REVIEWS

Ageing in Industry. By F. LE GROS CLARK and AGNES C. DUNNE.

[Pp. x+146. The Nuffield Foundation, 1955. 6s.]

New Jobs for Old Workers. By F. LE GROS CLARK and AGNES C. DUNNE.

[Pp. 19. The Nuffield Foundation, 1955. Gratis.]

The Employment Problems of Elderly Men. By F. LE GROS CLARK.

[Pp. 26. The Nuffield Foundation, 1956. Gratis.]

As men age, and their capacity for a full day's heavy work declines, a variety of consequences may follow. They may become altogether unfit for employment, or be discharged or finally retired. Alternatively, they may obtain within their own industry, or may seek and find elsewhere, a lighter form of work that will prolong their active life. Ideally, everyone should be encouraged to carry on for as long as he can in some occupation useful to himself and the community. To what extent, however, are those who are able to continue prevented from doing so because suitable opportunities do not offer themselves?

In 1954, the Ministry of Pensions and National Insurance published the results of an inquiry into *Reasons given for Retiring or Continuing at Work.* This showed that about 10% of elderly men were totally unfit at age 65 by reason of prolonged illness, and that another 14% chose to retire because of the strain caused by their job. A further 11% were discharged by their employers. It seems probable that many of the 25% included in the second and third of these groups could have undertaken lighter work if it had been available and, in times of full employment at least, it would be of national advantage, apart from the benefit to the individual, if this could be arranged. Among the obstacles to such a course are a general unawareness of the magnitude of the problem, which is growing as the numbers of the elderly increase, and an absence of knowledge of the scope for suitable rearrangement of work.

In order to throw some further light on these questions, the authors have drawn on the available Census data and have collected supplementary information from the General Register Office, the Ministry of Labour and National Service and other sources. They have been able to examine the situation for men-women will need separate consideration-by an indirect approach. It is hardly possible to assess lack of opportunity for taking up lighter employment by a direct process, and they have therefore devoted their attention to examples of success in continuance at work. The Census data can be made to show, first, to what average age men stay in various occupations, and secondly to what lighter jobs they turn in later life. The details of placings by the Employment Exchanges can illustrate from what types of work to what other types men transfer through this medium in their fifties and sixties. These are, broadly speaking, the tasks undertaken successively in the three Nuffield Foundation Reports in the order in which they are set out at the head of this review. The proportion of men who suffer disappointment in their efforts to continue employment and the extent to which rearrangements could be made in order to remedy such disappointment are then surmised.

Ageing in Industry, the major document of the trio, is a study of each of thirty-two selected occupations on a uniform plan developed by the authors. The tables of age and occupation published in the Census Reports for 1021. 1031 and 1051 have been taken as a basis for a survey of 'the varying conditions of work, the opportunities for modifying the work processes and the retirement and superannuation practices peculiar to different occupations'. The principal feature of the plan consists of an attempt to trace the differences between the numbers employed in the decennial age-groups 15-24, 25-34, etc., in 1931 and those employed in the corresponding age-groups twenty years older in 1951. Approximate allowance having been made for deaths and retirements, the residue of movement is reasonably ascribable to net transfers between occupations. Such movement must to some extent have been occasioned by changes in demand, by developments in industrial processes and by the disturbances created by the second world war, as well as by ageing of the employees, Wisely, therefore, the authors have not relied entirely on this approach but have also studied, first, variations in the age-structure of the occupations between 1921, 1931 and 1951, and secondly, the percentage changes between the numbers employed in 1931 and 1951 at the same ages.

Even with the checks that may be made by the use of alternative approaches, the statistical material must be regarded as being dangerous to handle, in the sense that false conclusions could readily be reached from it. The authors have, however, shown that they are fully aware of the difficulties and, indeed, have lucidly described them. It is therefore easy to accept their main conclusion, which is that many men in their mid-sixties cease to be employed before their capacity for work is exhausted. Some could have continued longer in their old jobs—the number can hardly be estimated. Others—perhaps 40,000 a year are ready for lighter work; even under present conditions not all of them find it.

What are the lighter employments? These are discussed in New Jobs for Old Workers, which may be regarded as supplementary to the report already described. Sixteen alternative occupations are examined, by simpler methods, with little more than illustrative purposes in mind. In many of these lighter occupations—for instance those of watchmen, office cleaners, hall-porters and messengers—the proportion of employees aged 55 and over has rapidly risen over the last twenty years. To what extent this is due to a shortage of young men arising from the comparatively low birth rates of the 1930's, and to what extent there may be changes as the larger wartime and post-war generations reach their teens, are not explored.

