output, the new deflators are 'outturn tender price indices': these are calculated for each quarter from estimates of the proportions of output stemming from orders placed in the preceding quarters, from tender price indices for those earlier quarters and from estimates of the additional payments resulting from 'variation of price' contract clauses. Separate deflators are being produced for the five types of new work: public housing, private housing, public non-housing, private industrial and private commercial. For private housing, the tender price index is modified by combining it with an index of house prices less land prices.

Until now, new output has been deflated by using the 'cost of new construction' (CNC) index, adjusted to take account of house prices and land prices in the case of private housing, but otherwise making no distinction between prices for different types of work. The CNC index value for any quarter is based on *current costs* of materials and labour, but was being used as a proxy for *prices*. The increase in information available about tender prices has made it possible to produce the new and more appropriate deflators.

Tender price information is not available for contractors' output of repair and maintenance. The previous deflator which was similar in its construction to the CNC index for new work, has been replaced by an index calculated from cost of materials and labour (on a quarterly basis), adjusted to allow for the variation in gross output per man from quarter to quarter. Current costs are suitable for the deflator of repair and maintenance which is largely carried out in relatively short jobs.

Indices of contractors' tender prices are also considered to be inappropriate for deflating direct labour output and this output – both in new work and in repair and maintenance – is being deflated in a similar fashion to contractors' repair and maintenance, although with different weighting of materials and labour.

A fuller description of the new deflators will appear in the July 1978 issue of *Economic Trends* and the revised series in *Housing and Construction Statistics* No. 25. Further details will be provided on application to:

Department of the Environment,
Statistics Construction Division,
Room S11/11,
2 Marsham Street,
London SW1P 3EB.

Reference
Housing and Construction Statistics Notes and Definitions supplement (HMSO) (Price 0·75p net)

AGRICULTURE

Censuses and surveys

The June 1977 agricultural census

The final results of this census in England and Wales were published in Statistical Information Notice STATS 94/78 on 12 April 1978.

The final results for the United Kingdom will be published shortly.

The spring 1977 orchard fruit census

The results of the 1977 orchard fruit census were published in Statistical Information Notice STATS 93/78 on 10 April 1978.

The October 1977 vegetable census

The results of the October 1977 census of vegetables and flowers grown in the open were published in Statistical Information Notice STATS 78/78 on 29 March 1978.

Glasshouses and Glasshouse Equipment – special enquiry (E and W) December 1976

The results of the special enquiry in December 1976 of glasshouses and glasshouse equipment in England and Wales were published in Statistical Information Notice STATS 78/78 on 29 March 1978.

The December 1977 agricultural census

The main results of this census in England and Wales were published in Press Notice No. 68 on 22 February 1978. The machinery and glasshouse results will be published later. Results for the United Kingdom will be published shortly.

Provisional results of the December 1977 Scottish agricultural census

Provisional results of the Scottish Agricultural Census held on 1 December 1977 were published as a Press Notice on 12 January 1978 (Press Notice 27/78).

The total number of cattle fell by 30,000 (1 per cent). The number of beef cows dropped by 11,000 (2 per cent) although at 503,000 the number was only 1,000 lower than that recorded at June. The number of beef heifers in calf fell by 8,000 (13 per cent) to 48,000, the lowest total recorded since 1968, and the number of beef heifers intended for breeding was down by 5,000 (6 per cent).

The number of fattening cattle, however, increased by 24,000 (4 per cent). The diary cow herd was smaller by 1,000 cows, thus showing little change from the past two years. The number of dairy heifers in calf fell by 5,000 (8 per cent) but the number of dairy heifers intended for breeding was unchanged. The number of cattle under one year old dropped by 23,000 (3 per cent).

The greatest stability was in national sheep flock with an increase in the number of gimmers compensating for a small drop in the number of ewes.

