

THE  
BURDEN OF BRITISH  
TAXATION

BY

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AND

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## INTRODUCTION

The present enquiry has been undertaken at the request of the National Institute of Economic and Social Research and under the auspices of that body. Its object, expressed in simple terms, is to estimate how much was paid in taxation, in 1937-38 and in 1941-42, out of each of a range of different incomes. So far as income tax and surtax are concerned, such a calculation presents few difficulties. But for all other taxes, a number of complicated and difficult calculations and estimates are necessary, as the following pages will indicate. These difficulties presumably explain why the calculation has been so infrequently attempted. The pioneer estimate was that contained in the Presidential Address of Sir Herbert (now Lord) Samuel to the Royal Statistical Society in 1919; the most authoritative calculation is that contained in the *Report of the Committee on National Debt and Taxation*, usually known as the Colwyn Committee, in 1927. Since that date, great changes have taken place in the burden of taxation. In particular, the outbreak of war has entirely transformed the scale of taxation; a much larger fraction of the national income now passes through the Exchequer than ever before. To state that fraction accurately would involve a discussion of the basis of estimates of the national income. But without any pretence to precise accuracy, it can be said that, while in 1913-14 only some 6 to 8 per cent of the net national income was raised in national taxation, and in 1925-26 (the last year to which the Colwyn Committee's calculations refer) some 17 to 19 per cent, by 1941-42 the revenue of the Exchequer alone (that is, excluding not only local rates but also a number of compulsory levies which do not flow into the Exchequer) may well prove to have been about 30 per cent of the net national income.<sup>1</sup> In these circumstances, the necessity for ascertaining the burden of taxation on different incomes, as a preliminary to forming a judgment on the equity of the existing system of taxes, is redoubled.

<sup>1</sup> Since the above was written, the appearance of the official estimates of the net national income (in the White Paper entitled 'An Analysis of the Sources of War Finance and an Estimate of the National Income and Expenditure, in 1938, 1940 and 1941') has revealed that the ordinary tax revenue of the Exchequer in 1941-42 amounted to 30.96 per cent of the net national income in the calendar year 1941. Government expenditure, expressed as a percentage of the national income, was much larger.

The primary object of this enquiry was, therefore, to bring up to date the estimates of previous enquiries. It has proved possible, however, in some particulars, to enlarge on the previous methods and to present a more comprehensive picture of the burden of taxation than has been done before. The picture is not yet, however, quite complete; it covers at least three-quarters of the levies that the community imposes on its members, but we have not been able to allocate the remainder to the incomes that bear it. The most important of the omissions, and the one that it should be possible to remedy with the greatest approach to accuracy, is the burden of local rates. But this awaits a considerable volume of preliminary research which we have not been able to undertake.

The assumptions on which the calculations have been based, and the limitations to which the results are subject, are fully set out in subsequent chapters. Two cautions should, however, be mentioned at the outset and borne in mind throughout the book. *The first is that the estimates relate solely to the burden placed on the citizen by the finances of the State; they take no notice of the advantage he derives. Before any judgments in equity are entered, both sides must be considered.*

The second caveat relates to the accuracy of the figures. The burden of income tax and surtax can be assessed with tolerable precision—though, even here, there are more qualifications than might appear at first sight. The burden on any particular income of every other tax can be assessed only with the aid of certain assumptions and approximations, and the results, accordingly, are subject to a greater or less margin of error. *Although the results are printed with an air of precision it must be very clearly understood that all of them are approximate. They are not exact figures, but more or less close indications of the orders of magnitude involved.*

The Report is divided into two parts. The first deals with the definitions and the main assumptions underlying the Report and summarizes the results obtained. The tables and charts at the end of Part I, on pp. 38–70, contain the detailed results. Part II consists of twelve chapters on the individual taxes. The methods of calculation are there set out in great detail.

Although we accept full responsibility for the results, it is only fair to state that we have received the greatest assistance and advice from various Government Departments, notably the Treasury, the Board of Inland Revenue, the Board of Customs and Excise, the Ministry of Labour and National Service, the Ministry of

Health, the Board of Trade, the General Post Office, the Ministry of War Transport, the Petroleum Department, the Ministry of Food and other Departments. We have had great assistance from Chambers of Commerce and from unofficial persons of all classes. Without this expert assistance, the results in this Report would have been incomplete.

There remains the duty of personal acknowledgments. Apart from the many eminent Civil Servants who are covered by the anonymity of their Service, we wish to place on record the debt of gratitude that is due to Mr Henry Clay, Chairman of the Council of the National Institute of Economic and Social Research, to Mr Geoffrey Crowther, Chairman of the Special Committee of the Institute appointed for this enquiry, to Professor J. R. Hicks and Mr Nicholas Kaldor, members of the Committee, and to Mrs F. S. Stone, Acting Secretary of the Institute. Thanks are also due to the officers of a number of Chambers of Commerce, Trade Associations and private firms, and to many non-official experts. Members of the Department of Economics, University College, Exeter, including Mr J. Sebag Montefiore, M.A., Miss Margaret Roger, B.Sc., and Miss V. A. Clark have, during the enquiry, served its interests with conspicuous efficiency and a zeal particularly their own.

## PART I

### CHAPTER I. *THE BASIS OF THE ESTIMATES: DEFINITIONS AND ASSUMPTIONS*

1. The first necessity is to define what is meant by a tax. A tax is sometimes narrowly defined as a compulsory contribution to Public Authorities to meet the expenses of Government which have been incurred for the general good; so defined, it excludes contributions, however compulsory, which are made in return for, or in the expectation of, specific benefits. It can, however, be more broadly defined as a compulsory contribution to public funds regardless of the presence or absence of a specific *quid pro quo*. By this definition compulsory contributions in connection with the social services are regarded as taxes. The same difficulty arises with regard to fees charged for special services which people are compelled to accept, whether they will or not—especially when the fees are more than the cost of the service rendered or where the possible service rendered is absent. The motor licence duties are an example. These duties have become a fruitful tax paid by a group of people who benefit by a certain type of governmental activity, the upkeep of roads; but the yield of the duties has for many years been much greater than expenditure on the roads. When fees shade in this manner into taxation, it is difficult to distinguish them clearly from taxes. Similarly, Post Office net revenue—that is, what remains after paying for the cost of running the Department—should properly be regarded as taxation. *For the purposes of this enquiry, the most logical and convenient course seemed to be to include any compulsory contribution to public funds, raised from the public, as a tax.*

2. The next problem is that of incidence. A tax may not be borne by those who pay it in the first instance. The beer duty, for example, is paid by the brewers, but it is passed on by them, in whole or in greater part, to the drinkers of beer. In other cases, the process of 'shifting' is more difficult to analyse, and a considerable part of the science of public finance is concerned with discussions of the incidence of taxation. The effects of taxes may

reach even further than their incidence; an increased duty on beer might conceivably lead to reduced expenditure on bread. Thus, in this case, the tax would be collected from *A*, the brewer; its incidence would be on *B*, the beer drinker; and its effects would fall on *C*, *D* and *E*, the baker, the miller and the farmer. In this enquiry, the Gordian knot of these complications has been cut. *It has been assumed that the burden of taxation is borne as it is intended to be.* The direct taxes, such as income tax, surtax and employees' social insurance contributions, are assumed to be borne by the payer. The indirect taxes, such as those on the consumption of sugar, tea, tobacco and alcoholic drinks, are assumed to be shifted by the payer and borne by the consumer. In the case of death duties the incidence is assumed to fall on the estate, in the manner explained in Chapter vi. Protective customs duties are assumed to be paid by the consumer and not by the 'foreigner'. Taxes falling on production in general, such as the duty on industrial petrol and employers' social insurance contributions, are taken to be shifted on to the consumer. Taxes on business profits are assumed to be a burden on the income of those who own business capital (although, as will be seen, it has not been found practicable to allocate these taxes to specific incomes).

3. This interpretation of incidence settles, for the purposes of this Report, the question of which taxes should be regarded as direct taxes and which should be regarded as indirect taxes. The former include income tax and surtax, death duties, employees' social insurance contributions, and also the taxes on profits. They are largely, though not entirely, identical with the Inland Revenue duties. Indirect taxes include practically the whole field of Customs and Excise duties, the motor vehicle duties, Post Office net revenue, employers' social insurance contributions, the greater part of the stamp duties and rates (which it has also proved impossible to allocate). *In this Report, 'gross income' means income before any taxes are paid. 'Spensible income' means income after the payment of direct taxes (including provision for death duties). 'Net income' or 'free income' means income remaining after paying all taxes.*<sup>1</sup>

4. British income-tax law differentiates between earned income and unearned, or investment, income. In this enquiry, the burden

<sup>1</sup> An exception is made in Chapter vi (death duties), where net income is used in the sense of gross income minus direct taxes.

of taxation on the two extreme cases, fully earned and fully investment income, has been calculated. Previous enquiries, including that of the Colwyn Committee, have also given calculations for half-earned and half-investment income. But this category has no more basis in reality than the two extreme cases, and as the adjustments, which relate only to income tax and death duties, are easily made, the halfway category has been dropped in this Report. The actual distribution of incomes shows that in the lower ranges a very large proportion of the total is earned income. For example, in 1937-38 over 90 per cent of the total of incomes in the £200-£250 range was earned income. The percentage of the whole represented by earned income decreases somewhat rapidly as the range of incomes rises. At £500-£600 it is 73 per cent. At £1,000-£1,500, 57 per cent, and at £2,000-£2,500, just above the surtax level, it is under 50 per cent. Over £50,000 less than 20 per cent of the total amount of incomes is earned income. It is thus possible to work out the average proportion of earned and unearned income within each range of total incomes, and Table 13 on p. 57 shows the tax burden for the year 1937-38 on these 'average' or 'representative' incomes.

5. The family in this enquiry is the tax-paying family and not the social family or household. The distinction would be very simple if it could be said that the tax-paying family consists of the people who are dependent on a single income, while the social family may include several incomes if more than one member of it is earning or has an investment income. This is, in fact, the broad distinction; but it is complicated by wives' incomes. In income-tax law, the incomes of husband and wife are aggregated and treated as a single income; a tax-paying family may thus include two incomes, but only if the owners of those two incomes are married to each other. Children are not included in a tax-paying family unless they are under 16 years of age or have no, or very insignificant, independent incomes. A husband and wife, both working, with two earning children and two dependent children are six persons, four earners and three tax-paying families, but often only one social family or one household. The difference is made very clear by comparing the structure of the tax-paying family of, say, four members (the type used in the present enquiry) with the structure of the average working-class family, as ascer-

THE BASIS OF THE ESTIMATES

tained by the recent Family Budget Enquiry of the Ministry of Labour relating to industrial households.<sup>1</sup> The figures are as follows:

	Tax-paying family of four members	Average actual social family
Average number of persons per household	4	3.77
Children under 14 years	2 <sup>1</sup>	0.99
Males 14 and under 18 years		0.15
Females 14 and under 18 years		0.16
Males 18 years and over	1	1.22
Females 18 years and over	1	1.25
Average number of wage or salary earners per household	1 <sup>2</sup>	1.75

<sup>1</sup> Under 16, or without independent income.

<sup>2</sup> Or 2, provided the second is the wife or husband of the first.

It may be noted that the total burden of taxation has been calculated in this enquiry on a tax-paying family of four (namely, husband, wife and two children), while previous calculations referred to a tax-paying family of five (husband, wife and three dependent children). The new basis has been necessary because of the fall in recent years in the size of the social family—and, therefore, presumably in the size of the tax-paying family. Indeed, a family of four is still above the average, as the Census of 1931 showed the size of the social family to be 3.78 and it has been estimated for 1941 at 3.52. The percentage distribution of families according to their size was estimated for 1937 from the Census of 1931 as follows:<sup>2</sup>

Size of family (number of persons)	Percentage of all families	Size of family (number of persons)	Percentage of all families
1	7.1	5	12.1
2	22.7	6-7	10.5
3	24.8	8 or more	3.2
4	19.6		<u>100.0</u>

The Family Budget Enquiry of the Ministry of Labour relating to industrial households shows an average of 3.77 persons per household for 1937-38. Another survey of family budgets of persons working in offices shows an average of 3.45 persons per household for 1938-39. It is unlikely, however, that the size of tax-paying families varies greatly in relation to income. It is more likely at

<sup>1</sup> *Ministry of Labour Gazette*, December 1940, pp. 300-5.

<sup>2</sup> *The Home Market* (George Allen & Unwin Ltd., London, 1939), p. 59.



the lower than at the upper end of the scale that the social family includes more than one tax-paying family.

In order to take account of the great variations in the size of family, the burden of some of the taxes—those which may be classified as unavoidable—has been calculated for five sizes of tax-paying families. When the burden of the taxes on these tax-paying families has been arrived at it is not difficult to estimate the burden on social families of the same size. Thus a social family of six (father, mother and four children), where the father earns £200 a year and two of the children earn £100 a year each, bears a burden equal to that of one tax-paying family of four persons and two tax-paying families of one person each. This involves the assumption that the consumption of tea and sugar (the duties on which are regarded as unavoidable taxes) does not change when two or more tax-paying families are amalgamated into one household. The assumption is arbitrary; but the resulting error is almost negligibly small. It is not possible to estimate to what extent the burden of the avoidable taxes—of which the largest are those on tobacco and alcohol—varies between different-sized families of the same income for the reason that consumption depends as much on the taste of the consumer as on the number of persons in the family. It is probably true that the fathers of large families smoke and drink less than single men, but it is impossible to estimate, and difficult even to guess, how much less.

6. Income in this Report refers in every case to the statutory income as computed for income-tax purposes (except that in Chapter VII the corresponding burdens are also shown for imputed incomes). The levels chosen are roughly identical with those of the Colwyn Committee, viz. £100, £150, £200, £250, £300, £350, £500, £1,000, £2,000, £2,500, £5,000, £10,000, £20,000 and £50,000. As compared with the Colwyn Committee's figures, more middle-class income levels were taken and a few higher incomes have been added up to £50,000. The number of incomes over this level (£50,000) in the year 1937-38 was only 416. The lower limit of £100 does not cover all the wage-earning families, nor does it cover the considerable number of families living on Unemployment Benefits, Public Assistance, Old Age Pensions, and having less than £100 per annum.

The distribution of families into income grades is of some interest in interpreting the results of this enquiry. The following

table shows an estimate of the distribution and refers to the year 1937:<sup>1</sup>

Income of the chief earner of the family	Estimated percentage in each income group
Less than £130 (£2. 10s. a week)	35.7
Less than £208 (£4 a week) but more than £130	37.8
Less than £520 (£10 a week) but more than £208	21.3
£520 and more	5.2

In the absence of authoritative and more detailed estimates of the number of families in each income group, it is not possible to allocate the total yield of taxation among different income groups—that is, to say how many million pounds are raised from families of a given income level.

#### *Limitations of the Calculations.*

7. We now turn to the limitations of the calculations. Those which apply to individual taxes or groups of taxes are set out in the relevant chapters of Part II and, in some cases, summarized in Chapter II. There are, however, some of more general character which should be mentioned here. The first of these is the simplified interpretation of incidence. It does not seem probable that any significant error is involved in the calculations by this procedure. It is, however, necessary to enter a caveat in this connection.

8. In the second place, it is necessary to emphasize clearly the assumptions made in the calculation of the burden of dutiable goods and services. There is no difficulty in calculating the burden of the direct taxes, but when it comes to the burden of indirect taxes, this depends on the amount of dutiable goods and services used, and the duty paid on them. This information is not available and can only be estimated by the methods explained in Part II of this Report. With the assistance of family budgets a fairly reliable estimate can be made of the consumption of essentials, such as tea and sugar, and the duties payable on them are not difficult to calculate. It is when we come to the estimates of non-essentials, such as tobacco and alcoholic drinks, and the duties payable on them that the estimates have to be based on several assumptions. In calculating the consumption of tea and sugar use was made of all the Family Budget Surveys available and, fortunately, there have been, in recent years, several Surveys of this nature. A list of these

<sup>1</sup> *The Home Market* (George Allen & Unwin Ltd., London, 1939), p. 65.

is given on pp. 104-5<sup>1</sup>. For tobacco, the results of a detailed enquiry into smoking habits were used and non-official expert opinion was available. In the case of alcoholic drinks, there is very little information available and the estimates are, therefore, somewhat less reliable than the others. Nevertheless, we had official and non-official assistance at every stage. Moreover, in addition to family budgets and other information available, there were data on total national consumption and total national yield. These were taken into account in the distribution of the tax burden among the different classes of the people.

In some cases it has been thought to be unrealistic to attempt to make an estimate for each income in the range, and the estimates have been confined to three: for lower income groups, middle income groups and higher income groups. The allocation of specific incomes to these groups is not easy, owing to the overlapping between the higher strata of the working classes and the lower strata of the middle classes. War-time conditions push these limits upwards and an income of £300 could be put into the lower income group, while an income of £350 could probably be put into the middle income group. Similarly, it is not possible to define clearly the boundary between the middle and higher income groups, but this is probably around £1,000, although in all calculations the boundaries have not been interpreted rigidly. There is a further difficulty in taking the figures for the burden at different income levels as representative of all incomes on that level. The tax burden will differ from family to family at the same level of income, not only on account of the size and composition and social grade of the family, but also on account of the place of residence and the occupation of the earning members. Differences, for example, in the consumption of tea, sugar and alcoholic drinks by industrial and agricultural households are pointed out in the appropriate chapters. The results are, on the whole, more representative for the industrial and urban population than for the remainder of the community.

9. A third limitation of our estimates is that the value of the benefits of public expenditure has not been deducted from the figures showing the burden. The tax burden is strongly influenced by the character of public expenditure. Some public expenditure benefits

<sup>1</sup> Vide also footnote on p. 208.

all classes alike, such as expenditure on defence and on administration. On the other hand, other expenditure may benefit certain social groups or classes, the most obvious example being the amount spent on social services. In order to give a complete picture of the effect of public finance on individual incomes, the estimates of this Report would have to be complemented by a similar calculation of the benefits conferred on different income groups—an undertaking that would raise a number of theoretical and practical difficulties.

10. The fourth limitation of the figures is that the taxes whose burden has been allocated among the various incomes do not cover the whole field. For 1937-38 nine-tenths of the revenue of the Exchequer is covered, and for 1941-42 four-fifths. Taking all compulsory contributions into consideration—and not only revenue of the Exchequer—the field covered by the present enquiry amounts to 82 per cent of all compulsory contributions for 1937-38 and nearly 70 per cent for 1941-42. The most important items that have been excluded from the present enquiry are the taxes on business profits and rates on dwelling-houses. Further reference is made to this in Chapter II.

11. In interpreting our results, it should be noted that we measure the money burden only and not the real burden. In other words, the calculations show the proportion of the money income taken in taxation at different income levels in the selected years. No allowance is made for changes in the income of different social classes from one period to another. It might happen that the proportion taken from incomes in all levels increased from one period to the other, but if incomes at the same time increased to an even greater extent, the income left after taxation at the disposal of the same families, or individuals, would be greater, in spite of the increase in the money burden of taxation. A calculation of changes over time in the real burden of taxation would thus have to take into account the changing structure of incomes. There is also the familiar point that it is impossible to evaluate the real sacrifice of different social classes or of different individuals in the same social classes, or of the same individual at different times, solely in terms of sums of money.

12. Another factor of importance arises out of the assumption which has necessarily been made that the monetary burden of a

tax is equal to the sum of money collected. In the case of indirect taxes this may not be true. It may not be possible accurately to translate a change in duty into a change in retail price, and the purchaser may sometimes pay more than is collected in duty. A similar point arises when the imposition of a protective duty permits an increase in the price charged not merely on the quantity imported but also on the quantity made at home. In addition to the sum which comes into the Exchequer, a further sum is, in effect, being compulsorily levied by the State from the consumer and handed over to the domestic producer. No allowance for these points has been, or could well have been, made.<sup>1</sup> Another reason why indirect taxation may be more burdensome in proportion to its yield than direct taxation is that it may lead to a diversion of expenditure on goods and services (or on savings) from the channels giving the greatest real satisfaction, thereby causing an extra loss.

13. Error may also creep in through the assumption that the tax liabilities for any particular year are payable and are actually paid in that year. The fact that in many cases they are not may involve the tax-payer in either a greater or a smaller burden, both in the case of direct and indirect taxation. Statutory income as computed for income-tax purposes is not always a measure of the actual income for the year. For purposes of this enquiry, however, a correspondence is assumed in order that there may be a common income to which indirect taxes, as well as direct taxes, may be referred. In the case of indirect taxes a burden of similar character, loss of interest, arises from changes in the amount of stocks held of dutiable commodities. The trader who holds a greater quantity of dutiable commodities than is sold in the same year incurs some loss of interest between the stock-taking and the selling of goods. This loss, in all probability, will be shifted on to the consumer in higher prices. The whole problem becomes more important in the case of heavy fluctuations in the prices of goods. In the case of direct taxes, violent changes in prices take place when the money burden of the taxes assessed in a previous period and collected in a later period is in no relation to the real burden. A tax which is collected promptly is, on the whole, more burdensome in the case of rising prices than one which allows by law or administrative measures for the postponement of payment.

<sup>1</sup> A partial exception was made in the case of sugar. See Chapter VIII.

In normal years changes in the money burden are a fairly reliable guide to changes in the real burden. Under war-time conditions some additional aspects have to be taken into account. In order to compare the real burden in 1937-38 with that in 1941-42, apart from increases in taxation, the additional effect of rationing, of increased prices and of the increase in earnings has to be taken into account. The fact that certain goods are rationed, such as sugar, tea and petrol, at the present time, reduces the burden of the corresponding taxes and leads further to a new extra loss in real income by changing the most preferred channels of spending. These factors, together with the increase in the cost of living, are mitigated by increases in wages and salaries.

## CHAPTER II. THE TAX STRUCTURE

### I. *The Net Receipts of the Exchequer from Taxation.*

The main changes in the British tax structure during recent years are set out in the following table, which shows the total net receipts of the Exchequer from ordinary revenue.

TABLE I. NET RECEIPTS OF THE EXCHEQUER FROM ORDINARY REVENUE  
(United Kingdom)

	1913-14	1925-26	1937-38	1940-41	1941-42
	£ mill.	£ mill.	£ mill.	£ mill.	£ mill.
1. Income tax	43·9	259·4	297·9	523·9	769·7
Supertax and/or surtax	3·3	68·5	57·1	76·1	74·9
Death duties	27·4	61·2	89·0	80·8	90·9
Stamp duties	10·0	24·7	24·2	13·7	14·1
N.D.C. and E.P.T.	—	—	1·4	96·2	269·0
Corporation profit tax	—	11·7	—	—	—
Inhabited house duty	2·0	—	—	—	—
Other Inland Revenue duties <sup>2</sup>	1·4	2·9	1·7	1·0	0·9
<b>TOTAL Inland Revenue duties</b>	<b>88·0</b>	<b>428·4</b>	<b>471·3</b>	<b>791·7</b>	<b>1,219·5</b>
2. Tea	6·5	5·8	7·3	13·4	12·9
Sugar, etc.	3·3	19·4	11·9	31·5	31·3
Other food	1·1	1·5	1·8	2·8	4·3
Alcoholic drinks <sup>3</sup>	43·3	140·5	111·8	198·5	220·9
Tobacco	18·2	53·5	82·8	172·6	221·1
Entertainments duty	—	5·7	8·0	9·0	16·0
Duty on matches	—	3·3	4·4	6·0	5·5
Oil <sup>4</sup>	0·8	—	50·2	47·2	54·4
Protective duties <sup>5</sup>	—	4·3	55·6	23·0	38·0
Purchase tax	—	—	—	26·2	98·5
Other Customs and Excise	1·8	4·0	1·8	1·7	0·8
<b>TOTAL Customs and Excise</b>	<b>75·0</b>	<b>238·0</b>	<b>335·6<sup>6</sup></b>	<b>531·9<sup>7</sup></b>	<b>703·7<sup>8</sup></b>
3. Motor vehicle duties	1·0	18·1	34·6	38·0	38·4
<b>TOTAL TAXATION</b>	<b>164·0</b>	<b>684·5</b>	<b>841·5</b>	<b>1,361·6</b>	<b>1,961·6</b>
P.O. net revenue	6·2	3·4	11·3	15·3	13·7
Crown lands	0·5	1·0	1·3	1·1	1·0
Receipts from sundry loans	1·6	14·9	5·2	2·6	5·2
Miscellaneous	2·3	54·3	13·5	31·1	92·2
<b>TOTAL ORDINARY REVENUE</b>	<b>174·6</b>	<b>758·1</b>	<b>872·8</b>	<b>1,411·7<sup>7</sup></b>	<b>2,073·7<sup>8</sup></b>

For Source and Notes see Table 2.

The next table shows the net receipts of the Exchequer from individual taxes as percentages of the total tax receipts.

TABLE 2. NET RECEIPTS OF THE EXCHEQUER FROM TAXATION.  
IN PERCENTAGE OF TOTAL RECEIPTS  
(United Kingdom)

	1913-14	1925-26	1937-38	1940-41 (Prov.)	1941-42 (Prov.)
1. Income tax	26.8	37.9	35.6	38.4	39.2
Supertax and/or surtax	2.0	10.0	6.7	5.6	3.8
Death duties	16.7	8.9	10.5	5.9	4.6
Stamp duties	6.1	3.6	2.8	1.0	0.7
N.D.C. and E.P.T.	—	—	0.2	7.1	13.7
Corporation profit tax	—	1.7	—	—	—
Inhabited house duty	1.2	—	—	—	—
Other Inland Revenue duties	0.9	0.4	0.2	0.1	0.1
<b>TOTAL Inland Revenue duties</b>	<b>53.7</b>	<b>62.6</b>	<b>56.0</b>	<b>58.1</b>	<b>62.1</b>
2. Tea	4.0	0.8	0.9	1.0	0.7
Sugar, etc.	2.0	2.8	1.5	2.3	1.6
Other food	0.7	0.2	0.2	0.2	0.2
Alcoholic drinks <sup>3</sup>	26.4	20.5	13.3	14.6	11.3
Tobacco	11.1	7.8	9.8	12.7	11.3
Entertainments duty	—	0.8	0.9	0.7	0.8
Duty on matches	—	0.5	0.5	0.4	0.3
Oil <sup>4</sup>	0.5	—	6.0	3.5	2.8
Protective duties <sup>5</sup>	—	0.6	6.6	1.7	1.9
Purchase tax	—	—	—	1.9	5.0
Other Customs and Excise	1.0	0.6	0.2	0.1	—
<b>TOTAL Customs and Excise</b>	<b>45.7</b>	<b>34.8</b>	<b>39.9</b>	<b>39.1</b>	<b>35.9</b>
3. Motor vehicle duties	0.6	2.6	4.1	2.8	2.0
<b>TOTAL TAXATION</b>	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>

Source. (*Statistical Abstracts for the United Kingdom, 1924-37* (London, 1939), Table 147, etc. *Financial Statement, 1941-42, and 1942-43.*)

<sup>1</sup> The yield was insignificant.

<sup>2</sup> Including for 1913-14 and 1925-26 land tax and land value duties (for 1925-26 also arrears of E.P.D.), for other years small arrears and land tax.

<sup>3</sup> Spirits, beer, wine, British wine (for the three latter periods) and liquor licences.

<sup>4</sup> For 1913-14 motor spirits duty.

<sup>5</sup> For 1925-26 silk and artificial silk duties and McKenna duties, for the three latter periods silk and artificial silk duties, key industry duties, duties under the Import Duties Act 1932 (including the old McKenna duties), Ottawa duties, duties on imported beef and veal and on goods from Eire.

<sup>6</sup> Actual receipts; payments into Exchequer were £335.3 millions.

<sup>7</sup> Actual receipts; payments into Exchequer were less by £2.9 millions.

<sup>8</sup> Payments into Exchequer were more by £0.4 million.

These two tables show a considerable measure of stability in the sixteen years between 1925-26 and 1941-42 in regard to the nature of the taxes. The importance of Inland Revenue duties, com-





prising the main direct taxes, is unchanged on balance. Their yield contributes nearly two-thirds of total revenue, while Customs and Excise duties, comprising the main indirect taxes, bring in rather less than two-fifths. This change is mainly due to the greater scope of the income tax and the increased severity of the rates at which it is levied. } Almost half the tax revenue is now derived from income tax and surtax, while the relative importance of death duties has decreased. } Changes in the structure of revenue from Customs and Excise duties have been noticeable. In 1913-14 more than 95 per cent of the total under this head came from the four traditional duties on tea, sugar, tobacco and alcoholic drinks. Recently these duties, though still the mainstay, have brought in roughly two-thirds only of the Customs and Excise revenue. The yield of the tobacco duty has in recent years been growing faster than that of the duties on alcoholic drinks. The duties on sugar and tea are now of small importance in the tax structure, although with the increase in the consumption of sugar the absolute yield of the sugar duties has much increased. The entertainments duty, introduced in the last war, is a small but stable source of revenue. In the recent past the protective duties have also been of some fiscal importance; for example, in 1937-38 their yield was almost as much as the yield of surtax. Owing to the great development in the use of motor cars, the duties on oil have become a prolific source of revenue. Motor taxation, including the motor vehicle duties, are now bringing in rather more money than the death duties.

{ Two war-time taxes, the Excess Profits Tax (combined with the National Defence Contribution) and the Purchase Tax, yielded, in 1941-42, 13·7 per cent and 5 per cent respectively of the total war revenue. Their contribution to the revenue is thus quite considerable, although the British tax system, even in war-time, relies to an overwhelming degree upon the established taxes. It is to be noted that the indirect duties on tea, sugar, tobacco and alcoholic drinks have been less sensitive to war-time changes, in spite of tea and sugar rationing, than the newer taxes, namely motor taxation and protective duties.

Excluding taxation proper, other ordinary revenue of the Exchequer is still insignificant. Apart from Post Office net revenue, which for our present purposes is regarded as tax, these other items have been ignored in this Report. They include such items as sundry loans (namely, receipts on account of Suez Canal and

Anglo-Iranian shares held by the Government), the contribution to the Exchequer of the Post Office Savings Bank and the Mint, Departmental receipts, Conscience Money, Free Gifts, Small Capital receipts and, for a few years, Reparations. For 1941-42 miscellaneous revenue includes an amount in respect of War Damage contributions and premiums equal to the expenditure on War Damage during the year. The balance of the receipts under this head was paid into the Exchequer outside the budget.<sup>1</sup>

The following table shows the net receipts of the Exchequer per head of population in 1913-14, in 1925-26 (the last year to which the Colwyn Committee's *Report* refers), the year 1937-38 (the pre-rearmament year), and 1941-42. The figures do not show, of course, the total tax burden, which includes local taxes and all other compulsory contributions.

*Exchequer Net Receipts from Taxation per head of Population in Selected Years*  
(United Kingdom)

	1913-14	1925-26	1937-38	1941-42 <sup>1</sup>
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
From direct taxation	1 16 0	9 0 0	9 12 0	25 2 0
From indirect taxation	1 16 0	6 2 0	8 4 0	15 15 0
From total taxation	3 12 0	15 2 0	17 16 0	40 17 0

<sup>1</sup> Based on estimated total population.

## II. *The Aggregate Burden of Taxation.*

In order to show the aggregate burden of taxation on the community a number of modifications—all but two of them additions—have to be made to the figures of the Exchequer's net receipts.

In the first place, the Exchequer's net receipts from taxation exclude the yield in Northern Ireland of those national taxes which are 'transferred' to the Northern Ireland Government (Estate Duties, Stamp Duties, Excise Licences Tax, Entertainments Duty, Motor Vehicle Duty). The yield of these taxes was some £2·2 millions in 1937-38, and was estimated at £1·8 millions for 1941-42. These sums should accordingly be added to the net receipts of the Imperial Exchequer.

In the second place, Post Office net receipts will, in this Report, be added to the taxes. For 1941-42 the figure given in the Exchequer returns has been adjusted; the main adjustment is in

<sup>1</sup> *Hansard*, 14 April 1942, p. 109.

order to cover the cost of services rendered by the General Post Office to other Departments. These services do not represent a direct money contribution to the Exchequer; nevertheless, their cost is part of the burden levied in the postal charges. Post Office net receipts amounted to £11·3 millions for 1937-38, and for 1941-42 are estimated at £14 millions, as will be seen in the chapter dealing with these receipts.

Thirdly, the receipts of local taxation are obviously a burden on the tax-paying community. Rates are the chief of these. They amounted to £197·9 millions in 1937-38 and to £216·1 millions (provisionally) in 1941-42 for Great Britain. In Northern Ireland rates brought in £2·4 millions in 1937-38 and are estimated at £2·7 millions for 1941-42. There are other items of small importance which have the character of taxes in the local taxation of England and Wales, namely licence duties which are of the order of £1·4 millions, and an unspecified amount of tolls, fees, etc. In Scotland, local tolls, dues and duties are of the order of £1·8 millions. No details are available for tolls, dues, etc. in Northern Ireland. There may be also an element of tax in the receipts of Public Trading Services (water, gas and electricity) in the United Kingdom. This, however, has not been included in the estimates.

Fourthly, we have included as taxation all compulsory contributions to public funds, including the social insurance contributions and contributions under the War Damage and similar Acts. Contributions, both of employers and employees, to the three social insurance schemes (including contributions to the agricultural and special unemployment schemes) amounted, approximately, in 1937-38 to £109 millions and for 1941-42 will probably be of the order of £120-£125 millions for the United Kingdom. The compulsory contributions under the War Damage Act in respect of buildings and other immovable property are (excluding public utility undertakings) estimated at £40 millions a year. As regards the business scheme for the insurance of movable assets of business undertakings, premiums which fall in the year 1941-42 (covering the period ending September 1941) are estimated to be of the order of £25 millions. Premiums paid under the compulsory Commodity and Marine War Risk Insurance Schemes amounted to £238·0 millions for the calendar year 1941.<sup>1</sup>

<sup>1</sup> Cmd. 6347, 1942. Table I (13), p. 9.

Fifthly, the State is subsidizing agriculture and industry and is, in many cases, doing this not from the public revenue drawn from ordinary taxes, but in the form of concealed special taxes. In cases where the subsidy takes the form of monopolistic price-fixing, it is impossible to trace the amount of subsidy involved and it is a matter of argument as to what part of the price can be regarded as tax. These cases have perforce to be neglected. In some cases, however, the amount of the tax, whether included in the Exchequer-returns or not, is clearly identifiable. In the case of sugar, the structure of the tax is such that the aggregate amount of duties paid by the consumer is considerably more than the amount received by the Exchequer, the difference benefiting the sugar producers at home and in the Empire. This can be estimated at, say, £8 millions for 1937-38 and in 1941-42 at something of the order of £10 millions. The levy on flour milling and the coal levies are taxes paid by the consumer. The former amounted to £1·7 millions in 1937-38 and the latter probably amounted to £3 or £4 millions in 1941-42.

Sixthly, for the year 1941-42 the yields of tea and sugar duties indicate larger aggregate clearances of these commodities in the year than the estimates of aggregate tea and sugar consumption, in all possible forms, would suggest. This may be due to a dispersal of stocks over the country, that is, to an increase in stocks and/or a replacement of stocks destroyed by fire.<sup>1</sup> The duties on the difference noted may have been paid by the trade or by the Ministry of Food; in neither case is there a burden on the tax-payer in the current year. Further, the yield of protective duties includes arrears from previous years, and the yield of the purchase tax includes approximately £8 millions arrears from the previous year.<sup>2</sup>

Lastly, part of the annual tax burden is paid by the Government on account of its consumption of dutiable commodities, such as petrol, or on its use of the services of industry. Industry can shift on to the shoulders of Government, through prices, a proportionate part of the taxes falling on production in general, and their deduction therefore is necessary to avoid double counting. In peacetime the amount to be deducted on this account is small, provided

<sup>1</sup> Although the Parliamentary Secretary of the Ministry of Food stated in the House of Commons in July 1941 that the amount of foodstuffs destroyed by enemy action was negligible.

<sup>2</sup> *Hansard*, 14th April, 1942, p. 109 and p. 130.

the part played by the Government in the sphere of economic activity is not great. At a time of heavy Government spending, especially in war, this amount increases considerably. In war-time, too, some deduction will be necessary on account of the protective duties, as a part of the goods liable to duty is directly used by the Government. Another item to be deducted in this connection is the duty on commodities such as tea and sugar supplied to the armed forces, or on such commodities as petrol, when used for Government purposes. A fourth item is that part of social insurance contributions paid by the Government as employer.

For the year 1937-38, when comparatively little was spent on

TABLE 3. TOTAL BURDEN OF TAXATION AND OTHER COMPULSORY CONTRIBUTIONS BORNE BY THE COMMUNITY<sup>1</sup>  
(United Kingdom)

	1913-14 £ mill.	1925-26 £ mill.	1937-38 £ mill.	1941-42 £ mill.
(1) Exchequer net receipts from taxation	164.0	684.5	841.5	1,940.0 <sup>2</sup>
(2) P.O. net revenue	6.2	3.4	11.3	14.0
(3) Sugar subsidy	—	—	8.0	10.0
(4) Wheat levy, coal levy, etc.	—	—	1.7	3.0
(5) Local taxation receipts (rates, etc.)	82.0	172.0	202.0	220.0
(6) Social insurance contributions	20.0 <sup>3</sup>	60.0 <sup>3</sup>	109.0	125.0
(7) War damage contributions	—	—	—	303.0 <sup>5</sup>
(8) Northern Ireland receipts from transferred taxes	—	1.3	2.2	1.8
(9) GROSS TOTAL BURDEN	272.2	921.2	1,175.7	2,616.8
(10) Deducted as paid by the Government	—4	—4	—4	135.0 <sup>6</sup>
(11) NET TOTAL BURDEN (Approx.)	272.0	921.0	1,176.0	2,482.0
(12) Approximate net burden per head of total population	£5. 19s.	£20. 8s.	£24. 16s.	£51. 14s.

<sup>1</sup> All figures estimated except net receipts of taxation, P.O. net revenue and the yield of wheat levy.

<sup>2</sup> Based on Exchequer returns adjusted according to paragraph 6 on p. 17.

<sup>3</sup> Approximate figures. Actual figures refer to insurance year or calendar year. The figures are not strictly comparable with those given for 1937-38 and 1941-42.

<sup>4</sup> Amount unknown; probably not large.

<sup>5</sup> This item includes the estimated compulsory contributions under the War Damage Act, payable in 1941-42: £40 million to the property scheme and £25 million to the business scheme. It also includes the premiums paid under the Commodity and Marine War Risk Insurance Schemes, the great bulk of which is compulsory. The latter item amounted to £238.0 millions for the calendar year 1941. (Cmd. 6347, 1942, p. 9.)

<sup>6</sup> Rough estimate.

public works, etc., the aggregate amount to be deducted may have been comparatively small. But in 1941-42 it may have amounted, at a rough estimate, to, say, £130 millions to £140 millions. The largest constituent item, something of the order of £100 millions on account of taxes on production in general, can be estimated on the basis of data given in the White Paper: *An Analysis of the Sources of War Finance and an Estimate of the National Income and Expenditure in 1938 and 1940.*<sup>1</sup>

When allowance has been made for all the changes suggested in the previous paragraphs, the preceding table shows the total burden of taxes of all sorts.

### III. *The Distribution of the Tax System according to Tax Categories.*

In order to show how the burden is distributed among different income groups, taxes have been divided into certain definite categories. The division is intended to show the varying character of the different parts of the burden falling on the community and on the individual tax-payer. Part of the tax burden is entirely or very nearly unavoidable; other taxes are levied on goods which are generally but not universally consumed; and some taxes fall on production in general, while others again are assessed on business profits and are a burden on a very small part of the community. The table on p. 20 sets out the details.

The first category in the table below includes all the personal direct taxes, such as income tax (after deduction of that part paid on undistributed profits), surtax, employees' social insurance contributions and rates on dwelling-houses. Death duties are placed, for convenience, in this category, but with the caveat that they are not necessarily a liability on current income and their burden can be shifted on to the successor if the predecessor so wishes. In the same category as income tax are included the duties paid on the consumption of sugar, tea and a few other essential commodities, namely wheat, coal, household matches, postal services, etc. Tea and sugar are commodities in universal consumption in this country and thus the burden of all taxes in category I should be regarded as unavoidable.

In category II are included all the duties paid on the consumption or use of non-essential or quasi non-essential goods or services,

<sup>1</sup> Cmd. 6261, 1941.

such as alcoholic drinks, tobacco, entertainments and private motoring. The consumption or use of these commodities or services is optional, being entirely dependent upon the choice of the individual. The variations from individual to individual or from family to family are, in the circumstances, considerable.

TABLE 4. THE DISTRIBUTION OF THE TAX BURDEN  
ACCORDING TO TAX CATEGORIES  
(United Kingdom)

	1937-38 £ mill.	1941-42 £ mill.
I. Direct personal taxes and commodity taxes on essentials (unavoidable taxes)		
Income tax and surtax <sup>1</sup>	299·0	695·0
Commodity taxes on essentials (tea, sugar, wheat, coal, postal services, etc.) <sup>2</sup>	36·0	59·0
Rates on dwelling-houses	133·0	146·0
Employees' social insurance contributions	52·0	60·0
Death duties <sup>3</sup>	90·0	92·0
II. Taxes on non-essential goods and services:	241·0	478·0
Alcohol and tobacco	198·0	442·0
Entertainments	8·0	16·0
Private motoring <sup>4</sup>	35·0	20·0
III. Purchase tax and protective duties, duties on buses and taxis	66·0	132·0
IV. Taxes on production in general <sup>5</sup>	175·0	212·0
V. Taxes on business profits <sup>6</sup>	66·0	425·0
VI. War Damage contributions and war risk insurance premiums	—	303·0
VII. Other items <sup>7</sup>	18·0	15·0
TOTAL	1,176·0	2,617·0

Source as in Table 1, with allowances for items 1-7 mentioned on pp. 15-17.

<sup>1</sup> Tax on undistributed profits deducted and added to V.

<sup>2</sup> Including duties on tea, sugar, coffee, cocoa, household matches, patent medicines, table waters, wheat, coal and postal services.

<sup>3</sup> Estate duties in Northern Ireland included.

<sup>4</sup> Vide Chapter XII.

<sup>5</sup> Vide Chapter XVI.

<sup>6</sup> Vide Chapter VII.

<sup>7</sup> Including other Inland Revenue, other Customs and Excise revenue, part of stamps, local dues, tolls, etc., social insurance contributions in Northern Ireland and unemployment contributions to the agricultural and special schemes.

Category III, halfway in character between I and II, includes the purchase tax and protective duties. The commodities affected



by these taxes are partly essentials (e.g. toilet articles), partly un-essentials (watches, etc.), and partly goods, whether essentials or not, the purchase of which in any particular year is to some extent dependent upon the free will of the tax-payer (e.g. clothing, furniture).

In category IV are taxes falling on production in general; category V includes taxes on business profits; category VI includes War Damage contributions and war risk insurance premiums; and category VII the rest of the items.

These categories, used for the sake of convenience, are by no means watertight. On the contrary, as can be seen, some arbitrariness in the definitions is inevitable. Part of the burden of category I (e.g. on account of non-domestic use of sugar and of small items such as coffee, etc.) could be added to II, while part of III and IV could be added to I.

The analysis of taxation in this Report covers practically the whole field of taxation. It is not, however, practicable to treat each category of taxes in the same way. Category I (unavoidable taxes) is payable by virtually every tax-payer, and the burden of these taxes has accordingly been worked out in great detail for different sizes of family as well as for different incomes. As already explained, however, local rates have had to be omitted. For category II (avoidable personal taxes) accurate estimation is much less possible, and estimates are presented on the basis of a family of four only. For categories III (purchase tax and protective duties) and IV (taxes on production) we have estimated a rough distribution of the burden on incomes at different points.

The chief omissions from the following estimates of the burden of taxes on individual incomes are:

(a) *Local Rates* (part of category I).

It is impossible to make any approximation of the distribution of the burden of rates on dwelling-houses without a very careful survey of the whole system of local taxation, and particularly of the great differences in valuation. A rough estimate puts the rates paid on dwelling-houses at two-thirds of the total collected and the part paid on business premises at one-third at present. The latter have been included in taxes falling on production in general, and included in category IV.

(b) *Taxes on Business Profits* (category V).

These were excluded from the burden of statutory incomes for reasons explained in Chapter VII. In order to show the magnitude

of error introduced by this omission a separate calculation including some of these taxes was made of the burden of taxation on 'imputed' incomes.

(c) *Contributions to the different Compulsory War Damage Schemes (category VI).*

These contributions are omitted from the calculations, although they may influence the taxable capacity of the groups concerned. War risk insurance premiums are also excluded.

(d) *Small Items (grouped together in category VII).*

The total contribution under category VII is an insignificant percentage of the total public revenue. It includes the following items:

	1937-38 £ mill.	1941-42 £ mill.
From Inland Revenue items:		
Land tax	0.6	0.9
Mineral rights duty	0.2	
E.P.D. and C.P.T. arrears	0.8	
From Customs and Excise items:		
Licences—other than liquor licences— and miscellaneous items	0.5	0.8
Local taxation licence duties (England and Wales)	1.3	approx. 1.3
Local tolls, dues, duties, etc. (Scotland)	1.4	approx. 1.4

The Inland Revenue items are arrears or remnants of old taxes, which have to-day no fiscal importance. 'Licences—other than liquor licences' are of a very mixed character and include trading licences, establishment licences, gun and game licences, and dog licences. The most important item is dog licences. These are paid to the Exchequer in Scotland only: in England and Wales they are revenues of the local authorities, and form the main contributions to the 'Local Taxation Licence Duties'.

On the whole, our calculations cover 82 per cent of all compulsory contributions, and 90 per cent of the Exchequer net receipts from taxation for 1937-38; they cover nearly 70 per cent of all compulsory contributions and 80 per cent of the Exchequer net receipts from taxation for 1941-42. This is a wider field than was covered in earlier enquiries. The items included in the calculations of the Colwyn Committee, for example, would cover for 1937-38 only 52 per cent of all compulsory contributions and only 74 per cent of the Exchequer net receipts from taxation.

## CHAPTER III. *THE TOTAL BURDEN OF TAXATION*

### *I. The Reliability of the Summary Tables.*

To estimate the total burden of national taxation upon taxpayers at different income levels, a series of summary tables and charts has been prepared. It is clear from what has been stated in the previous chapters that the calculations have the inevitable limitations and do not pretend to give the amount of the burden with any exactness, but are indicative of its magnitude. The data, as will be seen, refer to the pre-rearmament year 1937-38 and to the year 1941-42, except in one or two cases where comparisons have been made over longer periods. The tables have, for convenience, been collected into five groups.

1. The first group, Tables 5-8, shows the burden on wholly earned incomes and on wholly investment incomes, for five family categories, of the unavoidable taxes (except rates on dwelling-houses). These figures are the most precisely accurate in the Report.

2. The second group of tables, 9-11, shows, in addition to the unavoidable taxes, the burden of taxation that is borne where there is a moderate consumption of tobacco and of alcoholic drinks, a moderate attendance at entertainments and, on incomes of £500 and over, a moderate use of a private motor car. Owing to the great individual variations in respect of these items, the tables in this group are illustrative only. In Chapters VIII-XI, estimates are given showing the burden for light, moderate and heavy smokers and drinkers. In all the tables of this group, the burden is calculated on a tax-paying family of four (a man, his wife and two children under 16). The burden is shown not only for fully earned but also for fully investment incomes. This involves taking account of the burden of death duties, necessitating somewhat arbitrary assumptions, which are summarized on pp. 27-29 of this chapter and discussed in detail in Chapter VI.

The second group of summary tables also brings in a field of taxation omitted from previous enquiries. In these tables are included the burden of taxes falling generally on production, the protective duties and, for 1941-42, the purchase tax. The methods of estimation are fully explained in Chapter XVI. The basic assump-

tion that has had to be made is that the burden of these taxes is proportionate to the expenditure on goods affected by them.

3. Table 12 gives, for earned incomes, the closest approximation that it has been possible to achieve to the total burden of taxation; it covers 82 per cent of all compulsory contributions. It also shows the net income remaining after taxation. Table 13 shows, for each level of income, the taxes payable on a 'representative' income—that is, on an income with about the distribution between earned and unearned sources that is estimated to prevail at that level of income. These tables are the most comprehensive in the Report.

4. Tables 14 and 15 show the change in the tax burden since the beginning of the century; the former shows the burden on fully earned incomes, and the latter the burden of unavoidable national taxes. In order to compare the present enquiry's estimates for 1937-38 and 1941-42 with those of previous enquiries, which assumed a family of five, the data for 1937-38 and 1941-42 have been recalculated for a family of five. These tables, however, cover only the incomplete range of taxes included in previous enquiries, in order to give comparable estimates of the changes in the tax burden. For the years 1937-38 and 1941-42, therefore, the tables underestimate the actual burden because of the new taxes now in operation, and this should be remembered when comparing with the actual burden given in tables 9-12. All non-Exchequer taxes (e.g. rates and social insurance contributions), the petrol duty and the protective duties, as also new items, such as the purchase tax, have been excluded. No comparative table is given for investment incomes, as the burden of death duties—as calculated by the present enquiry—is not strictly comparable with the figures given in previous enquiries.

5. Tables 16-18 are substantially a repetition of the figures given in tables 9-12, but with figures added for light and heavy consumption of tobacco and alcoholic drinks as well as for moderate consumption.

## II. *The Main Characteristics of the Tax Burden.*

The main characteristics of the tax burden and of its changes as shown from these tables may be summarized as follows:

1. In the last pre-rearmament year, 1937-38, the distribution of the tax burden did not differ substantially from that of the

period following the last war. The distribution of the tax burden was markedly progressive at the upper end, say from £1,000 upwards, and distinctly regressive at the lower end, i.e. below £300, while the burden on the middle incomes, i.e. incomes ranging from £300 to £1,000, was light in comparison. It would appear that the addition of the taxes in categories III and IV, the burden of which has been calculated for the first time in this enquiry, has the effect of increasing the regressive nature of the distribution in incomes below £300. (It should, however, be recalled that no account is taken anywhere in this Report of the distribution of the benefits of public expenditure.)

2. War-time taxation has made considerable changes,<sup>1</sup> especially at one point which is brought out with remarkable clearness in Chart 4. Since the war, the relatively light treatment of the middle incomes has been eliminated. The distribution of the tax burden is now notably progressive from incomes of £250 upwards, while there is a steep progressive increase on incomes of £1,000 upwards. War-time taxation has not changed the regressive nature of the burden on incomes below £250, which has become even slightly more marked. This, too, is brought out clearly in Chart 4.

3. The figures for 1937-38 confirm the prevailing opinion that direct taxes were then mainly a burden on the higher income groups—that is, incomes of £1,000 and over—while the burden

<sup>1</sup> It should be noted that while there has been a considerable increase in the burden of taxation since 1937-38, there has also been an increase in the benefits of public expenditure. The most important new items since 1937-38 are the subsidies aiming to keep down the prices of essentials, and the different war-time allowances to soldiers' dependents, to civilian and other casualties, for evacuees, etc. Exchequer expenditure during 1941-42 on food subsidies amounted to over £120 millions. The main groups of subsidized foods are: cereals, flour, bread and oatmeal, meat, milk, tea, eggs and potatoes. The price of food will be affected also by the subsidies of about £5 millions on the transport of coal and also by whatever may emerge from the Government's agreement with the Railway Companies.

The main items of different war-time allowances were estimated as follows: the normal allowances to families and dependents of members of the Forces were estimated at £115 millions for the year 1941-42; the estimated annual cost of the grants made by the War Service Grants Advisory Committee of the Ministry of Pensions can be put (on the recently improved basis) at £13.5 millions; net costs of billeting allowances for evacuees were estimated in April 1941 at £22 millions; no figures are published on the cost of allowances for casualties.

of these taxes was of little account in the middle and lower income groups. In these last two groups it was the indirect taxes which constituted the greatest burden. In 1941-42, however, the lower incomes bore a larger, but still not a heavy, burden, on account of direct taxes. In the middle income groups direct taxes had become an important item; while the burden in the higher income groups, that is over £1,000, was very heavy.

### III. *The Burden of the Individual Taxes.*

In Part II of this Report will be found the estimates of the magnitude of the burden of the various items of taxation, and all the relevant factors determining this magnitude. It is convenient here to summarize the results.

**DIRECT TAXES. *Income Tax.*** In 1937-38 the lower income groups were almost entirely exempted from income tax by the operation of personal and family allowances and allowances on earned income. The result was that practically no working-class family, with children, paid income tax. The generous earned income allowance and the reduced rate payable on the first £135 of taxable income made the burden on middle-class incomes very light. In the year 1941-42 a single man with a fully earned income became liable for income tax at 42s. per week, compared with 52s. per week in 1937-38; he now pays 2s. per week, the whole of which will be treated as post-war credits. The married man who has two children becomes liable at £267 per annum, or just over £5 per week, instead of £375 per annum, or £7·5 per week. The maximum incomes exempt from the standard rate were in 1941-42 £272 for a single man, instead of £294 in 1937-38, and £450 for a married couple with two children, instead of £544 in 1937-38. Above these limits up to £1,500 the earned income relief operates, which means that at present every £ of earned income from the limits just stated up to £1,500 pays 9s. in the £, from £1,500 to £2,000, 10s., and above that limit surtax in addition. Married couples with two children at income levels of £300, £350 and £500 now pay 3·2, 6·9 and 15·2 per cent of their incomes respectively.

The manner in which the income tax, combined with the surtax, operates in the higher income groups has the effect of creating an income ceiling. In 1941-42, after deduction of income tax and

surtax, almost no one had a spendable income of more than £7,000 a year. In 1937-38, in order to have a spendable income of £7,000, a gross income of approximately only £12,000 was required, while in 1941-42 roughly £150,000 was required.

*Death Duties.* The death duties stand in a somewhat different position from the other taxes considered in this Report. They are assessed not on income but on capital and paid at irregular but fairly long intervals. It is therefore held by some authorities that they are not properly included in the burden of taxation on incomes. This view has not been accepted in the present Report. It is true that death duties are not assessed on income, but neither are any of the indirect taxes. As for the fact that they are not levied annually, that can be regarded as a matter of administrative convenience. The fact that much the largest of the death duties, the estate duty, is levied on the estate of the deceased, not on the inheritance of the heir, seems to show that it is intended to look backwards, as if it were a deferred income tax. And in any case, however assessed, death duties have to be paid out of income, or at least have an effect on income. An estimate of their burden must therefore be included when the total burden of taxation on investment incomes is under consideration.

To make such an estimate, however, is not an easy matter. Previous enquiries have assumed that the burden could be measured by the premium on a life insurance policy sufficient to pay the duties and leave the capital intact. This method has the merit of simplicity. But it has several grave defects. For one thing, it assumes that all owners of investment incomes act in a certain way (namely, that they save just enough to pay their death duties, neither more nor less), when there is no evidence that most of them actually act in this way, and a good deal of evidence that they do not. Secondly, the accumulation of savings (whether by life insurance or otherwise) increases the estate that passes at death and therefore the amount of death duties payable. To calculate the burden by this method therefore results in a very high figure being put upon it. Indeed, when taxation on large incomes rises to the levels of 1941-42, the results given by this method are absurd. Thus if a man with an investment income of £50,000 (that is, a capital of £1,250,000) were, at the age of 38, to take out a policy to pay his death duties, the net premium would be

£54,028 per annum. As he would already be paying income tax and surtax of about £45,420, the total burden of direct taxation would amount to £99,448 or 198·9 per cent of his income. To quote a figure such as this may be arithmetically correct—that is to say, it accurately measures what it would cost to do what is in fact impossible—but it cannot be accepted as a measure of the burden of taxation. The assumptions are artificial and contradictory; they assume that a man draws on his capital in order to keep his capital intact. They also invite the reader to believe that the higher the gross income the lower the net income, or that a rich man would enjoy a larger net income by giving some of his capital away.

In actual fact, of course, so long as income tax and surtax are less than 100 per cent, and the rate of death duties is less than 100 per cent, a given amount of capital must yield some positive net income and the combined burden of all three taxes must be less than the whole of the income. Any method of calculation that gives figures of burden in excess of 100 per cent must be in error. So much can be stated with some certainty; it is less easy to say how the burden should be calculated. In fact, it is impossible to lay down a single figure for each income. Since death duties are levied at some time in the future, the amount to be levied depends not only on the rate of duty remaining constant (an assumption that has to be, and is rightly, made by any method) but also on what happens to capital between now and then—in other words, upon whether there is any saving out of income, and if so, how much. The insurance method makes a particular assumption about the rate of saving, and though it is the wrong assumption—at least for some incomes—that does not mean that there is no need for some assumption to be made. The higher the current saving, of course, the greater the burden of death duties *on present income*.

A full description of the method adopted is given in Chapter vi. The results are quoted in alternative form. Assumption I (Minimum Burden) assumes that there is no net saving and that the principal of an estate is reduced by the amount of the death duties. Assumption II (Maximum Burden) assumes that the estate-owner attempts, by saving against death duties, to keep the *net* income from the property constant over successive generations. For the lower incomes, this attempt can be successful—that



is, it is possible to provide for death duties. For these incomes, then, Assumption II is the same as the insurance method (subject to minor qualifications). For the larger incomes, it is assumed that saving is done to the extent necessary to keep net income as constant as possible.

On both assumptions the method of calculation is, in brief, to compare the present (discounted) value of the income-stream, present and future, emanating from the property, as it would be if there were no death duties with the present (discounted) value of the income-stream as it would be if death duties were paid once every generation. The minor assumptions are set out in full in Chapter vi.

In the summary tables, two figures are given for each investment income, representing the Maximum and Minimum Burdens. Since the present annual burden of death duties is affected by the burden of income tax and surtax,<sup>1</sup> the figures are given, in each case, for all three taxes combined.

*Employees' Social Insurance Contributions.* In 1937-38 employees' social insurance contributions were a burden on those having incomes up to £250 per annum. From January 1942 social insurance contributions are a burden on all incomes (whether of manual or non-manual workers) up to £420 per annum. The rate is fixed and does not vary with earnings. The charge, therefore, is regressive, representing, in 1937-38, from 3.5 to 1.4 per cent on incomes ranging from £100 to £250 per annum and, in 1941-42, 4.2 to 1.2 per cent of the earnings of a tax-paying family with incomes from £100 to £350 per annum. This percentage is based on the supposition of 44 weekly contributions for an adult man in 1937-38 and, owing to a better state of employment, to 48 weekly contributions in 1941-42. The Family Budget Survey of the Ministry of Labour and National Service shows that social insurance contributions amount to 2 per cent of the total expenditure and probably also to 2 per cent of the total income of an average industrial household. Recent surveys on saving and

<sup>1</sup> If income tax and surtax take 18s. in the £ of income, the burden on income of death duties, however high the rates at which they are levied, is necessarily limited to 2s. in the £. But if the rates of income tax and surtax were lower, the same scale of rates of death duty might represent a higher burden on income.

spending<sup>1</sup> show the same proportion, about 2 per cent, in relation to average incomes.

(INDIRECT TAXES. A common feature of the main indirect taxes on tea, sugar, tobacco, alcoholic drinks, and petrol is that they are specific and not *ad valorem* duties. Thus the burden of these taxes is independent of the quality of the dutiable goods and is entirely dependent upon the quantities used.) In many cases the granting of Empire preferences has slightly altered the picture. Empire goods, bearing a lower burden of tax, are cheaper and people in the lower income strata are inclined to purchase them and thus have to bear a lower tax burden.

*Tea and sugar* are articles of general consumption and therefore the variations in the amount of duties payable at different income levels are slight. Owing to the wide range of qualities available, especially in the case of tea, the main differences between the income groups are in the expenditure, but these differences do not affect the burden of taxes. The variations which are ascertainable in the burden on the basis of the *per capita* variations in consumption are determined by the level of income and the size of the family. In the case of sugar, the tax paid on the quantity consumed in manufactured articles, such as jam, cakes, chocolate and ices, or in catering establishments, has also to be taken into account. This part of the consumption shows greater variations from one income level to another than does the use of sugar in the household.

The burden of the tea and sugar duties appears to be very low at all income levels, except the two lowest ones. On incomes of £100 and £150, especially where large families are concerned, the burden is by no means negligible.

*Tobacco, Alcoholic Drinks, Entertainments, Private Motoring.* The burden of the duty on tobacco depends both on the amount and the quality of the tobacco consumed.) Tobacco consumption is a matter of personal taste, with infinite variations from individual to individual. In general, the amount of income is a factor in consumption, but there is no marked relation between the two. Investigations show that the number of cigarettes consumed is much the same among smokers of all incomes, except the very

<sup>1</sup> Conducted by Charles Madge in Gloucester (1941), Glasgow (1941), and Leeds (1942).

poor. There are differences in the amount expended, owing to the difference in brands consumed by the lower and higher groups, and since brands vary in price and in the amount of tobacco in the cigarettes, the aggregate burden of duty shows a closer relation with income than does the number of cigarettes smoked. It is of interest to note that occupation, age and sex have a far greater influence than income on the consumption of tobacco.

(The burden of the tax on alcoholic drinks depends upon the nature and the amount of consumption.) To arrive at an estimate of the consumption of alcoholic drinks and also the duty paid on them is even more complicated than in the case of tobacco. Regular drinkers have a greater variety of choice than regular smokers. They may consume beer, spirits or wines, or any variation of these drinks, which are partly complementary and partly substitutes for each other. The burden of the duty will vary very considerably according to these variations. The consumption of alcohol, either in the form of beer, spirits or wine, although not independent of income, is again, to a large degree, a matter of personal taste and social habit. It is influenced to a great extent by occupation and place of residence.

The burden on account of entertainments depends upon the frequency of visits to places of entertainment, and the prices paid, by the different income levels. While the latter is largely (although not entirely) dependent upon income, the frequency of visits is quite independent. In fact alternative sources of leisure may diminish this frequency in the higher income levels.

The burden on account of private motoring is entirely dependent on whether the tax-payer has a car or more than one car and is using it to a greater or lesser extent. In 1941-42, the mileage depended upon the ration allowances of petrol.

Individual cases may show many possible variations in the consumption of drinks and tobacco, in the frequenting of cinemas, etc., and in motoring. Some individuals may abstain from all these and avoid these taxes altogether. Others may indulge in all and bear a very heavy burden indeed. The figures show that, even in the case of a moderate consumption of tobacco and alcoholic drinks, the burden is a significant one on the lower and also on the middle incomes.

For a moderate consumer of all four of these commodities the burden of the duty on alcoholic drinks is heavier throughout than

that on account of tobacco. The burden on account of entertainments is negligible at all income levels. For the year 1941-42, the burdens on tobacco and alcoholic drinks approach each other very closely, and at one point, the £500 income level, the tobacco duties appear, on the assumptions made, to be the heavier. In 1937-38, the taxes on private motoring constituted a heavier burden on most of the incomes to which they applied than either the tobacco or the alcoholic duties. In 1937-38, on the lower income groups, the keeping of a motor cycle involved on the whole a heavier burden than smoking and a rather smaller burden than drinking.

**BURDEN OF OTHER TAXES.** A rough estimate was made of the distribution of the burden of protective duties, taxes on production in general, and of the purchase tax. We allocated these taxes on incomes roughly in proportion to the expenditure which bears these taxes. As the calculations have to be based on average periodical expenditure on the goods and services involved, individual cases will differ from the average on account of differences in circumstances, family conditions, and for many other reasons. These taxes appear to absorb roughly the same proportion of income on all lower and middle levels, while the proportion of income paid on account of these taxes decreases with increasing incomes (from £1,000 upwards). The effect of these taxes—which in the great majority are of recent origin, imposed since the last war—is to make the burden of the lower incomes considerably heavier and to accentuate the regressiveness of the tax system.

#### IV. *The Burden of Taxation on Different Social Classes.*

Another aspect of the distribution of taxes requires further examination, namely, which taxes weigh most heavily upon the different social classes. The latter can be conveniently grouped into the higher group, over £1,000, into the middle group, of the order of from £300 to £1,000, and the lower group, with incomes up to £300. Table 16 shows the burden of the main tax items on the lowest of these three classes. The results show that the lower classes are bearing a tax burden which is not negligible, even without the tax which they pay on account of their consumption of tobacco and alcoholic drinks. If we take a moderate consumption of tobacco and drinks, the aggregate of all other taxes paid appears to be heavier at almost all income levels than the amount

paid on tobacco and alcohol. Heavy smokers, heavy drinkers, or those who indulge unduly in both smoking and drinking, pay a very heavy contribution to the Exchequer in the form of duties on tobacco and alcoholic drinks. This is especially the case in the year 1941-42. The burden of these taxes had increased to a greater extent in that year than that of other taxes. This is partly due to rationing, restriction of imports and the short supply of some other goods. As the taxation of the lowest group depends to a large extent on indirect taxes, the distribution of the burden in this group is regressive. This picture, however, is incomplete without taking into account rates on dwelling-houses on the one hand and, on the other hand, the effect of that part of public expenditure which benefits these classes more than the others. These factors will not, however, alter the general tendency as ascertained above.

The main items of the burden on the middle-class incomes is given in Table 17. In 1937-38, for the lower-middle incomes, duties on tobacco and alcoholic drinks, on the one hand, and all the other taxes together, on the other, roughly balance. The burden of both groups separately (or the two added together) was not heavy; while the burden on the consumption of tobacco and alcohol is significant only if consumption is heavy. In 1941-42 income tax is, throughout the middle income groups, the main item of the burden. The burden of both tobacco and alcohol duties has also increased; this applies especially to the burden of tobacco duties, as some of the alcoholic drinks consumed by these classes (wines or spirits) are in short supply.

Table 18 shows the main items of the burden on families in the higher income strata. As will be seen, the burden of the income tax and surtax is the overwhelming item. The burden of duties on essentials (tea, sugar, etc.) is insignificant. Even heavy spending on private motoring, smoking and drinking would amount, in terms of duty, to a very small percentage of the income tax and surtax payable, except at the lower end of the group.

Table 12 A shows the increase in the burden of taxation on earned incomes from 1937-38 to 1941-42. While the burden on the lower incomes increased roughly by 50 per cent, the burden on middle incomes was approximately doubled. The burden on higher incomes, as compared with the level of 1937-38, increased by 70 to 80 per cent.

Perhaps a fairer comparison is that shown in Table 12 B. Between 1937-38 and 1941-42, net incomes (i.e. incomes after tax) were reduced by 8 per cent where the gross (earned) income was £200, by 25 per cent at £1,000, by 39 per cent at £5,000 and by no less than 79 per cent at £50,000.

#### V. *The Unavoidable Tax Burden on Different-Sized Families.*

It is of interest to compare the unavoidable burden of taxation (income tax, social insurance contributions, duties on tea and sugar) according to the size of the family. Throughout the income scale, except at the very bottom, married couples pay a lower percentage of their incomes in these taxes than single persons. Above roughly £300 in 1937-38 and roughly £250 in 1941-42, the burden of taxation falls as the size of the family rises. But below these limits, large families bear a heavier burden than small. It should be particularly remembered in this connection that the burden of rates, which will tend to be heavier on large families, has not been included in these figures. Tables 5-8 show the burden of the main unavoidable taxes, other than rates.

## CHAPTER IV. SUMMARY OF CONCLUSIONS

The purpose of the enquiry was to estimate the money burden of taxation—that is, the amount of taxation taken at selected income levels for the pre-rearmament year 1937–38, and in the year 1941–42. This enquiry covers a wider field than its predecessor, the Colwyn Committee's *Report* of 1927,<sup>1</sup> as not only have additional taxes collected by the Exchequer been included but also rates on business premises, compulsory contributions to the social insurance schemes, Post Office net revenue, and the wheat and coal levies. The burden of the taxes on business profits and of rates on dwelling-houses has been estimated as a whole, although not on individual incomes. Our analysis of the tax burden, therefore, covers almost the whole field of taxation. On individual incomes 82 per cent of the total tax burden is allocated for 1937–38 and nearly 70 per cent for 1941–42.

It is not proposed to summarize the thousands of details dealt with in the following chapters and statistical tables. To do so would bewilder the enquirer and distract him from the broad facts that have to be understood. It is, however, necessary in the briefest possible way to set out the main conclusions.

(*First*, there has been a large increase in the Exchequer net receipts from taxation in recent decades.) The following *per capita* figures show the payment of taxes into the Exchequer:

	£	s.		£	s.
	(per head)			(per head)	
1913-14	3	12	1937-38	17	16
1925-26	15	2	1941-42	40	17

If all compulsory contributions, such as social service contributions and rates, are included, the following are the *per capita* figures:

	£	s.		£	s.
	(per head)			(per head)	
1913-14	5	19	1937-38	24	16
1925-26	20	8	1941-42	51	14

(*Second*, the distribution of the tax burden in 1937–38 did not differ to any large extent from the distribution that obtained during the period following the last war.) The distribution in 1937–38

<sup>1</sup> Cmd. 2800, 1927.

was markedly progressive at the upper end, from £1,000 upwards, and regressive at the lower, viz. on incomes up to £300 per annum. The burden on the middle incomes, i.e. on incomes from £300 to £1,000 per annum, was relatively light.

( *Third*, war-time taxation, as has been shown from the data for 1941-42, has eliminated the light treatment of the middle incomes. The distribution of the tax burden is noticeably progressive from incomes of £250 per annum upwards and especially on incomes of £1,000 per annum upwards. War-time taxation, however, has not changed the regressive nature of the burden on incomes below £250 per annum. Indeed, regression has become even slightly more marked.

( *Fourth*, in 1937-38 direct taxation was mainly a burden on the higher incomes of £1,000 per annum and over, while the burden was of little account in the middle and lower income groups, for which indirect taxation was the greater burden.) In the year 1941-42 the lower income groups bore a larger, but still not a heavy, burden on account of direct taxes. In the middle income groups, £300 to £1,000 per annum, direct taxes have become an important item, while the burden in the higher income groups, i.e. over £1,000 per annum, is very heavy. The recent increase in the burden of direct taxation is entirely due to increases in the burden of income tax and surtax. The present scope of income taxation is wider than hitherto. At the lower end single persons with 42s. a week are liable to income tax. At the upper end income tax leads with the surtax to an actual ceiling of possible spendable income at about £7,000, which requires a gross income of £150,000. This increase in the taxation of income is the most striking development in British taxation and is nothing short of revolutionary. It will be explained in Chapter VI that the increases in the income tax and surtax have the effect of *reducing* the proportion of income which should be allocated for death duties. This is because the burden on income of payments of death duties is the loss of income which the capital payments on account of death duties create; and the more the State takes away in other forms of taxation, the smaller will be the effect on net incomes of any reduction of capital. At the same time, with the current system of taxation, it is impossible to maintain capital intact, over successive generations, above a certain level. Of the other taxes classified as direct, employees'



social insurance contributions are at present a burden on the lower income groups up to £420 and represent a burden of approximately 2 per cent of the total incomes.

(*Fifth*, of the indirect taxes tea and sugar duties are a heavy burden on the two lowest income levels, £100 and £150 per annum, and especially where large families are concerned.) The duties on tobacco and alcohol, even if tobacco and alcoholic drinks are consumed in a moderate degree, are a heavy burden on the lower incomes (i.e. up to £300 per annum) and on the middle incomes (i.e. from £300 to £1,000 per annum). Above £1,000 per annum (i.e. on the higher incomes), the burden of these duties is insignificant as compared with that of income tax and surtax. It may be noted that the lower income groups (i.e. incomes up to £300 per annum) are bearing a significant burden of taxation apart from the duties on tobacco and alcoholic drinks. This is clear if the burden of tea and sugar duties is added to the burden of 'other items' (viz. on cocoa, wheat, coal), of the purchase tax and of the taxes on production in general.

(*Sixth*, a comparison of the burden on account of tobacco, alcoholic drinks, private motoring and entertainments shows that, if a moderate use of all four is assumed, the burden of the taxation of private motoring is heaviest (in the income groups which are affected by them at all), followed by alcoholic drinks, and very closely after alcoholic drinks comes that of tobacco. The burden of the entertainments duty is negligible.)

The detailed figures are given in the different tables of this Report. Those who desire to see at a glance the unavoidable burden of taxation on the representative family, the family of four (man, wife and two dependent children) should consult Tables 5-8 on pp. 39-50. Those who are interested in the burden of taxation on tobacco and alcoholic drinks should consult Table 10 on pp. 52-53. Those who wish to examine the order of magnitude of the total burden of taxation as covered by the present enquiry should consult Table 12 on p. 56.

## POSTSCRIPT

The calculations were completed at the end of the calendar year 1941. The figures of the burden of indirect duties for 1941-42 were based mainly on the estimates of yield given by the Chancellor of the Exchequer in his Budget speech of April 1941, corrected for the increases in yield that were apparent by December.

This book was in proof by the end of the financial year, when it became apparent that, in some cases, the increases in consumption and in yield were even larger than had seemed likely in December. The estimates of the burden of certain duties (those on alcoholic drinks, on entertainments, on 'other foods', of the protective duties and of Post Office net revenue) may therefore be somewhat understated. The increased yield, however, is more likely to have been due to an increase of incomes than to an increase of consumption at each income level. Even if it were wholly due to the latter cause, the figures for 1941-42 in the last column of Table 10 would not be increased by more than 1 per cent of total income on the very smallest incomes. The difference would be about 0.5 per cent at £500, 0.2 per cent at £2,000, and entirely negligible above £5,000.

## APPENDIX TO PART I

*SUMMARY TABLES AND CHARTS*

## NOTES ON TABLES 5-8 (Group A)

This group of tables shows only the burden of the 'unavoidable' taxes that are paid out of income, i.e. the income tax and surtax, social insurance contributions, the tea and sugar duties and small indirect duties of the same nature. The burden of death duties is not included in this group of tables.

The burden of income tax and surtax is calculated on the statutory basis. The burden of the employees' social insurance contributions is taken as equivalent to 44 contributions per annum for an adult man in 1937-38 and 48 contributions in 1941-42 (vide Chapter xiv). The burden on account of tea duty, sugar duty and small indirect taxes (on coffee, cocoa, etc., on household matches, on wheat, 1937-38, and on coal, 1941-42) was based on estimated consumption of these commodities. There is a small margin of error in all these estimates.

TABLE 5. THE BURDEN OF TAXATION ON INDIVIDUAL INCOMES.  
THE UNAVOIDABLE BURDEN, 1937-38

Income £	Single person		Married couple without children		Married couple with							
	£	s. d.	£	s. d.	one child		two children		three children			
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1. <i>Income tax and surtax. Fully earned incomes</i>												
100	—			—			—			—		
150	1	13	4	—			—			—		
200	5	0	0	—			—			—		
250	8	6	8	1	13	4	—			—		
300	12	10	0	5	0	0	—			—		
350	22	10	0	8	6	8	3	6	8	—		
500	52	10	0	32	10	0	17	10	0	8	6	8
1,000	152	10	0	132	10	0	117	10	0	102	10	0
2,000	377	10	0	357	10	0	342	10	0	327	10	0
2,500	530	0	0	510	0	0	495	0	0	480	0	0
5,000	1,464	7	6	1,444	7	6	1,429	7	6	1,414	7	6
10,000	3,896	17	6	3,876	17	6	3,861	17	6	3,846	17	6
20,000	9,559	7	6	9,539	7	6	9,524	7	6	9,509	7	6
50,000	28,334	7	6	28,314	7	6	28,299	7	6	28,284	7	6
2. <i>Income tax and surtax. Fully investment incomes</i>												
100	—			—			—			—		
150	4	3	4	—			—			—		
200	8	6	8	1	13	4	—			—		
250	15	0	0	5	16	8	16	8	—	—		
300	27	10	0	10	0	0	5	0	0	—		
350	40	0	0	20	0	0	9	3	4	4	3	4
500	77	10	0	57	10	0	42	10	0	27	10	0
1,000	202	10	0	182	10	0	167	10	0	152	10	0
2,000	452	10	0	432	10	0	417	10	0	402	10	0
2,500	605	0	0	585	0	0	570	0	0	555	0	0
5,000	1,539	7	6	1,519	7	6	1,504	7	6	1,489	7	6
10,000	3,971	17	6	3,951	17	6	3,936	17	6	3,921	17	6
20,000	9,634	7	6	9,614	7	6	9,599	7	6	9,584	7	6
50,000	28,409	7	6	28,389	7	6	28,374	7	6	28,359	7	6
3. <i>Employees' social insurance contributions</i>												
100	3	10	0	3	10	0	3	10	0	3	10	0
150	3	10	0	3	10	0	3	10	0	3	10	0
200	3	10	0	3	10	0	3	10	0	3	10	0
250	3	10	0	3	10	0	3	10	0	3	10	0
300	—			—			—			—		
350	—			—			—			—		
500	—			—			—			—		
1,000	—			—			—			—		
2,000	—			—			—			—		
2,500	—			—			—			—		
5,000	—			—			—			—		
10,000	—			—			—			—		
20,000	—			—			—			—		
50,000	—			—			—			—		

TABLE 5 (continued)

Income £	Single person		Married couple without children		Married couple with					
	£	s. d.	£	s. d.	one child		two children		three children	
					£	s. d.	£	s. d.	£	s. d.
4. Tea duty										
100	4	8	6	8	7	11	9	5	10	6
150	5	9	8	3	8	8	11	6	12	11
200	6	3	8	11	10	6	12	6	14	0
250	6	5	9	2	10	9	12	10	14	4
300	6	4	9	0	10	8	12	9	14	2
350	6	3	8	11	10	6	12	6	14	0
500	6	3	8	11	10	6	12	6	14	0
1,000	6	3	8	11	10	6	12	6	14	0
2,000	6	3	8	11	10	6	12	6	14	0
2,500	6	3	8	11	10	6	12	6	14	0
5,000	6	3	8	11	10	6	12	6	14	0
10,000	6	3	8	11	10	6	12	6	14	0
20,000	6	3	8	11	10	6	12	6	14	0
50,000	6	3	8	11	10	6	12	6	14	0
5. Sugar duty										
100	8	0	15	1	1	0 10	1	5 5	1	9 3
150	9	8	18	2	1	5 1	1	10 8	1	15 4
200	10	6	19	10	1	7 2	1	13 3	1	18 5
250	11	3	1	1 3	1	9 2	1	15 8	2	1 3
300	11	10	1	2 5	1	10 9	1	17 8	2	3 6
350	12	6	1	3 7	1	12 5	1	19 8	2	5 10
500	12	9	1	4 2	1	13 2	2	0 7	2	6 11
1,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
2,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
2,500	12	9	1	4 2	1	13 2	2	0 7	2	6 11
5,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
10,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
20,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
50,000	12	9	1	4 2	1	13 2	2	0 7	2	6 11
6. Small indirect taxes										
100	4	3	5	6	6	6	7	6	8	9
150	4	9	6	0	7	3	8	6	9	9
200	5	3	6	6	7	9	9	0	10	3
250	5	9	7	0	8	6	10	0	11	3
300	6	3	7	6	9	3	10	6	12	3
350	6	9	8	0	9	9	11	6	12	9
500	7	3	9	0	11	3	12	6	13	9
1,000	7	3	9	0	11	3	12	6	13	9
2,000	7	3	9	0	11	3	12	6	13	9
2,500	7	3	9	0	11	3	12	6	13	9
5,000	7	3	9	0	11	3	12	6	13	9
10,000	7	3	9	0	11	3	12	6	13	9
20,000	7	3	9	0	11	3	12	6	13	9
50,000	7	3	9	0	11	3	12	6	13	9

TABLE 5 (continued)

Income £	Single person		Married couple without children		Married couple with										
	£	s.	d.	£	s.	d.	one child		two children		three children				
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
<i>7. Total unavoidable taxes paid out of earned income</i>															
<i>(Including employees' social insurance contributions)</i>															
100	4	6	11	4	17	3	5	5	3	5	12	4	5	18	6
150	6	3	6	5	2	5	5	12	0	6	0	8	6	8	0
200	9	12	0	5	5	3	5	15	5	6	4	9	6	12	8
250	13	0	1	7	0	9	5	18	5	6	8	6	6	16	10
300	13	14	5	6	18	11	2	10	8	3	0	11	3	9	11
350	23	15	6	10	7	2	5	19	4	3	3	8	3	12	7
500	53	16	3	34	12	1	20	4	11	11	12	3	7	1	4
1,000	153	16	3	134	12	1	120	4	11	105	15	7	91	4	8
2,000	378	16	3	359	12	1	345	4	11	330	15	7	316	4	8
2,500	531	6	3	512	2	1	497	14	11	483	5	7	468	14	8
5,000	1,465	13	9	1,446	9	7	1,432	2	5	1,417	13	1	1,403	2	2
10,000	3,898	3	9	3,878	19	7	3,864	12	5	3,850	3	1	3,835	12	2
20,000	9,560	13	9	9,541	9	7	9,527	2	5	9,512	13	1	9,498	2	2
50,000	28,335	13	9	28,316	9	7	28,302	2	5	28,287	13	1	28,273	2	2

*8. Total unavoidable taxes paid out of investment income*  
*(Excluding death duties)*

100		16	11	1	7	3	1	15	3	2	2	4	2	8	6
150	5	3	6	1	12	5	2	2	0	2	10	8	2	18	0
200	9	8	8	3	8	7	2	5	5	2	14	9	3	2	8
250	16	3	5	7	14	1	3	5	1	2	18	6	3	6	10
300	28	14	5	11	18	11	7	10	8	3	0	11	3	9	11
350	41	5	6	22	0	6	11	16	0	7	7	0	3	12	7
500	78	16	3	59	12	1	45	4	11	30	15	7	16	4	8
1,000	203	16	3	184	12	1	170	4	11	155	15	7	141	4	8
2,000	453	16	3	434	12	1	420	4	11	405	15	7	391	4	8
2,500	606	6	3	587	2	1	572	14	11	558	5	7	543	14	8
5,000	1,540	13	9	1,521	9	7	1,507	2	5	1,492	13	1	1,478	2	2
10,000	3,973	3	9	3,953	19	7	3,939	12	5	3,925	3	1	3,910	12	2
20,000	9,635	13	9	9,616	9	7	9,602	2	5	9,587	13	1	9,573	2	2
50,000	28,410	13	9	28,391	9	7	28,377	2	5	28,362	13	1	28,348	2	2

TABLE 6. THE BURDEN OF TAXATION ON INDIVIDUAL INCOMES.  
THE UNAVOIDABLE BURDEN. 1941-42

Income £	Single person		Married couple without children		Married couple with							
	£	s. d.	£	s. d.	one child		two children		three children			
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1. <i>Income tax and surtax. Fully earned incomes</i>												
100	—			—			—			—		
150	17	17	6	—			—			—		
200	32	10	0	13	0	0	—			—		
250	47	2	6	27	12	6	11	7	6	—		
300	66	2	6	42	5	0	26	0	0	9	15	0
350	88	12	6	58	12	6	40	12	6	24	7	6
500	156	2	6	126	2	6	101	2	6	76	2	6
1,000	381	2	6	361	2	6	326	2	6	301	2	6
2,000	856	2	6	826	2	6	801	2	6	776	2	6
2,500	1,156	2	6	1,126	2	6	1,101	2	6	1,076	2	6
5,000	2,837	7	6	2,807	7	6	2,782	7	6	2,757	7	6
10,000	6,862	7	6	6,832	7	6	6,807	7	6	6,782	7	6
20,000	16,174	17	6	16,144	17	6	16,119	17	6	16,094	17	6
50,000	45,424	17	6	45,394	17	6	45,369	17	6	45,344	17	6
2. <i>Income tax and surtax. Fully investment incomes</i>												
100	—			—			—			—		
150	22	15	0	3	5	0	—			—		
200	39	0	0	19	10	0	3	5	0	—		
250	56	2	6	35	15	0	19	10	0	3	5	0
300	81	2	6	52	0	0	35	15	0	19	10	0
350	106	2	6	76	2	6	52	0	0	35	15	0
500	181	2	6	151	2	6	126	2	6	101	2	6
1,000	431	2	6	401	2	6	376	2	6	351	2	6
2,000	931	2	6	901	2	6	876	2	6	851	2	6
2,500	1,231	2	6	1,201	2	6	1,176	2	6	1,151	2	6
5,000	2,912	7	6	2,882	7	6	2,857	7	6	2,832	7	6
10,000	6,937	7	6	6,907	7	6	6,882	7	6	6,857	7	6
20,000	16,249	17	6	16,219	17	6	16,194	17	6	16,169	17	6
50,000	45,499	17	6	45,469	17	6	45,444	17	6	45,419	17	6
3. <i>Employees' social insurance contributions</i>												
100	4	8	0	4	8	0	4	8	0	4	8	0
150	4	8	0	4	8	0	4	8	0	4	8	0
200	4	8	0	4	8	0	4	8	0	4	8	0
250	4	8	0	4	8	0	4	8	0	4	8	0
300	4	8	0	4	8	0	4	8	0	4	8	0
350	4	8	0	4	8	0	4	8	0	4	8	0
500	—			—			—			—		
1,000	—			—			—			—		
2,000	—			—			—			—		
2,500	—			—			—			—		
5,000	—			—			—			—		
10,000	—			—			—			—		
20,000	—			—			—			—		
50,000	—			—			—			—		

TABLE 6 (continued)

Income £	Single person		Married couple without children		Married couple with					
	£	s. d.	£	s. d.	one child		two children		three children	
					£	s. d.	£	s. d.	£	s. d.
4. <i>Tea duty</i>										
100		4 0		7 8		11 2		13 8		16 1
150		4 2		7 10		11 5		15 1		18 2
200		4 3		7 11		11 6		15 1		18 9
250		4 3		8 0		11 7		15 3		18 10
300		4 3		7 11		11 6		15 2		18 9
350		4 3		7 11		11 6		15 1		18 9
500		4 3		7 11		11 6		15 1		18 9
1,000		4 3		7 11		11 6		15 1		18 9
2,000		4 3		7 11		11 6		15 1		18 9
2,500		4 3		7 11		11 6		15 1		18 9
5,000		4 3		7 11		11 6		15 1		18 9
10,000		4 3		7 11		11 6		15 1		18 9
20,000		4 3		7 11		11 6		15 1		18 9
50,000		4 3		7 11		11 6		15 1		18 9
5. <i>Sugar duty</i>										
100		12 1		1 2 5		1 12 7		2 0 11		2 8 10
150		13 1		1 4 5		1 15 3		2 4 2		2 12 8
200		13 7		1 5 5		1 16 7		2 5 10		2 14 7
250		13 10		1 5 9		1 17 1		2 6 6		2 15 3
300		13 11		1 6 0		1 17 6		2 6 11		2 15 10
350		14 7		1 7 2		1 19 1		2 8 11		2 15 10
500		14 8		1 7 6		1 19 7		2 9 6		2 18 1
1,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
2,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
2,500		14 8		1 7 6		1 19 7		2 9 6		2 18 9
5,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
10,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
20,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
50,000		14 8		1 7 6		1 19 7		2 9 6		2 18 9
6. <i>Small indirect taxes</i>										
100		6 6		7 0		8 0		8 6		9 0
150		7 0		8 6		10 0		10 6		11 0
200		7 6		10 0		11 0		11 6		12 0
250		8 6		11 0		12 0		12 6		13 0
300		9 6		12 0		13 0		13 6		14 0
350		10 6		13 0		14 0		14 6		15 0
500		11 6		14 6		15 0		15 6		16 0
1,000		11 6		14 6		15 0		15 6		16 0
2,000		11 6		14 6		15 0		15 6		16 0
2,500		11 6		14 6		15 0		15 6		16 0
5,000		11 6		14 6		15 0		15 6		16 0
10,000		11 6		14 6		15 0		15 6		16 0
20,000		11 6		14 6		15 0		15 6		16 0
50,000		11 6		14 6		15 0		15 6		16 0

TABLE 6 (continued)

Income £	Single person		Married couple without children		Married couple with					
	£	s. d.	£	s. d.	one child		two children		three children	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
7. Total unavoidable taxes paid out of earned income (Including employees' social insurance contributions)										
100	5	10 7	6	5 1	6	19 9	7	11 1	8	1 11
150	23	9 9	6	8 9	7	4 8	7	17 9	8	9 10
200	38	3 4	19	11 4	7	7 1	8	0 5	8	13 4
250	52	17 1	34	5 3	18	16 2	8	2 3	8	15 1
300	71	18 2	48	18 11	33	10 0	17	18 7	8	16 7
350	94	9 10	65	8 7	48	5 1	32	14 0	17	2 4
500	157	12 11	128	12 5	104	8 7	80	2 7	56	13 6
1,000	382	12 11	353	12 5	329	8 7	305	2 7	280	16 0
2,000	857	12 11	828	12 5	804	8 7	780	2 7	755	16 0
2,500	1,157	12 11	1,128	12 5	1,104	8 7	1,080	2 7	1,055	16 0
5,000	2,838	17 11	2,809	17 5	2,785	13 7	2,761	7 7	2,737	1 0
10,000	6,863	17 11	6,834	17 5	6,810	13 7	6,786	7 7	6,762	1 0
20,000	16,176	7 11	16,147	7 5	16,123	3 7	16,098	17 7	16,074	11 0
50,000	45,426	7 11	45,397	7 5	45,373	3 5	45,348	17 7	45,324	11 0
8. Total unavoidable taxes paid out of investment income (Excluding death duties)										
100	1	2 7	1	17 1	2	11 9	3	3 1	3	13 11
150	23	19 1	5	5 9	2	16 8	3	9 9	4	1 10
200	40	5 2	21	13 4	6	4 1	3	12 5	4	5 4
250	57	9 1	37	19 9	22	10 8	6	19 3	4	7 1
300	82	10 2	54	5 11	38	17 0	23	5 7	7	13 7
350	107	11 10	78	10 7	55	4 7	39	13 6	24	1 10
500	182	12 11	153	12 5	129	8 7	105	2 7	80	16 0
1,000	432	12 11	403	12 5	379	8 7	355	2 7	330	16 0
2,000	932	12 11	903	12 5	879	8 7	855	2 7	830	16 0
2,500	1,232	12 11	1,203	12 5	1,179	8 7	1,155	2 7	1,130	16 0
5,000	2,913	17 11	2,884	17 5	2,860	13 7	2,836	7 7	2,812	1 0
10,000	6,938	17 11	6,909	17 5	6,885	13 7	6,861	7 7	6,837	1 0
20,000	16,251	7 11	16,222	7 5	16,198	3 7	16,173	17 7	16,149	11 0
50,000	45,501	7 11	45,472	7 5	45,448	3 7	45,423	17 7	45,399	11 0



TABLE 7. THE BURDEN OF TAXATION ON INDIVIDUAL INCOMES.  
THE UNAVOIDABLE BURDEN, 1937-38

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
<i>1. Income tax and surtax. Fully earned incomes</i>					
100	—	—	—	—	—
150	1.1	—	—	—	—
200	2.5	—	—	—	—
250	3.3	0.7	—	—	—
300	4.2	1.7	—	—	—
350	6.4	2.4	0.9	—	—
500	10.5	6.5	3.5	1.7	0.7
1,000	15.2	13.2	11.7	10.3	8.7
2,000	18.9	17.9	17.1	16.4	15.6
2,500	21.2	20.4	19.8	19.2	18.6
5,000	29.3	28.9	28.6	28.3	28.0
10,000	39.0	38.8	38.6	38.5	38.3
20,000	47.8	47.7	47.6	47.5	47.5
50,000	56.7	56.6	56.6	56.6	56.5
<i>2. Income tax and surtax. Fully investment incomes</i>					
100	—	—	—	—	—
150	2.8	—	—	—	—
200	4.2	0.8	—	—	—
250	6.0	2.3	0.3	—	—
300	9.2	3.3	1.7	—	—
350	11.4	5.7	2.6	1.2	—
500	15.5	11.5	8.5	5.5	2.5
1,000	20.2	18.2	16.7	15.2	13.7
2,000	22.6	21.6	20.9	20.1	19.4
2,500	24.2	23.4	22.8	22.2	21.6
5,000	30.8	30.4	30.1	29.8	29.5
10,000	39.7	39.5	39.4	39.2	39.1
20,000	48.2	48.1	48.0	47.9	47.8
50,000	56.8	56.8	56.7	56.7	56.7
<i>3. Employees' social insurance contributions</i>					
100	3.5	3.5	3.5	3.5	3.5
150	2.3	2.3	2.3	2.3	2.3
200	1.7	1.7	1.7	1.7	1.7
250	1.4	1.4	1.4	1.4	1.4
300	—	—	—	—	—
350	—	—	—	—	—
500	—	—	—	—	—
1,000	—	—	—	—	—
2,000	—	—	—	—	—
2,500	—	—	—	—	—
5,000	—	—	—	—	—
10,000	—	—	—	—	—
20,000	—	—	—	—	—
50,000	—	—	—	—	—

TABLE 7 (continued)

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
4. <i>Tea duty</i>					
100	0.2	0.3	0.4	0.5	0.5
150	0.2	0.3	0.3	0.4	0.4
200	0.2	0.2	0.3	0.3	0.3
250	0.1	0.2	0.2	0.3	0.3
300	0.1	0.1	0.2	0.2	0.2
350	0.09	0.1	0.1	0.2	0.2
500	0.06	0.09	0.1	0.1	0.14
1,000	0.03	0.04	0.05	0.06	0.07
2,000	0.02	0.02	0.03	0.03	0.03
2,500	0.01	0.02	0.02	0.03	0.03
5,000	0.006	0.01	0.01	0.01	0.01
10,000	0.003	0.004	0.005	0.006	0.007
20,000	0.002	0.002	0.003	0.003	0.003
50,000	0.001	0.001	0.001	0.001	0.001
5. <i>Sugar duty</i>					
100	0.4	0.7	1.0	1.2	1.5
150	0.3	0.6	0.8	1.0	1.2
200	0.3	0.5	0.7	0.9	1.0
250	0.2	0.4	0.6	0.7	0.8
300	0.2	0.4	0.5	0.6	0.7
350	0.2	0.3	0.5	0.6	0.6
500	0.1	0.2	0.3	0.4	0.5
1,000	0.06	0.12	0.2	0.2	0.2
2,000	0.03	0.06	0.08	0.1	0.1
2,500	0.03	0.05	0.06	0.08	0.09
5,000	0.012	0.02	0.03	0.04	0.05
10,000	0.006	0.01	0.02	0.02	0.02
20,000	0.003	0.006	0.01	0.01	0.01
50,000	0.001	0.002	0.003	0.004	0.005
6. <i>Small indirect taxes</i>					
100	0.2	0.3	0.3	0.4	0.4
150	0.2	0.2	0.2	0.3	0.3
200	0.1	0.2	0.2	0.2	0.3
250	0.1	0.1	0.2	0.2	0.2
300	0.1	0.1	0.2	0.2	0.2
350	0.1	0.1	0.1	0.2	0.2
500	0.07	0.1	0.1	0.1	0.14
1,000	0.04	0.05	0.06	0.06	0.07
2,000	0.02	0.02	0.03	0.03	0.03
2,500	0.014	0.02	0.02	0.03	0.03
5,000	0.007	0.01	0.01	0.01	0.01
10,000	0.004	0.005	0.006	0.006	0.007
20,000	0.002	0.002	0.003	0.003	0.003
50,000	0.001	0.001	0.001	0.001	0.001

TABLE 7 (continued)

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
<i>7. Total unavoidable taxes paid out of earned income</i>					
<i>(Including employees' social insurance contributions)</i>					
100	4.3	4.9	5.3	5.6	5.9
150	4.1	3.4	3.7	4.0	4.3
200	4.8	2.6	2.9	3.1	3.3
250	5.2	2.8	2.4	2.6	2.7
300	4.6	2.3	0.8	1.0	1.2
350	6.8	3.0	1.7	0.9	1.0
500	10.8	6.9	4.0	2.3	1.4
1,000	15.4	13.5	12.0	10.6	9.1
2,000	18.9	18.0	17.3	16.5	15.8
2,500	21.2	20.5	19.9	19.3	18.7
5,000	29.3	28.9	28.6	28.4	28.1
10,000	39.0	38.8	38.6	38.5	38.4
20,000	47.8	47.7	47.6	47.6	47.5
50,000	56.7	56.6	56.6	56.6	56.5

*8. Total unavoidable taxes paid out of investment income*  
(Excluding death duties)

100	0.8	1.4	1.8	2.1	2.4
150	3.5	1.1	1.4	1.7	2.0
200	4.8	1.7	1.2	1.4	1.6
250	6.5	3.0	1.3	1.2	1.3
300	9.6	3.9	2.5	1.0	1.2
350	11.8	6.3	3.4	2.1	1.0
500	15.8	11.9	9.0	6.1	3.2
1,000	20.4	18.5	17.0	15.5	11.1
2,000	22.6	21.7	21.1	20.2	19.6
2,500	24.2	23.5	22.9	22.3	21.7
5,000	30.8	30.4	30.1	29.9	29.6
10,000	39.7	39.5	39.4	39.2	39.2
20,000	48.2	48.1	48.0	48.0	47.8
50,000	56.8	56.8	56.7	56.7	56.7

## SUMMARY TABLES AND CHARTS

TABLE 8. THE BURDEN OF TAXATION ON INDIVIDUAL INCOMES.  
THE UNAVOIDABLE BURDEN. 1941-42

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
<i>1. Income tax and surtax. Fully earned incomes</i>					
100	—	—	—	—	—
150	11.9	—	—	—	—
200	16.2	6.5	—	—	—
250	18.8	11.0	4.5	—	—
300	22.0	14.1	8.7	3.2	—
350	25.3	16.7	11.6	6.9	2.3
500	31.2	25.2	20.2	15.2	10.4
1,000	38.1	35.1	32.6	30.1	27.6
2,000	42.8	41.3	40.0	38.8	37.6
2,500	46.2	45.0	44.0	43.1	42.0
5,000	56.7	56.1	55.6	55.1	54.6
10,000	68.6	68.3	68.1	67.8	67.6
20,000	80.9	80.7	80.6	80.5	80.3
50,000	90.8	90.8	90.7	90.7	90.6
<i>2. Income tax and surtax. Fully investment incomes</i>					
100	—	—	—	—	—
150	15.2	2.2	—	—	—
200	19.5	9.7	1.6	—	—
250	22.4	14.3	7.8	1.3	—
300	27.0	17.3	11.9	6.5	1.1
350	30.3	21.7	14.9	10.2	5.6
500	36.2	30.2	25.2	20.2	15.2
1,000	43.1	40.1	37.6	35.1	32.6
2,000	46.6	45.1	43.8	42.6	41.3
2,500	49.2	48.0	47.0	46.1	45.0
5,000	58.2	57.6	57.1	56.6	56.2
10,000	69.4	69.1	68.8	68.6	68.3
20,000	81.2	81.1	81.0	80.8	80.7
50,000	91.0	90.9	90.9	90.8	90.8
<i>3. Employees' social insurance contributions</i>					
100	4.4	4.4	4.4	4.4	4.4
150	2.9	2.9	2.9	2.9	2.9
200	2.2	2.2	2.2	2.2	2.2
250	1.8	1.8	1.8	1.8	1.8
300	1.5	1.5	1.5	1.5	1.5
350	1.3	1.3	1.3	1.3	1.3
500	—	—	—	—	—
1,000	—	—	—	—	—
2,000	—	—	—	—	—
2,500	—	—	—	—	—
5,000	—	—	—	—	—
10,000	—	—	—	—	—
20,000	—	—	—	—	—
50,000	—	—	—	—	—

TABLE 8 (continued)

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
<i>4. Tea duty</i>					
100	0·2	0·4	0·6	0·7	0·8
150	0·1	0·3	0·4	0·5	0·6
200	0·1	0·2	0·3	0·4	0·5
250	0·08	0·2	0·2	0·3	0·4
300	0·07	0·1	0·2	0·3	0·3
350	0·06	0·1	0·2	0·2	0·3
500	0·04	0·08	0·1	0·2	0·2
1,000	0·02	0·04	0·06	0·08	0·1
2,000	0·01	0·02	0·03	0·04	0·05
2,500	0·008	0·016	0·02	0·03	0·04
5,000	0·004	0·008	0·01	0·015	0·02
10,000	0·002	0·004	0·006	0·007	0·01
20,000	0·001	0·002	0·003	0·004	0·005
50,000	0·001	0·001	0·001	0·001	0·002

*5. Sugar duty*

100	0·6	1·1	1·6	2·0	2·4
150	0·4	0·8	1·2	1·5	1·8
200	0·3	0·6	0·9	1·1	1·4
250	0·3	0·5	0·8	0·9	1·1
300	0·2	0·4	0·6	0·8	0·9
350	0·2	0·4	0·6	0·7	0·8
500	0·15	0·3	0·4	0·5	0·6
1,000	0·7	0·14	0·2	0·2	0·3
2,000	0·04	0·07	0·1	0·1	0·1
2,500	0·03	0·05	0·08	0·1	0·1
5,000	0·015	0·03	0·04	0·05	0·06
10,000	0·007	0·014	0·02	0·02	0·03
20,000	0·004	0·007	0·01	0·012	0·015
50,000	0·001	0·003	0·004	0·005	0·006

*6. Small indirect taxes*

100	0·3	0·3	0·4	0·4	0·4
150	0·2	0·3	0·3	0·4	0·4
200	0·2	0·2	0·3	0·3	0·3
250	0·2	0·2	0·2	0·2	0·3
300	0·2	0·2	0·2	0·2	0·2
350	0·2	0·2	0·2	0·2	0·2
500	0·1	0·14	0·15	0·2	0·2
1,000	0·06	0·07	0·07	0·08	0·08
2,000	0·03	0·04	0·04	0·04	0·04
2,500	0·02	0·03	0·03	0·03	0·03
5,000	0·012	0·014	0·01	0·02	0·02
10,000	0·006	0·007	0·007	0·008	0·01
20,000	0·003	0·003	0·004	0·004	0·004
50,000	0·001	0·001	0·001	0·002	0·002

TABLE 8 (continued)

Income £	Single person %	Married couple without children %	Married couple with		
			one child %	two children %	three children %
7. Total unavoidable taxes paid out of earned income (Including employees' social insurance contributions)					
100	5.6	6.2	6.9	7.5	8.0
150	15.6	4.2	4.8	5.3	5.7
200	19.0	9.7	3.7	4.0	4.4
250	21.2	13.7	7.6	3.2	3.5
300	24.0	16.3	11.1	6.0	2.9
350	27.0	18.7	13.8	9.3	4.9
500	31.5	25.7	20.9	16.1	11.4
1,000	38.3	35.4	33.0	30.4	28.1
2,000	42.9	41.4	40.2	39.0	37.8
2,500	46.3	45.1	44.2	43.2	42.2
5,000	56.8	56.2	55.7	55.2	54.8
10,000	68.6	68.3	68.1	67.9	67.6
20,000	80.9	80.7	80.6	80.5	80.4
50,000	90.9	90.8	90.7	90.7	90.6

8. Total unavoidable taxes paid out of investment income  
(Excluding death duties)

100	1.2	1.8	2.5	3.1	3.6
150	16.0	3.5	1.9	2.4	2.8
200	20.1	10.7	3.1	1.8	2.2
250	23.0	15.2	9.1	2.7	1.7
300	27.5	18.0	12.8	7.8	2.5
350	30.7	22.4	15.8	11.3	6.9
500	36.5	30.7	25.9	21.1	16.2
1,000	43.3	40.4	38.0	35.4	33.1
2,000	46.7	45.2	44.0	42.8	41.5
2,500	49.3	48.1	47.2	46.2	45.2
5,000	58.3	57.7	57.2	56.7	56.4
10,000	69.4	69.1	68.9	68.6	68.3
20,000	81.2	81.1	81.0	80.9	80.8
50,000	91.1	90.9	90.9	90.9	90.8

## NOTES ON TABLES 9-11 (Group B)

This group of tables repeats the figures for the 'unavoidable' taxes given in the previous group and adds to them figures for the estimated burden involved in a moderate consumption of alcohol, tobacco, entertainments and (at certain incomes) private motoring. The burden of death duties on investment incomes is also brought in for the first time. The burden of Post Office net revenue is included.

The burden of income tax and surtax is calculated on the statutory basis. In the case of death duties the burden is represented by two limits according to whether estate-owners are saving out of current income or not. For the actual method followed vide Chapter vi. The burden of the employees' social insurance contributions is taken as equivalent to 44 contributions per annum for an adult man in 1937-38 and 48 contributions in 1941-42 (vide Chapter xiv). The burden on account of consumption of tea, sugar, coffee, etc., tobacco and alcoholic drinks, and on account of the entertainment tax, was estimated. There is a margin of error in all the estimates of consumption. The burden on account of private motoring is based on the use of one car (or more) with a mileage of 9,000 per car in 1937-38 and 1,800-2,200 in 1941-42.

The tables also take account of protective duties, purchase tax and taxes on production in general. The estimates for the last named are very conjectural.

The following items are excluded: taxes on business profits, and rates on dwelling-houses.

TABLE 9. THE BURDEN OF TAXATION ON FULLY  
Assuming a moderate consumption of alcohol and tobacco and  
(Husband, wife and

Income £	Income tax and surtax		Social insurance contributions		Tea		Sugar		Small indirect taxes		Tobacco		Alcohol		Entertainments	
	£	s. d.	£	s. d.	s. d.	£	s. d.	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1937-38																
100	—	—	3 10 0	0	9 5	1 5 5	7 6	3 0 0	5 0 0	7 0 0	5 0 0	7 0 0	—	—	—	—
150	—	—	3 10 0	0	11 6	1 10 8	8 6	4 0 0	7 0 0	7 0 0	8 0 0	7 0 0	—	—	6 0	0
200	—	—	3 10 0	0	12 6	1 13 3	9 0	5 0 0	9 0 0	8 0 0	8 0 0	8 0 0	—	—	12 0	0
250	—	—	3 10 0	0	12 10	1 15 8	10 0	5 15 0	10 0 0	9 0 0	9 0 0	9 0 0	—	—	1 0 0	0
300	—	—	—	—	12 9	1 17 8	10 6	6 10 0	10 0 0	10 0 0	10 0 0	10 0 0	—	—	1 4 0	0
350	—	—	—	—	12 6	1 19 8	11 6	7 0 0	11 0 0	11 0 0	11 0 0	11 0 0	—	—	1 8 0	0
500	8 6 8	—	—	—	12 6	2 0 7	12 6	8 0 0	12 0 0	11 0 0	11 0 0	11 0 0	—	—	2 0 0	0
1,000	102 10 0	—	—	—	12 6	2 0 7	12 6	8 10 0	12 0 0	15 0 0	15 0 0	15 0 0	—	—	3 0 0	0
2,000	327 10 0	—	—	—	12 6	2 0 7	12 6	9 0 0	12 0 0	30 0 0	30 0 0	30 0 0	—	—	4 0 0	0
2,500	480 0 0	—	—	—	12 6	2 0 7	12 6	9 0 0	12 6	35 0 0	35 0 0	35 0 0	—	—	4 10 0	0
5,000	1,414 7 6	—	—	—	12 6	2 0 7	12 6	9 0 0	12 6	45 0 0	45 0 0	45 0 0	—	—	5 0 0	0
10,000	3,846 17 6	—	—	—	12 6	2 0 7	12 6	9 0 0	12 6	60 0 0	60 0 0	60 0 0	—	—	5 0 0	0
20,000	9,509 7 6	—	—	—	12 6	2 0 7	12 6	9 0 0	12 6	60 0 0	60 0 0	60 0 0	—	—	5 0 0	0
50,000	28,284 7 6	—	—	—	12 6	2 0 7	12 6	9 0 0	12 6	60 0 0	60 0 0	60 0 0	—	—	5 0 0	0
1941-42																
100	—	—	4 8 0	0	13 8	2 0 11	8 6	7 0 0	8 6	7 0 0	8 0 0	8 0 0	—	—	3 0	0
150	—	—	4 8 0	0	15 1	2 4 2	10 6	9 5 0	11 6	11 0 0	11 0 0	11 0 0	—	—	15 0	0
200	—	—	4 8 0	0	15 1	2 5 10	11 6	11 5 0	11 6	13 0 0	13 0 0	13 0 0	—	—	8 0	0
250	—	—	4 8 0	0	15 3	2 6 6	12 6	13 0 0	13 6	15 0 0	15 0 0	15 0 0	—	—	1 5 0	0
300	9 15 0	—	4 8 0	0	15 2	2 6 11	13 6	14 10 0	13 6	16 0 0	16 0 0	16 0 0	—	—	1 10 0	0
350	24 7 6	—	4 8 0	0	15 1	2 8 11	14 6	15 15 0	14 6	18 0 0	18 0 0	18 0 0	—	—	1 15 0	0
500	76 2 6	—	—	—	15 1	2 9 6	15 6	18 0 0	15 6	18 0 0	18 0 0	18 0 0	—	—	2 5 0	0
1,000	301 2 6	—	—	—	15 1	2 9 6	15 6	20 0 0	15 6	20 0 0	20 0 0	20 0 0	—	—	3 0 0	0
2,000	776 2 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	30 0 0	30 0 0	30 0 0	—	—	3 10 0	0
2,500	1,076 2 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	36 0 0	36 0 0	36 0 0	—	—	3 10 0	0
5,000	2,757 7 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	42 0 0	42 0 0	42 0 0	—	—	4 0 0	0
10,000	6,782 7 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	42 0 0	42 0 0	42 0 0	—	—	4 0 0	0
20,000	16,094 17 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	42 0 0	42 0 0	42 0 0	—	—	4 0 0	0
50,000	45,344 17 6	—	—	—	15 1	2 9 6	15 6	21 0 0	15 6	42 0 0	42 0 0	42 0 0	—	—	4 0 0	0

TABLE 10. THE BURDEN OF TAXATION ON FULLY  
Assuming a moderate consumption of alcohol and tobacco and  
(Husband, wife and  
(In percentage

Income £	Income tax and surtax	Social insurance contributions	Tea	Sugar	Small indirect taxes	Tobacco	Alcohol	Entertainments
1937-38								
100	—	3.5	0.5	1.2	0.4	3.0	5.0	—
150	—	2.3	0.4	1.0	0.3	2.7	4.7	0.2
200	—	1.7	0.3	0.9	0.2	2.5	4.0	0.3
250	—	1.4	0.3	0.7	0.2	2.3	3.6	0.4
300	—	—	0.2	0.6	0.2	2.2	3.3	0.4
350	—	—	0.2	0.6	0.2	2.0	3.1	0.4
500	1.7	—	0.1	0.4	0.1	1.6	2.2	0.4
1,000	10.3	—	0.06	0.2	0.1	0.9	1.5	0.3
2,000	16.4	—	0.03	0.10	0.03	0.46	1.5	0.2
2,500	19.2	—	0.03	0.08	0.03	0.4	1.4	0.2
5,000	28.2	—	0.01	0.04	0.01	0.17	0.9	0.09
10,000	38.5	—	0.006	0.02	0.006	0.09	0.6	0.05
20,000	47.5	—	0.003	0.01	0.003	0.045	0.3	0.025
50,000	56.6	—	0.001	0.004	0.001	0.018	0.12	0.01
1941-42								
100	—	4.4	0.7	2.0	0.4	7.0	8.0	0.2
150	—	2.9	0.5	1.5	0.4	6.2	7.3	0.3
200	—	2.2	0.4	1.1	0.3	5.6	6.5	0.4
250	—	1.8	0.3	0.9	0.2	5.2	6.0	0.5
300	3.2	1.5	0.3	0.8	0.2	4.8	5.3	0.5
350	6.9	1.3	0.2	0.7	0.2	4.5	5.1	0.5
500	15.2	—	0.2	0.5	0.2	3.6	3.9	0.4
1,000	30.1	—	0.08	0.3	0.07	2.0	1.8	0.3
2,000	38.8	—	0.04	0.1	0.04	1.06	1.50	0.18
2,500	43.1	—	0.03	0.1	0.03	0.84	1.4	0.14
5,000	55.1	—	0.015	0.05	0.01	0.42	0.84	0.08
10,000	67.8	—	0.007	0.03	0.008	0.21	0.42	0.04
20,000	80.5	—	0.004	0.015	0.004	0.105	0.21	0.02
50,000	90.7	—	0.001	0.005	0.002	0.042	0.084	0.007

† See Postscript, p. 38.



EARNED INCOMES. 1937-38 AND 1941-42

(on incomes of £500 and over) a moderate amount of private motoring  
two dependent children)

Transport		Post Office net revenue	Protective duties	Taxes on production in general	Purchase tax	Total burden of taxation
Private motoring	Buses and taxis					
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
—	9 0	2 0	1 6 0	2 10 0	—	17 19 4
—	10 0	3 0	2 8 0	4 3 0	—	24 10 8
—	11 0	4 0	4 0 0	5 17 0	—	30 8 9
—	12 0	5 0	5 0 0	6 16 0	—	34 16 6
—	15 0	7 0	5 17 0	8 10 0	—	36 3 11
—	17 0	9 0	6 5 0	9 8 0	—	39 10 8
15 12 7	19 0	15 0	8 16 0	13 6 0	—	72 0 10
24 2 0	1 10 0	1 10 0	11 4 0	22 0 0	—	192 11 7
39 10 7	2 0 0	1 10 0	15 14 0	38 10 0	—	471 0 2
39 10 7	2 0 0	1 10 0	16 8 0	44 0 0	—	635 4 2
63 2 7	2 0 0	1 10 0	18 14 0	65 0 0	—	1,626 19 8
78 11 2	2 0 0	1 10 0	24 14 0	105 0 0	—	4,135 18 3
102 3 2	2 0 0	1 10 0	35 14 0	175 0 0	—	9,903 0 3
117 11 9	2 0 0	1 10 0	53 14 0	300 0 0	—	23,836 8 10
—	8 0	2 6	13 0	1 17 0	1 17 0	27 11 7
—	9 0	3 9	18 0	3 2 0	3 2 0	36 5 6
—	10 0	5 0	1 10 0	4 7 0	3 7 0	42 9 5
—	11 0	7 3	1 17 0	5 3 0	4 2 0	48 17 6
—	12 0	8 6	2 3 0	6 2 0	5 0 0	64 4 1
—	14 0	11 0	2 6 0	6 11 0	6 7 0	84 3 0
12 14 2	15 0	18 6	3 3 0	9 1 0	10 0 0	151 19 3
18 7 5	16 0	1 17 0	3 8 0	12 6 0	15 0 0	397 17 0
34 12 3	1 0 0	1 17 0	4 4 0	18 9 0	25 0 0	919 14 10
34 12 3	1 0 0	1 17 0	4 8 0	21 0 0	27 10 0	1,230 19 10
34 12 3	1 0 0	1 17 0	6 18 0	35 0 0	43 15 0	2,051 9 10
34 12 3	1 0 0	1 17 0	8 18 0	55 0 0	50 0 0	7,004 14 10
34 12 3	1 0 0	1 17 0	10 18 0	85 0 0	50 0 0	16,349 4 10
34 12 3	1 0 0	1 17 0	15 18 0	120 0 0	50 0 0	45,639 4 10

EARNED INCOMES. 1937-38 AND 1941-42<sup>1</sup>

(on incomes of £500 and over) a moderate amount of private motoring  
two dependent children)  
of income)

Transport		Post Office net revenue	Protective duties	Taxes on production in general	Purchase tax	Total direct taxes	Total indirect taxes	Total burden of taxation paid out of earned incomes
Private motoring	Buses and taxis							
—	0.4	0.1	1.3	2.5	—	3.5	14.4	17.9
—	0.3	0.1	1.6	2.8	—	2.3	14.1	16.4
—	0.3	0.1	2.0	2.9	—	1.7	13.5	15.2
—	0.2	0.1	2.0	2.7	—	1.4	12.5	13.9
—	0.2	0.1	1.9	2.8	—	—	11.9	11.9
—	0.2	0.1	1.8	2.7	—	—	11.3	11.3
3.1	0.2	0.2	1.8	2.7	—	1.7	12.8	14.5
2.4	0.1	0.1	1.1	2.2	—	10.3	9.0	10.3
1.9	0.1	0.08	0.8	1.9	—	16.4	7.1	23.5
1.5	0.08	0.06	0.7	1.8	—	10.2	6.2	25.4
1.3	0.04	0.03	0.4	1.3	—	28.3	4.2	32.5
0.713	0.02	0.015	0.2	1.0	—	38.5	2.8	41.3
0.597	0.01	0.007	0.2	0.9	—	47.5	2.0	49.5
0.243	0.004	0.003	0.1	0.6	—	56.6	1.1	57.7
—	0.4	0.1	0.6	1.8	1.8	4.4	23.2	27.6
—	0.3	0.1	0.6	2.1	2.0	2.9	21.3	24.2
—	0.2	0.1	0.7	2.3	1.7	2.2	19.3	21.5
—	0.2	0.1	0.7	2.1	1.6	1.8	17.8	19.6
—	0.2	0.1	0.7	2.0	1.7	4.7	16.5	21.2
—	0.2	0.2	0.7	1.9	1.8	8.2	16.0	24.2
2.6	0.1	0.2	0.6	1.9	2.0	15.2	15.2	30.5
1.8	0.1	0.2	0.3	1.2	1.5	30.1	9.7	39.8
1.7	0.05	0.09	0.2	0.9	1.2	38.8	7.2	46.0
1.4	0.04	0.07	0.2	0.8	1.1	43.1	6.2	49.3
0.69	0.02	0.037	0.1	0.7	0.9	55.1	3.9	59.0
0.346	0.01	0.018	0.1	0.5	0.5	67.8	2.3	70.1
0.173	0.005	0.009	0.05	0.4	0.3	80.5	1.2	81.7
0.068	0.002	0.003	0.03	0.2	0.1	90.7	0.6	91.3

TABLE II. THE BURDEN OF TAXATION ON FULLY INVESTMENT INCOMES.  
1937-38 AND 1941-42

Assuming a moderate consumption of alcohol and tobacco and (on incomes of £500 and over) a moderate amount of private motoring

(Husband, wife and two dependent children) (In percentage of income)

Income £	Total burden of direct taxes (income tax, surtax and death duties)		Total burden of all indirect taxes <sup>2</sup>	Total burden of taxation paid out of investment income	
	Minimum burden <sup>1</sup>	Maximum burden <sup>1</sup>		Minimum burden <sup>1</sup>	Maximum burden <sup>1</sup>
1937-38					
100	2.0	2.1	14.4	16.4	16.5
150	2.0	2.1	14.1	16.1	16.2
200	2.0	2.5	13.5	15.5	16.0
250	2.4	2.5	12.6	15.0	15.1
300	2.4	2.7	12.0	14.4	14.7
350	3.4	3.8	11.3	14.7	15.1
500	7.5	9.6	12.7	20.2	22.3
1,000	18.5	22.0	9.1	27.6	31.1
2,000	24.8	31.1	7.1	31.9	38.2
2,500	27.1	34.8	6.2	33.3	41.0
5,000	35.2	47.8	4.2	39.4	52.0
10,000	44.4	63.9	2.8	47.2	66.7
20,000	53.2	68.4	2.0	55.2	70.4
50,000	62.1	68.5	1.1	63.2	69.6
1941-42					
100	2.0	2.1	23.3	25.3	25.4
150	2.0	2.1	21.4	23.4	23.5
200	2.0	2.5	19.3	21.3	21.8
250	3.3	4.2	18.0	21.3	22.2
300	8.1	9.4	16.5	24.6	25.9
350	11.8	13.1	16.0	27.8	29.1
500	21.8	24.9	15.3	37.1	40.2
1,000	37.7	42.9	9.7	47.4	52.6
2,000	46.2	56.6	7.2	53.4	63.8
2,500	49.6	62.6	6.2	55.8	68.8
5,000	59.8	71.5	3.9	63.7	75.4
10,000	71.2	77.1	2.3	73.5	79.4
20,000	82.0	85.2	1.2	83.2	86.4
50,000	91.3	93.0	0.6	91.9	93.6

<sup>1</sup> The two estimates of the burden of death duties differ according to whether estate-owners are saving out of current income or not. For the actual method followed vide Chapter vi.

The burden of indirect taxes is the same for both earned and investment incomes. For the burden of the different indirect taxes, vide Table 10.

## NOTES ON TABLES 12 AND 13 (Group C)

This group of tables summarizes the final figures on the total burden, as shown in Group B tables, and shows net incomes after deduction of taxation.

Table 13 is the only table in the whole Report which refers neither to wholly earned nor to wholly investment income. On the basis of an enquiry into the actual distribution of incomes in 1937-38, it is possible to calculate the average actual ratio of earned and investment income in incomes of £100, £150, etc. in that year. Table 13 shows the burden of taxation on these 'representative' incomes.

## NOTES ON TABLES 14 AND 15 (Group D)

These tables compare the burden of taxation at different periods from 1903-04 to the present day. The range of taxes covered is slightly less than in Group B.

Figures for all periods include roughly the same taxes: income tax and surtax, duties on sugar, tea, other food and small items, alcoholic drinks, tobacco, entertainments.

Figures for the first five periods were taken from the *Colwyn Report*, pp. 94-5.

Figures for 1930-31 were based on calculations of Mr D. M. Sandral, after deduction of stamps, petrol and motor duties. Figures for 1937-38 and 1941-42 are the present estimates, adjusted to show the burden for a family of five.

The following items are excluded: death duties, petrol and motor vehicle duties, protective duties, taxes on business profits and all non-State taxes, etc. The figures for 1937-38 and 1941-42 therefore differ from those given in Tables 9-11.

TABLE 12. A. ESTIMATED TOTAL BURDEN OF TAXATION, INCLUDING TAXES ON PRODUCTION IN GENERAL, PROTECTIVE DUTIES AND PURCHASE TAX.

1937-38 AND 1941-42  
(Husband, wife and two dependent children)

Income £	Fully earned incomes <sup>1</sup> Percentage of income taken in taxation		Fully investment incomes <sup>2</sup> Percentage of income taken in taxation	
	1937-38	1941-42	1937-38	1941-42
	100	18	28	16-16
150	16	24	16-16	23-23
200	15	22	15-16	21-22
250	14	20	15-15	21-22
300	12	21	14-15	25-26
350	11	24	15-15	28-29
500	14	31	20-22	37-40
1,000	19	40	28-31	47-53
2,000	24	46	32-38	53-64
2,500	25	49	33-41	56-69
5,000	33	59	39-52	64-75
10,000	41	70	47-67	73-79
20,000	50	82	55-70	83-86
50,000	58	91	63-70	92-94

B. ESTIMATED NET INCOME AFTER DEDUCTION OF ALL TAXES.

1937-38 AND 1941-42  
(Husband, wife and two dependent children)

Income £	Fully earned incomes <sup>1</sup>		Fully investment incomes <sup>2</sup>			
	1937-38	1941-42	1937-38		1941-42	
	£	£	£	£	£	£
100	82	72	84-	84	75-	75
150	126	114	126-	126	116-	116
200	170	156	170-	158	158-	156
250	215	200	213-	213	198-	195
300	264	237	258-	255	225-	222
350	311	266	303-	303	252-	249
500	430	345	400-	390	315-	300
1,000	810	600	720-	690	530-	470
2,000	1,520	1,080	1,360-	1,240	940-	720
2,500	1,875	1,275	1,680-	1,480	1,100-	780
5,000	3,350	2,050	3,050-	2,400	1,800-	1,250
10,000	5,900	3,000	4,300-	3,300	2,700-	2,100
20,000	10,000	3,600	9,000-	6,000	3,400-	2,800
50,000	21,000	4,500	18,500-	15,000	4,000-	3,000

<sup>1</sup> The following items are included: income tax and surtax, social insurance contributions, tea, sugar, small indirect taxes, tobacco, alcohol, entertainments, private motoring, P.O. net revenue, buses and taxis. The series also includes a conjectural burden on account of taxes on production in general, protective duties and the purchase tax.

*Excluded items:* death duties, taxes on business profits and rates on dwelling-houses.

<sup>2</sup> These figures include death duties (and exclude employees' social insurance contributions). The difference between the two figures represents the difference between the minimum and maximum estimate of the burden of death duties. (Vide Chapter VI.)

TABLE 13. THE BURDEN OF TAXATION ON PARTLY EARNED AND PARTLY INVESTMENT INCOMES.<sup>1</sup> 1937-38

Assuming a moderate consumption of alcohol and tobacco and (on incomes over £500) a moderate use of private motoring  
(Husband, wife and two dependent children)

1	2	3	4	5	6	7	8	9	10
Total income (partly earned, partly invest- ment income)	Investment income in column 1	Total burden of income tax, surtax and death duties <sup>2</sup>	Employees' social insurance contri- butions	Tea, sugar, small indirect taxes	Alcohol, tobacco, enter- tainments, motoring	Taxes on production in general, pro- tective duties, P.O. net revenue, buses and taxis <sup>3</sup>	Total burden of taxation on		
							partly earned, partly investment incomes <sup>2</sup>	fully earned incomes <sup>4</sup>	fully investment incomes <sup>2,4</sup>
£	£	%	%	%	%	%	%	%	%
100	5	0.05-0.05	3.5	2.1	8.0	4.3	18-18	18	16-16
200	14	0.3-0.3	1.7	1.4	6.8	5.3	16-16	15	15-16
250	25	0.8-0.9	1.4	1.3	6.3	5.0	15-15	14	15-15
300	48	2.0-2.1	—	1.0	5.9	5.0	14-14	12	14-15
500	135	4.0-4.1	—	0.6	7.3	4.9	17-17	14	20-22
1,000	430	13.9-15.5	—	0.4	5.1	3.5	23-25	19	28-31
2,000	1,080	19.3-21.3	—	0.2	4.1	2.9	27-29	24	32-38
5,000	3,150	31.3-37.3	—	0.06	2.4	1.7	36-42	33	39-52
10,000	6,900	42.0-52.3	—	0.03	1.5	1.3	45-55	41	47-67
20,000	14,200	51.2-64.7	—	0.02	0.9	1.1	53-67	50	55-70
50,000	41,000	62.5-69.0	—	0.01	0.4	0.7	64-70	58	63-70

<sup>1</sup> The proportion of earned and investment incomes was calculated on the basis of an income distribution for 1937-38. A representative combination was calculated according to the amounts of investment and earned income in each range, taking the *lower* level as representative for each range. See p. 3.

<sup>2</sup> Showing maximum and minimum burden on account of death duties according to whether estate-owners are saving out of their current income or not.

<sup>3</sup> Conjectural estimates.

<sup>4</sup> Vide Table 12.

The following items were excluded: taxes on business profits and rates on dwelling-houses.

TABLE 14. THE INCREASE IN THE BURDEN OF NATIONAL TAXATION. A comparison with previous enquiries, omitting certain taxes  
(The tax-payer is assumed to be married and to have three children under the age of 16)

		FULLY EARNED INCOMES							
		Total taxation: percentage of income							
Income £		1903-04	1913-14	1918-19	1923-24	1925-26	1930-31	1937-38	1941-42
<i>Direct taxes</i>	100	—	—	—	—	—	—	—	—
	150	0·2	0·2	0·2	—	—	—	—	—
	200	1·1	0·4	0·2	0·1	—	—	—	—
	500	3·5	2·6	7·0	3·2	2·0	0·6	0·7	10·4
	1,000	4·9	4·0	14·9	10·9	8·1	7·0	8·7	27·6
	2,000	4·8	4·0	22·7	15·7	13·2	13·8	15·6	37·6
	5,000	4·8	6·0	35·9	27·1	21·9	25·1	27·9	54·6
	10,000	4·7	7·7	42·0	35·9	30·0	34·6	38·3	67·6
	20,000	4·7	8·1	47·3	41·7	36·9	42·9	47·5	80·3
	50,000	4·7	8·3	50·5	47·8	44·2	51·2	56·5	90·6
<i>Indirect taxes</i>	100	5·6	5·4	9·9	14·1	11·9	11·0	10·4	19·1
	150	4·3	4·2	8·8	13·5	11·6	10·9	9·5	16·7
	200	3·7	3·6	7·7	11·7	10·2	9·6	8·4	14·8
	500	1·8	1·8	3·2	4·8	4·2	3·9	4·9	8·0
	1,000	1·2	1·2	2·0	3·2	2·9	2·7	3·1	4·6
	2,000	0·9	0·9	1·3	2·2	2·0	1·9	2·4	2·9
	5,000	0·7	0·7	0·7	1·4	1·3	1·2	1·3	1·5
	10,000	0·3	0·3	0·5	1·2	1·2	1·2	0·8	0·7
	20,000	0·2	0·2	0·3	0·6	0·6	0·6	0·4	0·4
	50,000	0·1	0·1	0·1	0·2	0·2	0·2	0·2	0·1
<b>TOTAL taxation</b>	100	5·6	5·4	9·9	14·1	11·9	11·0	10·4	19·1
	150	4·5	4·4	9·0	13·5	11·6	10·9	9·5	16·7
	200	4·8	4·0	7·9	11·8	10·2	9·6	8·4	14·8
	500	5·3	4·4	10·2	8·0	6·2	4·5	5·6	18·4
	1,000	6·1	5·2	16·9	14·1	11·0	9·7	11·8	32·2
	2,000	5·7	4·9	24·0	17·9	15·2	15·7	18·0	40·5
	5,000	5·5	6·7	36·6	28·5	23·2	26·3	29·2	56·1
	10,000	5·0	8·0	42·5	37·1	31·2	35·8	39·1	68·3
	20,000	4·9	8·3	47·6	42·3	37·5	43·5	47·9	80·7
	50,000	4·8	8·4	50·6	48·0	44·4	51·4	56·7	90·7

TABLE 15. THE INCREASE IN THE UNAVOIDABLE BURDEN OF NATIONAL TAXATION.<sup>1</sup>  
A comparison with previous enquiries, omitting certain taxes

(The tax-payer is assumed to be married and to have three children under the age of 16)

Income £	FULLY EARNED INCOMES								
	Total taxation: percentage of income								
	1903- 04	1913- 14	1918- 19	1923- 24	1925- 26	1930- 31	1934- 35	1937- 38	1941- 42
100	1.5	1.1	4.6	5.0	2.7	2.2	1.9	2.4	3.9
150	1.2	1.0	3.6	3.8	2.1	1.7	1.4	2.0	2.9
200	2.0	1.0	3.0	3.2	1.6	1.3	0.9 <sup>2</sup>	1.6	2.3
500	3.8	2.9	8.2	4.4	2.7	1.2	1.7	1.4	11.4
1,000	5.1	4.2	15.5	11.5	8.5	7.2		9.1	28.1
2,000	4.9	4.1	23.0	16.0	13.4	13.9		15.8	37.8
5,000	4.8	6.0	36.0	27.2	22.0	25.2		28.1	54.8
10,000	4.8	7.7	42.1	35.9	30.0	34.6		38.4	67.6
20,000	4.7	8.1	47.4	41.8	36.9	42.9		47.5	80.4
50,000	4.7	8.3	50.5	47.8	44.2	51.2		56.5	90.6

Figures for all periods refer roughly to the same taxes: income tax and surtax, duties on sugar, tea, other food and small items. Employees' social insurance contributions and local rates are excluded. The figures for 1937-38 and 1941-42 therefore differ from those given in Tables 7 and 8. Figures for the first five periods were taken from the *Colwyn Report*, p. 96; for 1930-31 rough estimates were calculated on the lines of the *Colwyn Report*; for 1934-35 the calculations of Lindahl were used ('Taxation in Sweden and other countries.' A Report submitted to the Swedish Ministry of Finance. Stockholm, 1936, p. 115. In Swedish). For 1937-38 and 1941-42 the figures are the present estimates extracted from Tables 7 and 8 after deducting social insurance contributions.

For £225 income.

#### NOTE ON TABLES 16-18 (Group E)

These tables are substantially a repetition of those in Group B, but with figures added for light and heavy consumption of tobacco and alcoholic drinks as well as for moderate consumption.

TABLE 16. THE BURDEN OF TAXATION ON LOWER INCOMES. FULLY EARNED INCOMES  
(Family of four.) (In pounds and shillings; to the nearest shilling)

	Income group				
	£100	£150 <sup>1</sup>	£200	£250	£300
1937-38	£ s.	£ s.	£ s.	£ s.	£ s.
Income tax	—	—	—	—	—
Social insurance contributions	3 10	3 10	3 10	3 10	3 10 <sup>1</sup>
Tea, sugar, other food, wheat, etc.	2 2	2 11	2 15	2 19	3 1
Entertainments	—	6	12	1 0	1 4
Taxes on production in general, protective duties, postal services, buses and taxis <sup>2</sup>	4 7	7 4	10 12	12 13	15 9
<i>Together</i>	9 19	13 11	17 9	20 2	23 4
Tobacco <sup>6</sup> : Light	2 5	2 5	2 5	2 5	2 5
Moderate	5 10 <sup>3</sup>	5 10	5 10	5 10	5 10
Heavy	15 6 <sup>3</sup>	15 6	15 6	15 6	15 6
Alcoholic drinks <sup>4</sup> : Light	£2-£7	£2-£7	£2-£7	£2-£7	£2-£7
Moderate	£4-£12	£4-£12	£4-£12	£4-£12	£4-£12
Heavy	£6-£20	£6-£20	£6-£20	£6-£20	£6-£20
Private motoring <sup>5</sup>			Approximately £7. 6s.		
1941-42					
Income tax	—	—	—	—	9 15
Social insurance contributions	4 8	4 8	4 8	4 8	4 8
Tea, sugar, other food, coal, etc.	3 1	3 10	3 12	3 14	3 16
Entertainments	3	8	5	1 5	1 10
Taxes on production in general, protective duties, purchase tax, postal services <sup>2</sup>	4 17	7 15	9 19	12 0	14 6
<i>Together</i>	12 9	16 1	18 14	21 7	33 15
Tobacco <sup>6</sup> : Light	5 8	5 8	5 8	5 8	5 8
Moderate	13 5 <sup>3</sup>	13 5	13 5	13 5	13 5
Heavy	37 8 <sup>3</sup>	37 8	37 8	37 8	37 8
Alcoholic drinks <sup>4</sup> : Light	£3-£10	£3-£10	£3-£10	£3-£10	£3-£10
Moderate	£8-£18	£8-£18	£8-£18	£8-£18	£8-£18
Heavy	£14-£30	£14-£30	£14-£30	£14-£30	£14-£30
Private motoring <sup>5</sup>			Approximately £5. 7s.		

<sup>1</sup> For manual workers only.

<sup>2</sup> Rough approximation.

<sup>3</sup> For £100 level the consumption and the corresponding duty are probably lower

<sup>4</sup> Roughly to the nearest £.

<sup>5</sup> Motor cycle only.

<sup>6</sup> An illustrative distribution of the burden according to income levels is shown in Tables 9 and 10.



TABLE 17. THE BURDEN OF TAXATION ON MIDDLE INCOMES. FULLY EARNED INCOMES

(Family of four.) (In pounds and shillings; to the nearest shilling)

	Income group			
	£300	£350	£500	£1,000
	£ s.	£ s.	£ s.	£ s.
1937-38				
Income tax	—	—	8 7	102 10
Tea, sugar, other food, wheat, etc.	3 1	3 4	3 5	3 5
Taxes on production in general, protective duties, postal services, buses and taxis <sup>1</sup>	15 9	16 19	23 16	36 4
<i>Together</i>	18 10	20 3	35 8	141 19
Tobacco <sup>3</sup> : Light	3 6	3 6	3 6	3 6
Moderate	8 1	8 1	8 1	8 1
Heavy	23 0	23 0	23 0	23 0
Alcoholic drinks <sup>3</sup> : Light	£4-£9	£4-£9	£4-£9	£4-£9
Moderate	£7-£11	£7-£11	£7-£11	£7-£11
Heavy	£11-£20	£11-£20	£11-£20	£11-£20
Private motoring	—	—	15 13	24 2
Entertainments	1 4	1 8	2 0	3 0
1941-42				
Income tax	9 15	24 8	76 3	301 3
Social insurance contributions	4 8	4 8	—	—
Tea, sugar, other food, coal, etc.	3 16	3 18	4 0	4 0
Taxes on production in general, protective duties, purchase tax, postal services, buses and taxis <sup>1</sup>	14 6	16 9	23 17	33 7
<i>Together</i>	32 5	49 3	104 0	338 10
Tobacco <sup>3</sup> : Light	7 15	7 15	7 15	7 15
Moderate	19 0	19 0	19 0	19 0
Heavy	54 9	54 9	54 9	54 9
Alcoholic drinks <sup>3</sup> : Light	£6-£12	£6-£12	£6-£12	£6-£12
Moderate	£8-£14	£8-£14	£8-£14	£8-£14
Heavy	£15-£25	£15-£25	£15-£25	£15-£25
Private motoring	—	—	12 14	18 7
Entertainments	1 10	1 15	2 5	3 0

<sup>1</sup> Rough approximations.<sup>3</sup> To the nearest £.<sup>3</sup> An illustrative distribution of the burden according to income levels is shown in Tables 9 and 10.

TABLE 18. THE BURDEN OF TAXATION ON HIGHER INCOMES. FULLY INVESTMENT INCOMES<sup>1</sup>  
(Family of four.) (In pounds and shillings; to the nearest shilling)

	Income group				
	£2,000	£5,000	£10,000	£20,000	£50,000
1937-38					
Income tax and surtax	£ s. 402 10	£ s. 1,489 8	£ s. 3,921 18	£ s. 9,584 8	£ s. 28,359 8
Death duties <sup>4</sup>	£93. 11s.-£220	£268. 19s.-£899. 14s.	£518. 11s.-£2,464. 5s.	£1064. 16s.-£4,096	£2,717. 7s.-£5,887
Tea, sugar, etc.	3 5	3 5	3 5	3 5	3 5
Taxes on production in general, protective duties, postal services, buses and taxis <sup>2</sup>	57 14	87 4	133 4	214 4	357 4
Tobacco <sup>5</sup> : Light	3 6	3 6	3 6	3 6	3 6
Moderate	8 1	8 1	8 1	8 1	8 1
Heavy	23 0	23 0	23 0	23 0	23 0
Alcoholic drinks <sup>3</sup> : Light	£6-£22	£6-£22	£6-£22	£6-£22	£6-£22
Moderate	£13-£30	£13-£30	£13-£30	£13-£30	£13-£30
Heavy	£21-£39	£21-£39	£21-£39	£21-£39	£21-£39
Private motoring	39 11	63 3	78 11	102 3	117 12
Entertainments	4 0	5 0	5 0	5 0	5 0
1941-42					
Income tax and surtax	851 2	2,832 8	6,857 8	16,169 18	45,419 18
Death duties <sup>4</sup>	£72. 2s.-£280. 10s.	£156. 10s.-£743	£260. 5s.-£857	£230. 3s.-£875	£256. 9s.-£1,078
Tea, sugar, etc.	4 0	4 0	4 0	4 0	4 0
Taxes on production in general, protective duties, purchase tax, postal services, buses and taxis <sup>2</sup>	50 10	88 10	116 15	148 15	188 15
Tobacco <sup>5</sup> : Light	7 15	7 15	7 15	7 15	7 15
Moderate	19 0	19 0	19 0	19 0	19 0
Heavy	54 9	54 9	54 9	54 9	54 9
Alcoholic drinks <sup>3</sup> : Light	£7-£24	£7-£24	£7-£24	£7-£24	£7-£24
Moderate	£14-£32	£14-£32	£14-£32	£14-£32	£14-£32
Heavy	£20-£40	£20-£40	£20-£40	£20-£40	£20-£40
Private motoring	34 12	34 12	34 12	34 12	34 12
Entertainments	3 10	4 0	4 0	4 0	4 0

<sup>1</sup> Fully earned incomes would pay £75 less in income tax and surtax at all income levels.

<sup>2</sup> Rough approximation.

<sup>3</sup> To the nearest £.

<sup>4</sup> Showing two limits according to whether estate-owners are saving out of current income or not. For the actual method followed vide Chapter vi.

<sup>5</sup> An illustrative distribution of the burden according to income levels is shown in Tables 9 and 10.

CHART 2  
**THE TOTAL BURDEN OF TAXATION**  
 FULLY EARNED INCOMES  
 HUSBAND, WIFE AND TWO DEPENDENT CHILDREN

(Figures in Table 12)

Percentage of  
 income taken  
 in taxation

All items included except death duties, taxes on  
 business profits and rates on dwelling-houses

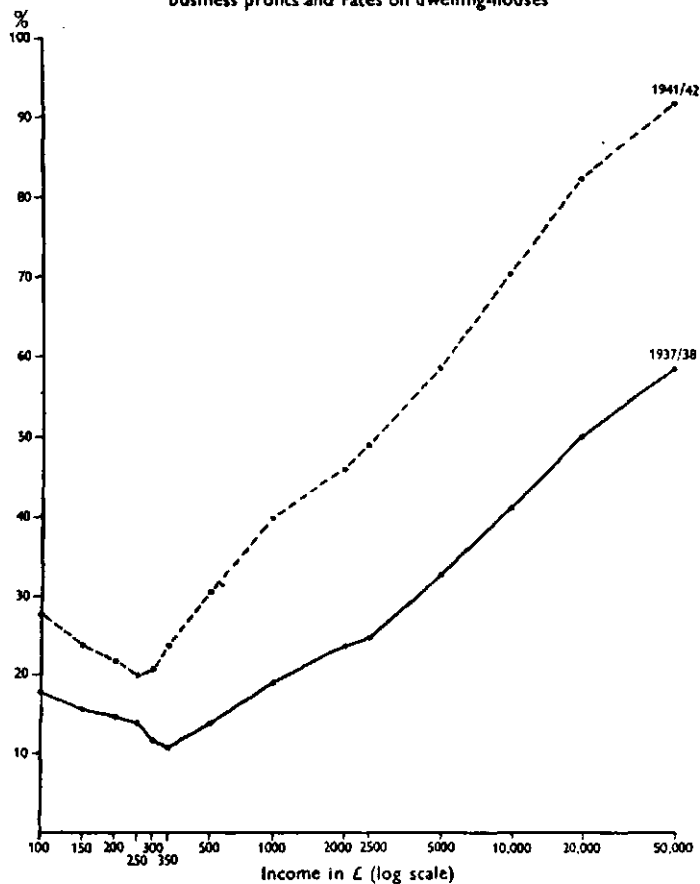


CHART 3  
THE INCREASE IN THE BURDEN OF  
NATIONAL TAXATION

FULLY EARNED INCOMES  
HUSBAND, WIFE AND THREE DEPENDENT CHILDREN

(Figures in Table 14)

*Excluded Items:* General industrial taxes,  
taxes on business profits, protective  
duties, purchase tax, etc.

Percentage of  
income taken  
in taxation

%

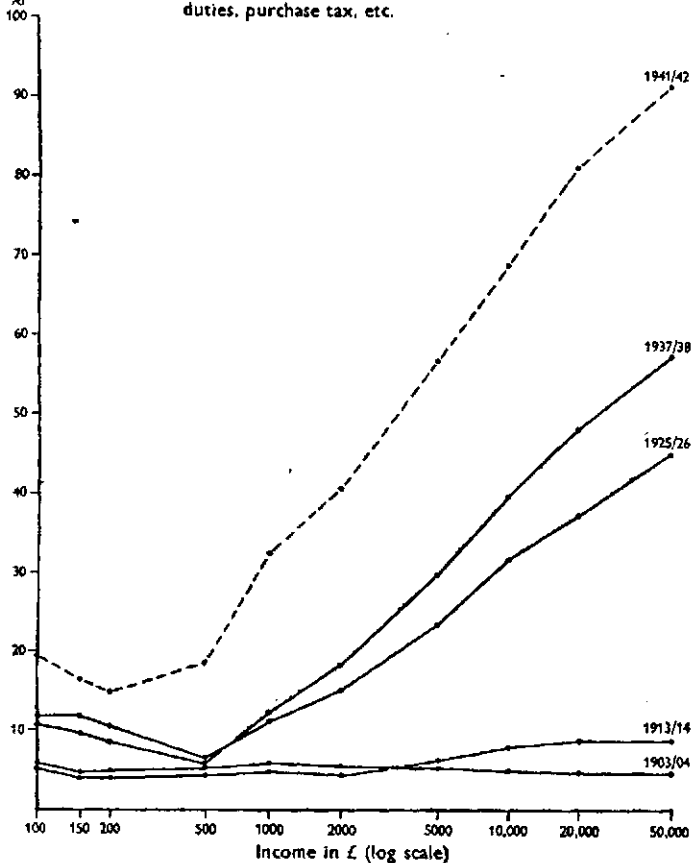


CHART 4  
 THE BURDEN ON THE LOWER AND  
 MIDDLE INCOMES  
 FULLY EARNED INCOMES  
 HUSBAND, WIFE AND TWO DEPENDENT CHILDREN  
 (Figures in Table 12)

Percentage of  
 income taken  
 in taxation

All items included except death duties, taxes on  
 business profits and rates on dwelling-houses

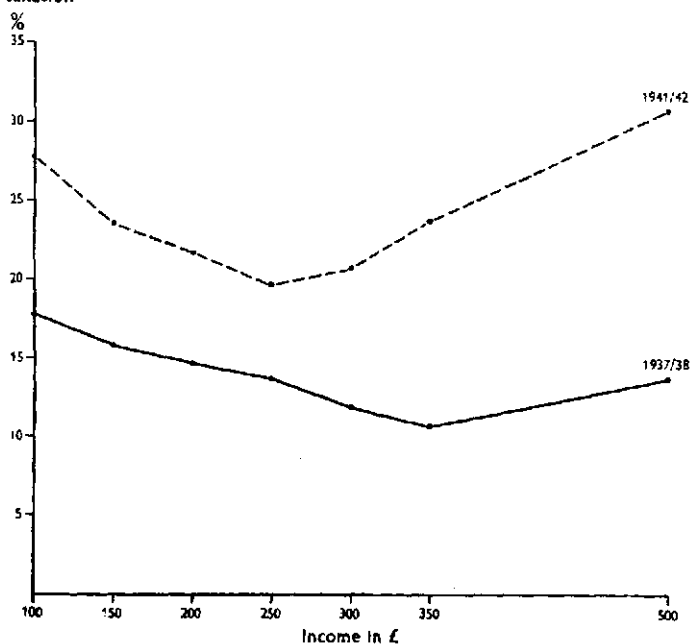


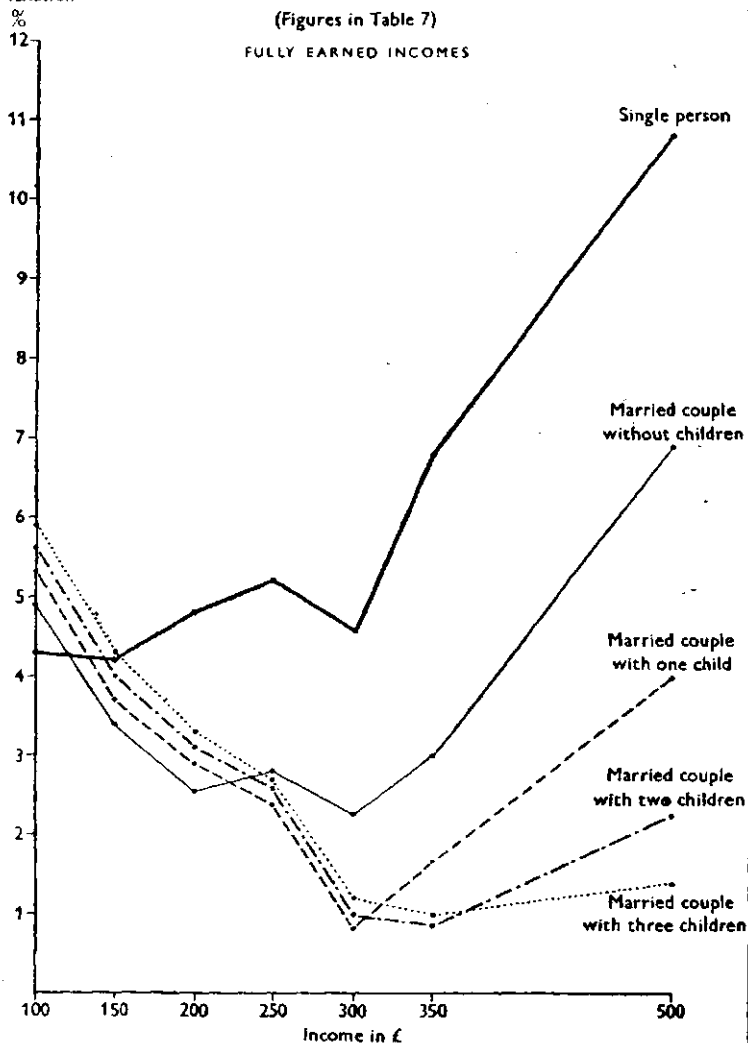
CHART 5  
UNAVOIDABLE BURDEN ON DIFFERENT SIZED  
FAMILIES AT DIFFERENT INCOME LEVELS. 1937/38

Percentage of  
income taken  
in taxation

Included items: Income tax, employees' social insurance  
contributions, tea, sugar, small indirect taxes.

(Figures in Table 7)

FULLY EARNED INCOMES



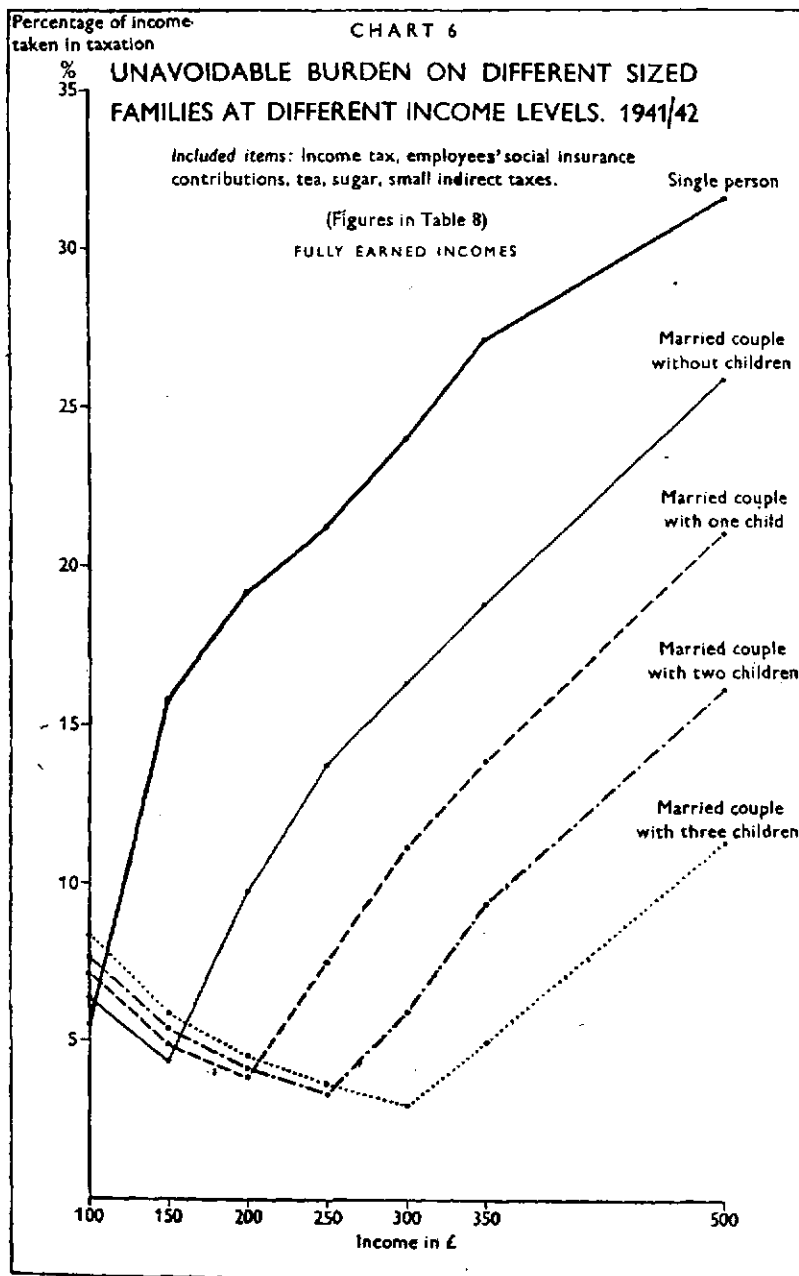


CHART 7

## THE BURDEN OF TAXATION

FULLY EARNED INCOMES

HUSBAND, WIFE AND TWO DEPENDENT CHILDREN

(Figures in Table 10)

All taxes included except death duties, rates on dwelling-houses and taxes on business profits

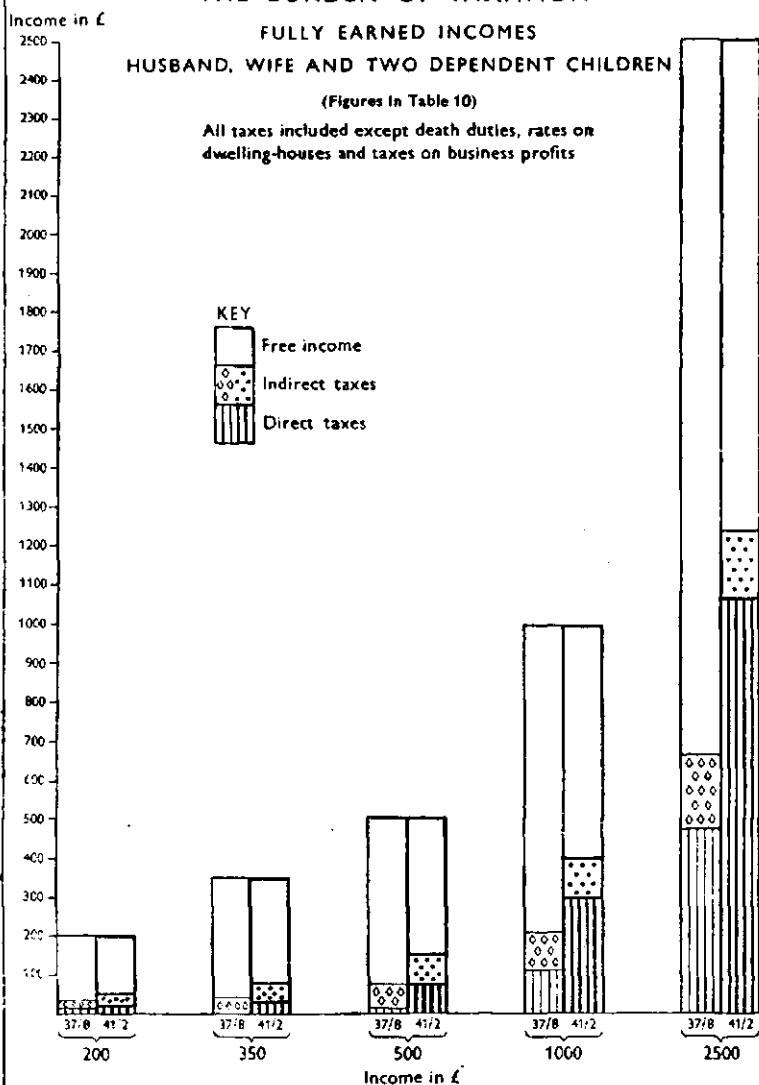
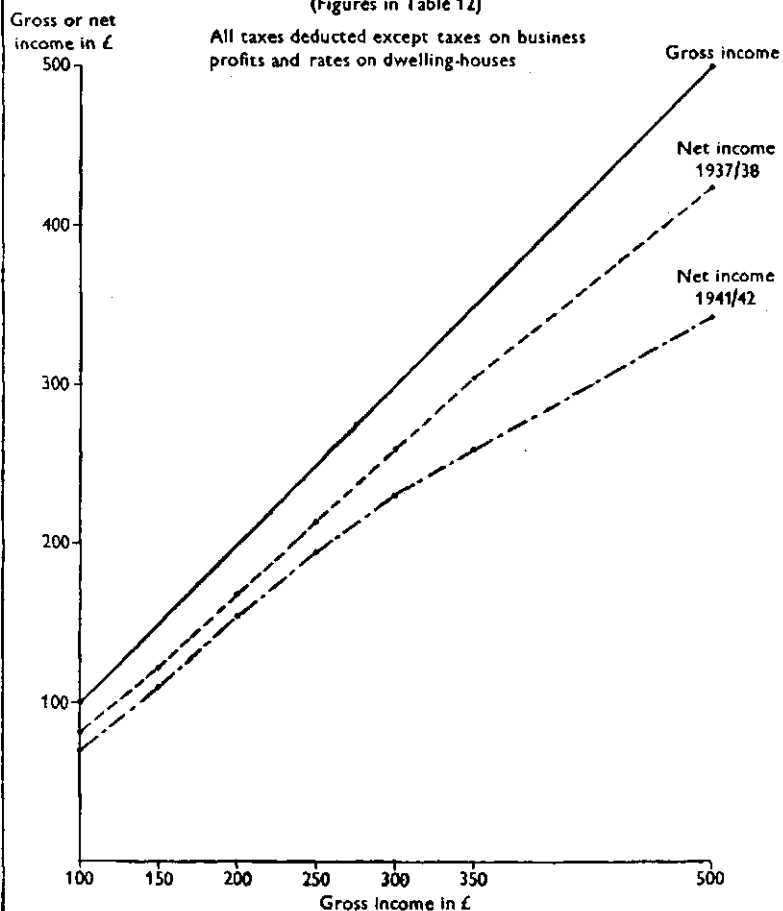
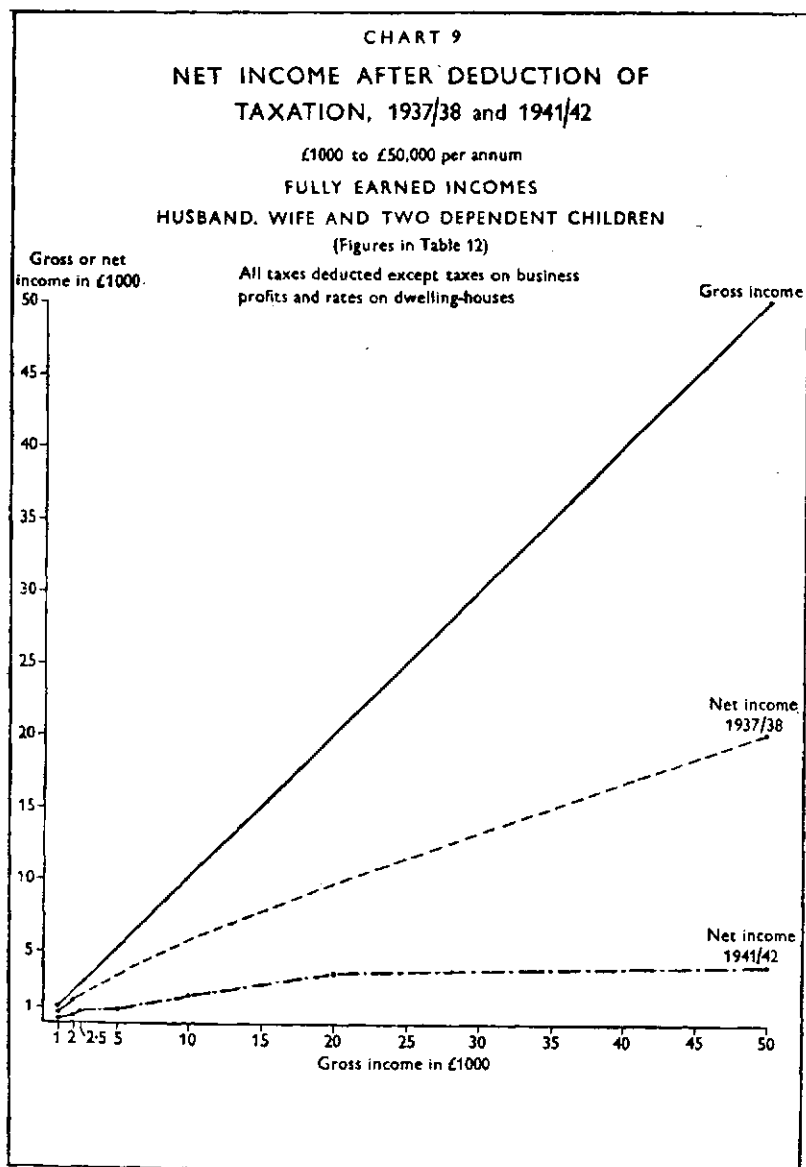




CHART 8  
 NET INCOME AFTER DEDUCTION OF  
 TAXATION, 1937/38 and 1941/42  
 LOWER AND MIDDLE INCOMES  
 FULLY EARNED INCOMES  
 HUSBAND, WIFE AND TWO DEPENDENT CHILDREN  
 (Figures in Table 12)





## PART II

### CHAPTER V. INCOME TAX AND SURTAX

In calculating for the purposes of this Report the burden of income tax and surtax, one preliminary assumption has had to be made—namely, that the tax-payer's actual income and his statutory income (i.e. his income as defined by the Income Tax Acts) are identical. This assumption is not exactly in accordance with actual practice—for example, many tax-payers deduct a certain amount of expenses from what they regard as their 'actual' income in order to arrive at statutory income—but it is necessary, since the calculation is not possible on any other basis, and the error involved is probably small.

The data necessary for a calculation of the burden of income tax in the two years are as follows:

	1937-38	1941-42
Standard rate in the £	5s.	10s.
Reduced rate	1s. 8d. (charged on the first £135)	6s. 6d. (charged on the first £165)
Exemption limit	£125	£110
Personal allowance:		
Single person	£100	£80
Married couple	£180	£140
Allowance per child	£60	£50
Earned income relief	1/5th (with a maximum allowance of £300)	1/10th (with a maximum allowance of £150)

No further allowances (e.g. for wife's earned income, or for life assurance premiums) were taken into account. For 1941-42 the additional tax payable above the 1940-41 level by each individual tax-payer on account of the reductions in the earned income allowance and the personal allowance will be treated as a credit to be made available to him after the war; for the purposes of the present enquiry these amounts have been treated as part of the income-tax burden.

The rates of surtax in force were as follows:

On income of £	On the last £	Payable 1 January 1938		Payable 1 January 1942	
		Rate in the £		Rate in the £	
		s.	d.	s.	d.
2,001- 2,500	500	1	1·2	2	0
2,501- 3,000	500	1	4½	2	3
3,001- 4,000	1,000	2	2·4	3	3
4,001- 5,000	1,000	3	3·6	4	3
5,001- 6,000	1,000	3	10·2	5	0
6,001- 8,000	2,000	4	4·8	5	9
8,001-10,000	2,000	5	6	7	0
10,001-15,000	5,000	6	0·6	8	3
15,001-20,000	5,000	6	7·2	9	0
20,001-30,000	10,000	7	1·8	9	6
30,001-50,000	20,000	7	8·4	9	6
above 50,000	—	8	3	9	6

The estimates of the burden of income tax and surtax are given in Tables 5-8.

In 1937-38 the burden of the income tax was still very light for the lowest income groups; almost no working-class family with children was affected. In 1941-42, however, the lowest incomes became liable for tax. In 1937-38 the estimated number of individuals (coming under the purview of the Inland Revenue) with total incomes above the exemption limit was estimated at 9·7 millions. Since 6,000,000 persons, however, were entirely relieved from the tax by the operation of allowances, 3,700,000 individuals only were chargeable with the tax. In 1941-42 the number of those chargeable with the tax was increased by several millions. The following data show the maximum tax-free incomes and illustrate the extent to which the lower incomes have recently become liable to income tax:

*Maximum Tax-free Incomes (All incomes fully earned)*

	1937-38	1941-42
	£	£
Single person	125	110
Married couple—no children	225	155
Married couple—one child	300	211
Married couple—two children	375	266
Married couple—three children	450	322

At the same time the points at which all the applicable allowances are exhausted and the full standard rate begins to be payable on every additional pound of income are (in nearly all cases) lower

than formerly. Since the relief for earned income operates up to a total income of £1,500 this particular allowance exerts some influence up to that point,<sup>9</sup> which has remained the same throughout the period under review. But the other allowances are exhausted at the following points:

	1937-38	1941-42
	£	£
Single person	235	245
Married couple—no children	315	305
Married couple—one child	375	355
Married couple—two children	435	405
Married couple—three children	495	455

For unearned incomes, every pound of income above these levels bears the full standard rate of tax. For earned incomes every additional pound carried four-fifths of the standard rate in 1937-38 and nine-tenths of the standard rate in 1941-42 up to a total income of £1,500, and thereafter the full standard rate. The level of total income at which surtax began to be payable was £2,000 in both years.

It should be noted, however, that the tax payable, reckoned as a rate in the £ on total income, remained in 1941-42 below the standard rate up to about £3,000. For example, in 1941-42 a single person enjoyed the maximum allowances (other than earned income relief) with an income of £245. Every pound of income above this level paid the full standard rate of 10s. in the £ (or 9s. in the £ if earned) up to £1,500. His total tax bill amounted, however, at £300 total (earned) income, to £66. 2s. 6d. and the effective rate of his income tax, therefore, was only 4s. 5d. At £1,000 his total tax bill was £381. 2s. 6d. and his effective rate of income tax therefore was 7s. 7½d. At £3,000 total income, with a total tax bill of £1,462. 7s. 6d., his effective rate of tax was still 9s. 9d.

While the lowering of the limits of tax-free incomes between 1937-38 and 1941-42 was responsible for bringing the lower income groups into the net of the Inland Revenue, the lowering of the points at which the standard rate begins to apply was mainly responsible for the heavier burden on the middle incomes (incomes of the order of £350 to £1,000). The earned income allowance is of importance in the lower and the middle income groups. It relieves many of the lower incomes of all liability, and alleviates the burden on the middle income groups. It has less importance

above the surtax level (£2,000 per annum) because the allowance reaches its maximum at a total income of £1,500.

It is of interest to show how much earned gross income is required by a single person to enjoy a certain amount of tax-free income. The figures are as follows:

Net income left after deduction of income tax and surtax	Gross income needed (approximately)	
	1937-38	1941-42
£	£	£
500	570	780
1,000	1,200	1,700
2,000	2,550	4,500
5,000	7,700	66,000
7,000	12,000	150,000

The last figures in the right-hand column indicate that the 1941-42 rates of tax imposed a virtual ceiling on net incomes ('net' is used for the moment in the special sense of 'after income tax and surtax but before all other taxes'). There can have been very few total incomes of over £150,000 in 1941-42—certainly less than 100.

The steep increase in progression above the surtax limit can be seen also from the following table. It shows the effective rate of tax for two extreme categories: (a) a single person with fully investment income, and (b) a family of five with fully earned income:

TABLE 19. EFFECTIVE RATE OF INCOME TAX AND SURTAX FOR THE TWO LIMITING CATEGORIES

Income £	Single person Fully investment income				Family of five Fully earned income			
	1937-38		1941-42		1937-38		1941-42	
	s.	d.	s.	d.	s.	d.	s.	d.
100	—	—	—	—	—	—	—	—
150	6	½	3	0½	—	—	—	—
200	10	—	3	11	—	—	—	—
250	1	2½	4	6	—	—	—	—
300	1	10	5	5	—	—	—	—
350	2	3½	6	1	—	—	—	—
500	3	1	7	3	1½	—	5½	—
1,000	4	0½	8	7½	1	9	2	1
2,000	4	6½	9	3½	3	1½	5	6½
2,500	4	10	9	10	3	9	7	6
5,000	6	2	11	8	5	7	8	5
10,000	7	11	13	10½	7	8	10	11
20,000	9	8	16	3	7	8	13	6
50,000	11	4	18	2½	9	6	16	1
150,000	12	7	19	1	11	4	18	1½
					12	7	19	0½

Post-war credits, as already mentioned, have not been taken into account for the purposes of the present calculation. It will, however, be seen from the following table that practically the total income tax paid by working-class families with family obligations will be credited to them as a post-war credit:

TABLE 20. POST-WAR CREDITS FROM INCOME TAXATION

Income £	Single person Fully earned income			Family of four Fully earned income		
	Total charge	Post-war credit		Total charge	Post-war credit	
£	£ s. d.	£	s. d.	£ s. d.	£	s. d.
100	—	—	—	—	—	—
150	17 17 6	9	15 0	—	—	—
200	32 10 0	10	16 8	—	—	—
250	47 2 6	11	18 4	—	—	—
300	66 2 6	17	7 6	9 15 0	9	15 0
350	88 12 6	21	13 4	24 7 6	17	6 8
500	156 2 6	26	13 4	76 2 6	28	9 2
1,000	381 2 6	43	6 8	301 2 6	48	6 8
1,500	606 2 6	60	0 0 <sup>1</sup>	526 2 6	65	0 0 <sup>1</sup>

<sup>1</sup> For higher incomes, these figures remain constant at £60 (single persons) or £65 (married persons).

## CHAPTER VI. DEATH DUTIES

### I. THE PROBLEM OF THE DEATH DUTIES

The duties collectively known as the death duties stand in a different position from all the other taxes and duties discussed in this Report. With many of the other taxes, there are difficulties in assessing exactly what is the burden on different individual incomes; but they are all clearly burdens on, and payable out of, income. With the death duties, this is not so clear. They are assessed on capital and payable only at irregular and long intervals. There are authorities who hold that the death duties should not be considered as taxes that weigh on income at all, and if this view were followed, they would be excluded entirely from this Report. We have thought it more correct to treat these duties as deferred and accumulated taxes on investment income; they would certainly be taken into account by a reasonable man in assessing the weight of taxation he had to bear, and their omission from our estimates would therefore be contrary to general usage. The previous calculations of the burden of taxes all made the same assumption.

The estate duty, the most important of the death duties, is payable in connection with the passing over of property at death, while the legacy duty and succession duty are payable in connection with the acquisition of property by the beneficiaries. (The fact that the heaviest of the duties is assessed on the estate left by the decedent, and that it is therefore, in a sense, a backward-looking tax, may be taken as a confirmation of the view taken in the last paragraph.) With taxes of this nature, there is obviously room for considerable difference of opinion on the question of incidence. Previous enquiries have made the following assumptions, namely: (1) that the burden of all three death duties is on the predecessor; and (2) that they can be expressed as a burden on his income—or, more exactly, on the income from the property.)

The traditional method of estimating the annual burden of the death duties is to assume that the property-owner takes out a life insurance policy to cover the amount of the duty. Since the value of the policy is, by law, reckoned as part of the estate, it must be sufficient to cover duty on the original estate plus the value of the



policy itself. The Colwyn Committee, who followed this method, assumed that the policy was taken out at the age of 45. It is also necessary, of course, to assume an average rate of interest, in order to translate a given investment income into the principal sum from which it is derived and on which death duties are payable. The Colwyn Committee assumed an average rate of 5 per cent. With these assumptions they arrived at estimates of the annual burden of death duties for the year 1925-26 ranging from 2.3 per cent on an annual investment income of £100 to 39.9 per cent on an annual investment income of £50,000. The total of direct taxation (income tax, surtax and death duties) did not exceed 84.2 per cent for the highest income (if fully investment income). This was a high figure, but not impossible.

It was our original intention to calculate the burden for the two years of the present Report by the same method. But it soon became apparent that the method broke down. Both in 1937-38 and in 1941-42 the combined burden of income tax, surtax and death duties, calculated by this method, exceeded, in some cases, 100 per cent of the income; and for 1941-42 the burden of death duties alone, by this method of calculation, exceeded the whole of the income in the highest category. It may serve some purpose in illustrating how steeply taxation has been increased to say that the annual burden of death duties on an investment income of £50,000 has increased from 39.9 in 1925-26 to 108.1 per cent in 1941-42. But for any other purpose such a figure is gravely misleading. It bears no resemblance to reality, since it invites the reader to believe that a very rich man derives no net income at all from his property, that he would be better off if he had less property. And, indeed, it contradicts its own assumptions, for the basis of this method of calculation is the assumption that every property-owner wishes to transmit his capital intact, while to quote a figure in excess of 100 per cent is equivalent to saying that he has to draw on capital to keep capital intact.

The traditional method—which can be called the ‘insurance method’—cannot therefore be used, in present-day conditions, for estimating the burden of death duties on the larger investment incomes. For lower incomes it remains a *possible* method, and it will be seen, later in this chapter, that we have made use of it (with one or two modifications). But it is still subject to the objection that it makes one particular assumption about the behaviour

of property-owners (namely, that they save up neither more nor less than is necessary to pay their death duties), although there is no evidence to show that this is the usual behaviour even among those smaller property-owners where it is still a possibility.

The problem of devising another method of estimation in place of the insurance method was one that gave us a great deal of trouble. For pointing the way out of our perplexities, we were finally indebted to Mr Nicholas Kaldor of the London School of Economics, a member of the Special Committee set up by the National Institute in connection with this enquiry, who developed what can be called the 'annuity' method. Before giving Mr Kaldor's own detailed description of his method, it may be appropriate to summarize it very briefly and to point out the basis on which it rests.

The annuity method involves an estimate of what the net income from the property would be, throughout an indefinite period of the future, if there were no death duties, and a similar estimate of what it will be on the assumption that death duties remain at the level of the year in respect of which the calculation is made. If there were no death duties, the net income would continue as at present (assuming the continuance of present income taxation). Since there are death duties, the estate will be diminished by them in each succeeding generation; but the net income will not be diminished in the same proportion, since the percentage of the smaller gross income taken in income taxation will be lower. It is possible to calculate the size of this future income-stream, and to ascertain its present value by the familiar method of discounting. The difference between the present capital value of the estate and this discounted present value of future income represents the burden *on capital* of the death duties, and the interest on this sum represents the burden *on income*.

A possibly simpler method of envisaging the calculation is to imagine the property-owner approaching an insurance company with the proposition that the company should take over the whole of his property, pay all taxes at their present rates and pay him and his heirs a perpetual annuity. The difference between the size of the annuity as it would be with present death duties and as it would be with no death duties is the burden of the death duties on income.

There is, however, a complication arising out of the fact that

there may be saving out of income. An insurance company entering into such a contract would have to make the stipulation that the property-owner should save nothing, because if he accomplished any saving, his estate at death, and consequently the duty payable, would be increased. If the property-owner was to be allowed to save, but the insurance company was to remain liable for death duties, the amount of the annuity would have to be reduced. That is to say, the burden of death duties on income is higher if part of the income is saved (indeed, the death duties can be regarded as a deferred tax on savings). Accordingly, it is necessary to make some assumption about the rate of saving out of income. As will be seen from Mr Kaldor's exposition, two alternative assumptions have had to be made. Assumption I is that there is no net saving. Assumption II is fully described on pp. 87-8; for the lower incomes it is substantially the same as the assumption of the 'insurance' method—namely, that saving is done to the extent necessary to pay the death duties. Assumption II, in fact, is the insurance method applied to the extent that it is sensible. We believe that Mr Kaldor's method incorporates all that is defensible from the insurance method into a more comprehensive and scientific approach to the whole problem.

The structure of assumptions on which the estimates are based is as follows:

1. It is assumed that the burden of all the death duties is on the income of the owner of the estate.
2. An assumption has to be made about the average length of a generation. (In the insurance method, this enters into the age at which it is assumed that the policy is taken out.)
3. It is necessary to assume an average rate of interest on capital. This is necessary both with the insurance method and the annuity method.
4. It is necessary to assume that death duties remain at the levels of the year in respect of which the calculation is made. With the insurance method, it is assumed that they remain unchanged for one transmission by death. With the annuity method, it is necessary to assume that they remain unchanged for an indefinite period. Either assumption may be justified, in spite of its departure from reasonable expectation, on the ground that the object of the calcu-

lation is to show the burden of taxation at the *present* rates of taxation, not at the rates that can be expected for the future.

5. The annuity method involves the further assumption that the present rates of income tax and surtax remain unchanged for an indefinite period. This also can be justified in the same manner. It should be pointed out that, when the calculation is done by the annuity method, the burden of death duties depends on, and to a certain extent varies inversely with, the burden of income taxation. This may seem paradoxical at first, but it is really in accordance with common sense. When income tax and surtax take 18s. in the £ of income, the burden on income of death duties is necessarily limited to an absolute maximum of 2s. in the £. If the burden of income tax and surtax were reduced to 15s. in the £, the burden of death duties could fluctuate within a range of 5s. in the £.

With this preface, Mr Kaldor may be permitted to speak for himself. The tables which follow his memorandum give the estimates in alternative form, as explained below, and these alternative figures have been carried to the Summary Tables in Part I. A table is also given, for comparative purposes, showing the estimated burden calculated by the crude insurance method, although, as has been explained, these figures are self-contradictory in the upper ranges. They are not included in any of the Summary Tables of Part I.

## II. THE ESTIMATION OF THE BURDEN OF DEATH DUTIES (by NICHOLAS KALDOR)

1. Death duties are a recurrent tax on capital paid at irregular, but fairly long, intervals. The income burden of a capital tax is the loss of income which the reduction of capital, due to the tax, creates. In the case of a once-and-for-all capital tax, payable immediately—a Capital Levy—the calculation of the income burden is simple: it is the difference between the net income of the estate (net after payment of income tax and surtax) before and after the levy is paid. In the case of a recurrent tax on capital, payable at more or less distant future dates, the *present* income burden can only be ascertained by listing the future tax payments, calculating the present value of this series (discounting at the same

rate of interest as that which relates the income of the estate to the capital) and finally relating this discounted value to the total value of the estate. It would follow, therefore, that the annual burden of death duties is a sum standing in the same proportion to the present annual net income as the present discounted value of all future death duties payable bears to the present value of the total estate.

2. This formula, however, requires some modification, on account of income tax and surtax. In so far as the payment of death duties reduces the size of the estate, it also relieves the estate from some of the taxes which would otherwise be payable in the form of income tax and surtax. The present discounted value which is relevant for calculating the net burden of death duties is not, therefore, the discounted value of the future death duties as such, but the *difference in the discounted value of all future tax payments caused by death duties*; in other words, the difference between (a) the discounted value of all future payments on account of income tax, surtax, and the death duties, and (b) the discounted value of the income tax and surtax that would have to be paid in the future if there were no death duties to be paid. It is the ratio which this difference bears to the total value of the estate which determines the proportion of net income which should be allocated to death duties.

Looked at in another way, the burden of death duties is the net reduction of the income-stream of an estate occasioned by them. This is shown, as a proportion of current net income, by comparing the discounted value of the expected net income-stream of an estate when there are no death duties, with the discounted value of net income-stream when future net income is reduced by successive death-duty payments. The proportion by which the second of these discounted values falls short of the first is the proportion of current net income which should be allocated to death duties. These two ways of approach must yield identical results if the rate of interest employed is the same as that which relates the income of the estate to the capital.

3. It follows from these considerations that the annual burden of death duties on present income can only be determined if definite assumptions are made not only as to the future rates of taxation (the future rates of income tax and surtax, as well as the

future rate of death duties payable), and the future rates of interest, but also as regards the changes in the *size* of the estate in the lifetime of each generation, i.e. the rate of saving or dis-saving, both present and future. The burden of death duties as a proportion of income will be all the greater, the greater the proportion of the income devoted to saving. Thus, if an estate-owner consumes the whole of his capital in his lifetime—by exchanging his capital for a life annuity, for instance—the estate escapes the payment of death duties altogether; while if the estate-owner in each generation ‘saves up’ for death duties—so that the estate is passed on intact despite the payment of death duties—the actual amount of death duties to be paid, and thus the annual burden as a proportion of income, will be greater, and in some categories of estates much greater, than if the size of the estate is allowed to be depleted by the payment of death duties in each successive generation.

4. The ‘insurance method’, which was adopted by the Colwyn Committee,<sup>1</sup> really amounts to a special case of our general formula, given above. If it is assumed that the owner in each generation saves an annual sum, the accumulated value of which is just sufficient to allow the estate to pass intact to his successor—or, what (subject to a qualification made in paragraph 7 below) amounts to the same thing, if he takes out a life insurance policy which is sufficient to cover the total amount of death duties payable, including the increase in the duty due to the policy, and if he does not save otherwise—the net addition to the discounted value of all taxes payable caused by death duties is just equal to the discounted value of the death duties paid (since, in this case, there is no reduction in capital in successive generations, hence

<sup>1</sup> Cf. Barna, ‘Death Duties in Terms of an Annual Tax’, *Review of Economic Studies*, November 1941, pp. 28 et seq., for an account of the methods adopted in previous enquiries. (Mr Barna follows a method which is different both from the insurance method adopted by the Colwyn Committee and the one adopted in the present enquiry. His method might best be described by saying that he regards as the annual burden of death duties the amount the typical estate-owner of any particular income-and-estate group would have to pay in order to insure against the risk of dying, and the consequent death-duty liabilities, in the current year. His method therefore amounts to assuming an alternative form of insurance against death duties—an annual insurance, instead of a life insurance—and is subject to the same kind of objections as are made below against the insurance method of the Colwyn Committee.)

no reduction, consequent upon death duties, in the payments of income tax and surtax); and the annual burden of death duties (if the rate of interest used in discounting is the same as the one at which the savings are accumulated) is just equal to the annual savings. In this case, therefore, but only in this case, the annual burden of death duties can alternatively be looked upon either as the interest on the discounted value of *net* death-duty payments, or the annual savings, made out of income, which provide a 'special fund' out of which death duties are paid.

It will be readily seen, however, that by 'saving up' for death duties estate-owners make the estate liable to much heavier payments of death duties than would be the case if they did not save up for it. This is partly because the size of the estate is increased by the accumulated savings; partly also because the more distant death-duty payments, made by successive heirs to the estate, will be on a *constant amount of capital*, instead of on a diminishing amount. The annual burden of death duties, as calculated by the 'insurance method', cannot therefore be regarded as *the* burden of death duties, applicable in all cases; or, rather, it is only applicable in those cases where estate-owners do, in fact, save up a sufficient amount to leave their property intact to their successors. It is unlikely that this is the usual practice, especially for the larger estates.

5. For certain categories of property-owners it may well be the case that savings made during lifetime are sufficient, or more than sufficient, to cover the payment of death duties on inheritance.<sup>1</sup> In those cases, the insurance method, if properly calculated,<sup>2</sup> gives the correct approximation of the true burden. But in the case of estates beyond a certain critical size—this critical size was the estate of £331,000 with the tax system of 1937-38, and of £86,000 with the tax system of 1941-42—it would be futile for estate-owners to save up for the *full* amount of the death duties, for this policy would leave the estate with a smaller *permanent* net income (after paying income tax and surtax) than would be obtained if estate-owners saved less.<sup>3</sup> For still larger estates, it would be impossible to save up for the full amount; and here the assumptions

<sup>1</sup> The size of the estate might also increase through 'capital gains'—unexpected capital appreciation, occurring in the future—but this factor must, of course, be ignored in calculating the burden on *current* income.

<sup>2</sup> Cf. paragraph 6 below.

<sup>3</sup> Cf. also p. 87 below.

of the insurance method yield nonsensical results. For these estates—which were estates of more than £1,072,800 in 1937-38 and of more than £190,000 in 1941-42—the necessary annual insurance premium, together with income tax and surtax, would amount to more than the total income of the estate, so that the insurance premiums could only be paid out of capital (with the result that at death the size of the estate, and hence the death duties to be paid, would be smaller than the amount on the basis of which the insurance premiums were calculated).<sup>1</sup> (Thus the insurance method is a *sensible* method of calculating the burden only for estates *below a certain size*; and it is the *correct* method only if the typical estate-owners in those categories do, in fact, behave in the manner assumed, and save up during lifetime, either by insurance, or in some other way, an amount sufficient to cover death duties.)

6. The particular form of the insurance method adopted by the Colwyn Committee, suffers, moreover, from another defect: it was there assumed that estate-owners take out an insurance policy at the age of 45. The age at which the policy is taken out cannot, however, be arbitrarily chosen; since the purpose of the calculation is to provide the equivalent of a constant annual burden, the age assumed for taking out the life insurance policy must be such as to provide an expectation of life which corresponds to the average length of a generation, i.e. the average interval of time during which the estate remains in the possession of a single owner. With the present life expectation, the Colwyn Committee's assumption of the age of 45 for taking out a policy implies an average length of generation of 25.5 years. The average

<sup>1</sup> But quite apart from this, any method of calculation which suggests that the total burden of direct taxation—income tax, surtax and death duties—amounts to more than 100 per cent of income is clearly misleading, for so long as the sum of income tax and surtax amounts to less than 100 per cent, the existence of death duties cannot make the burden *more* than 100 per cent of income as long as the rate of death duties is less than 100 per cent of capital. This becomes obvious when it is remembered that however many times an estate is subjected to death duties, the remaining part of the estate must still have some positive value. Thus, if the estate passed by inheritance  $n$  times, the  $(n+1)$ th heir would still derive some positive income from it, however large is  $n$ . The *present* net income from the estate, after allowing for taxation, must be greater than the net income of the  $(n+1)$ th heir. Another demonstration of the absurdity of the insurance method when applied to very large incomes can be derived from the reflection that it asks us to believe that the higher is gross income the lower is net income (net after income tax, surtax and death duties).



length of a generation is, however, about 31 years.<sup>1</sup> Hence the right assumption is, for this method, that the policy is taken out at the age of 38, since this gives an expectation of life of 31 years.

Calculations prior to the Colwyn Committee's—such as one given by the Chancellor of the Exchequer in answer to a Parliamentary question in 1918<sup>2</sup> and Sir Herbert Samuel's in 1919<sup>3</sup>—assumed the age of 40, which might well have been the right figure for that period, since it is likely that the age at which parents beget children has risen somewhat in the meantime.

7. It follows from what has been said above, that the correct approximation for assessing the annual burden of death duties can only be obtained by taking into account the *expected* increment in the size of the estates between inheritance and death, as inferred from the actual rate of savings in the various income groups.<sup>4</sup>

1 Mr Barna has calculated this figure by the following method. Assuming that the line of succession is from father to son and that the son is expected to die at the same age as the father, the length of a generation, i.e. the period which elapses from the time the son inherits his father's estate until his death, equals the age of the father when his son was born.

From preliminary data of the Bristol survey the following can be extracted (E. Grebenik, *Journal of the Royal Statistical Society*, 1940, p. 306):

In the highest occupational group the average age of mothers at the birth of their first child was 27·95, second child 30·50, third child 31·91; on the average 29·64 years.

Usually the first son inherits. The age of the mother when the first son is born is the average between the age when the first child and when the second child is born, which in Bristol was 29·23 years. But as not all first sons live long enough to inherit we ought to take a figure somewhere between the age when the first son is born and the age when the average child is born.

In 1910-15, which can be considered as the relevant period for our purpose, the difference between the mean ages of bachelors and spinsters who were married was 1·9 years, the men being older (*Registrar-General's Statistical Review of England and Wales*, 1937, Part II, p. 65. Mean age of bachelors marrying spinsters 27·2, of spinsters marrying bachelors 25·3 years). Hence the average age of fathers when their son who inherits is born was between 31·1 and 31·5 years. Therefore the length of generations is estimated to be 31 years.

2 Cf. *H.C. Debates*, 11 July 1918, 108, 53, p. 511.

3 Cf. 'The taxation of the various classes of the people', *J.R.S.S.* 1919.

4 Just as in the case of indirect taxes, the actual burden is calculated on the basis of the *actual consumption* of the taxed articles (without taking into account how much this consumption is itself altered by the existence of the tax), in the case of death duties, the calculation of the burden must be based on the actual distribution of income between consumption and saving—i.e. by taking into account just that increment in the size of the estate which results from this rate of saving—since it can be presumed that, in deciding how much to save, estate-owners take the existence of death duties into account along with all the other factors (such as the rate of interest) which are relevant to their decisions.

Unfortunately, however, there are no data available for the distribution of personal savings in various income categories. The only possible way of proceeding therefore appeared to be to work out the burden of death duties for *two special cases*, which might be looked upon as the limits within which the actual burden, in the great majority of cases, is likely to fall.<sup>1</sup> The estimates of burden thus derived can, with some looseness of language, be called the Minimum Burden and the Maximum Burden.

The first assumption, that of the Minimum Burden, the results of which are given in Table 21 below, is that the estate-owners of the present, and every successive generation, maintain their capital constant during lifetime (i.e. that there is *zero net saving* during the lifetime of each generation), so that the value of the estate inherited by the  $n$ th heir<sup>2</sup> is equal to the estate inherited by the  $(n - 1)$ th minus the death duties paid on his death. Here the amount of death duties to be paid by successive generations will be a diminishing series, since the estate will be smaller on every successive inheritance. The figures in Table 21 were so arranged as to show the calculation of the burden by *both* methods mentioned in paragraph 2 above—as the difference caused by death duties in the discounted value of future tax payments and as the difference in the discounted value of future net income. Thus, column (3) shows the discounted value of tax payments, on the assumption that the estate yields the present income permanently and no death duties are paid. Column (6) shows the present discounted value of all future death duties payable, and column (7) the present discounted value of income tax and surtax payments, when the size of the estate is reduced in successive generations by the death-duty payments. Thus the difference in the corresponding figures between

1 These two special cases are not true 'limiting cases' in the sense that the burden cannot lie outside them *under any circumstances*. The *minimum burden* of death duties is reached under the assumption that the estate-owner consumes all his capital in his lifetime; in this case the burden of death duties is nil. The *maximum burden* is obtained if we assume that the owner of the estate, in each generation, saves up the whole of his 'free income', i.e. the whole of his income after income tax and surtax have been paid. This gives the maximum possible increment in the size of the estate in the lifetime of each generation. But neither of these cases appeared to us sufficiently typical of real life to warrant its consideration.

2 It is assumed throughout these estimates that estates pass on to a *single heir*. If they pass on to several heirs, the successive death duties paid will be smaller. On the significance of this assumption, cf. p. 90 below.

column (3) and column (7) shows the reduction in the payment of other direct taxation resulting from death duties. Alternatively, column (4) and column (8) show, respectively, the discounted value of net income in the absence of death duties, and allowing for death duties. Column (9) brings the two methods together. It shows the discounted value of the net burden of death duties, and it equals *either* column (6) minus the difference between columns (3) and (7) *or* the difference between columns (4) and (8). Finally, this discounted value is converted into a net annual burden in column (10).

The second assumption, that of the Maximum Burden, the results of which are given in Table 22, is that estate-owners in each generation save out of income an amount sufficient to *maintain the net income of the estate constant over successive generations*, in spite of the payment of death duties, so far as that objective is attainable. Up to a certain capital level—the ‘optimum estate’—which, as mentioned earlier, was an estate of £331,000 in 1937–38 and of £86,000 in 1941–42, this assumption implies an annual rate of savings the accumulated value of which is just sufficient to pay the death duties (including the increase in death duties due to the accumulation) and leave the estate intact to the successor; it is identical, therefore, with the assumptions made by the Colwyn Committee. Beyond that critical level, however (i.e. for estates which are larger than the optimum), the assumption of maintaining the capital intact would have produced a *smaller* net income than could be obtained on the optimum estate. For the owners of these estates it would therefore be pointless, if not impossible, to maintain the capital intact. In fact, for the owners of these estates it would be pointless to save up anything at all for death duties, since by doing so they cannot prevent the reduction in the size of the estate to the optimum level; by saving they merely postpone the time at which the estate is reduced to the optimum level, at the cost of sacrificing the income from the estate in the intervening period. Saving only becomes worth while after the estate has fallen to the optimum level.

For these estates (which are those calculated by Method (c) in Table 22) it was assumed that annual savings out of income are equal to the savings on optimum estates. This, of course, is purely arbitrary; to assume that the owners in these categories saved nothing at all would have given results identical with Table 21,

whereas the whole purpose of Table 22 is to show the added burden of death duties due to savings; moreover, it is justifiable to assume that owners of large estates do, in fact, save something out of their income and, to that extent, make themselves liable to larger payments of death duties.

It will be noted that these assumptions make the annual burden of death duties (the Maximum Burden) identical with annual savings for estates which are less than the optimum and more than the annual savings for estates which are greater than the optimum.

For estates which are less than the optimum, it was assumed that savings take either the form of direct accumulation (at the same gross rate of interest which relates the income to the capital of the estate) or else the form of life insurance premiums, whichever secures the higher net income. For the lower categories of income (those calculated by Method (a) in Table 22), which are not subject to income tax, or else pay income tax at a reduced rate, direct accumulation yields the lower burden, for the reason that the income from investments of insurance companies is subject to income tax, and insurance premiums carry therefore a lower rate of interest. For higher categories of incomes (those calculated by Method (b) in Table 22) savings in the form of life insurance yield a higher net income, largely owing to the income-tax rebates which are allowable on insurance premiums but not on other forms of saving.

Table 23 shows the total burden of direct taxation (income tax, surtax and death duties) under both assumptions. Since the net burden of death duties, especially in the higher categories of income, is greatly influenced by the payment of income tax and surtax, for purposes of comparison between different years only Table 23 is the really instructive one, and not Tables 21 and 22. In particular the reduction of the net burden of death duties between 1937-38 and 1941-42 shown in Table 21, and also to some extent in Table 22, might be misleading if considered in isolation, since it was not due to any reduction in the rates of death duties payable (which were, in fact, increased between these two financial years), but was exclusively due to the compensating effect of increases in the other forms of direct taxation. This result may appear paradoxical at first sight, as may also the statement that the annual burden of death duties falls as income rises in the higher ranges. But when income tax and surtax amount to over 18s. in the £ (as they

did on an income of £50,000 in 1941-42), the effect on net income of death duties is necessarily confined within narrower limits (i.e. less than 2s. in the £) than when the burden of income tax and surtax is lower.

Table 24 shows the annual burden of death duties with the insurance method, assuming the policy is taken out at the age of 38 (instead of the age of 45, assumed by the Colwyn Committee). This is included in order to enable a comparison to be made with earlier calculations. The figures given in italics serve purely illustrative purposes, since the life insurance premiums in those categories could not, in fact, be paid out of income.

8. Throughout these calculations, which were prepared by Mr T. Barna, the following assumptions were made:

(i) The average yield of capital was assumed to be 4 per cent both for 1937-38 and 1941-42. The Colwyn Committee assumed an average yield of 5 per cent, but this was considered too high for recent years.

(ii) The length of a generation was assumed to be 31 years, and the death duties payable in the first instance were discounted 31 years, those in the second instance 62 years, and so on. It might be objected that since all the estates in existence at a particular moment will become liable for death duties over a period which, on the average, is only 15.5 years (since, on the average, present estate-owners must already have been in possession of their estates for a period equal to half the length of a generation), the death duties payable *in the first instance* should only be discounted for 15.5 years, and not 31 years. It must be remembered, however, that the purpose of the calculation is to provide the equivalent of a constant annual burden of death duties; if the death duties payable in the first instance had been discounted only for 15.5 years, this would have implied the assumption that there had been no burden, on account of death duties, on the income from the estates during the first half of the generation.

(iii) The average yield of capital, the rates of income tax, surtax and death duties were assumed to be the same for all future years as they actually were in the particular years for which the calculations were made. This, of course, is a much more realistic assumption for 1937-38 than for 1941-42 (since income tax and surtax can hardly be expected to remain permanently at their war-time

level), with the result that the figures for 1937-38 have more claim to be regarded as a true representation of the burden than those for 1941-42.

(iv) Future tax payments and future net income were discounted at the same rate of interest as that assumed for the average yield of capital, i.e. at 4 per cent. This assumption of a single rate of interest, applicable to all income and capital groups, is, of course, arbitrary. It should be borne in mind, however, that the rate of discount only enters into the determination of the annual burden in so far as it affects the *relation* between two capital values (i.e. the relation between the discounted value of net income with or without death duties); and changes in the rate of discount will only affect the figures for the annual burden to a significant extent if they are considerable.<sup>1</sup>

(v) It was assumed that the estate, on each successive occasion, is inherited by a *single heir*. The extent of the error introduced by this assumption is less than might at first be supposed. It can only affect the burden of death duties in terms of present discounted value, and thus on current income, in so far as the death duties paid on the second instance and subsequently are payable at a lower rate. But since the death duties payable in the second instance are discounted for 62 years (and those paid subsequently for 93 years or more) this factor is unlikely to cause a considerable difference to the present discounted value. The discounted value of *all* future tax payments can, of course, be considerably altered,

<sup>1</sup> If the rate of interest employed is not the same as that assumed for the average yield of capital (the ratio between income and estate), the annual burden as calculated by discounting net incomes (Column (4), *minus* Column (8), in Table 21) is no longer the same as that obtained by discounting tax payments (Column (6), *minus* the difference between Columns (3) and (7) in Table 21), the latter method giving *lower* figures for the annual burden than the former method, if the rate of interest chosen is *lower* than the average yield of capital, and *higher* figures, if it is *higher*. But with both of these methods, the figures obtained would have been *smaller* than those actually shown, if a *higher* rate of interest had been employed, and vice versa. Thus, if a 2 per cent rate had been employed, instead of the 4 per cent rate, the figures for 1937-38 in Column (11) of Table 21, obtained by discounting net incomes (Column (4) *minus* Column (8)), would have been changed from 2 to 5.4 per cent for the annual income of £100, from 4.67 to 11.65 per cent for the income of £2000 and from 5.43 to 12.09 per cent for the income of £50,000. If instead the figures had been computed by the alternative method of discounting tax payments, the differences caused by changing the rate of interest from 4 per cent to 2 per cent would have been much smaller.

TABLE 21. THE NET ANNUAL BURDEN OF DEATH DUTIES, ASSUMING ZERO NET SAVING DURING EACH GENERATION  
(Husband, wife and two dependent children)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Investment income £	Equivalent estate £	Discounted value of income tax and surtax in the absence of death duties £	Discounted value of net income in the absence of death duties [(2) - (3)] £	Rate of death duties payable in the first instance (see Table 25) %	Discounted value of death duties payable £	Discounted value of income tax and surtax allowing for death duties £	Discounted value of net income allowing for death duties [(2) - ((6) + (7))] £	Net discounted value of burden of death duties [(4) - (8) = (6) + (7) - (3)] £	Annual net burden [4 % of (9)] £ s.	Annual net burden as percentage of income
1937-38										
100	2,500	—	2,500	4.84	50	—	2,450	50	2 0	2.00
150	3,750	—	3,750	4.84	75	—	3,675	75	3 0	2.00
200	5,000	—	5,000	4.84	100	—	4,900	100	4 0	2.00
250	6,250	—	6,250	5.82	150	—	6,100	150	6 0	2.39
300	7,500	—	7,500	5.82	180	—	7,320	180	7 4	2.39
350	8,750	104	8,646	5.82	209	88	8,453	193	7 14	2.20
500	12,500	688	11,812	6.80	332	605	11,503	249	9 19	2.00
1,000	25,000	3,813	21,187	11.25	1,089	3,533	20,378	809	32 7	3.24
2,000	50,000	10,061	39,937	16.13	3,122	9,280	37,598	2,339	93 11	4.67
2,500	62,500	13,875	48,625	18.08	4,330	12,625	45,536	3,089	123 11	4.94
5,000	125,000	37,234	87,766	23.93	11,108	32,850	81,042	6,724	268 19	5.39
10,000	250,000	98,047	151,953	27.83	25,786	85,225	138,989	12,964	518 11	5.18
20,000	500,000	239,609	260,391	33.68	61,229	205,000	233,771	26,620	1,064 16	5.33
50,000	1,250,000	708,984	541,016	41.48	182,793	594,125	473,082	67,934	2,717 7	5.43
1941-42										
100	2,500	—	2,500	4.84	50	—	2,450	50	2 0	2.00
150	3,750	—	3,750	4.84	75	—	3,675	75	3 0	2.00
200	5,000	—	5,000	4.84	100	—	4,900	100	4 0	2.00
250	6,250	81	6,169	5.82	150	58	6,042	127	5 2	2.01
300	7,500	488	7,012	5.82	180	430	6,810	122	4 18	1.62
350	8,750	804	7,956	5.82	209	826	7,715	141	5 13	1.62
500	12,500	2,528	9,972	7.78	383	2,345	9,772	200	8 0	1.60
1,000	25,000	8,778	16,222	13.01	1,290	8,138	15,572	650	26 0	2.60
2,000	50,000	21,278	28,722	18.86	3,601	19,480	26,919	1,803	72 2	3.60
2,500	62,500	28,778	33,722	22.76	5,238	25,788	31,474	2,248	89 18	3.59
5,000	125,000	70,809	54,191	30.37	13,758	60,963	50,279	3,912	156 10	3.14
10,000	250,000	171,434	78,566	35.44	31,915	146,025	72,060	6,506	260 5	2.61
20,000	500,000	404,247	95,753	43.05	74,901	335,100	90,000	5,754	230 3	1.15
50,000	1,250,000	1,135,497	114,503	53.19	224,283	917,625	108,090	6,411	256 9	0.51

TABLE 22. THE NET ANNUAL BURDEN OF DEATH DUTIES, ASSUMING MAINTENANCE OF MAXIMUM NET INCOME  
(Husband, wife and two dependent children)

Method	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Investment income £	Equivalent estate £	Estate plus value of accumulated savings £	Rate of death duties (see Table 25) %	Death duties payable £	Annual savings £ s.	Income tax and surtax £ s.	Net income [(1)-(6)-(7)] £	Interest on discounted future net incomes £	Net burden [(6) or (1)-(6)-(7)] £ s.	Annual net burden as percentage of income
1937-38											
(a)	100	2,500	2,627	4.84	127	2 1	—	98	—	2 1	2.06
(a)	150	3,750	3,941	4.84	191	3 2	—	147	—	3 2	2.06
(a)	200	5,000	5,309	5.82	309	5 0	—	195	—	5 0	2.50
(a)	250	6,250	6,636	5.82	386	6 5	—	244	—	6 5	2.50
(a)	300	7,500	7,963	5.82	463	8 0	—	292	—	8 0	2.66
(a)	350	8,750	9,291	5.82	541	9 6	4 3	337	—	9 6	2.66
(a)	500	12,500	13,555	7.78	1,055	20 9	27 10	452	—	20 9	4.09
(a)	1,000	25,000	28,484	12.23	3,484	67 12	152 10	780	—	67 12	6.76
(a)	2,000	50,000	61,035	18.08	11,035	220 0	402 10	1,377	—	220 0	11.00
(b)	2,500	62,500	78,154	20.03	15,654	315 1	555 0	1,630	—	315 1	12.60
(b)	5,000	125,000	168,645	25.88	43,645	899 14	1,489 8	2,611	—	899 14	17.99
(b)	10,000	250,000	366,193	31.73	116,193	2,464 5	3,921 18	3,614	—	2,464 5	24.64
(c)	20,000	500,000	668,390	37.58	251,181	3,597 0	9,584 8	—	6,320	4,096 0	20.48
(c)	50,000	1,250,000	1,418,390	43.44	616,149	3,597 0	28,359 8	—	15,754	5,887 0	11.77
1941-42											
(a)	100	2,500	2,627	4.84	127	2 1	—	98	—	2 1	2.06
(a)	150	3,750	3,941	4.84	191	3 2	—	147	—	3 2	2.06
(a)	200	5,000	5,309	5.82	309	5 0	—	195	—	5 0	2.50
(b)	250	6,250	6,636	5.82	386	7 7	3 5	239	—	7 7	2.93
(b)	300	7,500	7,963	5.82	463	8 16	19 10	272	—	8 16	2.93
(b)	350	8,750	9,291	5.82	541	10 5	35 15	304	—	10 5	2.93
(b)	500	12,500	13,730	8.06	1,230	23 7	101 3	375	—	23 7	4.67
(b)	1,000	25,000	29,131	14.18	4,131	78 8	351 3	570	—	78 8	7.84
(b)	2,000	50,000	64,733	22.76	14,733	280 10	851 3	868	—	280 10	14.03
(b)	2,500	62,500	83,668	25.30	21,168	413 19	1,151 3	935	—	413 19	16.56
(c)	5,000	125,000	158,391	32.90	52,111	667 0	2,832 8	—	1,425	743 0	14.86
(c)	10,000	250,000	283,391	37.97	107,604	667 0	6,857 8	—	2,286	857 0	8.57
(c)	20,000	500,000	533,391	45.58	243,120	667 0	16,169 18	—	2,955	875 0	4.37
(c)	50,000	1,250,000	1,283,391	55.72	698,266	667 0	45,419 18	—	3,502	1,078 0	2.16

*Note on Methods used.* (a) It is assumed that annual savings are accumulated in order that at death they should cover death duties payable. Accumulation is assumed to take place at a rate of interest of  $4(1-t)\%$ , where  $t$  is the marginal rate of income and surtax at the given income. (b) For incomes of £2,500 and over in 1937-38 and for all incomes liable for income tax in 1941-42, the modified insurance method yields a lower burden than the method of accumulation. For these incomes it was therefore assumed that the individual insures instead of accumulating his own savings. (c) For incomes which, with the insurance method, would yield less than the optimum net income, it was assumed that the amount of saving is just as much as was the amount of premiums paid to cover death duties on the optimum estate. Estates are allowed to fall after death in successive generations until they reach the optimum level where they are maintained. Columns (2), (3), (4) refer to the estates in the first instance.



if the estate is broken up after the death of the present owner, since the estate might then become liable to much lower income tax and surtax payments. But this latter factor is irrelevant for

TABLE 23. THE TOTAL BURDEN OF DIRECT TAXES ON INVESTMENT INCOMES  
(Husband, wife and two dependent children)

Investment income £	Income and surtax %	Annual net burden of death duties		Total burden	
		Assump- tion I %	Assump- tion II %	Assump- tion I %	Assump- tion II %
1937-38					
100	—	2·00	2·06	2·00	2·06
150	—	2·00	2·06	2·00	2·06
200	—	2·00	2·50	2·00	2·50
250	—	2·39	2·50	2·39	2·50
300	—	2·39	2·66	2·39	2·66
350	1·19	2·20	2·66	3·39	3·85
500	5·50	2·00	4·09	7·50	9·59
1,000	15·25	3·24	6·76	18·49	22·01
2,000	20·13	4·67	11·00	24·80	31·13
2,500	22·20	4·94	12·60	27·14	34·80
5,000	29·78	5·39	17·99	35·17	47·77
10,000	39·22	5·18	24·64	44·40	63·86
20,000	47·92	5·33	20·48	53·25	68·40
50,000	56·72	5·43	11·77	62·15	68·49
1941-42					
100	—	2·00	2·06	2·00	2·06
150	—	2·00	2·06	2·00	2·06
200	—	2·00	2·50	2·00	2·50
250	1·30	2·01	2·93	3·31	4·23
300	6·50	1·62	2·93	8·12	9·43
350	10·21	1·62	2·93	11·83	13·14
500	20·23	1·60	4·67	21·83	24·90
1,000	35·11	2·60	7·84	37·71	42·95
2,000	42·56	3·60	14·03	46·16	56·59
2,500	46·05	3·59	16·56	49·64	62·61
5,000	56·64	3·14	14·86	59·78	71·50
10,000	68·57	2·61	8·57	71·18	77·14
20,000	80·85	1·15	4·37	82·00	85·22
50,000	90·84	0·51	2·16	91·35	93·00

the purposes of our calculation, since we are not interested in the discounted value of tax payments as such, but only in the difference caused by the payments of death duties to this discounted value.

(vi) It was assumed that the whole estate is subject to death duties. Actually, some proportion of estates escape the payment of death duties altogether, since they are passed on, from one generation to the next, by settlements during lifetime. It is impossible to discover statistically what the proportion of settled

TABLE 24. THE BURDEN OF DEATH DUTIES CALCULATED BY THE INSURANCE METHOD (Value of policy included in estate)  
(Policy taken out at age of 38) (Husband, wife and two dependent children)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Investment income £	Equivalent estate £	Estate plus value of policy £	Rate of death duties (see Table 25) %	Death duties payable £	Gross insurance premium £ s.	Income tax rebate £ s.	Net insurance premium £ s.	Net insurance premium as percentage of income
1937-38								
100	2,500	2,627	4.84	127	2 18	—	2 18	2.02
150	3,750	3,941	4.84	191	4 8	—	4 8	2.02
200	5,000	5,309	5.82	309	7 2	—	7 2	3.56
250	6,250	6,636	5.82	386	8 18	—	8 18	3.56
300	7,500	7,963	5.82	463	10 14	—	10 14	3.56
350	8,750	9,291	5.82	541	12 9	1 1	11 8	3.26
500	12,500	13,555	7.78	1,055	24 5	3 1	21 5	4.25
1,000	25,000	28,484	12.23	3,484	80 3	10 0	70 2	7.01
2,000	50,000	61,035	18.08	11,035	253 16	31 16	222 0	11.10
2,500	62,500	78,154	20.03	15,654	360 1	45 0	315 1	12.60
5,000	125,000	168,645	25.88	43,645	1,003 17	104 3	899 14	17.99
10,000	250,000	366,193	31.73	116,193	2,672 9	208 7	2,464 5	24.64
20,000	500,000	826,856	39.53	326,856	7,517 14	416 13	7,101 1	35.51
50,000	1,250,000	2,563,576	51.24	1,313,576	30,212 5	1,041 13	29,170 12	58.34
1941-42								
100	2,500	2,627	4.84	127	2 18	—	2 18	2.02
150	3,750	3,941	4.84	191	4 8	—	4 8	2.02
200	5,000	5,309	5.82	309	7 2	—	7 2	3.56
250	6,250	6,636	5.82	386	8 18	—	8 18	3.56
300	7,500	7,963	5.82	463	10 14	1 11	7 7	2.93
350	8,750	9,291	5.82	541	12 9	1 17	8 16	2.93
500	12,500	13,730	8.96	1,230	28 6	2 4	10 5	2.93
1,000	25,000	29,131	14.18	4,131	95 0	4 10	23 7	4.67
2,000	50,000	64,733	22.76	14,733	338 17	16 13	78 8	7.84
2,500	62,500	83,668	25.30	21,168	186 17	58 7	280 10	14.03
5,000	125,000	186,289	32.90	61,289	1,409 13	72 18	413 19	16.56
10,000	250,000	438,982	43.05	188,982	4,346 12	145 17	1,263 16	25.28
20,000	500,000	1,068,148	53.19	568,148	13,067 8	291 13	4,054 19	40.55
50,000	1,250,000	3,662,467	65.87	2,412,467	55,486 15	583 7	12,484 1	60.24
						1,458 7	54,028 8	108.06

estates is in the total, and even if data were obtainable, it is questionable whether allowance should be made for them, for the proportion of estates which thus escapes the payment of death duties varies very widely from case to case; the *average* proportion therefore gives very little information of the proportion which is *typical* in the various income groups.

It should be borne in mind, however, that the omission of this factor makes the burden of death duties, in both of the assumed cases, appear *larger* than it is in reality.

### NOTE ON MINOR DUTIES (LEGACY AND SUCCESSION DUTIES) (by T. BARNA)

Minor duties are, in practice, very much in the nature of an addition to the estate duty, and were treated as such for purposes of the present calculation. It is therefore necessary to express them in the same way as estate duties, i.e. as a rate on the capital value of the estate on which estate duties are payable.

The minor duties at present still in force (the legacy duty on personal property and the succession duty on real property) are levied in connection with the acquisition of the property by the beneficiaries.

The method adopted in previous calculations, including the *Colwyn Report*, was to allocate the burden of minor duties in proportion to the burden of estate duty, the proportion being the same as Exchequer receipts of minor duties bear to receipts of estate duty in the relevant financial year.

In fact minor duties are not paid in proportion to estate duty. Minor duties are paid by the beneficiary, whereas estate duty is payable by the estate, i.e. the legator by legal fiction. For purposes of valuation and of minor duties certain incumbrances are allowed. The main deduction is estate duty paid, and there are minor deductions also, e.g. Probate Court fees, fees of executor, etc. Minor deductions are not likely to form a significant proportion of the estate.

On the remaining part of the estate minor duties are payable at different rates. If the relationship of beneficiary to legator is close (wife or husband, linear descendant or linear ancestor) the rate is 1 per cent. For other persons higher rates (5 or 10 per cent) are payable. However, there are certain exemptions:

(i) Estates not exceeding or slightly exceeding £1,000 are exempt from minor duties.

(ii) If relationship between beneficiary and legator is close,

(a) estates under £15,000 are exempt,

(b) legacies under £1,000 or £2,000 are exempt.

(iii) If higher rates were payable certain small legacies (under £100) are exempt.

As can be seen there is no burden of minor duties on estates under £1,000. For estates over £1,000 we calculated two average rates, one rate for estates (after deduction of estate duties) from £1,000 to £15,000, and another average rate for estates over £15,000.

The average rate of minor duties on estates less estate duty payable was found to be:

(i) For estates of £1,000 to £15,000, 1·9 per cent.

(ii) For estates of £15,000 and over, 2·5 per cent.

This calculation was based on data given in Tables 16, 21 and 22 of the Report of the Board of Inland Revenue for 1937-38, and on certain assumptions as to the proportion of administrative expenses and small legacies in the two groups.

It has been assumed that the average rates 1·9 and 2·5 per cent were the same in 1941-42, which implies that rates of minor duties on the value of estate were lower because of higher rates of estate duty.

In the following table rates of estate duty and of minor duties as percentage of estate-duty capital are shown. (The rates shown in Tables 21-24 are those of death duties, i.e. estate duty plus minor duties.)

TABLE 25. THE RATES OF DEATH DUTIES

Range of estate £	1937-38			1941-42		
	Estate duty %	Minor duties %	Total death duties %	Estate duty %	Minor duties %	Total death duties %
100- 500	0·7 <sup>1</sup>	—	0·7	0·7	—	0·7
500- 1,000	2	—	2	2	—	2
1,000- 5,000	3	1·84	4·84	3	1·84	4·84
5,000- 10,000	4	1·82	5·82	4	1·82	5·82
10,000- 12,500	5	1·80	6·80	6	1·78	7·78
12,500- 15,000	6	1·78	7·78	7·2	1·76	8·96
15,000- 18,000	7	2·30	9·30	8·4	2·27	10·67
18,000- 21,000	8	2·28	10·28	9·6	2·24	11·84
21,000- 25,000	9	2·25	11·25	10·8	2·21	13·01
25,000- 30,000	10	2·23	12·23	12	2·18	14·18
30,000- 35,000	11	2·21	13·21	13·2	2·15	15·35
35,000- 40,000	12	2·18	14·18	14·4	2·12	16·52
40,000- 45,000	13	2·15	15·15	15·6	2·09	17·69
45,000- 50,000	14	2·13	16·13	16·8	2·06	18·86
50,000- 55,000	15	2·10	17·10	19·5	1·99	21·49
55,000- 65,000	16	2·08	18·08	20·8	1·96	22·76
65,000- 75,000	17	2·05	19·05	22·1	1·93	24·03
75,000- 85,000	18	2·03	20·03	23·4	1·90	25·30
85,000- 100,000	19	2·01	21·01	24·7	1·86	26·56
100,000- 120,000	20	1·98	21·98	26	1·83	27·83
120,000- 150,000	22	1·93	23·93	28·6	1·77	30·37
150,000- 200,000	24	1·88	25·88	31·2	1·70	32·90
200,000- 250,000	26	1·83	27·83	33·8	1·64	35·44
250,000- 300,000	28	1·78	29·78	36·4	1·57	37·97
300,000- 400,000	30	1·73	31·73	39	1·51	40·51
400,000- 500,000	32	1·68	33·68	41·6	1·45	43·05
500,000- 600,000	34	1·63	35·63	44·2	1·38	45·58
600,000- 800,000	36	1·58	37·58	46·8	1·32	48·12
800,000- 1,000,000	38	1·53	39·53	49·4	1·25	50·65
1,000,000- 1,250,000	40	1·48	41·48	52	1·19	53·19
1,250,000- 1,500,000	42	1·44	43·44	54·6	1·12	55·72
1,500,000- 2,000,000	45	1·36	46·36	58·5	1·03	59·53
2,000,000 and over	50	1·24	51·24	65	0·87	65·87

<sup>1</sup> Average of 1 per cent rate and fixed rate of 30s. or 50s. on small estates.

## CHAPTER VII. TAXES ON BUSINESS PROFITS, AND THE BURDEN OF TAXATION ON IMPUTED INCOMES

1. In the British income-tax system the profits of an individual trader or a partnership are imputed to the proprietors, whether these profits are withdrawn from the business or left in the business as reserves. In both cases they are taxed as the personal incomes of the proprietors. In the case of joint-stock companies, however, the total profits are liable to income tax at the standard rate irrespective of whether they are distributed or not. If the profits are distributed, income tax deducted at the standard rate at the source is allowed for in computing the total tax liability of the individual shareholder; tax payments are refunded for personal allowances and additional taxes collected, in so far as the shareholder's total income makes him liable to surtax. Undistributed profits, however, are taxed at the standard rate of income tax, quite irrespective of the personal tax liabilities of the shareholders of the company. Since these undistributed profits must properly be regarded as part of the total income of the shareholders, this implies that that part of income which takes the form of undistributed profits is taxed differently from the rest of the income. It follows, therefore, that an accurate estimate of the burden of taxation must make allowance for the difference in the level of taxation of these two different forms of income; and since personal direct taxation is based on statutory income, which *excludes* undistributed profits, this involves estimating the aggregate tax burden not on statutory income but on *total imputable income*, which includes them. It follows also that a proportion of the total income-tax receipts of the Exchequer should be separated from the rest and allocated as the revenue from the tax on undistributed profits.

2. No official figures are available to show the proportion of income-tax revenue received on account of undistributed profits. This amount can, however, be estimated. For 1919-20 the Board of Inland Revenue gave the amount of undistributed profits as approximately £173·3 millions.<sup>1</sup> The tax paid at the then standard

<sup>1</sup> Cf. Colwyn *Report*, Appendix XIV, pp. 128-32.

rate of 6s. amounted to £52 millions, i.e. about 12·9 per cent of the total yield of income tax and surtax. For the year 1937-38 undistributed profits were estimated at £225 millions, and the tax levied, with the standard rate of 5s. in the £, was £56 millions, or about 15·8 per cent of the total yield of income tax and surtax. For 1941-42 no similar calculation appears possible yet, since the amount placed in reserves is influenced by excess profits taxation and by the very cautious policy of companies in regard to their reserves. For 1940-41 undistributed profits were estimated at £300 millions. On this basis, and with the standard rate at 10s. in the £, the yield of the tax on undistributed profits, in 1941-42, would amount to £150 millions, or about 18 or 20 per cent of the total yield of income tax and surtax.

3. The difficulty of determining the effect of the tax on undistributed profits on the total burden of taxation of individual incomes is connected with the determination of total imputable income corresponding to statutory income. This can only be done if definite assumptions are made as to the proportion of dividend income in total investment income and the ratio of dividends to undistributed profits. The proportion of dividend income, in the total income derived from investment, varies from individual to individual; and the proportion of dividends to profits put to reserves varies from company to company. These proportions can naturally only be worked out for *average incomes*, and estimates based on these cannot claim to have the same significance as the calculation of the burden of taxation shown for *standard incomes*.

It was probably due to these difficulties that the Colwyn Committee omitted the consideration of this problem altogether and excluded that part of the yield of income tax which was paid on undistributed profits, in calculating the total burden of taxation. In the present enquiry the same policy was followed in the main tables showing the total burden of taxation, since it was thought that if investment incomes were shown as imputed incomes rather than statutory incomes this would have rendered the results more conjectural, and less comparable with those on earned incomes, than if the burden was calculated for statutory incomes. At the same time it should be pointed out that the neglect of total imputable income renders the calculation incomplete, and this must be borne in mind when interpreting the figures given in the main

tables. It was felt, therefore, that the best way of proceeding was to make a separate estimate of the relation of imputed incomes to statutory incomes and to make an estimate of the burden of taxation on the latter, on the basis of this assumed relation. Although this calculation cannot claim to have the same significance as those given for statutory incomes in our main tables, it should at any rate enable the reader to form an estimate of the order of magnitude of the change in the burden which is introduced by this factor.

4. The estimate of the relation of imputed income to statutory income was made, at the request of the authors of the present enquiry, by Mr T. Barna. He estimated by means of the Inland Revenue figures the amount of capital corresponding to each level of investment income and the proportion of the ownership of shares to other forms of property in each capital group. He also made an estimate of the difference between the average yield of shares and that of other forms of property and the average proportion between dividends and profits put to reserve. With the aid of these assumptions he obtained the following relation between investment income, undistributed profits and imputed income for the year 1937-38:

TABLE 26. IMPUTED INCOMES AT DIFFERENT LEVELS OF STATUTORY INCOMES  
(Average increases in statutory incomes on account of undistributed profits at different income levels, 1937-38)

Statutory incomes in £	Undistributed profits attributable to statutory incomes		Imputed incomes in £
	in percentage of statutory incomes	in £	
100	14	14	114
150	18	27	177
200	21	42	242
250	23	57	307
300	24	72	372
350	25	88	438
500	28	140	640
1,000	31	310	1,310
2,000	34	680	2,680
2,500	35	875	3,375
3,000	36	1,800	6,800
10,000	40	4,000	14,000
20,000	41	8,200	28,200
50,000	44	22,000	72,000

On the basis of this estimate, the percentage of total statutory income and total imputed income respectively, taken in taxation, was as follows:

TABLE 27. THE BURDEN OF TAXATION ON IMPUTED INCOMES. 1937-38  
(Fully investment incomes)

Statutory incomes in £	Imputed incomes in £	Total burden of taxation on statu- tory incomes, in percentage of statutory incomes <sup>1,2</sup>	Total burden of taxation on im- puted incomes, in percentage of imputed incomes <sup>2</sup>
100	114	16-16	17-17
150	177	16-16	18-18
200	242	15-16	17-17
250	307	15-15	17-17
300	372	14-15	16-17
350	438	15-15	17-17
500	640	20-22	21-23
1,000	1,310	28-31	27-30
2,000	2,680	32-38	30-35
2,500	3,375	33-41	31-37
5,000	6,800	39-52	35-45
10,000	14,000	47-67	41-55
20,000	28,200	55-70	46-57
50,000	72,000	63-70	51-57

<sup>1</sup> Vide Table 12.

<sup>2</sup> Minimum and maximum burdens are shown, on account of death duties, according as to whether estate-owners are saving or not from current income. For details vide Chapter vi.

It will be seen that the burden of taxation on a total imputed income is less than that on statutory income above a statutory income of £1,000, and the difference is all the greater, the higher the level of statutory income. Although undistributed profits cannot be regarded as constituting a part of income in *exactly the same way* as dividends (since the shareholder does not possess the same degree of freedom as to this disposal), it would be equally wrong to ignore their existence altogether, especially since a high ratio of undistributed profits is frequently merely a means of avoiding the payment of surtax on high personal incomes.<sup>1</sup>

<sup>1</sup> Successive Finance Acts, in particular the Finance Act 1922, Section 21, amended by Section 31 of the Finance Act of 1927 and the Finance Act of 1936, made special provisions against the practice of using the device of undistributed profits tax on undistributed profits as a means of avoiding the payment of surtax. It is now illegal for companies owned by less than a certain number of persons not to distribute within a reasonable time the income derived by the company to its shareholders. Although these provisions make the intentional



5. In recent years new taxes on business profits have been incorporated in the British tax system: the National Defence Contribution and Excess Profits Tax. Ultimately these are also a burden on the income of shareholders or of the owners of private firms (hence imputable income exceeds statutory income not only by the amount of undistributed profits but also by the amounts paid on account of these taxes);<sup>1</sup> but their allocation with respect to individual incomes is even more difficult than in the case of undistributed profits. The amount of E.P.T. varies enormously from company to company, and even if the proportion of E.P.T. in aggregate profits of all companies could be determined (which it clearly cannot until after the war) an average percentage added to profits on account of E.P.T. would obviously be meaningless. The incidence of N.D.C., as it is a flat percentage tax on all profits, might be more easily estimated, but the problem here is further complicated by the fact that N.D.C. operates as an alternative to E.P.T., being levied whenever it would give the higher yield.<sup>2</sup>

It has not seemed possible, therefore, to make any estimate as to the burden of these two war-time profit taxes on individual incomes. The total burden of these taxes (together with stamp duties on companies which have also not been allocated on individual incomes) is as follows:

	1937-38 £ mill.	1941-42 provisional £ mill.
Tax on undistributed profits (approx.)	56.0	150.0
N.D.C. }		
E.P.T. }	1.5	269.0
Stamp duties on companies	8.8	6.0
	<u>£66.3</u>	<u>£425.0</u>

avoidance of surtax much more difficult than formerly it would be idle to pretend that the ratio of undistributed profits to dividends, over the general field of companies, would remain the same if these tax differences between the two types of income were eliminated.

<sup>1</sup> The tax on undistributed profits is assessed (under Schedule D of Income Tax) on companies' profits only, while N.D.C. and E.P.T. are levied on the profits of business, whatever the legal form. It is estimated that 95 per cent of E.P.T. is derived from the profits of companies.

<sup>2</sup> This does not mean that current profits, whether taxed by E.P.T. or N.D.C., are cut uniformly to the E.P.T. limit. E.g. in cases where there are no excess profits, N.D.C. comes into operation and profits ex-tax will be lower than pre-war profits. In cases where there are excess profits and these are taxed according to E.P.T. profits ex-tax will be equal to the pre-war profits.

## NOTE ON STAMP DUTIES

Stamp duties were excluded from all previous investigations, except that of Mr Sandral. He summarily allocated their burden on the income tax-paying classes, by reference to the burden of income tax and surtax. The Colwyn Committee stated that 'these duties fall mainly on the better-off classes, but they are mostly levied on occasional transactions of irregular frequency and have no clearly definable relation to the annual income of the individual'. It is therefore not attempted, for the purposes of the present enquiry, to allocate them on individual incomes in the same way as we have allocated the income tax or tea or sugar duties. Neither is it proposed to go into details of their incidence, as this problem has been clarified by the Colwyn *Report* (vide paragraphs 549-79). For purposes of the present enquiry part of the stamps (payable on cheques, receipts, etc.) is added to the taxes on production in general, as it may be assumed that the bulk under these headings is of business origin and is passed on to the consumer in prices (entering into the cost). Another part of the stamps (on stocks, shares, companies' share capital, etc.) is regarded as a burden on business profits, and the rest is excluded from the calculation altogether.

In Table 27 of the *Inland Revenue Report* for 1937-38, the yield of stamp duties is given in detail under eight headings. Headings 2 and 3 are duties on companies (thus on shareholders). Duties under heading 1, on Land and Property other than Stocks and Shares, could be allocated in principle to owners of land and other property. It is, however, more advisable to exclude this item from the calculation. Duties under headings 4-8 (4, Cheques, Bills of Exchange; 5, Receipts, etc.; 6, Shipping; 7, Certificates and Licences; 8, Miscellaneous) will be added to the taxes on production in general. This procedure is indicated in the case of 6 and 7, which are mainly business expenses. 4 and 5 are partly business expenses, and are paid partly by individuals in the higher income groups. Duties under 8 are items of a very different character, e.g. on life insurance policies, settlements, penalties, etc., and their complete exclusion would be on the whole preferable.

The yield of the stamp duties in 1937-38 and in 1941-42 and the percentage distribution on the average of the three years 1935-38 are as follows:

	1935-38 Percentage distribution	1937-38 £ mill.	1941-42 £ mill.
1. Land and property	21.1	5.5	
2. Stocks, shares, debentures	37.6	7.7	
3. Companies' share capital duty	4.8	1.1	
4. Cheques, bills of exchange	17.5	4.7	
5. Receipts, etc.	11.3	3.1	
6. Shipping	2.5	0.8	
7. Certificates and licences	0.6	0.2	
8. Miscellaneous	4.6	1.1	
	100.0	£24.2	£14.1

## CHAPTER VIII. THE TEA AND SUGAR DUTIES

### 1. *Object of the Estimates.*

The object of this chapter is to provide estimates of the duty paid on tea and sugar, (a) by families at different income levels, and (b) by families of different sizes at each selected income level. As with the other estimates of this Report, they refer to the financial years 1937-38 (the last pre-rearmament year) and 1941-42. Calculations for the latter have necessarily to be based on estimates rather than on actual figures of consumption.

Both tea and sugar are articles of general consumption and the taxes on them for 1941-42 amounted to 0.7 and 1.6 per cent respectively of the total taxation receipts for that year. Variations in the amount of tax payable at different income levels are slight, especially in view of the fact that duties, in both cases, are specific (i.e. on quantity) and not *ad valorem*. The main differences in expenditure between the income groups are due to the wide range of qualities available, and this is particularly so in the case of tea. Family budget surveys give a fairly reliable picture of consumption at different income levels, from which it emerges that the two principal determinants of *per capita* consumption are income and the size of the family.

### 2. *Previous Enquiries.*

Several previous enquiries have been made on the same lines as the present one. Chief among these are (1) Lord Samuel's enquiry for the years 1903-04, 1913-14 and 1918-19,<sup>1</sup> (2) the report of the Colwyn Committee for the year 1925-26,<sup>2</sup> and (3) Mr Caradog Jones's investigation for the same year.<sup>3</sup>

Lord Samuel's enquiry was based on the family budgets collected by the Board of Trade in 1904,<sup>4</sup> and checked by the results of an enquiry by the Board of Inland Revenue in 1908, and by

1 The Presidential Address of the Rt Hon. Herbert Samuel delivered to the Royal Statistical Society for the session 1918-19.

2 *Report of the Committee on National Debt and Taxation* (London, 1927).

3 'Pre-War and Post-War Taxation', by D. Caradog Jones, reprinted from the *Journal of the Royal Statistical Society* (London, 1927).

4 *Board of Trade Report on the Consumption of Food and the Cost of Living of the Working Classes* (London, 1904).

the investigation of the Treasury Committee, presided over by Lord Sumner, on the cost of living in June and July 1918.<sup>1</sup> The results of these enquiries were compared, and brought into relation with the known figures of national consumption for the years in question. An estimate was made on this basis of the probable annual consumption per family of five in four income groups (£50, £100, £150, and £200 per annum, and over).

The Colwyn Committee drew on no fresh sources of information and in the main accepted Lord Samuel's estimates. Adjustments, however, were made to allow for changes in the level of national consumption and in the cost of living, as explained in Appendix X of their *Report*.

Mr D. Caradog Jones based his estimates for working-class consumption on the Board of Trade budgets for 1904, adjusted for the financial year 1925-26. For middle-class consumption he made an estimate based on his own private enquiries.

A comparison of these enquiries is set out in Tables 32 and 33.

### 3. *A Description of the Family Budget Surveys used in this Enquiry.*

It will be seen that all previous enquiries relied mainly on family budgets for 1904, which are now out of date. Several recent surveys are now available and have been made use of for the purposes of the present enquiry.

(1) *Sir John Orr's Family Budget Survey*<sup>2</sup> gives estimates of the quantities of various foodstuffs consumed in 1934 by each of six income groups spread over the whole community. The graphs and tables are based on 1,152 family budgets. These budgets are checked by comparison with data from all the dietary surveys published at the time, and also by comparison with the total national food consumption calculated from different data, viz. agricultural and trade statistics.

(2) *Sir William Crawford and H. Broadley*.<sup>3</sup> A collection of 4,950 family budgets was made by the Research Department of W. S. Crawford Ltd. in 1936. The data relating to certain items, including tea and sugar, have been extracted from the original budgets and analysed by Miss M. Joseph on behalf of the National

<sup>1</sup> *Report of Working Classes Cost of Living Committee* (London, 1918).

<sup>2</sup> Sir John Boyd Orr, *Food, Health and Income* (Macmillan, London, 1937).

<sup>3</sup> Sir William Crawford and H. Broadley, *The People's Food* (Heinemann, London, 1938).

Institute of Economic and Social Research. This analysis was made for the purpose of showing variations due to changes in income and in the size of the family.

(3) *The Ministry of Labour* made a representative collection of 10,762 working-class budgets<sup>1</sup> (of which 8,905 were industrial; 1,491 agricultural; 366 rural) for four separate weeks during 1937-38. A detailed analysis of these budgets was made available for the present enquiry.

(4) *Middle-Class Family Budgets*. The results of a recent enquiry into middle-class budgets (based on a sample of 436 families spread over four income groups ranging from £250 to £700 per annum and over) were confidentially supplied.

## THE CONSUMPTION AND TAXATION OF TEA

### 4. *The National Consumption of Tea.*

Representative figures of the national consumption of tea are given in the Reports of the Board of Customs and Excise:

Calendar year	Quantity of tea retained for home consumption lb.	Estimated population (mid-year) in thousands	Lb. per head per annum
1933	435,307,836	46,520	9.36
1934	430,478,387	46,666	9.22
1935	441,493,318	46,869	9.42
1936	438,192,757	47,081	9.31
1937	434,617,284	47,289	9.19
1938	431,798,632	47,485	9.09

It can be seen from these figures that no very significant change in the *per capita* consumption of tea has occurred in recent pre-war years. As tea is an article of almost universal consumption the *per capita* figures are fairly representative for all sections of the community. They serve, in any case, as a useful check—so far as consumption and expenditure are concerned—on the reliability of the different family budget enquiries on which the present estimates are based.

<sup>1</sup> 'Weekly Expenditure of Working Class Households in the United Kingdom in 1937-38', *Ministry of Labour Gazette*, December 1940, January 1941 and February 1941.

### 5. *Variations in Consumption due to Differences in Income.*

(All the available sources of information confirm the generally known fact that the quantity of tea consumed is relatively constant for the different income groups. There are naturally great variations in the amount spent on tea, because of the purchase of more expensive blends by the wealthier classes.) All family budget enquiries show a slightly rising *per capita* consumption as income increases within the lower working-class income groups. The highest *per capita* consumption is found among the higher working classes, where it is slightly over the national average. A consumption approximately equal to the national average is found between incomes of £150 to £200. Proceeding from the working classes to the middle classes, a slight decrease is ascertainable. Another point worth mentioning is the fact that the level of consumption is more influenced by social class than by money income. A prosperous working-class family with a relatively high *per capita* income will consume more tea than a middle-class family with the same income. Thus income cannot be taken as a complete guide to the level of consumption. The decrease in consumption in the higher income groups is in accordance with expectation, and can be explained by various considerations. Tea is relied upon as the chief drink in the majority of working-class homes, but is partially replaced by coffee and other more expensive beverages among the upper classes. Moreover, consumption figures are influenced by the fact that a cheaper quality of tea is less economical in use, and by the tendency for the poorer classes to prefer a strong brew. It is reasonable to suppose that the old formula of 'one for each person and one for the pot' is more often adhered to in working-class than in middle- and upper-class households.

The estimates of consumption related to income adopted in this Report are largely based on Sir John Orr's family budget figures. This particular investigation has been selected as a basis by reason of its closer conformity to the figures of the national average as obtained from official statistics. The figures have been checked by other family budgets and corrected to apply to 1937-38. Some allowance was made in the middle and higher income groups for tea consumed away from home.

Sir John Orr gives the following figures of *per capita* consumption in the 'average' family for different income groups in 1934:

Group	Weekly income per head		Consumption per head per week
			oz.
I	Under 10s.		2.2
II	Over 10s. and under 15s.		2.7
III	„ 15s.	„ 20s.	2.9
IV	„ 20s.	„ 30s.	3.0
V	„ 30s.	„ 45s.	2.9
VI	„ 45s.		2.7
Weighted average of groups			2.8
Customs and Excise figures:			
National average (1934)			2.837
„ (1937)			2.828
Other Family Budget Figures:			
Weighted average of Ministry of Labour family budgets for 8,905 industrial working-class households			2.97
Weighted average of Ministry of Labour family budgets for 1,491 households of agricultural workers			2.53
Weighted average of Ministry of Labour family budgets for 366 working-class households in rural areas in England and Wales			2.26
Weighted average of 436 middle-class budgets			2.65
Weighted average of Sir William Crawford's family budgets			3.40

As can be seen the average consumption per head shown by the budgets obtained by the Ministry of Labour from industrial households was above the general average for all classes in Great Britain.<sup>1</sup> On the other hand the average consumption per head shown by the budgets obtained from agricultural and rural households indicates a consumption below the general average. The budgets of the Crawford enquiry—collected mainly in urban districts—show an average consumption far above the national average.

On the basis of all the information available we estimate the weekly *per capita* consumption as follows:

Income group	Consumption per head per week in an average family of 3.6 persons
£	oz.
100	2.20
150	2.71
200	2.94
250	3.02
350 and over	2.94

<sup>1</sup> It may be mentioned that those households of which the principal wage-earners had been unemployed for long periods were excluded from the scope of the Ministry of Labour budget enquiry.

6. *Variations in Consumption due to Differences in the Size of the Family.*

A consideration of more importance in determining *per capita* consumption than a family's income is the size of the family. The *per capita* consumption in large families is very much less than in small families, the reasons clearly being, first, that the same amount of tea can be made to provide more cups by adding water, and secondly, that large families contain a number of children who drink little or no tea.)

A detailed analysis of the Crawford family budgets was available for the present enquiry, showing changes in consumption due to differences in the size of the family and in the income level. This analysis does not provide data relating to a person living alone, but a quantity corresponding to 70 per cent of that consumed by a family of two adults was considered by experts to be reasonable. The following estimate of percentage variation from the *per capita* consumption of the average-sized family has been made, mainly on the basis of the analysis mentioned above; for example, the consumption in a family of two will be 34 per cent per head more than in the 'average' family (of 3.6 persons), whereas the consumption in a family of five will be only 84 per cent per head of that in the 'average' family:

No. in family	<i>Per capita</i> consumption expressed as a per- centage variation from consumption in the 'average' family
1	188
2	134
3	105
3.6	100
4	94
5	84

Estimated consumption of tea by different-sized families at different income levels in 1937-38 is given in Table 28.

7. *The Duty on Tea.*

The full rate of duty in 1937-38 was 6*d.* per lb., the preferential rate 4*d.* per lb.; 91 per cent of the tea imported in 1937 came from Empire countries, making the average rate 4.18*d.* per lb. China tea pays the full duty, but the percentage of people consuming it in its pure form is small, and as China tea is usually more economical in use the effect of a higher tax is counteracted by a smaller *per capita* consumption.)



### 8. *The Estimate for 1941-42.*

(The rationing of tea was introduced on 9 July 1940, and an allowance of 2 oz. per head per week was made. This ration remained in force throughout the financial year 1941-42.)

It will be noticed that the 2 oz. ration exceeds the average *per capita* consumption in a family of five with an income of £100 per annum, as estimated for 1937-38. In view of the rise in the price of tea, and in the cost of living generally, it is unlikely that the full ration was purchased, either in this income group, or in the one immediately above. (This is confirmed by the figures for working-class budgets collected by Professor Bowley for 1940.) We have allowed the full ration for all the other families, as it appears that the purchase of tea is maintained wherever possible.

The ration does not, of course, include tea consumed away from home. This part of the consumption is evidently of greater importance under war-time conditions, as circumstances have increased the occasions on which tea is drunk away from home (factory canteens, A.R.P. shelters, etc.). For the same reason tea consumption outside the home is more generally distributed between all income groups than in pre-war years.

The total tea consumed away from home was estimated at 10 per cent of the total consumption in 1937-38. This estimate was confirmed by expert opinion. There is no information available, either on the total amount released to catering establishments,<sup>1</sup> or on how it is distributed among individuals. For purposes of present calculation the simple assumption was made that an amount of tea equal to 10 per cent of that consumed by the family in 1937-38 was drunk away from home in 1941-42. There will of course be differences in individual cases (the percentage may, for example, be 5 or 15 per cent), but this would only very slightly influence the final results. To increase the consumption of different-sized families by the same percentage may seem, at first sight, to weight unduly the consumption of members of smaller families, but it must be remembered (a) that the larger families include more children and therefore the *per capita* figure does not give a real idea of the adult consumption, and (b) that a small

<sup>1</sup> Although rationing has been applied to catering establishments the cut in consumption has not been great (in some cases the ration allowance has actually been more than the amount required).

family is relatively better off than a large family with the same income, and can therefore more easily afford restaurant and canteen meals.

TABLE 28. CONSUMPTION OF AND DUTY PAYABLE ON TEA. 1937-38

(1) Income per annum £	(2) Oz. per week per head	(3) Lb. per annum per head	(4) Lb. per annum per family	(5) Duty payable per annum s. d.
(a) Family of five (married couple and three children)				
100	1·85	6·02	30·10	10 6
150	2·28	7·41	37·05	12 11
200	2·47	8·03	40·15	14 0
250	2·54	8·26	41·30	14 4½
350 and over	2·47	8·03	40·15	14 0
(b) Family of four (married couple and two children)				
100	2·07	6·73	26·92	9 5
150	2·55	8·29	33·16	11 6½
200	2·76	8·97	35·88	12 6
250	2·84	9·23	36·92	12 10½
350 and over	2·76	8·97	35·88	12 6
(c) Family of three (married couple and one child)				
100	2·31	7·51	22·53	7 11
150	2·85	9·26	27·78	9 8
200	3·09	10·04	30·12	10 6
250	3·17	10·30	30·90	10 9½
350 and over	3·09	10·04	30·12	10 6
(d) Family of two (adults)				
100	2·95	9·59	19·18	6 8
150	3·63	11·80	23·60	8 3
200	3·94	12·80	25·60	8 11
250	4·05	13·16	26·32	9 2
350 and over	3·94	12·80	25·60	8 11
(e) Single person				
100	4·14	13·46	13·46	4 8½
150	5·10	16·58	16·58	5 9½
200	5·53	17·97	17·97	6 3
250	5·68	18·46	18·46	6 5
350 and over	5·53	17·97	17·97	6 3

The full rate of duty for the financial year 1941-42 was 8d. per lb. and the preferential rate was 6d. per lb. The proportion of Empire teas to total imports is estimated at 92 per cent. This gives an average rate of duty of 6·16d. per lb.

TABLE 29. CONSUMPTION OF AND DUTY PAYABLE ON TEA. 1941-42

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Income group £	Oz. per week per head	Lb. per annum per head	Lb. per annum per family	'Away from home' in lb. per annum	Total of columns (4) and (5) in lb. per annum	Duty payable per annum s. d.
<i>(a) Family of five (married couple and three children)</i>						
100	1.75	5.69	28.45	3.01	31.46	16 1½
150	1.95	6.34	31.70	3.71	35.41	18 2
200	2.0	6.50	32.5	4.02	36.52	18 9
250	2.0	6.50	32.5	4.13	36.63	18 10
350 and over	2.0	6.50	32.5	4.02	36.52	18 9
<i>(b) Family of four (married couple and two children)</i>						
100	1.85	6.01	24.04	2.70	26.74	13 8½
150	2.0	6.5	26.0	3.32	29.32	15 1
200	2.0	6.5	26.0	3.59	29.59	15 1½
250	2.0	6.5	26.0	3.70	29.70	15 3
350 and over	2.0	6.5	26.0	3.59	29.59	15 1½
<i>(c) Family of three (married couple and one child)</i>						
100	2.0	6.5	19.5	2.26	21.76	11 2
150	2.0	6.5	19.5	2.78	22.28	11 5
200	2.0	6.5	19.5	3.01	22.51	11 6½
250	2.0	6.5	19.5	3.10	22.60	11 7
350 and over	2.0	6.5	19.5	3.01	22.51	11 6½
<i>(d) Family of two (adults)</i>						
100	2.0	6.5	13.0	1.92	14.92	7 8
150	2.0	6.5	13.0	2.36	15.36	7 10½
200	2.0	6.5	13.0	2.56	15.56	7 11½
250	2.0	6.5	13.0	2.64	15.64	8 0½
350 and over	2.0	6.5	13.0	2.56	15.56	7 11½
<i>(e) Single person</i>						
100	2.0	6.5	6.5	1.35	7.85	4 0
150	2.0	6.5	6.5	1.66	8.16	4 2
200	2.0	6.5	6.5	1.80	8.30	4 3
250	2.0	6.5	6.5	1.85	8.35	4 3½
350 and over	2.0	6.5	6.5	1.80	8.30	4 3

*Note.* Columns (2), (3) and (4) exclude consumption away from home, and are therefore not immediately comparable with 1937-38 figures.

## THE CONSUMPTION AND TAXATION OF SUGAR

9. *The National Consumption of Sugar.*

Representative figures on sugar consumption, given in the Reports of the Board of Customs and Excise, show a steady and fairly considerable increase in sugar consumption throughout the last two decades:

Calendar year	Sugar retained for home consumption (estimated as the equivalent of refined sugar) cwt.	Consumption per head lb.
1924	31,476,498	78.49
1925	33,993,616	84.50
1926	35,167,550	87.08
1927	34,343,239	84.75
1928	37,189,072	91.39
1929	37,502,370	91.96
1930	37,953,296	92.68
1931	40,734,583	99.02
1932	39,244,271	94.86
1933	38,345,385	92.32
1934	40,592,595	97.42
1935	41,071,510	98.15
1936	42,490,462	101.08
1937	43,114,416	102.11
1938	42,619,831	100.52

10. *The Various Forms of Sugar Consumption.*

Sugar is consumed, as is well known, not only as such, for domestic purposes, but also in many products, such as marmalade, jam and confectionery (chocolate, cakes, biscuits, etc.). Some evidence relating to the proportion of the total sugar supply used industrially is given in the Report of the Census of Production for 1935.<sup>1</sup>

The Customs and Excise figures give the total sugar consumed in 1935 (in terms of refined sugar) as 41,071,510 cwt. Sugar imported in composite articles is put for the financial year 1935-36 at 1,338,967 cwt.

According to the Census of Production the following amounts of sugar were used for manufacturing purposes in 1935:

<sup>1</sup> *Final Report on the Fifth Census of Production and the Import Duties Inquiry, 1935* (H.M. Stationery Office, London, 1940).

Item	Amount of sugar used (in million cwt.)	Value of output (approx.) in £ mill.
1. Cakes, pastries, etc., including the manufacture of ice cream	1.6	25.3
2. Biscuits	1.0	16.9
3. Cocoa, chocolate and sugar confectionery	4.0	36.8 20.0 (cocoa preparations)
4. Preserved food (fruit, etc.)	4.3	7.1 (jams, etc.) 2.1 (rest)

These items, plus sugar contained in imported articles, amount to 12.2 million cwt., or roughly 30 per cent of the total sugar consumption. This figure can be regarded as the lower limit, as the Census of Production figures exclude the production of small firms (e.g. small bakeries). Furthermore, no details are given in the Census of Production on sugar used for brewing, manufacturing mineral waters, etc. It is believed, and confirmed by expert opinion, that the increase in sugar consumption from 1935 to 1939 can be mainly accounted for by the increasing industrial use. For the pre-war period the proportion of supplies used industrially was estimated at at least 40 per cent of the total supplies.

In addition to the domestic use of sugar and its consumption in manufactured form, the sugar consumed in catering establishments must be taken into account when calculating the total burden of the duty. The quantity of sugar used in this way is not known. Mr Feavearyear, in his estimates of national expenditure,<sup>1</sup> assumes that 10 per cent of the nation's food is purchased through hotels, restaurants and catering houses. This figure is—as Sir John Orr thinks<sup>2</sup>—an over-estimate, and may vary, of course, for single items, but as sugar is consumed in almost every meal served in catering establishments it does give some idea of the possible extent of this form of consumption. If we assume that for the fiscal year 1937-38 the aggregate non-domestic use of sugar (industrial use plus consumption in catering establishments) was 40 per cent of

1 A. E. Feavearyear, 'The National Expenditure, 1932', *Economic Journal*, 1934, p. 33.

2 Sir John Boyd Orr, *Food, Health and Income* (Macmillan, London, 1937), p. 69. It is worth noting that the Ministry of Labour family budget survey puts the average expenditure on meals, etc. away from home per industrial household as low as 1s. 1½d. out of a total expenditure on food of 34s. 1d. (*Ministry of Labour Gazette*, December 1940).

the total consumption, and that domestic consumption amounted to 60 per cent, we are certainly underestimating rather than overestimating the quantity used for non-domestic purposes.

### 11. *Family Budget Enquiries on the Consumption of Sugar at Different Income Levels.*

The importance of ascertaining the proportions of sugar consumed in different forms is due to the fact that such information—together with the known national *per capita* consumption figure—provides the only check on the reality of the different family budget surveys showing the varying sugar consumption at different income levels.

The somewhat contradictory results of the different family budget enquiries on sugar consumption at different income levels can be presented as follows:

(a) Sir John Orr gives figures for sugar purchased as such, and sugar consumed in other forms, in 1934. The latter excludes sugar consumed in jams, marmalade, etc., but very probably allows for sugar consumption in catering establishments for the higher income groups. He estimates the national average as 29·7 oz.<sup>1</sup> per head per week, the weighted average of domestic consumption as 17·8 oz. and the weighted average of consumption in other forms as 9 oz. The remaining 2·9 oz. (17·8 + 9 = 26·8 oz. only) is accounted for by sugar consumed in jams, jellies, syrup, etc. Sir John puts the average consumption of jams, etc. at 5·2 oz. per head per week, of which 50–60 per cent is the estimated sugar content. (The Ministry of Labour enquiry puts jam and marmalade consumption, among households of industrial workers, at 4·2 oz. per head per week.) Sir John gives the following detailed figures of weekly consumption:

Group	Weekly family income per head	Sugar purchased as such oz.	Sugar consumed in other forms (excluding jams, etc.) oz.	Sugar consumed in jams, etc. (50–60 % sugar content) oz.
I	Under 10s.	13·5	6·5	2·2–2·6
II	10s.–15s.	16·0	7·5	2·7–3·2
III	15s.–20s.	18·0	8·5	2·6–3·1
IV	20s.–30s.	19·0	9·5	2·7–3·2
V	30s.–45s.	19·5	10·5	2·9–3·5
VI	Over 45s.	19·5	11·5	2·8–3·3
Weighted average of groups		17·8	9·0	2·6–3·1
National average (all forms of consumption)			29·7	

<sup>1</sup> Partly based on additional information supplied to us by Sir John Orr.

(b) The results of the Crawford enquiry show the following variations for 1936:

Class	Yearly family income	Sugar purchased per head per week oz.	Sugar consumed in other forms oz.
D	Under £125	15.2	—
C	£125-£250	16.8	—
B	£250-£500	17.2	—
A	£500-£1,000	17.9	—
AA	£1,000 and over	17.6	—
Weighted average of groups		16.7	approx. 11.9
National average (all forms of consumption)		28.6	

The difference between these figures and the national average represents, in the opinion of the Crawford enquiry, sugar consumed in hotels, restaurants, tea shops, and in the form of confectionery, biscuits, cakes, jam, syrup, marmalade, etc., which would represent on this basis 42 per cent of the total *per capita* consumption of sugar. The national average mentioned by Crawford (28.6 oz. per head per week) is again too low, as by 1936, according to Customs and Excise estimates, it was over 31 oz. per head per week.

(c) The results of the recent family budget enquiry of the Ministry of Labour show the following figures of sugar consumption in households during four weeks in 1937-38:

Weighted average in households of industrial workers	20.4
Weighted average in households of agricultural workers	25.0
Weighted average in working-class households in rural areas	22.6

(d) A recent enquiry based on middle-class budgets shows the following results for 1938-39:

Middle classes (£250-£700 and over)	Sugar purchased as such per head per week 21.28 oz.
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All the family budget surveys analysed show increased *per capita* domestic consumption as income increases; the rise is, however, slight, as apart from the lowest income group there are no marked differences in the amount of sugar used for domestic purposes. The variations are distinctly greater where non-domestic consumption is concerned, as is shown by Sir John Orr's figures. The amount of sugar consumed increases as income rises, especially if allowance is made in the higher groups for sugar consumed in catering establishments. If we compare the expenditure on articles

containing sugar, and not the quantity of sugar in these articles, the variations are of course very great, although such comparisons are misleading from the quantitative point of view.

An analysis of the available data relating to the total consumption of sugar and of its variation with income enables us to make our own estimates. Although the complicated nature of the problem (*viz.* that domestic consumption must be combined with consumption of articles containing sugar, plus consumption in catering establishments, and that this aggregate figure must be varied with income) excludes the possibility of any great accuracy, it is believed that the margin of error is within reasonable limits. Different approaches to the problem—based exclusively on one family budget survey or another—though imperfect in themselves, gave substantially the same results.

An estimate was made, on the basis of family budget surveys, of the different forms of consumption, by taking into account (1) the national *per capita* consumption for the fiscal year 1937-38, *viz.* 102·8 lb. per year (31·65 oz. per week) and (2) the assumption that 60 per cent of the total consumption may have been domestic:

Income group (family income per annum) £	Sugar purchased as such (oz. per week)	Sugar consumed in other forms (oz. per week)	Estimated total sugar consumption (lb. per annum)
100	14·5	8·7	75
150	17·5	10·7	92
200	19·0	11·7	100
250	20·0	13·0	107
300	20·5	14·4	113
350	21·0	15·8	120
500 and over	21·5	16·2	122
Weighted average of the groups (approx.)	19·0	12·65	102·8
National average (all forms of consumption)		31·65	102·8

The non-domestic consumption was estimated with the assistance of Sir John Orr's figures. They give the percentage proportion of non-domestic consumption for each income group. An allowance was made for the consumption of sugar in jam, marmalade, etc. The increase in sugar consumption since 1934 was taken into account, and allowance was made for the fact that this increase was largely due to a rise in the purchase of sugar in non-domestic forms (see Table 30, column 3). In the higher income groups the



proportion of sugar consumed outside the home, or in manufactured articles (varying from 42 to 43 per cent), is higher than the national average for this type of consumption, whereas in the lower groups it is the domestic use of sugar which exceeds the national average (the non-domestic consumption varying from 37 to 38 per cent).

### 12. *The Influence of the Size of the Family on Sugar Consumption.*

The above figures refer to *per capita* consumption in the average family (3·6 persons). There are reasons for supposing that the *per capita* consumption of sugar varies not only with changes in income, but also with changes in the size of the family. Smaller families generally consume more per head than larger families (income remaining constant). This may be explained partly by the higher proportion of small children in the larger families, partly by the greater economy of cooking for a large family. This has been confirmed by an analysis of the Crawford budgets mentioned above. On the basis of this special analysis the variations from the average for the domestic use of sugar by different-sized families can be expressed as follows:

No. of persons in the family	<i>Per capita</i> consumption expressed as a percentage variation from consumption in the average family
1	120
2	115
3	105
3·6	100
4	97
5	90

Thus, for example, in a family of two the *per capita* consumption is 15 per cent higher than in the average family, at any one income level, whereas in a family of five it will be 10 per cent lower; or, in other words, a family of two is equivalent to 2·3 average consumers, whereas a family of five is equivalent to only 4·5 average consumers.<sup>1</sup>

<sup>1</sup> The percentage variations given above are a simplification of the so-called 'man-value' comparison. This comparison expresses the consumption of females and children as  $x$  and  $y$  per cent of the male consumption. The 'man-value' of a child naturally varies with age, and as the tax-paying family includes children up to 16 it is preferable to use percentage variations—based on family budgets and the actual age distribution of the children—rather than any theoretical 'man-value' calculations.

The variations in the domestic consumption of sugar according to the size of the family are known. The variations in the non-domestic consumption (jams, etc., and sugar consumed in restaurants) are not known. It has been assumed that the variations in *per capita* consumption are the same, and the following calculations are based on this assumption. The possible error involved will not be large. The calculations of domestic and non-domestic consumption for different-sized families at each of the chosen income levels are given in Table 30.

### 13. *The Duty on Sugar.*

The rates of duty on sugar show a very wide variation, depending, apart from the degree of polarization, upon (a) whether at the time duty is paid the sugar is in a raw or refined state, and (b) the country of origin. Home-grown and Empire sugars are given preferential rates. Furthermore, the highest rate (applicable to foreign refined sugar, viz. 11s. 8d. per cwt. in 1937-38 and 23s. 4d. per cwt. in 1941-42) includes a protective surtax of 2s. 4d. per cwt. imposed to safeguard the British refining industry.) The construction of the sugar duties is such that the home consumer in the United Kingdom gets the benefit of this surtax but not of the preferential rates on home-grown and Empire sugar. (Hence, in effect, the home consumer paid a duty equivalent to 9s. 4d. per cwt. (1d. per lb.) in 1937-38, and to 21s. per cwt. (2½d. per lb.) in 1941-42 on all sugar consumed. In 1937-38 the Exchequer received the entire duty of 1d. per lb. on foreign sugar only, while in respect of home-grown sugar the duty of 1d. was shared with the sugar producers. The same applied in 1941-42, except that the duty then stood at 2½d. per lb.) Thus, the total burden on the consumer on account of the sugar duty is much higher than is shown by the Exchequer receipts, the balance representing a subsidy to the sugar producers at home and in the Empire. In calculating the burden of sugar duties we have taken 1d. duty per lb. for 1937-38, and 2½d. duty per lb. for 1941-42. In the calculations given in Table 30 the amounts paid in sugar duty have been increased for 1937-38 by 1s. per family of from three to five persons, by 8d. for a family of two, and by 6d. for a single person, on account of the duty on glucose, molasses and saccharin. For

1941-42 this allowance has been quadrupled to cover the rise in rates of duty and the increased demand for saccharin.

#### 14. *The Estimate for 1941-42.*

War-time consumption of sugar is completely regulated by Government measures. Domestic consumption is rationed and supplies to the industry and to catering establishments are limited to a proportion of their pre-war consumption.

Domestic consumption of sugar has been assumed to be equal to the full ration allowance of the family, as people are only too anxious to get all the sugar they are able to purchase. This fact was proved by recent surveys, e.g. the family budget survey of Professor Bowley. The sugar ration at the moment is 8 oz. per week per head; it was increased to 12 oz. from 17 November 1941 to 12 January 1942. Thus the current annual consumption per head will amount to 28 lb. A family of five is consuming five times that amount.

As compared with 1937-38, domestic consumption has been reduced at all income levels, even in the lowest income groups. The war has brought drastic changes in the non-domestic consumption of sugar, both in catering establishments and in articles containing sugar. Supplies have been reduced, prices increased, and changes in distribution, both intentional and unintentional, have occurred. For example, priority supplies go to A.R.P. or factory canteens on the one hand, while on the other hand dislocations are caused by air raids, or the influx of evacuees to certain areas. The main limiting factor to consumption is the lack of supplies, and not the increase in prices. Thus the reduction in consumption in the higher groups is likely to be greater than in the lower groups. There is therefore even less variation between the consumption of different income groups than before the war.

We now turn to the single items. Jam, marmalade, syrup, etc. are grouped together under the name of 'sweet spreads', and rationed, at the moment, to 1 lb. per head per month. Pre-war consumption was approximately 20 oz. per head per month and the difference between income groups was not marked.

The sugar supplies of manufacturers of chocolate, sugar confectionery, cake, etc. have been cut down to 60 per cent for chocolate, and to 50 per cent for confectionery, of their pre-war consumption (1 July 1928 to 20 June 1929), and supplies of these

products to retailers have been rationed informally at a roughly similar rate.<sup>1</sup>

In order to arrive at the aggregate amount available for civilian consumption, the priority supplies to civilians (those in civil defence services, canteens in essential industries, etc.) must be added to the above amount, and private purchases in shops by members of the Services must be deducted.

An undisclosed quantity of sugar is consumed in catering establishments. At the present rate of consumption this item is of considerable significance.

It can be estimated—on the basis of available evidence—that in 1940-41 people consumed on the average at least the same amount of sugar in non-domestic forms (in catering establishments and in articles containing sugar) as for domestic purposes. The aggregate non-domestic civilian consumption of sugar in 1940-41 was approximately from 20 to 30 per cent below the level for 1937-38.

Owing to the further restrictions mentioned above the decrease in the year 1941-42 will certainly have been higher, say from 30 to 40 per cent. The distribution of supplies shows such irregularities that any allocation of non-domestic consumption to different income groups must be arbitrary. The distribution is neither even, as the average might suggest, nor will it show exactly proportionate changes from the 1937-38 level. It is likely, however, that the assumption of a proportionate change in the 1937-38 level will not be far out in the majority of cases, and the resulting estimate will at least show the order of magnitude of the burden of taxation on sugar. We shall therefore assume a 30 per cent decrease in the non-domestic consumption of sugar for the lower income groups, and a 35-40 per cent decrease for the higher groups.

<sup>1</sup> The reduction of sugar supplies does not necessarily mean that the production of chocolate, confectionery, etc. is being cut in exactly the same proportion. Owing to the shortage of sugar and the great increase in sugar prices, manufacturers have doubtless tried to transfer their production to articles containing the smallest possible proportion of sugar. It may be mentioned in this connection that there is not yet a shortage in the supply of raw cocoa, nor has the price increased to any substantial extent. The percentages given above are liable to changes; but it is unlikely that the supply of chocolate, etc. for the public changed fundamentally in the course of the year 1941-42, and 10-20 per cent changes in the quota would only slightly alter our results.

TABLE 30. CONSUMPTION OF AND DUTY PAYABLE ON SUGAR. 1937-38

Income group £	Oz. per week per head			Lb. per annum per head	Lb. per annum per family	Total duty <sup>†</sup> payable (1d. per lb.) £ s. d.
	Domestic	Non- domestic	Total			
	(a) Family of five (married couple and three children)					
100	13·05	7·83	20·88	67·86	339·3	1 9 3
150	15·75	9·63	25·38	82·49	412·45	1 15 4
200	17·10	10·53	27·63	89·80	449·0	1 18 5
250	18·0	11·70	29·70	96·53	482·65	2 1 3
300	18·45	12·96	31·41	102·08	510·4	2 3 6
350	18·90	14·22	33·12	107·64	538·2	2 5 10
500 and over	19·35	14·58	33·93	110·27	551·35	2 6 11
	(b) Family of four (married couple and two children)					
100	14·07	8·44	22·51	73·16	292·64	1 5 5
150	16·98	10·38	27·36	88·92	355·68	1 10 8
200	18·43	11·35	29·78	96·79	387·16	1 13 3
250	19·4	12·61	32·01	104·03	416·12	1 15 8
300	19·89	13·97	33·86	110·04	440·16	1 17 8
350	20·37	15·33	35·70	116·03	464·12	1 19 8
500 and over	20·86	15·71	36·57	118·66	474·64	2 0 7
	(c) Family of three (married couple and one child)					
100	15·23	9·14	24·37	79·20	237·6	1 0 10
150	18·38	11·24	29·62	96·27	288·81	1 5 1
200	19·95	12·29	32·24	104·78	314·34	1 7 2
250	21·0	13·65	34·65	112·61	337·83	1 9 2
300	21·53	15·12	36·65	119·11	357·33	1 10 9
350	22·05	16·60	38·65	125·61	376·83	1 12 5
500 and over	22·58	17·01	39·59	128·67	386·01	1 13 2
	(d) Family of two (adults)					
100	16·68	10·01	26·69	86·74	173·48	15 1
150	20·13	12·31	32·44	105·43	210·86	18 2
200	21·85	13·46	35·31	114·76	229·52	19 10
250	23·0	14·95	37·95	123·34	246·68	1 1 3
300	23·58	16·56	40·14	130·46	260·92	1 2 5
350	24·15	18·17	42·32	137·54	275·08	1 3 7
500 and over	24·73	18·63	43·36	140·92	281·84	1 4 2
	(e) Single person					
100	17·40	10·44	27·84	90·48	90·48	8 0
150	21·0	12·84	33·84	109·98	109·98	9 8
200	22·80	14·04	36·84	119·73	119·73	10 6
250	24·0	15·6	39·6	128·70	128·70	11 3
300	24·6	17·28	41·88	136·11	136·11	11 10
350	25·2	18·96	44·16	143·52	143·52	12 6
500 and over	25·8	19·44	45·24	147·03	147·03	12 9

† Including allowance for duty on saccharin, molasses, glucose.

TABLE 31. CONSUMPTION OF AND DUTY PAYABLE ON SUGAR. 1941-42

Income group £	Oz. per week per head			Lb. per annum per head <sup>1</sup>	Lb. per annum per family <sup>2</sup>	Total duty <sup>3</sup> payable (2½d. per lb.) £ s. d.		
	Domestic	Non- domestic	Total			£	s.	d.
(a) Family of five (married couple and three children)								
100	8	5.48	13.48	45.8	239.0	2	8	10
150	8	6.74	14.74	49.9	259.5	2	12	8
200	8	7.37	15.37	52.0	270.0	2	14	7
250	8	7.61	15.61	52.7	273.5	2	15	3
300	8	7.78	15.78	53.3	276.5	2	15	10
350	8	8.53	16.53	55.7	288.5	2	18	1
500 and over	8	8.75	16.75	56.4	292.0	2	18	9
(b) Family of four (married couple and two children)								
100	8	5.91	13.91	47.2	196.8	2	0	11
150	8	7.27	15.27	51.6	214.4	2	4	2
200	8	7.95	15.95	53.8	223.2	2	5	10
250	8	8.20	16.20	54.7	226.8	2	6	6
300	8	8.38	16.38	55.2	228.8	2	6	11
350	8	9.20	17.20	57.9	239.6	2	8	11
500 and over	8	9.43	17.43	58.6	242.4	2	9	6
(c) Family of three (married couple and one child)								
100	8	6.40	14.40	48.8	152.4	1	12	7
150	8	7.87	15.87	53.6	166.8	1	15	3
200	8	8.60	16.60	56.0	174.0	1	16	7
250	8	8.87	16.87	56.8	176.4	1	17	1
300	8	9.07	17.07	57.5	178.5	1	17	6
350	8	9.96	17.96	60.4	187.2	1	19	1
500 and over	8	10.20	18.20	61.2	189.6	1	19	7
(d) Family of two (adults)								
100	8	7.01	15.01	50.8	105.6	1	2	5
150	8	8.62	16.62	56.0	116.0	1	4	5
200	8	9.42	17.42	58.6	121.2	1	5	5
250	8	9.72	17.72	59.6	123.2	1	5	9
300	8	9.94	17.94	60.3	124.6	1	6	0
350	8	10.90	18.90	63.4	130.8	1	7	2
500 and over	8	11.18	19.18	64.3	142.6	1	7	6
(e) Single person								
100	8	7.31	15.31	51.8	53.8	12	1	
150	8	8.99	16.99	57.2	59.2	13	1	
200	8	9.83	17.83	59.9	61.9	13	7	
250	8	10.14	18.14	61.0	63.0	13	10	
300	8	10.37	18.37	61.7	63.7	13	11	
350	8	11.38	19.38	65.0	67.0	14	7	
500 and over	8	11.66	19.66	65.9	67.9	14	8	

<sup>1</sup> Including sugar for jam issued in July 1941 (2 lb. per head).

<sup>2</sup> Allowing for the increased rations (12 oz. instead of 8 oz.) from 17 November 1941 up to 12 January 1942 inclusive, thus for 8 weeks = 2 lb.

<sup>3</sup> Including allowance for duty on saccharin, molasses, glucose.

TABLE 32

## A. ESTIMATED CONSUMPTION OF TEA—FAMILY OF FIVE

Income per annum £	Lord Samuel		Colwyn Committee	Caradog Jones	Our estimates	
	1903-04	1913-14	1925-26	1925-26	1937-38	1941-42
	lb.	lb.	lb.	lb.	lb.	lb.
100	28.5	31.6	39.0	36.0	30.10	31.46
150	30.0	33.3	42.3	41.8	37.05	35.41
200	35.0	38.9	45.0	42.9	40.15	36.52
250	35.0	38.9	45.0	—	41.30	36.63
300	35.0	38.9	45.0	32.5	40.70	36.52
350	35.0	38.9	45.0	—	40.15	36.52
500	35.0	38.9	45.0	32.5	40.15	36.52

## B. ESTIMATED BURDEN OF TEA DUTY—FAMILY OF FIVE

(Rate of tax per lb. given in brackets)

Income per annum £	Lord Samuel		Colwyn Committee	Caradog Jones	Our estimates	
	1903-04	1913-14	1925-26	1925-26	1937-38	1941-42
	(6d.)	(5d.)	(3.4d.)	(3.4d.)	(4.18d.)	(6.16d.)
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
100	14 3	13 2	11 0	10 3	10 6	16 1½
150	15 0	13 10	12 0	11 11	12 11	18 2
200	17 6	16 2	12 9	12 3	14 0	18 9
250	17 6	16 2	12 9	—	14 4½	18 10
300	17 6	16 2	12 9	9 9	14 2	18 9
350	17 6	16 2	12 9	9 9	14 0	18 9
500	17 6	16 2	12 9	9 9	14 0	18 9

TABLE 33

## A. ESTIMATED CONSUMPTION OF SUGAR—FAMILY OF FIVE

Income £	Lord Samuel	Colwyn Committee	Caradog Jones	Our estimates	
	1903-04	1925-26	1925-26	1937-38	1941-42
	lb.	lb.	lb.	lb.	lb.
100	357	356	290	339.3	239.0
150	370	419	385	412.45	259.5
200	380	434	470	449	270.0
250	380	—	—	482.65	273.5
300	380	—	377	510.4	276.5
350	380	—	—	538.2	288.5
500	380	456	377	551.35	292.0

## B. ESTIMATED BURDEN OF SUGAR DUTY—FAMILY OF FIVE

Income £	Lord Samuel	Colwyn Committee	Caradog Jones	Our estimates	
	1903-04	1925-26	1925-26	1937-38	1941-42
	s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
100	13 3	1 17 6	1 8 0	1 9 3	2 8 10
150	13 9	2 3 9	1 17 2	1 15 4	2 12 8
200	14 1	2 5 3	2 5 5	1 18 5	2 14 7
250	14 1	—	—	2 1 3	2 15 3
300	14 1	—	1 16 7	2 3 6	2 15 10
350	14 1	—	—	2 5 10	2 18 1
500	14 1	2 7 6	1 16 7	2 6 11	2 18 9

## CHAPTER IX. THE TOBACCO DUTY

### 1. *Introduction.*

The burden of the duty on tobacco depends both on the amount and the quality of the tobacco consumed. Tobacco consumption is to a very considerable extent a matter of personal taste, with infinite variations from individual to individual. The amount of income is, in general, a factor in consumption, but there is no marked relation between the two.<sup>1</sup> Investigations show that the number of cigarettes consumed is much the same among smokers of all income classes except the very poor. There are, however, differences in the amount expended owing to the difference in brands consumed by the lower and the higher groups. Brands vary in price and in the amount of tobacco in the cigarettes. The aggregate burden of duty thus shows a closer relation with income than does consumption. Occupation, age and sex, however, have a far greater influence than income. Heavy smokers are to be found in particular occupations, such as those of engineers, lorry drivers, bricklayers and house painters. In general, facilities for smoking at work tend to increase consumption. The influence of age is also of importance, as (apart from the effect of reduced income on retirement) advancing age, after a certain point is reached, tends to reduce the appetite for smoking. Women are less frequently regular smokers than men, and, even if regular consumers, on the average consume less than men.

The allocation of the burden on individual incomes must always involve some arbitrariness, owing to the fact that variations in tobacco consumption are more influenced by factors other than income, and such consumption varies considerably from individual to individual.

### 2. *The consumption of Tobacco.*

Table 34 shows the very considerable increase in the consumption of tobacco in this country. The amount per head consumed

<sup>1</sup> The aggregate consumption of tobacco varies very largely with the general trend of business, as in the case of all commodities consumed by the majority of the population. This reflects the fact that the bulk of consumption is among the working classes. It does not, however, indicate any relation between individual incomes and the consumption in those income groups.



to-day is double the amount consumed before 1914. This increase is due to the growth in the number of regular smokers, especially of cigarettes, and also to the adoption by women of the habit of smoking.<sup>1</sup> Table 35, which is based on the Census of Production for 1935, shows the increase in cigarette smoking, the decline in pipe smoking, and the small consumption of tobacco in the form of cigars. The increase in cigarette smoking is due only in a small degree to a change in the habits of pipe smokers; considerable importance must be attached to an increase in per head consumption of cigarettes by older smokers, but the main point is that a new generation has grown up which smokes cigarettes increasingly. Cigars are now a very occasional smoke. According to the Census of Production Report, the weight of cigars manufactured in the United Kingdom in 1935 had fallen to just over 1 million lb., and retained imports of manufactured cigars to just over  $\frac{1}{2}$  million lb. Current consumption is probably in the region of  $1\frac{1}{2}$  million lb. per annum, or less than 1 per cent of the total consumption of tobacco.

For the fiscal year 1937-38<sup>2</sup> the consumption of cigarettes has been estimated at 150 million lb. in weight (excluding paper), and at 67,000 millions in count at an average rate of 450 cigarettes to the lb. The consumption of pipe tobacco for the same period has been estimated at 43 million lb. These figures should be related not to the total population, but to the total adult population. Juveniles do not usually become effective smokers until they are at least 20 years of age, although the total consumption by juveniles is probably sufficient to justify using population figures for 16 years of age and over.<sup>3</sup> The population of Great Britain and Northern Ireland on 1 January 1938 can be estimated in round figures at 17,000,000 males and 19,000,000 females over 16 years of age.

Expert investigation into the smoking habits of the people, based on a sample of about 50,000 adults, suggested that in 1938:

(1) Seven-eighths of the cigarettes (approximately 59,000 millions) were consumed by men and about one-eighth (approximately 8,000 millions) by women.

1 Vide 'Tobacco', *Thirty-first Report of the Imperial Economic Committee* (H.M. Stationery Office, London, 1937).

2 Consumption figures for any particular period (fiscal or calendar year) are not necessarily identical with the Board of Customs and Excise figures, which relate almost entirely to clearances of raw leaf tobacco.

3 Sales to young persons under the age of 16 are prohibited by law.

(2) Non-smokers of cigarettes in the total population were about one in ten men and about two in three women.

(3) The proportion of men who did not smoke pipe tobacco was about three in five.

These observations suggest that in 1938 the average consumption per cigarette smoker was 74 cigarettes per week for a man and 25 cigarettes per week for a woman. The main range of variation in consumption was found to be from 35 to 350 cigarettes per week for a man and from 10 to 100 or more cigarettes per week for a woman. The average consumption per pipe smoker, additional to the cigarettes smoked by him, was 2 oz. per week, equivalent in terms of cigarettes to a further 50-60 cigarettes per week. A reasonable average for a man who smokes pipe tobacco only is probably 3-4 oz. per week. Casual or ineffective smokers (mainly youths and women) were included in the calculation of all the above averages. They might account for possibly one-sixth of the tobacco smoked by the public.

For the two periods (1937-38 and 1941-42) to which the present calculations refer, the average consumption of regular smokers (including casual smokers) may reasonably be put as follows:

(1) The average consumption of male smokers consuming cigarettes only:

1937-38:	100 per week
1941-42: <sup>1</sup>	120 „

(2) The average consumption of male smokers consuming pipe tobacco only:

1937-38:	3½ oz. per week
1941-42: <sup>1</sup>	4½ oz. „

(3) The average consumption of male smokers consuming cigarettes and pipe tobacco:

1937-38:	70 cigarettes and 2 oz. tobacco per week
1941-42: <sup>1</sup>	85 cigarettes and 2¼-2½ oz. tobacco per week

Total national expenditure on tobacco (at retail prices) for the fiscal year 1937-38 has been estimated at £165-£170 millions,

<sup>1</sup> Rate of consumption in July 1941 based on current withdrawals of tobacco leaf permitted by the Government. It is borne out by the provisional figures of receipts from tobacco duty for 1941-42.

or over £13 per annum or 5s. per week per family, including non-smoking families. With the exclusion of the latter the average may well have been of the order of £15 per annum or over 6s. per week.

The average consumption figures given above show an average of 450 cigarettes per pound of tobacco. This is a general average and it does not correspond to any special brand. The brands usually consumed may be divided broadly into two categories: (1) middle-sized cigarettes such as Player's Medium, Gold Flake, Capstan, Craven 'A', etc.; (2) small-sized cigarettes, such as Woodbine, Player's Weights, Park Drive, De Reszke Minors, etc. Their price, weight and estimated share of the total consumption in 1937-38 were as follows:

	Price in 1937-38	Number per lb.	Division of total consumption in	
			Count	Weight
Category (1)	10 for 6d.	400	50 %	56 %
Category (2)	10 for 4d.	525	50 %	44 %

The difference in price is due largely to the difference in the weight of tobacco in the cigarette.

There are far greater variations in the brands of pipe tobacco; indeed there are many hundreds of brands differing in price mainly on account of the proportion of Empire tobacco used, which varies in these brands from nil to 100 per cent.

### 3. *Duty Paid on Tobacco Consumed.*

(The basic rate of Customs duty<sup>1</sup> on unmanufactured tobacco was 9s. 6d. per lb. in 1937-38; the preferential rate on Empire tobacco was 7s. 5½d. per lb. In 1937-38 almost one-quarter of the total tobacco consumed was of Empire origin, the mean rate of duty being about 9s. per lb. (or approximately 8s. 10d. after allowing for the effect of the drawback paid on exports and on waste from manufacture).) Many brands of cigarettes contain no Empire leaf at all, whereas a few popular brands contain a substantial proportion. The total amount of Empire leaf used in cigarette manufacture probably did not represent more than 10 per cent of the total amount of tobacco used for cigarettes. The bulk of Empire tobacco is used for pipe tobacco—roughly 80 per cent of the tobacco used for that purpose is of Empire origin.<sup>2</sup>

<sup>1</sup> Home production of tobacco is now nil.

<sup>2</sup> Vide the Imperial Economic Committee's *Report on Tobacco*, 1937, p. 59. Trade estimates put the proportion at 70 per cent for 1937-38.

#### 4. *The Burden of the Tobacco Duty on Selected Incomes in 1937-38.*

The burden of the duty paid by regular smokers depends on (1) the number and brand of cigarettes and the amount of pipe tobacco consumed at different income levels, determining the total weight of tobacco on which duty is payable, and (2) the proportion of Empire leaf in the tobacco consumed, determining the average rate of duty payable.

Owing to the great changes in smoking habits, previous enquiries are not helpful for our purpose. Family budgets usually underestimate the total expenditure on tobacco, as was proved by the recent family budget enquiry of the Ministry of Labour<sup>1</sup> and similar budgets. Much of the expenditure on tobacco is met by the head of the family from his pocket money and does not appear in the household expenditure at all.

In Table 36 consumption estimates are set out, taking into consideration all the factors in the previous paragraphs. In formulating these estimates the present enquiry was assisted throughout by the suggestions and criticisms of experts. It has been necessary to show the burden at three consumption levels—light, moderate and heavy—for a typical working-class income of, say, £200 and for a middle-class income of, say, £500. Investigations have justified this division, as, broadly speaking, consumption rises slowly with income and tends to stabilize at incomes of between £200 and £400 per annum. Separate figures are given for the consumption by women in the same income groups. To estimate the burden per family the consumption of the man and his wife has been taken into account. The consumption of tobacco is expressed in terms of a combined consumption of cigarettes and pipe tobacco so far as men are concerned. The duty burden for a man smoking cigarettes only will be greater than those given in Table 36, owing to the greater weight of leaf used by cigarette smokers and the smaller proportion of Empire leaf in cigarettes. The duty burden for a man smoking pipe tobacco only would be for the same reason lower than the amounts shown in Table 36. The consumption of a moderate smoker was taken at 70-85 cigarettes per week, that of a light smoker at 25-30 and that of a heavy smoker at 150-175 cigarettes per week. Additional pipe tobacco consumption was

<sup>1</sup> Vide *Ministry of Labour Gazette*, December 1940. Family expenditure on tobacco by industrial working-class households was put at 2s. 6½d. per week.

taken at 2½–3 lb. per year (less than 1 oz. per week) for the moderate smoker, 1½ lb. per year (½ oz. per week) for the light smoker and 13–16½ lb. per year (4–5 oz. per week) for the heavy smoker. The consumption of women smokers was taken at 25–30 cigarettes per week for a moderate smoker, 10–15 cigarettes per week for a light smoker and 70–100 cigarettes per week for a heavy smoker. The average weight of cigarettes was calculated at the rate of 475 cigarettes per lb. for the lower income group and 400 per lb. for the higher income group. Investigations show that while the cheaper brands are smoked mainly by the lower income group, this group also smokes a large proportion of the dearer brands. The higher income group mostly favours the dearer brands. The duty burden on the lower income group, therefore, will show greater variations. The spread of the consumption of dearer brands over the various income groups is wider than that of the cheaper brands.

For cigarettes the duty for the lower income group was calculated at 9s. 2d. and for the higher income group at 9s. 5d. per lb. Both figures are not much below the full rate, owing to the low proportion of Empire leaf in cigarettes. For pipe tobacco the average rate of duty was taken at 8s. per lb. for the lower income group and at 9s. per lb. for the higher income group. A rough allowance has been made for the varying percentage of moisture in the different tobaccos.

The calculated burden of tobacco duties for 1937–38 is as follows:

(A) A man in the lower income group if a moderate smoker paid £4. 5s. 10d., if a light smoker £1. 15s. 1d. and if a heavy smoker £11. 18s. 3d. per annum.

A woman in this category if a moderate smoker paid £1. 4s. 5d., if a light smoker 9s. 9d. and if a heavy smoker £3. 8s. 2d. per annum.

(B) A man in the higher income group if a moderate smoker paid £6. 5s. 2d., if a light smoker £2. 8s. 0d. and if a heavy smoker £17. 1s. 2d. per annum.

A woman in this category if a moderate smoker paid £1. 15s. 7d., if a light smoker 17s. 10d. and if a heavy smoker £5. 18s. 10d. per annum.

It is necessary to point out that variations may be far greater

than these figures would suggest. These duties refer to regular consumers only, excluding non-smokers or casual smokers, and they represent the duty paid by the average moderate, light or heavy smokers in the ranks of the regular consumers.

In Table 38 an estimate has been made of the total tax burden at the various income levels for a man and his wife. To arrive at these figures curves were drawn and the above figures varied upwards and downwards. This procedure can be justified by the fact that with the increase in income there is some increase in duty paid, as the quality and weight of the tobacco slightly increase. This is all the more true if the lowest income groups are excluded, where lack of spending power has a strong influence on consumption. In the highest income groups some allowance has been made on account of entertaining. Expert opinion holds that only in regard to cigars is expenditure in the highest income groups on entertaining of importance, and even on this account it is extremely slight. For the purposes of this table a moderate consumption of cigarettes by the wife is combined with a moderate consumption of cigarettes by the husband at all income levels. It may be of interest to note that the Colwyn Committee in its 1927 *Report* did not allow for the smoking of a wife in groups below £300 per annum. Such smoking, however, is known to have been quite common at the time. Since 1927 smoking among women has become even more general in all income groups, and it has therefore been included in our calculations. A rough allowance has been made for the duty on matches assumed to be paid by tobacco consumers. This part of the yield of match duties was put at £3 millions for 1937-38 (about 4 per cent of the revenue from tobacco duties), and at £3·4 millions for 1941-42 (about 2 per cent of the revenue from tobacco duties).

No information is available regarding the consumption of tobacco according to the size of families. It is probable that married couples with children spend less on tobacco than those (having similar incomes) without children. This affects the burden only to a small extent, however, and it may be disregarded.

##### 5. *The Burden of Tobacco Duty in 1941-42.*

The duty on tobacco in 1941-42 was 19s. 6d. per lb. at the full rate and 17s. 5½d. per lb. at the preferential rate. Between 1937-38 (when it was 9s. 6d. and 7s. 5½d. respectively) and 1941-42 it was

raised four times, namely, by 2s. in the April 1939 Budget, by 2s. in the September 1939 Budget, by 4s. in the April 1940 Budget and by a further 2s. in the July 1940 Budget. The rise in retail prices was less than proportionate to the rise in duty. In spite of the considerable (though less than proportionate) rise in retail prices there was an increase in consumption over the pre-war level. The total amount of tobacco retained for home consumption in the fiscal year 1939-40 was 7 per cent greater than in 1937-38. The course of tobacco consumption in 1941-42 depended entirely on the supply available and its distribution. Shortages of tobacco showed that demand generally exceeded supply. