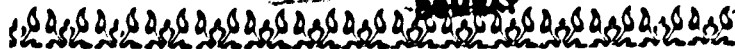


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THE DIVISION of the PRODUCT OF INDUSTRY

An Analysis of
NATIONAL INCOME
Before the War

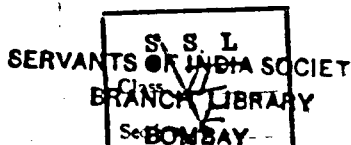
BY

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OXFORD
AT THE CLARENDON PRESS

1919



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INTRODUCTION

'Two-thirds of (the population), that is to say, the manual working class, obtain for all their needs only one-third of the produce of each year's work.'—*The Principles of the Labour Party*, Sidney and Beatrice Webb, 1918. (A four-page statement of policy.)

'Let a close examination be made of the whole industry of any country, and I am much mistaken if the result will not be approximately as follows:—Seventy-five per cent. of the total sale value of the commodities produced will have gone to pay the persons engaged in producing them.'—*The Rights and Responsibilities of Capital*, Sir Hugh Bell, Manchester Statistical Society, 1918, p. 141.

SINCE such apparently inconsistent estimates as these quoted above are current on a matter which affects vitally our views as to the practicability of a considerable rise in the standard of wages, it seems expedient to examine closely the statistics on which they are based, and to restate them in such a way as to show the amount and the origins of the aggregate incomes of the people of the United Kingdom and the proportions of the aggregate that go to various economic classes.

The investigation must necessarily relate to the years before the war, for the information since 1914 is indefinite and incomplete, and even if an adequate account could be given of incomes and earnings in 1918 it would afford little guidance as to future amounts. The forces that determined wages, profits, interests, and rents before the war are still in existence, and the results which they produce when the disturbances of war are over, will be of the same general character, except in so far as the intensities of the forces are modified or new forces or controls brought into action.

To obtain a complete view, it is necessary to define and enumerate the population and to bring into account the whole of income from all quarters. We can then proceed to analyse income according to its sources and determine the proportions in which it is received by those concerned in its production.

The material for such a task is of that uncoordinated, incomplete, and sporadic nature which is familiar to all those who have tried to obtain general results from official statistics. It is not proposed here to attempt a complete reconciliation of the various data or to aim at results of minute exactness, but only to make as certain as possible that no group of persons or incomes is excluded from the survey, to ensure that the results obtained are consistent with all ascertained statistical facts, and to give them in such a way as to distinguish the quantities that are known from the quantities that are open to debate till further information is obtained.

The principal sources of information are the Population Census of 1901 and 1911, the Census of Production of 1907, the incomplete Census of Wages in 1906, the Annual Reports of the Commissioners of Inland Revenue (interpreted by Dr. Stamp's *British Incomes and Property*), the report of a Committee of the British Association in 1910 on 'The Amount and Distribution of Income (other than Wages) below the Income-Tax Exemption Limit in the United Kingdom',¹ and the material as to employment and wage changes published monthly and annually by the Labour Department. The various estimates made in recent times on Income and Wages have all depended on these publications. It is to be noticed that the general accounts of population, wages, and production relate to different dates, and therefore careful estimates have to be made to bring them into relation with each other.

The sequel consists of five sections; in the first the population is analysed, in the second the aggregate of incomes is computed and analysed, in the third the national wages bill is computed, in the fourth the division of the product of the principal industries between wage-earners, salaried employees, employers and property-owners is considered, and in the last the whole is summarized.

¹ Published in the *Journal of the Royal Statistical Society*, December, 1910.

I

POPULATION IN 1911

TABLE L. POPULATION OF THE UNITED KINGDOM, APRIL, 1911,
AND ESTIMATED NUMBERS UNDER VARIOUS CATEGORIES.

OCCUPIED.	Men and Boys.	Women and Girls.
Wage earners . . .	11,000,000	4,650,000
Salaried	1,120,000	550,000
Independent workers . . .	650,000	650,000
Professions	330,000	
Farmers, &c.	520,000	
Employers	620,000	
Total occupied	14,300,000	5,850,000
UNOCCUPIED.		
Under 10 years	4,750,000	4,720,000
10 to 15 years	1,870,000	2,000,000
15 to 20 years	220,000	720,000
Retired	550,000	180,000
Others: single, } married or widowed }	260,000	{ 1,270,000 8,550,000
Total unoccupied	7,650,000	17,420,000
TOTAL POPULATION	21,950,000	23,270,000

Notes.—The number of soldiers and sailors, whose residence is in the United Kingdom, who were away and not enumerated in the Census, may be estimated as 250,000 approximately.

The majority of shop-assistants are classed as wage-earners. Teachers are classed as salaried, while nurses are included under 'Independent Workers' or professions. Under Farmers, &c., are included small-holders, market-gardeners, and others not working for wages.

In April, 1911, there were living in the United Kingdom 21,950,000 males and 23,270,000 females. These numbers include aliens and visitors, and exclude British and Irish abroad or at sea.

UNOCCUPIED.

Of the *Males* 6,620,000 were less than 15 years old and unoccupied; this includes only a small number over the age 14. A further 220,000 under 20 years were returned

as unoccupied, the majority being scholars or students. 550,000 in all were retired or pensioners. There were also 180,000 men between 20 and 65 years, and 80,000 over 65 years, who were apparently unoccupied,¹ but not necessarily idle. The number of able-bodied men who, according to their own statement, had no occupation, is thus extremely small.

Of the *Females* 6,720,000 were under 15 years and unoccupied; 720,000 between 15 and 20 years were unoccupied, a much larger number than that of boys of the same ages. 180,000 were retired or pensioners. 9,800,000 over 20 years were returned as unoccupied, of whom 7,400,000 were married, 1,130,000 widows, and 1,270,000 single, the majority of whom were of course busily engaged in domestic duties. The experience of the war years has shown that there were many women whose time was not fully employed, but it is easy to exaggerate the numbers whom the war has drawn into work, since many of those engaged in new occupations have simply been drawn from others (including domestic service), which have been depleted.

OCCUPIED.

14,300,000 men and boys and 5,850,000 women and girls were stated on the householders' schedules to be engaged in occupations. These probably include a large number who were permanently incapacitated or superannuated, but not willing to return themselves as 'retired' (there were 250,000 'occupied' men over 65 years), and of course include all those temporarily unemployed and all casual workers. Retired Army and Navy officers are definitely included as occupied, but the main deduction is to be made from manual workers, and is important when we are considering the national wages bill. In the Census report, occupied persons are classified as employers, employed, or working on their own account; this classification is not complete and is

¹ About 60,000 men of these two groups stated that they had 'private means'.

believed to be to some extent inaccurate, but it is sufficient to allow us to make the estimates in Table I with reasonable accuracy.

We need to divide the employed into wage-earners and salaried, a task not undertaken in the Census of Population, though the distinction is made in the Census of Production. For this purpose it is necessary to study the list of occupations in detail, and having picked out clerks, officials, officers, and other definitely salaried persons, to make estimates in other cases. There is a margin of error in this process, as there must be in any case where the distinction between classes is not clear, but it is not very great, and proves to be unimportant in the treatment of salaries and wages in the next sections, since small salaries do not differ from wages in amount. As a result we classify 11,000,000 men and boys and 4,650,000 women and girls as wage-earners (less a number ill or retired), that is about three-quarters of the occupied population. 1,120,000 men and half that number of women we classify as salaried, of whom 700,000 to 800,000 of the men and the great majority of the women are estimated to have received less than £160 a year, that is, not more than the wage of highly skilled workmen.

We have next a group of about 650,000 men consisting of small shopkeepers, hawkers, caterers, and workers of various kinds who find their own customers. The number of women in a similar group (small dealers, dressmakers, &c.) is not easily estimated, but may be put at about 550,000. The incomes of this group have nearly the same range as those of wage-earners.

The heading 'Professional Occupations' in the Census includes not only clergy, doctors, lawyers, engineers, &c., but also writers, artists, and entertainers. The number, 330,000, in the table excludes salaried teachers, but includes law clerks.

Farmers, &c. (580,000), include all those occupied on the land except wage-earners.

There remain employers in industry, commerce, and dealing, including the stock-broker who has a few clerks,

the shop-keeper with one assistant, and the owner of a large manufacturing business. Managers of companies are classed as salaried. The number of women in the last three groups is small, and cannot be distinguished from others working on their own account; the four groups are therefore merged.

In Table II an attempt has been made to classify the occupied persons shown in Table I, both according to the nature of the industry or service in which they are engaged (as to which the Census figures are on the whole adequate), and according to their status in the industry, for which only rough estimates can be made.

The number of persons assessed to income-tax (with incomes over £160 in 1911) is not known precisely, but is estimated at about 1,150,000 in 1911¹; of these, 433,000 were assessed as salaried under Schedules D and E, including a perceptible but unknown number of wage-earners, which may be taken as 50,000 in 1911; this leaves 385,000 income-tax paying salaries as shown in Table II. In all we have 1,120,000 salaried male persons to account for (Table I), and therefore 735,000 whose salaries are less than £160.

The number of taxpayers in each line of Table II has been estimated with the help of the data collected by the British Association Committee on Small Incomes, referred

¹ Stamp, *British Incomes*, pp. 448, 449.

² Table 153, 55th Report of Inland Revenue Commissioners, with some allowance for duplicates.

NOTES TO TABLE II.

NOTES.—Soldiers and sailors afloat or abroad are not included.

The figures in italics are rough estimates to indicate the probable division of numbers at £160. Farmers' incomes are taken (as for income tax prior to 1915) as one-third of their rents; some attempt is made to correct for this under-estimate in the subsequent tables, but there is no sufficient information.

The number of women whose salaries are over £160 is unknown but is certainly small in each category, and for the rough purposes of this table all have been entered as under £160.

The male wage-earners in productive industries include 80,000 men employed in railway workshops.

TABLE II. APPROXIMATE CLASSIFICATION OF ALL OCCUPIED IN THE UNITED KINGDOM, 1911, ACCORDING TO OCCUPATION AND INDUSTRIAL STATUS.

	Employers and independent workers.		Salaried.		Wage-earners.	Total numbers occupied.
	Incomes above £160	Incomes below £160	Salaries above £160	Salaries below £160		
NUMBER OF MALES.						
	000's	000's	000's	000's	000's	000's
Productive industries, including						
Mining	130	310	120	280	5,680	6,520
Dealing	85	435	40	80	1,060	1,700
Catering	5	95	5	5	190	800
Commerce	120	40	80	145	15	400
Transport	10	40	40	100	1,110	1,800
Agriculture and						
Fishing	30	550	—	5	1,615	2,200
Domestic offices ...	—	—	—	—	360	360
Professions	120	210	20	80	75	455
Army and Navy ...	—	—	25	5	225	255
Central and Local Government ...	—	—	55	85	670	810
Total Males...	500	1,680	385	735	11,000	14,300
NUMBER OF FEMALES.						
	000's	000's	000's	000's	000's	000's
Industries	5	260	—	70	1,820	2,155
Dealing	5	160	—	50	410	625
Catering	5	80	—	30	190	305
Commerce	—	—	—	60	—	60
Transport	—	—	—	5	15	20
Agriculture and						
Fishing	—	60	—	—	170	230
Domestic offices ...	—	—	—	—	1,950	1,950
Professions	15	60	—	290	40	405
Central and Local Government ...	—	—	—	45	55	100
Total Females...	30	620	—	550	4,650	5,850

to above; but there is a great deal that is uncertain in the division at £160, and the number of employers in industry paying tax is probably somewhat under-estimated. The Table, however, is sufficiently accurate to show the relative importance of the totals, horizontally and vertically, though it should not be used when precision in the details is needed.

The distinction sometimes drawn between manual workers and their families and the rest of the population is misleading, especially when manual workers are identified as wage-earners; for there is no definite line between wage-earners and persons working directly for customers and small employers and small farmers, except that the latter take the risk of the business and consequently make profits as well as earnings when successful, and make little or nothing when unsuccessful; nor is there any clear and uniform division between wages and salaries. It is more reasonable to take the amount of income obtained as the test, and the income-tax exemption limit of £160 (in 1911) not only brings into use the most certain statistics, but also was near the upper limit of ordinary manual earnings. The Table shows that of the 14,300,000 occupied males, about 13,400,000 had incomes of less than £160 or were wage-earners, some of whom were slightly above this limit. Of the occupied women the great majority received less than £160. The aggregate income is discussed in the next section.

Of the 1,680,000 male employers and independent workers shown in the Table as having incomes less than £160, about 550,000 are farmers. Before the war it was assumed for income-tax purposes that a farmer's income from farming was one-third of his rent; the number in the Table, 30,000, of farmers with incomes over £160 means the estimated number assessed to tax, i. e. the number whose rents were over £480. Farmers' incomes are, no doubt, under-estimated on this basis, and if we could get at the facts no doubt there would be a transference from the 550,000 nominally under £160 to the 30,000; but the number transferred would not

be large enough to affect the totals seriously, as can be judged from the fact that in 1908 in Great Britain there were only 17,714 holdings above 300 acres, and 151,002 holdings from 50 to 300 acres (Cd. 6277, p. 4). From 1915-16 farmers' incomes are taken as equal to the rent they pay.

The Census gives under the Category 'independent workers, not employers', sub-classes which in the case of males account for about 220,000 in industries (tailoring being a conspicuous example), 340,000 in dealing, 63,000 in catering, nearly 30,000 in transport, and a considerable number in professions (for which no details are available). The number of employers with incomes less than £160 is therefore quite small. Under the corresponding heading for females the bulk are dressmakers, milliners, &c., or small shop-keepers.

In the Table 915,000 income-tax payers are included, in addition to wage-earners paying tax. To obtain the total of 1,150,000 we have still to account for 180,000; these are made up of two classes, one where salaries or profits under £160 are brought up to £160 by receipts from investment, the other where persons without occupations have unearned income over £160. The number of unoccupied persons with incomes over £160 is insignificant; we have no means of judging the amount of their incomes.

II

THE AGGREGATE INCOME OF THE POPULATION
OF THE UNITED KINGDOM

TABLE III. THE AGGREGATE OF THE INCOMES OF RESIDENTS
IN THE UNITED KINGDOM, 1911.

	Total income £000,000's	Home income £000,000's	Income from abroad £000,000's
Wages	782	782	—
Salaries, less than £160 ...	84	84	—
Independent workers, small employers, farmers, &c., less than £160	180	180	—
Total earned income below £160 and wages	1046	1046	—
Salaries above £160	130	130	—
Other income above £160. Under Schedule A—			
Ownership of lands ¹ ...	34	34	—
Ownership of buildings ¹	144	144	—
Under Schedule B—			
Occupation of lands ...	15	15	—
Under Schedule C—			
Government securities	43	12	36
Under Schedule D—			
Profits from Trades and Professions	523	390	133
Evading tax or unremitted	37	17	20
Total income over £160 ...	936	742	194
Unearned income below £160	50	50	—
Soldiers and sailors abroad, say	20	20	—
Old Age Pensions	12	12	—
Agricultural income, not otherwise included	26	26	—
Total miscellaneous	108	108	—
Total Income, £000,000's ...	2090	1896	194

¹ In Schedule A 'lands' includes ground not built upon, and farm-houses and their sites; 'buildings' includes the land on which they stand. See *British Incomes*, pp. 42-4.

NOTES TO TABLE III.

The details of wages are discussed below, pages 27 to 30.

Small salaries and earnings are computed from the British Association Committee's Report on Small Incomes, brought up to date. The majority of shop-assistants are transferred to the wages group, and an addition is made for salaried persons in industry, other than clerks. The estimate is rough, since the information is fragmentary.

Salaries above £160 are from the Inland Revenue Commissioners' Report, less a small allowance for wages assessed to tax.

The income under the various Income-Tax Schedules is the gross assessment, less exemptions for incomes under £160, allowances for repairs, wear and tear and other discharges. The abatements on incomes between £160 and £700, allowances for Life Insurance and for children, and the income of charities (£14,000,000) are not deducted, but counted as income.

Under Schedule A the ownership of buildings includes that of the land on which they stand. The allowances under this Schedule cannot be divided with certainty as between lands and buildings; the total for the two classes together is known, but a relatively small sum may be transferable from one to the other.

The estimate for Income from abroad under Schedule D is based on Sir G. Paish's paper read to the Statistical Society (*Journal*, 1909), to which is added an estimate for interest accruing abroad and re-invested instead of being remitted home; this and the estimate for Income evading tax is from Dr. Stamp (*British Incomes*, p. 324), who goes very carefully into the matter.

Unearned income, accruing to persons whose total income is below £160, is for the most part shown under exemptions in the Inland Revenue Reports; the whole is as estimated in the British Associations's Committee's report.

The wages of about 250,000 British soldiers and sailors afloat and abroad are not included under wages in the upper part of the table, since the persons are not included in the population Census, and some estimate is therefore necessary.

Readers must decide for themselves whether or not Old Age Pensions should be included, bearing in mind that it is generally agreed that the interest on the National Debt, under Schedule C, equally paid out of the receipts from taxes, should be included in the aggregate of individual incomes. It is a question whether other payments and services rendered out of taxes are not also additive.

The entry against Schedule B is three times that actually taxed, corresponding to the present estimate adopted since 1915-16 for income-tax purposes that profits equal rents instead of being one-third of them as formerly estimated. Some small part of farmers' incomes classed in the table as below £160 should also strictly be brought into the second section of the table, but there is no means of estimating it.

The whole estimate of agricultural incomes, obtained by taking the whole net produce of agriculture, as estimated in the Census of Production, after allowing a sum for repairs and renewals, is about £26 million more than the amounts included in the first two sections of the table; it is doubtful to which class it belongs and is therefore included under miscellaneous.

16 AGGREGATE INCOME OF POPULATION

THE National Income, as the total of the individual incomes is generally designated, is estimated in Table III as amounting to nearly £2,100,000,000 in 1911. Of this total about £800,000,000 was received as wages and approximately £260,000,000 was received as salaries or earned by independent workers, farmers on a moderate scale, small holders, and other small employers. £936,000,000 was received by about 1,100,000 income-tax payers. The remainder is made up of various small items described in the table.

Of the income-tax payers' income about £194,000,000 was derived from investments abroad, and was in no sense the product of the manual work at home in the year 1911, whatever may have been its origin in the past. By now a considerable part of the capital from which this was derived has been brought home in the form of munitions and food, and the former owners have received war-stock in exchange. The income from this part is now replaced by a debt from the nation to the holders of the war-stock.

The income derived from 'the produce of the year's work', with which alone we are concerned in the sequel, is approximately £1,900,000,000,¹ of which over £1,000,000,000 is received by manual wage earners and other workers whose earnings are less than £160 per annum.

We will first examine from a general point of view what is the maximum sum that can, even on extreme hypotheses, be regarded as luxuriously or unnecessarily spent by persons with incomes of £160 or more, and is the broadest target for attack by those who wish to obtain a less unequal distribution of income. It is not necessary for this purpose to deal with the familiar estimates of the concentration of wealth in the hands of a few individuals, for their incomes are included in the larger survey. There would no doubt be some objection to putting aside entirely from the discussion the income derived from abroad, and it is therefore

¹ Mr. and Mrs. Webb's dictum quoted above (p. 5) is presumably derived by comparing the wages of manual labourers solely (excluding independent workers and persons with small salaries) with a somewhat larger estimate of the National Income, including income from abroad.

only omitted when the possibility of increasing wages is considered, and included in questions involving taxation.

It is difficult to carry the analysis into detail with any certainty, since the tables of the Inland Revenue Reports do not distinguish adequately between home and foreign income, or between gross and net income, do not show the incomes of individuals at all, and fail in explicitness as to other crucial questions; but it is possible to draw broad and important conclusions from them.

From Table III it is seen that the home-income of income-tax payers was about £742,000,000. Of this £17,000,000 is estimated as evading tax; about £475,000,000¹ was taxed at the rate for unearned income; £10,000,000 of farmers' income was not taxable; the remaining £240,000,000 was taxed at one of the rates for earned incomes.

By unearned income is understood income derived from the possession of property, excluding capital which the owner employs in his own business. That is, agricultural and building rents, royalties, interest on Government stock, and interest and dividends arising from industrial and other debentures and shares, and similar income were taxed as unearned. Earned incomes, accruing to persons with more than £3,000 in all, were also taxed at the higher rate, and are included in the total of £475,000,000 named above.

In estimating the *maximum* open to attack it is assumed for the purposes of argument that the whole of rent and interest could be transferred from its present owners to the nation; but the £50,000,000 in the possession of people with less than £160 per annum, which include the results of small savings, pensions, annuities, and incomes of people incapable of work, is regarded as non-transferable.

Earned incomes are also, of course, open to attack. A sufficiently extreme supposition in these cases is that every income might be reduced to £160 (at the price levels of 1911). Putting aside the small amount of taxed farmers'

¹ This is obtained from Table 93 of the 57th Inland Revenue Report, after subtracting an estimate for income from abroad.

18 AGGREGATE INCOME OF POPULATION

income, we have £235,000,000 in question, divided between salaries and profits.

The salaries of 385,000 employees of the government, companies, firms, or individuals account for nearly £150,000,000, the average salary being £340.¹ About 40,000 salaries of over £500 were assessed, the aggregate of these being £38,000,000. If all salaries were reduced to £160, while none below that sum were increased, the amount saved would be about £70,000,000, equal to 9 per cent. of the national wage bill.

There remains £105,000,000 paying tax at the lower rates; this is the earned income of professional men, employers or firms, using no capital or working on their own capital, whose individual incomes from all sources are less than £3,000 per annum. The average assessment² per head in these groups (including those over £3,000) is about £555³ gross, say £500 net. This affords a rough estimate of the average profits of professional and business men of all kinds whose earned incomes are over £160 per annum.

If now we take the supposition that all 'unearned' income could have been nationalized, except that belonging to persons with less than £160 all told, and all salaries, professional earnings, and employers' profits reduced to £160 per head, while lower salaries were not raised, and the surplus devoted to national objects, perhaps £550,000,000 would have been available. Out of this sum (together with what would be obtained from foreign incomes) the receipts from Income-tax, Super-tax, and the great part of the Estate duties, would have had to be met (about £64,000,000) and a considerable part of indirect taxation and rates, and to preserve the current rate of saving (that is, the accumula-

¹ This is the average of the salaries above £160, including those paying at the full rate, but excluding an estimated number of wage earners. The average of the salaries included in Table III is £122; if women are excluded the average is about £160.

² Since individuals may be assessed under more than one heading, e.g. from other occupations or for unearned income, the average assessment differs from the average personal income.

³ I follow Dr. Stamp (*British Incomes*, p. 245) in taking an average of 2.4 persons to a firm.

tion of new capital), a further £230,000,000 would have had to be drawn, if we ignore foreign income and new investment abroad. It does not seem possible to find more than £200,000,000 or at a maximum £250,000,000 after these liabilities are met.

The supposition made above that unearned income is nationalized includes of course the assumption that no interest is paid to individuals, and that all capital is owned by the State. No one supposes that immediate appropriation without compensation is practicable; and many people would ask what sum would be needed to pay a minimum rate of interest on existing capital, if rents, monopoly profits, and any other payments which may be supposed to be unnecessary were transferred to the State. There is no material for giving a definite answer, though data as to a large part of industrial capital are given below, pp. 35 and 39; it can only be said that payments of interest to individuals would reduce the sum available for national purposes very considerably.

Those who have only looked at the considerable aggregate of national income and the proportion that is attributable to wages, and then considered the large amount that was received by a limited number of rich people (e.g. that 12,400 persons in 1911-12 had incomes over £5,000, aggregating £152,000,000), have been led to the view that the obvious inequality of the distribution could be rectified by drawing on a considerable fund that was in the hands of a small number of rich people, who spent it luxuriously and wastefully, and diverting it to wage-earners whose incomes it is supposed would be increased by the transfer to a level of relative affluence. They appear to have exaggerated the amount not already in the hands of persons with incomes less than £160, and not to have considered that a great part of the expenses of government and the savings necessary for the progress of an increasing population, are drawn from the larger incomes. Though the view often expressed is exaggerated, it is true that less than the maximum sum named above (£250,000,000) would be in fact sufficient, if

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it could be obtained without destroying it and applied without injuring the recipients' earning power, to bring the lowest incomes up to a minimum that before the war would have been considered reasonable. In fact, about £130,000,000 per annum would have been required to bring all adult male wages before the war up to the minimum of 35s. 3d. a week recently computed by Mr. Rowntree¹ without lowering those above that sum, and the remainder would more than have sufficed to subsidize women's wages up to the 20s. a week, which he regards as meeting their reasonable requirements. If, however, both these tasks had been accomplished, without affecting the total, the people depending on unearned income would have had very little, and all salaries and profits would have been cut down to little more than £160 per head.

We can also approach the question in the following way. If we leave out of account income from abroad and investment abroad entirely, and assume that the expenses of government are to be met out of home income, and that the increase of £230,000,000² in home capital, computed in the Census of Production (Final Report, pp. 32-3) as taking place in 1907, continues, we have the following:

Home income in 1911	£1,900 millions
Saving	230
Central Government	180
Rates not already deducted from business income	40
Remainder	£1,450 millions
Population, United Kingdom	45 millions

The average annual income, per family of five, rate and tax free, is then £160 per annum, or £170 if all foreign income not reinvested abroad were included. If we take $4\frac{1}{2}$ persons to a family, which is near the true average, we

¹ *The Human Needs of Labour*, pp. 129 and 131.

² There is some evidence that this is over estimated, and perhaps £200,000,000 may be nearer the fact; but it is very undesirable that investment at home should be curtailed, and the higher figure is therefore kept.

have £145 or £154¹ This appears to be the income that would be available for individual expenditure if the income were pooled and equally divided, if no saving of waste alleged to be inherent in competitive production were effected, no idle persons drawn into industry, if there were no loss of efficiency when salaries and profits were cut down, no increase in efficiency on the part of those whose wages were increased, no vanishing of apparent income when attempt was made to transfer it, and no general change in the methods of production; if, in fact, those engaged in producing the amenities and luxuries consumed by families whose income was over £160 were transferred to the production of commodities desired by those with lower incomes. The very difficult questions as to the change in price levels resulting from such a transfer cannot be considered here.

This statement must not be construed as an attack on socialism, for no writer assumes nowadays that re-division without a revolution in production is expedient; it is only a definition of an abstract average, the calculation of which has a certain utility in affording a starting-point for considering the possible results of reconstruction of society.

The question how far whatever surplus there is in the possession of the well-to-do is open to appropriation for national purposes by taxation, and how far it might be possible to transfer it directly by increasing wages, is discussed in the sequel.

Income grew rapidly in the three years before the war, and when the estimates in Table III are brought up to the date 1913-14, the total of all income is found to be rather over £2,250,000,000, and of home income between £2,050,000,000 and £2,100,000,000, and the average family income reckoned as above, rate and tax free, about £170. If net income from abroad were included in the aggregate, the average would be about £180 or less per family of 5, or £162 per average

¹ 'With £150 the family has, with £30 it has not, the material conditions of a complete life'.—Marshall, *Principles of Economics*, 3rd edition, 1895, p. 2.

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family of 4½. I am unable to obtain the figure of £2,400,000,000, frequently stated as the pre-war income, without making extravagant estimates of wages or of incomes from abroad.

The general impression that there was wealth sufficient and to spare before the war, if only it had been equitably divided, was due partly to a careless assumption that the £1,400,000,000 not paid in wages to manual workers was all unearned (the large amounts paid in salaries or received by working employers making small profits being ignored), and partly to the visibly great expenditure on luxury, an expenditure the less justifiable since the margin above needs was so small in the country as a whole. A good deal of ostentatious expenditure may perhaps be attributed to the recipients of income from abroad or even to visitors from overseas; but on reflection it is evident that some 10,000 or 20,000 rich persons spending £50,000,000 or more in luxury, duly advertised in the papers, and visible in all places where motorists congregate, would quickly give the appearance of great wealth lavishly spent.¹

It may be thought that the facile supply of the vast sums of money used in carrying on the war proves that the free income of the country was greater than here estimated; but since (1) savings at home and abroad, estimated at £230 and £100 millions in 1907, were invested almost solely in war loan, (2) capital, goods, and stock, for the upkeep of which £190 million was devoted in 1907, have been allowed to depreciate, (3) a considerable part, perhaps one quarter,

¹ As some guide to the number of the rich, the following data are given:—

Estimated number of persons with incomes over £5,000, chargeable to Super-tax in 1913-14, 13,850. (58th Inland Revenue Report, Table 133.)

Estimated number of incomes over £2,000 per annum in 1905 (Select Committee on Income Tax, 1906, p. 229), 47,000.

Number of private dwelling-houses of annual value over £150 in London or over £100 in the rest of Great Britain (1913-14), 75,000. (58th Inland Revenue Report, Table 69.)

Estimated number of private motor cars in use in the United Kingdom, August, 1914, 151,000. This includes those used by doctors and others for professional purposes. (Communicated by the Secretary of the Road Board.)

of the capital held abroad which produced an annual income of £194 million in 1911 has been brought home and lent to the government, and £1,200 million borrowed in U.S.A. alone, and (4) production and expenditure, especially in the most recent years, have been at highly inflated prices, and (5) the ordinary measurements of value have quite broken down, so that no one knows to what a present expenditure of £5,000,000 daily would be equivalent at pre-war valuation—it is not necessary to assume any great saving in consumption or increase in production (beyond that necessary to compensate the withdrawal of men into the services) to explain the possibility of the huge expenditure.

If we leave the problem of the maximum that was open to attack, and consider the narrower question as to how much was transferable from employers and shareholders to employees, we need a further classification, to show what income is obtained from different kinds of enterprise and industry. It is attempted to give a general view in Table IV, where the occupation figures of Table II are combined with the income shown in Table III. Such a table is sufficient to show broad outlines and serve to separate to some extent the occupations where wage-earners are closely concerned with the creation of the value of the product and its division, from others where the value of the product depends little on their efforts.

In forming Table IV there is a great deal of difficulty in separating the numbers and incomes between employers and salaried, and between those with incomes above and below £160, and the numbers shown in italics must be regarded as rough approximations. The table and the following comments relate to the year 1911.

It is only in connexion with the first two classes in the table (productive industry and railways) that we can come to close quarters, and the discussion of the division in these classes is the subject of Part IV below. Agriculture presents so many difficulties and special problems in this connexion

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and requires such special knowledge that no detail is attempted.

In the first group, which includes the productive industries, the product depends in a definite sense on the co-operation of manual and clerical labour, capital and direction in producing tangible goods sold in competitive markets. The employers and shareholders receive about 30 per cent. of the net value of the product,¹ about 9 per cent. goes in salaries, and 56 per cent. in wages; the remaining 5 per cent. is accounted for by employers on a very small scale and independent workers.

In railways, where the capital is very much larger in relation to the receipts, 52 per cent. goes to the share and debenture holders, only 9 per cent. in salaries, though the work done in private firms by employers is in this case done by salaried officials, and the remaining 39 per cent. in wages. (See p. 42 below.)

The next group contains a miscellany which there is no means of sorting out. Transport by road and water account for one-seventh of the group, and in this case labour is a very important part of the cost. In commerce, on the other hand, wage-earners are very few, and are only remotely concerned with the production of income. In shop-keeping and other dealing wage-earners (including shop-assistants) are only about 60 per cent. of all occupied, and their wages are only a small percentage of the turn-over; an increase of wages would have a relatively small effect on price. In the whole miscellany wages are 33 per cent. of the total net income, salaries 20 per cent., independent workers (small dealers and shop-keepers) account for 18 per cent., and profits and interests for 29 per cent.

In agriculture wages, including payments in kind, &c., appear to amount to about one-third of the product.

In domestic offices, in which are occupied 33 per cent. of the women included in Table II, no question of the division of any money product arises, except in hotels, restaurants,

¹ Interest at 5 per cent. on the capital involved is about three-tenths of this receipt, or 9 per cent. of the net value of the product, see p. 39 below.

TABLE IV. CLASSIFICATION OF INCOME OF ALL OCCUPIED PERSONS, 1911.

	Income over £100.				Incomes under £100.				Wage Earners.		Total.	
	Number of Employers. 000's.	Profits, Interest, Rent. £000,000's.	Salaried.		Employers and Independent Workers.		Salaried.		Number. 000's.	Income. £000,000's.	Number. 000's.	Income. £000,000's.
			Number. 000's.	Income. £000,000's.	Number. 000's.	Income. £000,000's.	Number. 000's.	Income. £000,000's.				
Manufactures* as included in Census of Production	135	202†	120	88	570	36	350	23	7,420	389	8,595	688
Railways, including railway workshops	—	47‡	10	2	—	—	80	6	530	35	620	90
Other transport, Dealing, Catering, Commerce and Fishing	230	121†	155	57	850	74	395	27	2,650	140	4,290	419
Agriculture	30	49§	—	—	610	37	5	1	1,675	63	2,320	176
Domestic Offices	—	—	—	—	—	—	—	—	2,310	94	2,810	94
Professions	135	48	20	6	270	33	320	17	115	6	860	110
Central and Local Government, including Army and Navy	—	—	80	27	—	—	185	10	950	55	1,165	92
Total	580	467	385	180	2,300	180	1,255	84	15,650	782	20,150	1,669

Other elements of home incomes—Old Age Pensions £12,000,000
Income of charities 14
Interest on national debt } Owners' incomes over £100 } 11
Houses } 76
Income of local authorities 27 (interest on loans, and profits).
Unearned income, holders' incomes under £100 50
Soldiers and sailors abroad 30
Evading tax 17

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* Including small workshops and independent workers; excluding cases where profit is not reckoned. † Includes income of shareholders, debenture holders, &c. ‡ Income of shareholders, &c. § Including rents. || Of these totals, £26,000,000 is not contained in the previous columns, since it is uncertain to what category of incomes it belongs.

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&c., as to whose profits and wages there is no general information.

The income and detailed numbers in the line relating to professions rest on a slender basis, and are only inserted to complete the totals.

Under Government Employment are included the Army and Navy (so far as enumerated at home in the Population Census), the Civil Service, and all those employed by the Central Government or Local Authorities, whether in administration, sanitation and other work of public utility, tram service, water, gas or electric undertakings, or in any other capacity; the total numbers are obtained from tables introduced for the first time in the Census of 1911 and depend in the main on the accuracy of the statements of individuals as to the service in which they were engaged. It is only in a small part of this group that profits are realized.

III

THE NATIONAL WAGES BILL, 1911

THE main general source of information as to earnings is the general inquiry made by the Board of Trade in 1906-7. The results were published for the groups of trades shown in Table V, the last volume not being issued till 1912, but no general summary or report has ever been published. The returns from employers were voluntary, but sufficient information was received from the great majority of trades where the work is done in factories or large workshops to lead to results accurately representing the average earnings in these trades; the conspicuous exception is coal-mining, as to which returns were not obtained in sufficient numbers to lead to any report. Home workers, domestic service, dock labourers, and casual workers were not reported on. Shop-assistants and others occupied in dealing, catering, and commerce were not included.

A detailed account was obtained of wages and earnings in a single week in the autumn; in Table V are shown the average earnings of all who received payment¹ in that week, whether they worked overtime, normal hours, or undertime. The averages differ by only a few pence from those relating to normal hours only. When different industries, in which the proportion of skilled to unskilled workers differs considerably, are aggregated into the general groups shown in the table, it is noticeable that the average earnings of all males in each of the groups are within 2s. of the general average, viz. £1 6s. 3d., except in the groups where women's work is preponderant (textiles, clothing, food, and tobacco), in which the average wages of males are a little

¹ A quite inconsiderable number of persons who received payment from two employers in the same week are counted twice in the divisor and the average thereby very slightly lowered.

lower. There is little risk of error in the statement that the average of a week's earnings in ordinary industry in the autumn of 1911 was £1 9s. for men (over 20), 10s. 6d. for lads and boys, and £1 6s. 3d. for all males, and in default of other information these averages can be applied (with suitable modifications) to other occupations.

The averages of women's wages are also confined to fairly narrow limits, and those of women and girls together range from 9s. 9d. to 13s. 5d.

The employers also stated the total amount paid in wages in 1906, and the number employed in one full week in each month. The amounts in the last column of Table V are obtained by dividing this total of wages by the average of the numbers employed. The sums as obtained show the average annual earnings on the assumption that the same persons were employed every week the factories were open, that is between 50 and 51 weeks, allowance being made for bank and trade holidays. In any particular week a certain number would be absent through illness, and throughout the year there is a margin of unemployment to take into consideration, so that the average earnings of individuals are some 7 per cent. less in each case, as shown below.

To connect the occupation statistics of the Population Census with the annual earnings so calculated we have to allow not only for sickness and unemployment, but also for superannuation (since retired persons are frequently included under the occupations they used to follow) and for casual workers, who are either included under general labourers or under the occupations with which they are intermittently connected. For ordinary unemployment we have the percentage figures of the Labour Department, 3.8 per cent. in 1906; for sickness we can use the experience of the Hearts of Oak Friendly Society in 1910, which shows an average of 12 days (1.68 weeks) sickness yearly for its members between the ages of 15 and 65.¹ The allowances to be made for superannuation (in which we may include the majority of men over 65 years) and for casual work are matters of

¹ See Dr. Snow in *Statistical Journal*, 1912-13, p. 477.

TABLE V. SUMMARY OF THE RESULTS OF THE WAGE CENSUS OF 1906.*

Industry.	Average earnings in one week of all persons, whether working full time, overtime, or short time.							Annual wage bill divided by average number employed in a full week.
	Males.			Females.			All.	
	Over 20 years.	Under 20 years.	All.	Over 18 years.	Under 18 years.	All.		
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>£ s.</i>
Textiles	27 3	10 5	22 11	14 10	8 8	13 5	17 6	43 10
Clothing	23 3	9 7	24 2	13 0	5 8	11 3	14 10	37 2
Building and Woodwork	30 8	9 11	27 5	12 5	6 8	10 10	27 1	65 4
Metals, Engineering, Shipbuilding	32 3	10 7	28 1	12 2	7 2	10 8	27 5	68 10
Food and Tobacco	28 5	10 2	23 5	11 3	6 6	9 9	19 0	48 10
Paper and Printing	34 2	9 2	27 3	11 11	6 3	9 11	20 10	54 0
Earthenware, &c., and Chemicals ...	28 3	11 4	25 6	11 5	6 10	10 2	23 3	59 5
Miscellaneous... ..	27 9	10 4	25 8	11 10	6 7	10 7	23 7	60 0
Public Utility	27 0	12 0	26 5	13 2	8 2	13 1	26 3	67 8
Railways	26 8	11 11	25 4	11 5	6 4	10 0	25 4	64 16
Average of all included in the table	29 2	10 7	26 3	13 6	7 3	11 10	23 1	£58 9

* Excluding Agriculture.

conjecture ; in the general estimate here given, about 3 per cent. has been allowed in each industry for superannuation and excessive absence from illness or unemployment of persons over 65 years, and some 3 per cent. or less for the irregularity of earnings of casual workers. Then we have the following estimate for 1906 :

Average annual wages for employment of men and boys in 50.6 weeks (i.e. the year less trade holidays)	£66.0
Allowance for ordinary unemployment 3.8 per cent., and sickness 3.2 per cent.	4.6
Allowance for superannuation, &c., 3 per cent.	2.0
Allowance for casual workers, 3 per cent.	2.0
Average annual earnings of males, counted in the population census as occupied in industry	<u>£57.4</u>

The average is raised by the inclusion of coal mines, by the greater regularity obtained in government and some other employments, and lowered by the inclusion of agriculture ; estimates have been made for each industry separately, till all wage-earners in the United Kingdom are accounted for, with the result that the average earnings of all males occupied in the sense used in the Population Census was £56.1 in 1906 and £57.4 in 1911. The wage-bill in 1911 for the 11,000,000 males shown in Table II is therefore estimated as £631,000,000. This estimate includes the value of payments in kind to agricultural workers.

For women and girls, including shop-assistants and domestic servants,¹ with little deduction for superannuation, since the majority retire on marriage, an average of £32.5 is estimated for 1911, and an aggregate of £151,000,000. The margin of error is greater than in the case of men, but the total concerned is smaller.

For both sexes the aggregate is estimated at £733,000,000 in 1906, and £782,000,000 in 1911. This estimate is rather below those generally quoted.²

¹ The average annual earnings of domestic servants are taken as £37 in 1911, including a valuation for board and lodging.

² Other estimates quoted in *British Incomes*, p. 427 (1907), Bowley, £740,000,000; Money, £703,000,000—both excluding shop-assistants, who account for £50,000,000 in the text here; Whittaker, £881,000,000; (1908), Fabian Society, £730,000,000.

IV

WAGES, SALARIES, AND PROFITS IN THE PRINCIPAL INDUSTRIES, 1907

WE are less in the region of hypothesis and more on the basis of ascertained statistical facts when we confine ourselves to the productive industries included in the Census of Production of 1907.* These account for half of the wage-earners in the United Kingdom, and for about 36 per cent. of the home income, and include nearly all the manufacturing industry and mining in the Kingdom.

The method of this Census was to estimate the selling value of the gross product of the industries in the year, and from this total to subtract expenditure on raw material, including the products of other industries which were further worked up, fuel, and some other items, and so to obtain the 'net output' of each industry. The net output 'constitutes for any industry the fund from which wages, salaries, rents, royalties, taxes, rates, depreciation, advertisement, and sales expenses, and all other similar charges have to be defrayed, as well as profits'; for clearness it should be added that interest on invested capital, whether borrowed or owned, comes from the same fund. The 'sales expenses', as a separate category, exclude, of course, salaries of travellers and other employees.

The net output in these industries is stated as £712,000,000; from this must be deducted for our purpose £53,000,000, the product of government work and of railway shops which in the Census reckoning contain no element of profit, and £15,000,000 paid in excise duties before sale; the remaining net output is £644,000,000, and it is to this that the following analysis relates.

The value of this output can be built up by estimates

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obtained (except as to numbers employed) independently of the manufacturers' returns to the Census thus :

Wages	£344,000,000
Salaries	60,000,000
Depreciation	57,000,000
Rates	10,000,000
Rents, Royalties, Interests, and Profits	188,000,000
Total	<u>£659,000,000</u>

These figures are very important, and it will be well to state as definitely as possible the data and method of estimation on which they depend.

Naturally, in view of the large element of estimate involved, exact agreement cannot be obtained; the discrepancy would be rather greater if expenses of advertisement and fire and accident insurance¹ were subtracted, as they should be, from the £644,000,000 net output; the error of 3 or 4 per cent. is not greater than might be expected. In the sequel it is the proportions that wages bear to salaries and to profits, &c., that is principally considered, and there seems good evidence that the table gives these proportions with sufficient accuracy. The numbers differ from those in the first line of Table IV, because the latter relates to 1911, and includes independent workers and employees in small workshops, as to whom information was not obtained in the Census of Production.

1. WAGES.—No information as to wages was given in the returns made for the Census of Production, but the number of persons employed on four specified days (the last Wednesdays of January, April, July, and October in the year of return) was stated for the bulk of the industries²; these persons were classified as wage-earning or salaried, male or female, over or under 18 years of age. In the

¹ In future investigation the amounts paid for health and unemployment insurances must also find a place, but in 1907, of course, these were not in existence.

² In workshops, as distinguished from factories, the numbers ordinarily employed were stated; for outworkers the numbers were stated for February 1 and August 1.

industries to which the figures above relate the average of the four records of wage-earners were: Males 4,330,000, Females 1,732,000; including outworkers, Males 27,000, and Females 75,000. These numbers must be very nearly the true average of those employed throughout the year on the days the factories and mines were working.

For earnings we must turn to the wage census of 1906, summarized above. The final column in Table V shows for each group of industries the annual wage-bill divided by the average numbers paid in twelve selected weeks. Similar figures are given for each of the industries (over 100 in number) dealt with in the wage census. The numbers of persons are thus computed on a basis very similar to that in the Census of Production, and the average earnings shown (with some adjustment to pass from 1906 to 1907) can be applied without risk of any serious error to the numbers of the Census of Production. The numbers *in both cases* are exclusive of persons absent from illness, unemployment, or any other causes, and considerable additions for these and for persons occupied in very small workshops or working independently would have to be made if we were accounting for all the persons shown in the occupation tables of the Census of Population; but for the purpose of computing the wage-bill corresponding to the net output of these industries no such additions are necessary.

The wage census covers very nearly the same sphere of industry, with the exception of mining, as does the Census of Production, though the classification differs. To obtain the wage aggregate the information has been tabulated industry by industry, and adjusted to the Census of Production classification.

For coal mining a different and less exact method has been followed. From the material published in an earlier Census of Wages in 1885-7, for which fairly adequate returns of the earnings of miners were obtained, it is computed that at that date the average annual earnings of all employed in or about coal mines was £52 10s. Between 1885 and 1907 hewers' piece rates, according to the Labour

Departments' reckoning, increased 52 per cent.; but from the Home Office Statistics of output and numbers employed, the number of tons of coal raised per person occupied in or about the mines diminished in the same period $10\frac{1}{2}$ per cent., and presumably very nearly the same relative fall would be found if we could have taken as the quotient the number of tons divided by the number of hewers.

The rise in rates combined with the fall in output results in an average increase of hewers' annual earnings of $36\frac{1}{2}$ per cent. In the absence of complete information we can only assume that the average earnings of other persons employed increased in the same proportion, and consequently that the annual earnings in 1907 were £72 (without allowance for sickness, &c.).

The necessity of using this involved and uncertain method of calculation, based on records now 32 years old and even then incomplete, and involving reference to three independent publications by two unconnected Departments, illustrates how hopelessly inadequate are our national statistics, even for calculations of very considerable importance.

In spite of these difficulties in details, there is very little possible margin in estimating the aggregate, which may be regarded as correct within perhaps 3 per cent. (or £10,000,000); if it errs, it is more likely (from the evidence) to be under- than over-estimated.

2. SALARIES.—The number of salaried persons in the same group of industries was: Males 390,000, Females 70,000. The distinction between wages and salaries was made by the employers, who were instructed to include as 'salaried' the following:—clerks, travellers, salesmen and buyers in the sole employment of a firm, and the management staff. In the case of companies some men are salaried whose functions are nearly the same as employers in private firms.

For the amounts of salaries we can only make estimates, as in Tables II and IV above. The Income Tax returns show salaries above £160 in all occupations together, including commerce, dealing, transport, and government and professional service, as well as industries; the British

Association Committee obtained some information showing the relative numbers above and below £160, and the average of those below £160. Consideration of these data leads to the following estimate :

270,000 men and lads with salaries under £160	Average £75	Aggregate	£20,000,000
120,000 men with salaries over £160	" £300	"	£36,000,000
70,000 women and girls	" £55	"	£4,000,000
	Total		<u>£60,000,000</u>

The average for women is quite doubtful, but, since these numbers are relatively small, the uncertainty has very little effect on the total.

3. DEPRECIATION.—From an analysis made in the Final Report of the Census of Production (pp. 35–6), it appears that the capital of the companies and firms concerned may be estimated at £1,200,000,000,¹ of which £800,000,000 is the value of buildings and plant, and £400,000,000 the value of lands and working capital. On the assumption that buildings and plant need (on the average) complete renewal in 10 years, £67,000,000 annually should be reckoned for depreciation on a 4 per cent. basis. Repairs currently carried on by employees of the firms owning the plant (and already deducted from the gross output) are estimated as subtracting about £10,000,000 from this total. Hence we get the £57,000,000 included above (p. 32). The estimate is evidently very rough, and in practice it is not easy completely to distinguish renewals from new investment, since improved types of machinery and more expensive buildings replace obsolescent plant and structures, and current allowance for depreciation is generally on a hypothetical or formal basis. The sum included is intended to be that which is necessary to set aside from the year's profits to make good the year's destruction of capital.

4. RATES.—Rates on business premises are working

¹ Deductions are made, as with profits, net product and numbers employed, for undertakings (Local Authorities, &c.), for which no profit is shown.

expenses and are so reckoned in assessment for income tax. The average rate in urban areas in 1907 was 6s. 10½d. The assessed value of buildings and land occupied by the industries included was approximately £29,000,000; hence rates amounted to £10,000,000.

5. PROFITS, ETC.—Profits, interests, and royalties are assessed to Income Tax under Schedule D, and lands and buildings under Schedule A. In the Income Tax returns those arising from the group of industries included in the Census of Production are not distinguished from profit and rents from other sources, but very fortunately Dr. J. C. Stamp (of the Inland Revenue) has given in the *Economic Journal* (1918, p. 284), an authoritative estimate of precisely the sum we want to know. 'An analysis of the income-tax results, in order to obtain, for 1907, those proper to the industries covered by the Census, has given (with additions for the premises occupied and for businesses exempt from income tax) £198,000,000 as the full profits.' To obtain this sum considerable allowances have already been made for depreciation, but £3,000,000 has to be deducted for various allowances from gross income, a further £5,000,000 for the statutory allowance for depreciation on £29,000,000 annual value of buildings included in the estimates and about £2,000,000 more for profits of local authorities excluded from the estimates in this section. When these deductions are made, the amount £188,000,000 as stated above (p. 32) is obtained.

This sum is the amount of income as defined for income-tax purposes, and many criticisms have been made as to the fairness of assessment, suggesting that income is over-assessed, and in particular that no allowance is made for losses and insufficient allowance for depreciation. Dr. Stamp goes very fully into this¹ and finds that the whole assessed value for all the profits reviewed under Schedule D is perhaps 4½ per cent. in excess of true income. The most considerable part of this excess appears to apply to profits, &c., not arising from the industries here in question, and it is sufficient to

¹ *British Incomes*, pp. 176-203.

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say that a relatively small sum, perhaps £5,000,000, should be deducted from the £188,000,000 to obtain the income really available for employers and owners; against this, however, should be put some estimate for income legally taxable, but concealed and evading tax.

In comparing wages and salaries with profits, interests, &c., we may set aside depreciation and rates.¹ We have then the following table:—

DIVISION OF THE NET OUTPUT OF MANUFACTURING INDUSTRIES
AND MINING IN 1907.

		Percentages.
Wages	£344,000,000	58
Salaries under £160	24,000,000	4
Salaries over £160	38,000,000	6
Rents, royalties, interests, and profits	188,000,000	32
Total	592,000,000	100

If the estimates here given are accepted it will be seen that Sir Hugh Bell's forecast (p. 5) is not realized so far as this group of industries is concerned. It is true that the method of computation here followed is not that indicated by him, since he speaks of the total sale value (or gross product), whereas here the values added industry by industry are the basis; the difference between the gross product and net output, however, is made up mainly by payments for materials, &c., the output of other industries, and (apart from imports) involves duplicate reckonings; the proportion between earnings and profits would be nearly the same whichever basis is adopted. We can only obtain Sir Hugh Bell's 75 per cent. if we count £40,000,000 of the profits, &c., as payments to employers for their share of production, which would be a not unreasonable method, for a sum comparable with this would pay their salaries if their businesses were turned into private companies with them as managers.

¹ A great part of the rates pay for public services necessary for the industry (roads, drainage, &c.); part pays for the education of the operatives' families, and in one sense is an addition to earnings, but this can hardly be added to wages in this computation.

There can be little objection to taking the salaries under £160, where average is little higher than that of manual earnings, under the same heading as wages, and not as in any way being at the expense of wages. As to the higher salaries it can only be said that no more fatal economy could be made than in curtailing the application of brains to industry, and it would be a very dangerous experiment to make any great reduction in their remuneration. It is very unlikely that the administrative and clerical staff is redundant in profit-making industries, and that the numbers could be diminished without loss to the output. If we suppose that the excess of every salary over £160 was transferred to wages, these would be raised only 5 per cent., and if only the higher salaries were attacked the average increase of wages would be negligible.

It is by no means evident, on the other hand, that wages could not have been raised at the expense of profits, whether by general pressure for increases on the part of wage-earners, or by a reconstruction of the whole system of ownership of capital and direction of industry; and, without any attempt here to discuss the question in its many aspects, attention may be directed to some numerical considerations.

Mining royalties and kindred payments are estimated at about £7,000,000 annually.¹ To discuss their nature and the factors which determine their amount is beyond the scope of this analysis. They can reasonably be taxed or may be owned by the state, but to hand them over to the workers in or exploiters of mines would be analogous to handing over the agricultural rent of a fertile farm to the farmer or labourers who happened to work on it. If this view is accepted, we are left with £181,000,000.

Whatever the system of ownership, the capital used in an industry was not in general created by the present workers in the industry; buildings, plant, and machinery are provided for them as the result of past industrial activity, and each industry must bear the expense of its own capital. If the state provided the capital, it would still have to be paid

¹ *British Incomes*, p. 194

sooner or later out of the products of the industry before it was worn out. Provision for depreciation merely keeps the capital intact without paying for it. If we take for hypothesis the Marxian view of interest, and ignore time as an element in value, as a socialistic government might attempt to do, an industry might be required to pay back the value of its capital to a general fund in say 25 years; this would require 4 per cent. for 25 years and thereafter nothing.

To pay off the capital in 25 years, reckoning interest on outstanding loans, as in existing industry and in existing government loans, would require an annual charge of 6.4 per cent. (taking interest at 4 per cent.) The difference between 4 per cent. and 6.4 per cent. illustrates the difference of the charge on the two bases.

We may take it, then, that a payment for capital must be made by every undertaking using it, whether the money goes to private owners or to the state.

The estimated capital of these industries in 1907 was £1,200,000,000 (p. 35), including buildings, plant, land, and working capital, and the annual payment at 4 per cent. would be £48,000,000. This is a very low rate for industrial capital and is taken as the minimum that any one would be likely to suggest. Of this a part was for interest on debentures and mortgages and for rents, which must be paid before any surplus is divided for profit, and of course a considerable part is interest on capital owned by the firms or employing companies. The element of rent for land, apart from buildings, is probably not great, and there are reasons for holding that this is an unavoidable charge on the industry whether it goes to a private owner or to the state.

After subtracting this sum for interest and rent, there is left £133,000,000 for profits. If the whole of this were handed over to the wage-earners, their earnings would be increased by the handsome amount of 42 per cent.; but still they would not be opulent, for the average of earnings of men fully employed would be only 41s. 6d. a week, 22 per cent. above Mr. Rowntree's pre-war minimum of 35s. 3d.

(or say 34*s.* at the lower prices of 1907). If the more moderate assumption is made that half is left to the employers, which would leave them only a very modest average income, the minimum 35*s.* 3*d.* would just be obtained as an average; but the minimum would only be reached by all if at the same time skilled earnings were brought down to this sum.¹ At the same time the sum in the possession of the employers would be so small that they would not have enough to take necessary risks in development of their manufactures nor to invest new capital in them. It is rightly held that investment by successful employers in their own business is one of the main sources of industrial progress.

Actually there is a very definite reason why this sum cannot be made available in this way. It must be granted that the product of each industry ought to pay for its own labour and all other expenses, unless there is very good reason for subsidizing it out of the product of other industries. Similarly each branch of industry and each separate firm or company ought to pay its own expenses or go out of existence. Now this £133,000,000 estimated profit is not obtained by all firms in exact proportion to the number of workers employed. Some undertakings by good management, abundant capital, partial or complete monopoly, or good luck, obtain large profits, others obtain little or none. In the former group the wage-earners could receive a considerable addition to wages while the employers still enjoyed moderate profits; in the latter group an increase in wages would drive the firms out of existence. Profit-sharing is not in general approved by trade unionists, and an inequality of wages based on an inequality of skill in management or monopoly would not be approved at any rate by those who received the lower rates. It may be said that inefficient firms ought to cease operation, and their place be taken by an extension of the more prosperous, and no doubt such a process is continually going on; but unfortunately there is a dearth of the highly specialized skill

¹ For this rough statement it is assumed that women's, boys', and girls' earnings are raised on the average in the same proportion as men's.

which results in prosperous business, and not enough of it to keep all industry in a high state of efficiency, nor is it a quality that is developed by government organization or by ordinary education, and in each undertaking there comes a point where even special ability is unable to secure efficiency beyond its existing scale of operation, and much production must be carried out by employers with only moderate aptitude and only moderate profits.

Wage-earners in fact can only claim a share in that product which they personally help to produce, so long as a system of wage-payments exists, and in very many cases the margin of profit is extremely small. Surplus or large profits can reasonably be taxed for the general benefit, but cannot generally in any equity be handed over to wage-earners, unless the principle of profit and loss sharing is admitted.

It by no means follows that *no* increase of wages was obtainable in some cases at the expense of profits in 1907. (1) Where there is a considerable element of monopoly and considerable monopolistic profits throughout an industry or in firms controlling a large part of it, the owners could be forced to share the abnormal profits with their employees, if the industry was closed by Trade Union or other action to outsiders. (2) The raising of wages, whether by a legally enforced minimum or otherwise, might force employers to become more efficient or, if a small number of inefficient employers were obliged to stop, others might be able to extend their operations so as to give the same aggregate employment; evidently this process cannot go very far without radical changes in methods. (3) Without a system of profit-sharing based on individual firms, it has been found possible for workmen's earnings to increase or diminish with profits by sliding-scales based on realized prices. By a revision of the basis of the scale, part of the profits could be transferred to wages, if there was an element of monopoly, and by increasing wages more than proportionally to prices when prices were above normal a greater part of excessive profits could be transferred to wages. But

these cases are temporary or exceptional and could only lead to a relatively small change in the proportion of total wages to total profits. Most people who study the question closely will admit that only a fraction of this £133,000,000 is open to direct attack by the wage-earners.

Under a socialistic regime, where profit was not the determinant, the difficulties of inequality of efficiency of management might be obscured, but they would still exist, as they did in pre-war government undertakings.

It remains in this section to pass in review some principal industries for which adequate information is available.

RAILWAYS.—Transport is not included in the detailed estimates of the Census of Production, but other official statistics are available for railways,¹ which lead to the following estimates, which relate to all employed by railway companies.

UNITED KINGDOM, 1911.	
Annual Wage Bill	£35,000,000 (a)
Salaries, 10,000 above £160; 80,000 below £160 ²	£8,000,000 (b)
Coal	£7,000,000
Rates and taxes	£5,000,000
Materials and other working expenses	£25,000,000
Assessed to Income Tax, net (approximately)	£47,000,000 (c)
Whole receipts by Railways	£127,000,000

We thus find that £90,000,000 (the total of (a), (b) and (c) in the table) was available for the payment of profits and interests, salaries and wages. Of this total about 39 per cent. went to wage-earners, 9 per cent as salaries, and 52 per cent. to shareholders, &c. It need hardly be said that in this industry the capital employed per wage-earner is exceptionally great, and even if the State constructed, owned, and operated a railway, the payment of interest or other

¹ 16th Abstract of Labour Statistics, p. 93, Railway Returns, 1913, Inland Revenue Reports.

² Based on British Association Report. Amount assessed by special income-tax commissioners is only £6,500,000, but this probably excludes weekly salaries.

provision for capital would need a considerable proportion of the net earnings.

But it must be remembered that it is by no means an easy thing to decide what is the value of capital fixed in an undertaking. When a business is started the actual sum invested is definite, and the additions from time to time can be known. An attempt can also be made so to adjust renewals and depreciation as to keep the physical equipment at an unchanged efficiency. But the value of fixed capital is determined not by what it cost, but by what it can earn, and it is bought and sold on this basis. In the case of old-established railways the original cost is only of historical interest; the shares and debentures have continually changed hands, and the only capital value that can be assigned is based on the current value of the shares, &c. If wages were raised specially in this industry, so that working expenses were greater, the value of the shares would automatically fall. In the case of industries where capital wastes rapidly and fluid and new capital is relatively more important, the difficulty here indicated is less, but it still exists.

COAL MINES, 1911.

In this case we can use the Home Office Statistics as well as the Census of Production, but the estimates must remain rough because of the uncertainty of earnings discussed above (pp. 33-4).

Wages and earnings	£60,500,000
Salaries (16,000 persons)	£2,500,000
Materials	£19,000,000
Rates and depreciation, advertisement, &c. ¹	£11,500,000
Assessed to Income Tax—	
Royalties	£7,000,000
Profits and interest	£10,500,000
Value of gross output	£111,000,000
Tons of coal raised	<u>272,000,000</u>

¹ This is obtained by subtracting the other items, for which information is fairly adequate, from the gross product, and is therefore subject to the accumulation of any inaccuracies in other items.

The capital involved is estimated (*Census of Production*, p. 35), at 10s. per ton raised, viz. £136,000,000; on this sum the interests and profits equal 8 per cent.

If we exclude royalties for the reasons given above, we have £73,500,000 divisible as wages, salaries, and profits; wage-earners get 82½ per cent., salaried 3½ per cent., and employers 14½ per cent. When royalties are included the figures become 75 per cent., 3 per cent., and 22 per cent.

In Table VI corresponding figures are shown for 19 important industries.

NOTES TO TABLE VI.

Those industries are selected which employ the greatest numbers of persons, and for which there are adequate wage statistics.

In the columns showing net output, 10 per cent. has been allowed in each case for rates and depreciation of capital as shown (p. 32) for all the productive industries together. This flat rate should be modified for particular industries, but no information is available.

The net output so reduced is divided by the average number of wage-earners recorded in the Census of Production to obtain average output per wage-earner.

The average earnings are computed from the wage-census of 1906, as discussed above. If allowance was made for lost time through illness or unemployment, the average would be lower; but as stated they are properly comparable with the output per head, as it is computed.

Aggregate wages are calculated from the average wage paid and the average number employed, and compared with the total net output to obtain the percentage that goes to wages.

For aggregate salaries it is assumed that in each industry the average salary is £130, as is computed above (p. 35) for all industries together. Since the proportion of the total net output is small, a margin of error can be allowed here without seriously affecting the other percentages. The aggregate of salaries in each industry is then expressed as a percentage of the total net output. In the cases of clothing and of building, salaries on this basis amount to so large a proportion that it is probable that £130 is too high and that they are not separated from the last column.

The residue when wages and salaries are deducted is shown in the last column as a percentage of net output.

The difference in average earnings in these industries is mainly attributable to the variation in the proportion of men and women employed; thus the average is high in the metal trades, building and gas works, and low in the textile, clothing, and tobacco industries.

Not too much importance should be attached to the variations in the percentages that are attributed to salaries,

TABLE VI. CENSUS OF PRODUCTION, 1907.

Principal Industries.	Net output, deducting 10 % for rates and depreciation.		Estimated average annual earnings for full employ- ment. £	Percentage division of value of net output.		
	Total £ millions.	Per wage- earner. £		Wages %	Salaries %	Profits, interests, rents, royalties, & adverti- sement %
Iron and Steel Production	27,1	110	81	74	7	19
Engineering ...	45,5	108	66.5	62	11	27
Shipbuilding ...	16,7	93	70.5	75	8	17
Cotton ...	40,5	72	48	66	4	30
Wool and Worsted ...	16,7	66	40	61	7	32
Cute, Hemp, Linen ...	8,5	56	31.5	55	6	39
Bleaching, Dyeing, Finish- ing ...	9,5	97	54.5	56	8½	35½
Clothing and Millinery ...	24,6	56	36†	65	35	
Hats and Shoes ...	8,1	69	48	70	14	16
Bread and Biscuits ...	10,4	106	53	50	15	35
Brewing and Malting ...	25,3*	367	63	17	8	75
Tobacco ...	5,3	171	34.5	20	8	72
Paper-making ...	4,1	106	53	50	7	43
Printing and Bookbinding	13,8	88	56.5	64	16	20
Woodworking, Furniture, Upholstery ...	15,2	92	59	64	15	21
Brick and Fireclay ...	5,0	76	56.5	74	10	16
China and Earthenware ...	4,2	65	47	72	12	16
Building and Contracting	38,7	81	67	83	17	
Gas Companies ...	10,4	210	78	37	7	56
All Industries in the Census of Production, for which profits are shown ...	590,0 viz. : £590,000,000	£97 6	£57 0	58	10	32

After excise is subtracted.

† Including outworkers.

since it has been necessary to assume the same average salary in all industries for want of information.

The expense of advertisement was ignored in the general discussion on pp. 37 seq. above, since in many industries it is quite small. But it probably accounts in part for the high percentages shown for tobacco profits, where the amount of capital involved is also unusually great.

It would be expected that the variation in the amount of capital employed per workman would dominate the proportion that goes to profits, rents, and interests. There is no adequate information by which we can compute the capital, and even if we could the value depends so much on its earning capacity that there would be danger in doing so. We can only repeat that a substantial part of the residue after wages and salaries are made must be allotted to the interest on or repayment of capital before profits are divided. Of the profits, considerable amounts are, no doubt, in many cases re-invested in the works from which they are drawn, and it would be very dangerous to the future of these industries if this process were checked.

V

SUMMARY AND CONCLUSIONS

IN considering the division of the product of home industry we must exclude income derived from abroad. The aggregate income of the residents in the United Kingdom in 1913-14, derived from home sources, was probably between £2,000,000,000 and £2,100,000,000. In 1911 it was £1,900,000,000 or less, and of this £800,000,000 (42 per cent.) was received as wages, and £264,000,000 (13 per cent.) or somewhat less was received in small salaries or earned by independent workers or small employers whose income was due almost entirely to their own exertions. In all rather more than one-half was *earned* by people whose annual income was under £160, and when old age pensions and small receipts from property (whose owners' incomes were below the exemption limit) are included, we find nearly 60 per cent. of the whole in the hands of this group.

About 40 per cent. of the whole (£742,000,000) form the income from home sources of 1,100,000 income-tax payers and their families. Of this £145,000,000 certainly was 'earned' as salaries or by farmers, and £190,000,000 certainly was 'unearned' (in the sense in which the word is currently used) and obtained from the ownership of real property or securities. The remaining £407,000,000 is the total of all profits of trades and professions (excluding those which go to persons whose incomes are under £160), and a considerable part (whose amount cannot be ascertained) goes to shareholders and others who take no active part in the businesses. The average salary of salaried persons paying income-tax was about £340, and the average profit (whether arising from use of a person's own capital or

simply from personal exertions) of all persons assessed to profits over £160, may be roughly estimated at £500; this group includes the assessments of men and women in professions as well as those engaged in business.

There was a considerable transference of the income-tax payers' incomes to the benefit of the poorer classes. Not only are old age pensions (already included above as income) drawn from taxation, but the expense of feeding of school-children, much of the expense of education, and on poor-law relief, and other benefits financed from the rates, contributions to national insurance, &c., are mainly deductive from the incomes of the well-to-do, and the actual income of endowed charities (£14,000,000), is included in the £742,000,000 in Table III. No attempt is here made to allocate the expense of national defence and other national expenditure between the classes; but, evidently, in the future it will be necessary to pay very careful attention to the incidence of taxation when estimates are made of the spendable income in the possession of different groups.

In the £190,000,000 distinguished above as certainly unearned is included £76,000,000 derived from house property; though this does not differ essentially from other income derived from ownership, it is well to make clear that in the supposition presently made that all unearned income is nationalized is involved the supposition that those who have provided (as well as those who have inherited) houses receive nothing, and that people who own the houses they occupy are taxed 20s. in the pound on the annual value.

We must certainly allow something for the work of active employers, professional men, and salaried employees, when we are considering surplus income. Let us suppose that each earned income is reduced to £160 per annum. When we have subtracted the incomes so reduced, farmers' incomes and the incomes of endowed charities, from the £742,000,000 of tax-paying income, we are left with about £550,000,000. This may be taken as a maximum estimate of surplus and unearned income that could be regarded as transferable to

national purposes. Actually the cutting down of earned incomes would in fact seriously diminish the power as well as the will to work, and a good deal of income would disappear in the process of transfer. £550,000,000 is then an outside estimate of the part of home-produced income that is the target of attack by extreme socialists.

Out of this sum, however, the great part of national saving is made and a large part of national expenses are met; when these are subtracted only £200 to £250 millions remain, which on the extremest reckoning can have been spent out of home-produced income by the rich or moderately well-off on anything of the nature of luxury. This sum would have little more than sufficed to bring the wages of adult men and women up to the minimum of 35s. 3d. weekly for a man and 20s. for a woman, which Mr. Rowntree in *The Human Needs of Labour* estimates as reasonable.

In fact the spendable wealth of the nation derived from home industry has been grossly exaggerated by loose reasoning. Before the war the home income would not have yielded more than £230 gross annually per family of five, or £170 net after all rates and taxes were paid and an adequate sum invested in home industries.¹ The income brought home from abroad amounted to about £90,000,000,² or £10 a family. The average family is not, however, five as is frequently assumed, but about 4½ persons³; the number of households is not 9,000,000 as just taken, but about 10,000,000, and the average net income of a family would have been £153 from home-product or £162 if income from abroad is included. If this sum is compared with pre-war wages it must be remembered that there are on an average nearly two earners to a family.

¹ An equal distribution of pooled income would make enormous differences to prices, but it does not seem necessary to attempt any estimate here.

² The residue shown in Table III of foreign income is reinvested abroad.

³ The average urban workman's family consists of 1.9 earners and 2.3 non-earners approximately. As Mr. Rowntree's minimum rates the weekly income would be nearly £3.

When it is realized that the whole income of the nation was only sufficient for reasonable needs if equally divided, luxurious expenditure is seen to be more unjustifiable even than has commonly been supposed, and the problems of obtaining a distribution that is more reasonable and of reducing poverty appear more difficult, though none the less urgent.

There are three methods of redistribution : (1) an equal division of the income ; (2) taxation of the larger incomes ; (3) raising of wages. Of these it is not proposed to consider the first ; the effect would be that the capital and labour engaged in producing luxuries and superfluities would be transferred to the satisfaction of more elementary needs. The second and third form the subjects of the following paragraphs.

If we include income from abroad the maximum income open to additional taxation appears to have been £300,000,000 before the war. The whole could not have been taxed at 20s. in the pound without assuming ownership of the sources of income, and an increase in taxation tends to destroy the income by diminishing the incentives to production and to cause income from abroad to be reinvested and not brought home ; but the experience of the war years shows that taxation had not reached its limits.

Social reformers have made many propositions involving the increase of national expenditure. Some of these aim directly at relieving poverty without increasing future production, as, for example, the increase of old age pensions and the lowering of the age to 60 years, and more liberal provision for the ill and incapable. Others involve direct gifts to the population as a whole, such as the supply of better and free education, reduction of expenses of travelling, the provision of parks, recreation, amusement, and libraries ; the subsidizing of houses, the supply of milk and other goods below cost ; by these it may be reasonably argued that the ability and physique of the nation would be improved and productivity increase. Others are directed to the benefit of special groups, with the same beneficial

results, such as the charge of children of widows and of badly paid labourers. There is no doubt that very much could be spent, and it is probable that under very carefully devised schemes a great deal could be spent with advantage.

As regards the raising of wages, it is suggested that we ought to accept the principle that the output of every factory, mine, and farm ought to pay its own wages and other expenses. It is at once clear that only a part of the £250,000,000 possibly transferable from home-produced income can be applied directly to wages. It is shown in Table IV that the income arising from industry and occupation of all kinds, excluding employment by the Central and Local Government, is about £1,577,000,000, of which £570,000,000 goes in salaries (over £160), profits, interest, and rent, while wages and small salaries account for £800,000,000. A great part of the profits arises from professions and occupations to the production of which wage-earners contribute very little, and another part is due to special skill of management, and to partial monopoly, the excess of whose profits is not due to the workers who help to make them. These sums can be reached by taxation, but are not available for the direct increase of wages. Of the industries and occupations where the work of wage-earners contribute substantially to the product we have information as to profits, salaries, and wages for a great group included in the Census of Production and for railways, but not for other transport or agriculture; this detailed information refers to an aggregate of income of about £700,000,000 in 1911, and, though it covers the main productive industries, it deals with less than half the national income. The remainder is shown in Table IV. Since we can only survey in detail a part of the whole, attention should be directed to the relative proportions that go to wages, salaries, and profits, rather than to the actual amounts. It should be remembered that out of the part that goes to profits a considerable amount of saving and national expenses must be met, and the spendable incomes are much less than the gross incomes.

If we give up part of the principle that each industry and firm must pay its own way and suppose the profits of each industry pooled, we can see the amount of profits which can conceivably be diminished to the advantage of wages on pp. 42-5 and in Table IV. In railways in 1911, 39 per cent. of the net receipts went to wages, 9 per cent. to salaries, and 52 per cent. to shareholders, &c. In coal-mining in the same year 75 per cent. (or 82½ per cent. if royalties are excluded) of the value of the net output was paid to wage-earners.

In 1907 from 60 to 70 per cent. of the net output¹ was paid in wages in the case of engineering, cotton, wool and worsted, clothing, boots and shoes, printing and binding, and wood working. Over 70 per cent. went to wages in iron and steel production, shipbuilding, brick-making, pottery, and building, and under 60 per cent. in jute, linen and hemp, bleaching, &c., bread and biscuit making, brewing, tobacco, paper-making, and gas-works.

In the whole group of industries for which we have adequate information, taken all together, excluding railways, it is found that 58 per cent. of the net product (after all other expenses and depreciation are met) goes to manual workers, 4 per cent. in small salaries, 6 per cent. in salaries over £160; in all 68 per cent. goes to those employed. 32 per cent. is left for royalties, rents, interests and profits, advertisement, &c., and this is reduced to 23 per cent. if we count out royalties (as not being the result of the efforts of employed) and allow 4 per cent. for the necessary repayment of or interest on capital invested. How far this 23 per cent. or £133,000,000, together with a relatively small sum (probably well under £10,000,000) for the salaries of managers of companies, is an excessive or unnecessary remuneration for the organization of industry employing 6,000,000 wage-earners and £1,200,000,000 capital and producing £340,000,000 wages is a question that may properly be

¹ Rates and depreciation are subtracted from the net output as shown in the Census before these percentages are reckoned. Advertisement has to be paid for out of the balance.

debated ; it is this sum that formed the only possible source of increased earnings in this group with industries conducted as before the war and production at its then level. In fact, while in some industries a considerable advance may have been practicable, in the majority no such increase as would make possible the standards of living now urgently desired, and promised in the election addresses of all the political parties, could have been obtained without wrecking the industry, whether by stopping the source of further investment or closing down firms whose profits were low. This statement in its general terms cannot, it is thought, be reasonably denied by any one who has studied the facts.

If industry before the war could not afford a satisfactory livelihood to those engaged in it, there is every reason for attempting a radical change. It is no part of the purpose of this statistical analysis to touch on problems of reconstruction, but to prevent the impression that statistics and economics lead only to pessimistic conclusions, a brief analysis may be offered of the possible sources of improvement, apart from beneficial expenditure from taxation.

Before proceeding it is well to consider how far economic factors have changed since the date to which the statistics given relate. The productive man-power of the nation has diminished by the loss of many men, the invaliding of others, and the want of training of the young men who were drawn into the war at an age when they would have been learning their trade ; on the other hand, a certain number of persons who would otherwise have been idle have started work, and a considerable number of women and unskilled men have learnt to perform operations of a fairly high grade. There has been a great lack of ordinary investments in industry, and capital goods have been allowed to deteriorate without sufficient renewal ; on the other hand, a considerable part of war expenditure has gone to supply plant and material useful for warfare, much of which can be transferred to production of civilian requirements. At the same time wasteful methods of production have been eliminated, and it is confidently stated that a great deal has

been accomplished in the direction of increased efficiency; on the other side, the dead hand of government control has interfered with the pre-war methods of adapting production to visible wants. It is impossible to find the resultant of these forces, but at the best it can only be hoped that the loss in productive power is not very serious nor permanent. There is, at any rate, no proof that, reckoned at the prices of 1913, the national output, when peace has been established, will be greater than before the war, even if there is no slackening of effort.

The large income and lavish expenditure of 1918 was mainly due to the great inflation of prices, and partly due to borrowing from abroad and calling in capital. No one can reckon what the product of 1918 would have been worth at pre-war prices; the unit of value is unstable and unknown. Our only course is to base our reasoning on what can be known, and that is the pre-war product. The division of the product has been and will be profoundly affected; property has changed hands, some has appreciated, other lost its value. Some persons have accumulated large holdings of war stock and bonds, others will have to pay the interest on them. Nominal incomes, when the national receipts and expenditure again balance, will be very different from spendable incomes, and the larger the apparent income the greater will be the deduction that will be made by taxation. But none of this affects the total divisible product, and there is little reason to think that the existing distribution of income among individuals, or the existing rates of remuneration for capital, land, management, services or labour will be permanent. Economic forces will produce effects which cannot be forecasted.

In spite of the fact that so much is unknown, it is none the less possible to point to some general conclusions as to the possibility of increasing the total that wage-earners can draw from the value of the goods they help to produce.

The first idea of a workman, who realized that in his industry profits and salaries were already as low as possible, while his own earnings were unsatisfactory, would naturally

be that the price of the product should be raised till all concerned in the output had a 'living wage'; and the first and most obvious criticisms would be (1) that while this can be done in a single industry it would result in a smaller sale of the product and less employment¹ in that industry, unless there were compensating factors, and (2) that if wages generally were raised from the proceeds of higher prices, then all prices would be higher and the purchasing power of the new wage would be no greater than that of the old. So far as the members of the working-class are working for one another—*A* bakes bread, *B* hews coal, *C* mends boots and *A*, *B*, *C* exchange (through the medium of money) with each other—it is obviously true that a uniform rise of prices benefits no one, while a rise in one industry is at the expense of another. Thus unskilled wages could be raised at the expense of skilled workmen, coal-miners' wages at the expense of all other workmen, and so on, but a general rise would be nugatory. But so far as the poorer sections of the population are providing commodities for the richer the criticism is not valid. If I pay my gardener more, he has more purchasing power and I have less; he can buy more beer and I can buy less whisky, and when a shifting of production has taken place from the distillers to the brewers the immediate effects of the change are over, and till I produce something the gardener wants and raise the price of it I have no compensation. It is true that I can reduce my expenditure on gardening, but that will not help me if the whole working-class takes similar steps and the prices of all commodities are raised.

If we take no other factors into consideration the question is simply to what extent the working-class are producing for each other, and to what extent they are producing for

¹ A request for a higher week's wage and such shortening of hours that the same numbers are employed for the diminished output, i.e. more money for fewer things, not more money per thing, can only be satisfied if the demand is inelastic and there is no substitute or alternative supply and prices can be raised greatly, and if other workmen can be kept out of the industry, in those cases where profits and salaries are already at a minimum.

other groups the prices of whose services or the rent for the use of whose property can be supposed not to rise. The target open to attack by this method is the same as by the method of taxation or appropriation ; but a policy of raising prices, even if it is not checked by economic factors as it would have been before government control, results in very great inconvenience during the considerable period that must elapse before a new equilibrium is attained ; in each trade where the price of the product is raised there is a smaller sale and consequent diminution of employment, and to every group that purchases the dearer articles there is a loss till they also can raise their wages. After all the inconvenience, the only possible benefit is that one miscellaneous group of persons, some of whom have large and others moderate or small incomes, will have smaller real incomes, and another miscellaneous group, some of whom have moderate and others small incomes, will have increased real incomes ; those now very rich will still be much better off than people of moderate means, and the unskilled workman and work-woman will still be poor as compared with the highly paid man. The 'error of distribution' will remain, though slightly modified.

Another method of raising wages is at the sacrifice of the upkeep and development of the buildings, plant, and machinery necessary for future production, as has to some extent been the case during the war ; but this course is evidently suicidal. Similarly an attack can be made on the remuneration of capital with the effect of checking its supply. Possibly the rate of interest might be forced down a little from whatever level it attains, but the attempt might have dangerous results. The question of the amount of interest that ought to be paid is quite distinct from the question of the ownership of capital. The ownership can be affected by a capital levy or alteration in the laws of inheritance or by increased death duties or by confiscation, but still some payment would have to be made for the use of capital as argued above (p. 39).

Wages can be raised temporarily by legislation or by the

shock tactics of special groups of men whose services for the moment are essential. But no individual or company can be forced to employ people at a loss, and there is evident danger of unemployment on a large scale if workmen put too high a value on their services. It has been shown above that, unless new income is created, there is no fund from which unemployment on a large scale can be subsidized; and there is little reason to think that the State could furnish productive work at the higher wages without a loss when competitive employers failed to do so.

There remains the one hopeful way by increasing production, care being taken that the increased product is well distributed. This will not come suddenly nor by act of Parliament, but there are great possibilities in certain directions. Capital can be better applied to production, as has been shown during the war, and it is probable that an effective demand for higher wages would force its better and more economical use; but it must be remembered that skill of management is limited, and the best results cannot be universally obtained. At the same time, on the side of labour there must be no waste of productive power, but plant and machinery must be put to their maximum use. Greater encouragement of skill, more facilities for promotion from unskilled work to skilled, better education, and an improved physique which may result from higher wages, more leisure and better environment, together with full opportunity for the use of all intelligence, strength and skill, irrespective of sex, and without undue insistence on pedantic rules as to previous training, would result in a much fuller use of the latent abilities of the race than has hitherto been possible. Long hours and excessive exertion on the other hand militate against production, and to prevent these is one of the tasks of those who organize labour. These improvements, however, will need time, skill, and patience, and they have not yet taken place. There is a great risk of disappointment and failure, if there is an attempt to grasp the fruits of progress before the tree that might produce them has been cultivated.

This analysis has failed in part of its purpose, if it has not shown that the problem of securing the wages, which people rather optimistically believe to be immediately and permanently possible, is to a great extent independent of the question of national or individual ownership, unless it is seriously believed that production would increase greatly if the State were sole employer. The wealth of the country, however divided, was insufficient before the war for a general high standard; there is nothing as yet to show that it will be greater in the future. Hence the most important task—more important immediately than the improvement of the division of the product—incumbent on employers and workmen alike, is to increase the national product, and that without sacrificing leisure and the amenities of life.

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APPENDIX

In the Report on the Census of Production (Cd. 6320, pp. 21-34) the National Income is estimated by adding up the values of goods produced, services and net imports. The following table shows the various items, which are admittedly only approximate. It is comparable with Table IV above in some respects, but there are differences in classification and in date, and income from abroad is excluded from Table IV.

INCOME, 1907	£ millions
Gross output of industry, mining, and agriculture, excluding duplicates, but including imported materials to value of £380 millions.	1370
Carriage, merchandising and retailing of home-goods	430
Duties on home-goods	50
Imports ready for consumption, valued at ports	220
Duties on carriage, merchandising and retailing of imports	140
	<u>2210</u>
Subtract exports	465
Total value to purchasers of material goods available for consumption, maintenance of capital or saving	1745
Subtract maintenance of plant, &c. (£175 millions) and of consumers' stock (£15 millions)	190
Remainder, available for consumption or saving	1555
Add value of personal services and occupation of houses	375
Add new investments abroad	100
* Total income	<u><u>2030</u></u>

APPENDIX

CONSUMPTION AND SAVING, 1907		£ millions
Personal consumption: material goods		1325
Services and houses		375
		<hr/> 1700
Additions to capital and stock at home		230
Additions to investments abroad		100
	Total	<hr/> <u>2030</u>

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