The total number of pigs fell by 58,000 (10 per cent) to 524,000, the lowest total since 1966. Although over the year the breeding herd dropped by 8,000 (13 per cent) and the number of maiden gilts declined by 2,000 (29 per cent) there were signs that the size of the breeding herd may be stabilising. Since the sample pig census of August 1977, the number of sows and gilts in pig fell by less than 2 per cent, while the number of maiden gilts increased by 9 per cent and the number of barren sows for fattening dropped by 12 per cent. The number of store pigs went down by 49,000 (10 per cent) compared with a year earlier.

Since last December the regular labour force fell by 400 (1 per cent), while within this, the number of part-time workers increased by 300 (6 per cent). The decline in the number of full-time workers occurred in the older age groups while the number of full-time youths increased by 200 (5 per cent).

TRANSPORT

The inland transport of imports and exports

A survey of the transport of imports and exports within the United Kingdom is being carried out by HM Customs and Excise for the Department of Transport. At present little is known about the places of origin of exports or the destinations of imports, or about how these relate to the different UK ports and routes through to overseas countries. This information is required primarily to help in the appraisal of port investment, but other uses include the planning of transport facilities serving ports and, for HM Customs and Excise, the formulation of policy on inland clearance. Widespread interest in the information has been expressed by shippers, shipping companies forwarding agents and transport operators, and it is intended to publish results from the survey.

The method adopted for the survey is to draw a sample of items from Customs' main computer files of imports and exports. These monthly files are compiled from returns made by traders and already contain much of the information required: commodity classification, weight and also the UK port and the foreign country. For each sampled item a copy of the original document is pinned to a questionnaire which asks for further information on the inland transport of the item in the United Kingdom: where it came from if an export, or went to if an import, the method of transport and any routeing via intermediate depots. The questionnaire is in most cases sent to the organisation that completed the original return to Customs.

Although the sample is drawn from a list of items, it is in fact a sample of tonnage, the most relevant quantity for ports. This is achieved by making the probability of selection proportional to the physical weight of each item. The 1 per cent sample of items then accounts for about half of tonnage covered. The survey will cover the twelve months of 1978, trade through sea ports only, and fuels are excluded.

Similar surveys have been conducted successfully in the United States, but it was not certain that the technique would work in the United Kingdom. There was therefore a trial run of the full survey for just one month in 1976. The response rate was high, particularly for a voluntary postal survey – nearly 80 per cent for import questionnaires and 85 per cent for export questionnaires. Discussions with respondents both before the pilot survey and in preparation for the main survey have shown that much goodwill is created by the brevity and simplicity of the single page questionnaire. The fact that the questions relate to a specified item and do not require the respondent to calculate aggregates, adds to its acceptability.

Further information on the survey is available from:
Department of Transport,
Statistics Transport B,
2 Marsham Street,
London SW1P 3EB.
Telephone: 01-212 8518.

DISTRIBUTION AND OTHER SERVICES

1977 Shops inquiry

The Business Statistics Office will conduct a small-scale statistical inquiry to shops in selected areas during 1978. The inquiry, which has been endorsed by the Distribution Statistics Advisory Committee, will act as a pilot for more comprehensive collection of shop statistics to provide the regional and small area analyses previously given by the now discontinued censuses of distribution (see *Statistical News* No. 31). One aim will be to assess the methodological and practical problems arising from the use of the register compiled mainly from lists of traders registered for Value Added Tax purposes and from the Annual Census of Employment. In particular, subsequent analysis of the information collected will enable the Government Statistical Service to keep the form-filling burden for smaller shops to a minimum in any future shop inquiries by making full use of data drawn from these register sources. Results of the inquiry will be of value to local authorities concerned with the selected areas, the Department of the Environment, the Scottish Office and the Welsh Office.

The inquiry will be statutory and will request information relating to 1977 from about 4,000 shops on their kind of business, turnover, employment (full-time and part-time) and, for medium size and larger shops, floorspace. Results should be published in the first half of 1979.

Retail sales and retailers' instalment credit statistics

The retail sales and retailers' instalment credit statistics have been rebased on the final results of the Census of Distribution for 1971. The rebased series were published in Business Monitors SD1, SD2, SD3, SD4 and SD8 for December 1977. A full description of the rebasing exercises was given in *Trade and Industry* on 10 February 1978.

Inquiries concerning the Business Monitors and the articles should be addressed, in the case of retail sales, to Retail Sales Section, Room 341 (telephone 01-215 3506) or, in the case of instalment credit sales, to Consumer Credit Section, Room 345 (telephone 01-215 5224), Economics and Statistics Division 6, Departments of Trade, Industry and Prices and Consumer Protection, Sanctuary Buildings, 16–20 Great Smith Street, London SW1P 3DB.

HOME FINANCE

A transactions demand for money

An article in the March 1978 *Bank of England Quarterly Bulletin* is a research article prepared mainly by R. T. Coghlan, a member of the Bank's Economic Intelligence Department, on the subject of the relationships affecting the narrow definition of the money stock (M1). A summary of conclusions, and a general description of the subject matter, is printed at the beginning of the text.

Why is Britain in a recession?

An article in the Bank of England's March 1978 Bulletin has been prepared as a discussion paper by C. T. Taylor, a member of the Bank's Economic Intelligence Department, and does not necessarily reflect the views of the Bank. The paper attempts to identify the immediate causes of recession by examining changes in the principal components of aggregate demand over the last fifteen years.

Copies of the Bank's Bulletin and off-prints of the above articles may be obtained, free of charge, from:

The Economic Intelligence Department,
Bank of England,
Threadneedle Street,
London EC2R 8AH.

Financial statistics

Some recent changes and improvements in *Financial Statistics* include, in the November 1977 issue, a supplementary table (reprinted from the Blue Book) giving details of the transactions leading to the net acquisition of financial assets in life assurance and pension schemes by the personal sector, both for funded and unfunded schemes, for the years 1966–76.

The December 1977 issue contained an improved presentation of the reconciliation between the financial accounts and the balance of payments accounts and a supplementary table provided a residual maturity analysis of local authority loan debt by type of authority at 31 March for the years 1975–77 for England and Wales and a detailed maturity analysis by type of authority and by country at 31 March 1977 for Great Britain. This information was published six months earlier than for the previous survey.

The table on government expenditure was revised in the January 1978 issue to show a translation from general government expenditure on a national accounts basis to public expenditure on the basis of this year's White Paper on the Government's Expenditure Plans (Cmnd. 7049).

A more precise definition of the general government borrowing requirement was shown in the February 1978 edition together with a re-presentation of some of the items in the local authorities' capital account and the analysis of the local authorities' borrowing requirement. A new table showing average rates for certain short-term money rates was introduced with quarterly figures for 1963–77. Figures were shown for the Bank of England's minimum lending rate, the average discount rate on Treasury bills, 3 months commercial bills discount market buying rates, London clearing banks' base rate and 7 day deposit rate, 3 month inter-bank rate, the calculated gross redemption yield for long-dated (20 years) British government securities, the flat yield on 3½ per cent war loan, and the rate for 3 months deposits with local authorities. Also in the February issue was a supplementary table on debt of the public sector showing the nominal amounts outstanding for the years 1967–77. The timeliness of these data has been improved by three months compared with the previous year.

The March 1978 issue now shows percentage changes in the velocity of circulation.

Reference
Financial Statistics (HMSO) (Price £3·20 net)

OVERSEAS FINANCE

Import penetration and export performance

A new quarterly Business Monitor, M12, is being published in May. It presents estimates of import penetration and export sales ratios for over 100 sectors of manufacturing industry. Annual figures for these ratios for the years 1968 to 1976 were introduced and discussed in the August 1977 edition of *Economic Trends*. The interest in more frequent and up-to-date estimates which was aroused by that article cannot be fully satisfied at present, since quarterly figures move seasonally and erratically and, only extending back to 1975, they cannot be seasonally adjusted satisfactorily. The solution adopted to make the best use possible of the quarterly data available is to publish figures for overlapping twelve-month periods, three months apart. The series shown in the Monitor relate to periods from the twelve months ending in December 1975 to the twelve months ending in June 1977, and for more recent periods where the information is available.

The figures show that the easing of the rate of growth of import penetration for all manufacturers, which occurred in 1975, was short-lived, and that in the year ended June 1977, penetration was again at the peak level of 1974, but that the proportion of British-manufactured goods exported continued to grow.

The new Monitor will be available from HMSO, PO Box 569, London SE1 9NH.

OTHER PUBLICATIONS

Guide to Official Statistics

The second edition of the *Guide to Official Statistics* was published at the beginning of May 1978. The Guide offers detailed information on some 2,500 statistical sources covering about 800 topics. All official and important non-official publications offering statistics relevant to these subjects and produced during the last ten years are listed in its 400 pages. Publication details are listed in a separate bibliography for each source identified and an alphabetical index locates the occurrence of some 3,000 'key-words' throughout the main part of the Guide. A list of contact points in central government departments for further information is also included.

This second edition builds upon the success of the first, which was awarded the Library Association's Besterman Medal for the outstanding bibliography or guide to the literature – the first publication from a government department to win such an award. Since that first edition in 1976 the file of information, held on computer, has been continually up-dated and revised by a network of respondents. Thousands of amendments and additions have been made, maintaining the Guide as a unique and indispensable aid for all kinds of users of official statistics.

Reference
Guide to Official Statistics (HMSO) (Price £8·25 net) (£9·11 by post)

Regional Accounts

This booklet, recently published by the Government Statistical Service, contains up-to-date information on the data sources and methods used in estimating gross domestic product, personal incomes and components of final expenditure for Scotland, Wales, Northern Ireland and the eight economic planning regions of England. A Continental Shelf region is also distinguished; this includes the profits of the UK offshore oil and gas activity. Certain of the estimates are further subdivided within the South East region to distinguish the Greater London area.

The booklet provides an essential background for regional economists and others concerned with the interpretation of the published data in the regional accounts. The concepts adopted for the individual items within the accounts, the limitations of the data and methods used to produce the estimates are fully discussed.

Reference
Regional Accounts (Studies in Official Statistics No. 31) (HMSO) (Price £1·75 net)

'Facts from your figures' – A new booklet from the Central Statistical Office

A free booklet produced by the Central Statistical Office in collaboration with the statistics divisions of other government departments explains why official statistics – particularly those about businesses – are needed, and how they are collected. It is intended primarily for form-fillers in industry. An introduction to the booklet – 'Facts from your figures' – says 'Many people are put to a great deal of trouble to provide figures for government statistics, and we think they should know what happens to the figures and how they can benefit the nation'.

The central part of the booklet describes eleven examples of important statistical inquiries, such as wholesale price indices and the census of production. In each case there is an explanation of exactly what the inquiry is and why it is important, with details on how the results are compiled and published. Other sections explain how the statistics are collected and how the different statistical series all fit into a coherent pattern.

The booklet – with illustrations by Frank Dickens, the cartoonist, of the London *Evening Standard* – has been distributed as part of a recent Government Statistical Service press advertising campaign, and further distribution to industry will follow. However, it will go only to people who specifically ask for it.

'Facts from your figures' is available from the Press and Information Service, Central Statistical Office, Great George Street, London SW1P 3AQ.

National Institute Economic Review

'Properties of macroeconomic models of the UK economy: a comparative study', by J. S. E. Laury, G. R. Lewis and P. A. Ormerod.

This article describes a variety of simulations carried out with the three major macroeconomic quarterly forecasting models of the United Kingdom currently in operation – those of the Treasury, the London Business School and the National Institute. The simulations cover both fixed and floating exchange rate regimes.

Reference
National Institute Economic Review, February 1978.

Appointments and changes

Mr. A. R. Thatcher, C.B., formerly Deputy Secretary and Director of Statistics in the Department of Employment has been appointed Registrar General for England and Wales and Director of the Office of Population Censuses and Surveys in succession to Mr. G. Paine, C.B., who retired on 14 April 1978 (see photograph facing page vi).

Mr. G. Penrice, C.B., Principal Director of Statistics (Under Secretary) at the Departments of the Enviroment and Transport has transferred to the Department of Employment on promotion to Deputy Secretary from 4 May 1978 to be Director of Statistics in succession to Mr. A. R. Thatcher, C.B.

Mr. N. H. W. Davis, Chief Statistician in the Office of Population Censuses and Surveys, was transferred to the Department of Employment Group on 3 January 1978.

Mr. W. N. T. Roberts, Chief Statistician in the Department of Energy, was transferred on loan to the Ministry of Overseas Development, on return from secondment to the United Nations Statistical Office, on 3 January 1978.

Mr. W. A. Wessell, Chief Statistician in the Departments of Industry, Trade and Prices and Consumer Protection will retire on 30 June 1978.

Mr. D. B. Manwaring, Chief Statistician in the Civil Service Department will transfer to Departments of Industry, Trade and Prices and Consumer Protection on 28 March 1978 to work in parallel with Mr. Wessell and to succeed him when he retires.

LATE ITEMS

Recent trends in family building and contraception

Results from three surveys carried out in 1967/68, 1973 and 1975 among mothers of legitimate children are carried in a report issued in April 1978 in which Ann Cartwright looks at trends in the use of contraception, in parents' hopes for further children and attitudes to pregnancy.

There was a dramatic increase in the use of the pill between 1967/68 and 1973, which levelled off thereafter and decreases in the use of less reliable methods of contraception were reflected in the fall in the proportion of births where the mother had become pregnant by mistake. From the three surveys increased uncertainty in people's family size intentions is the most notable trend particularly among those with one or two children. Over half the mothers under 20 having their first baby and two-thirds of those aged 30 or more having their fourth or later child said that their pregnancies were unintended. This leaves plenty of scope for an improvement in birth control facilities and for a further fall in unplanned births.

Reference

Recent trends in family building and contraception by Ann Cartwright (Studies on Medical and Population Subjects No. 34) (HMSO) (Price £1·75 net)

Family planning services

Published in April was the report[1] of a survey carried out in 1975 by the Office of Population Censuses and Surveys for the Department of Health and Social Security (DHSS).

The survey was intended to help DHSS monitor the effectiveness of the family planning services. It shows that use of the services increased considerably between 1970 (the year of an earlier survey[2]) and 1975: in 1970 less than a third of 16–40 year old married women at risk were using the services compared with about half in 1975. In the same period the proportion of 16–35 year old single women using the services increased from 6 per cent to about 25 per cent.

The introduction of free prescribed supplies was not completed until the period of the survey. But there were already indications that this innovation was attracting more women.

Although the services were catering for growing numbers of women, there was no evidence from the women's reports of any deterioration in their quality and some indication of improvements. Clinics were available at more times of day in 1975 than in 1970, the time women were obliged to wait before seeing a doctor had slightly declined and GPs were more commonly than in 1970 found to provide sympathetic advice.

There were still some women in 1975 who felt uncomfortable about using the services .The survey findings suggest the need for more privacy at reception and in the wating rooms of clinics, for more women GPs who will give contraceptive advice and for more clinics or sessions specially designed for the young single girls who need such advice.

The survey findings are based on interviews with representative samples of 3,900 ever-married women aged 16–54 and of 750 single women aged 16–40, living in England and Wales.

References

(1) *The family planning services: Changes and effects* by Margaret Bone 1978 (HMSO £5·25 net)

(2) *Family planning services in England and Wales* by Margaret Bone 1973 (HMSO £4·00 net)

Alphabetical Index

The index to *Statistical News* covers the last nine issues. Page numbers are prefixed by the issue number, e.g. 33.30 signifies number 33, page 30.

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.

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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