Some men achieve the transition to alternative work on their own initiative; others succeed only through the medium of Employment Exchanges. Any data of placings that the Ministry of Labour and National Service can supply can thus give no more than partial information. Nevertheless, it was worth while, in order to obtain a deeper insight into the nature of the change-over, to explore what particulars can be made available. The results are described in the third report, entitled *The Employment Problems of Elderly Men*. The data make it clear that seasonal and local variations are a highly significant factor.

The authors draw the conclusion from their reports that any expansion of opportunities for light work in later life will probably need careful planning. For instance, it might well be helpful if a higher status could be generally afforded to such work. They do not find that more procedural machinery is needed for making known such vacancies as are on offer, but consider that a new approach to the allocation of work is necessary—as well as the continuance of

a high level of employment generally—if a social problem of increasing severity is to be alleviated in the coming years. It is in these conclusions and in the sidelights thrown up by the statistics rather than in the data themselves or in the methods of analysis that the value of the authors' investigations seems chiefly to reside. P.R.C.

National Income Statistics: Sources and Methods.

[Central Statistical Office; pp. viii+387, H.M.S.O. 1956, 255.]

THE first estimates of the national income of the United Kingdom to be published officially appeared in April 1941 in the form of three brief tables forming part of a White Paper under the title An Analysis of the Sources of War Finance and an Estimate of the National Income and Expenditure in 1938 and 1940. From that modest beginning sprang a series of annual White Papers which increased in size and complexity until, from 1952, the White Paper published just before the Budget was reduced to a summary of the main tables and the bulk of the material was published later in the year as a Blue Book. As the volume of information has increased, so has the use made of it by economists, research workers, business men, politicians and others. But to make the best use of this new information a thorough understanding of the statistics is needed—a knowledge of the underlying theory, the omissions, the overlaps, the level of reliability. The explanatory notes in the White Papers and Blue Books, copious as they have been, could only go part of the way to meet this need, and the much more complete account now available in this new book is therefore most welcome.

The first two chapters deal with the general theory of national income and expenditure statistics and their presentation in the form of a set of social accounts. Chapter 3 consists of a general review of the many different sources from which the figures are built up and Chapter 4 of a brief description of the contents and interrelations of the principal tables in the annual Blue Books. Each of the remaining chapters is devoted to one of the principal sections of the Blue Books-personal income and expenditure, companies, public corporations, the Central Government, etc.--and gives detailed accounts of the way in which the estimates are prepared, with a commentary on their quality and, for the main items, an estimate of the grading for reliability. An 'A' or 'good' grading is given where it is considered that the margin of error (positive or negative) is unlikely to exceed 3 %, 'B' or 'fair' for 3 % to 10 % and 'C' or 'poor' for more than 10 %. In many cases figures for the latest year are based on less complete information and are therefore considered less reliable than those for earlier years. In such cases separate gradings are given for the latest and for the previous years.

National income statistics are necessarily built up from such a wide variety of sources that the descriptions given cover a large part of the whole body of economic statistics in the United Kingdom. As a result, there is, not unnaturally, greater uniformity in describing the final adjustments made in the Central Statistical Office itself than in the material relating to the figures as originally compiled. Where, as is frequently the case, an adequate account of the methods used in compiling the basic figures is already available elsewhere, it has been considered sufficient to give only a brief summary in the present volume. But for other series this is the first account to be published in such detail and it is of considerable value in such cases to have this background

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information not only in its present connexion but as an aid to interpreting the statistics for other purposes.

Although the bulk of the material is naturally drawn from the records of Government Departments, a considerable use is made of figures compiled by private bodies. An interesting example is in the field of superannuation contributions, where the material used includes the reports issued by the Life Offices' Association, the Report of the Joint Research Group of the Institute and the Faculty on *The Growth of Pension Rights and their Impact on the National Economy* (J.I.A. 80, 141) and the information on privately operated funds supplied by Fellows for the use of the Phillips Committee. This dependence at certain points on figures collected by private bodies is one of the difficulties faced by the compilers of the National Income estimates, since it is rarely that such figures, compiled for a different purpose, are precisely in the form required or give all the detail necessary. The same problem arises, of course, with some of the figures derived as a by-product of administration in Government Departments, although in these cases it is frequently possible to draw on unpublished material or to arrange for special analyses to be made.

One of the more interesting features of this book is the light it throws on the gaps in the nation's statistical armoury. A great deal has been done, during and since the war, to improve and expand the statistics which are so important in diagnosing the economic troubles which beset us, but much still remains to be done. This is a field in which the actuary, as a statistician, is playing an increasing part and to all those interested in this development, as well as to those who already make use of national income and expenditure statistics in the course of their work, this book is recommended. R.E.B.

The National Sample Survey: No. 7. Couple Fertility. By Ajit Das Gupta, F.I.A., Ranjan Kumar Som, Murari Majumdar and Samarendra Nath Mitra.

[Calcutta: Issued by the Department of Economic Affairs, Ministry of Finance, Government of India. Pp. vi + 199, 1955.]

BIRTH registration in India is defective, and the statistics collected are too unreliable for use in measuring fertility; census data are also unsuitable for this purpose. It was therefore very desirable that when sample surveys began, in 1950, to be made there on a national scale, some information about family size should be sought. The National Sample Survey has so far been conducted about twice a year and has on each occasion covered about 10,000 representative households all over the country. The present report refers mainly to the information collected from the second 'round' of the survey, at which were sought the ages of husband and wife, at marriage and also at the time of the investigation, the duration of marriage at the birth of each child, the sex and age of each child, and the age at death of any of the foregoing who had deceased. Some confirmatory data collected from the fourth 'round' are also shown.

Since human fertility is essentially a function of pairing—in spite of recent suggestions to the contrary in the popular press—the use of the word 'couple' in the title of the volume appears at first sight to be tautological. Nevertheless until quite lately fertility has been measured in most national demographic systems solely in relation to characteristics of women, and there is some

justification for emphasizing that the Indian statisticians have adopted the more balanced approach through both parents together.

Demographic publications, like other scientific works, are rarely free from their own brand of jargon, which may perhaps be defined as uncommon words and phrases that are deemed by the authors to be self-explanatory but are not found to be so by their readers. The most frequent offence in the volume under consideration arises from references to 'recall lapse', and particularly to its more developed form 'sex-selective recall lapse'. The meanings of these expressions may perhaps be indicated as follows: the longer ago an event happened, the more likely it is to have been forgotten. The less important the event seemed, again the more likely it is not to be remembered now. Thus female infants are less liable to be reported than male infants, especially where they were born many years ago. Whereas, therefore, the number of boys born to couples married in the last five years is given by the samples as being in the not unreasonable ratio of 106:100 to the number of girls born, the corresponding ratio for other married couples increases steadily as the duration of the marriage increases, until it reaches 126:100 for couples married before 1910. The older data are clearly valueless in this respect, and part of the analysis made in Chapter 9 could therefore have been omitted without loss. Failures of memory account also for an apparent increase of infant mortality in the samples as time has progressed, whereas it has already been established that in recent years higher and higher proportions of children born have survived.

The presence of these obvious misstatements in the sample data naturally prompts the reader to ask whether similar inaccuracies exist in the other features of the statistical material presented. The attempts that have been made to check the information have probably ensured a reasonably satisfactory standard of accuracy in reporting recent events, but implications regarding trends must be treated with reserve. For instance judgment may be suspended on an apparent increase in fertility among the later marriages, which is accepted as significant in the report although it is in conflict with other sources of information.

So far as distributions of marriages by age are concerned, the changes in time have been comparatively small—and this makes it easier to obtain valid comparisons of family size. The measurement of fertility by duration of marriage is, however, rendered difficult by the substantial proportion of pre-pubertal marriages in India in which there is, for a while, no exposure to risk of childbearing. Such premature occurrences are carefully segregated from mature marriages throughout much of the report, but no effort has been made to apply any correction for the period of non-exposure. It would seem that such a correction could have been approximately calculated, and that the value of the information presented would have been considerably enhanced if this had been done.

If the present investigation has revealed a few defects, it must be remembered that it is the first of its kind and that, in the words of the report, 'the limited objective of the present study has been to obtain...some broad bench-mark facts, mainly on the national scale, to fill the vacuum that otherwise obtained. As the volume of data gradually builds up and resources become available, it would be possible and worth while to undertake a much more searching analysis involving finer classifications and diversified combinations'.

It may be added that some interesting analyses of differential fertility by caste, religion, region and economic status are included in the volume.

British Tax Review.

[Annual subscription 30s. Single parts 10s.]

A NEW quarterly magazine under the title British Tax Review has been launched by Sweet and Maxwell under the editorship of G. S. A. Wheatcroft.

In the preface it is stated that the publication is intended primarily for the accountant and lawyer to assist him to keep his knowledge of tax law up-to-date. The first number contains little of special interest to the actuary in his professional capacity, apart from a summary of the provisions of the Budget and Finance Bill 1956 and an article dealing with estate duty on life policies, but contains much of legal interest. If the standard of the first number (June 1956) can be maintained, it seems probable that this publication will prove informative to those interested in problems of taxation.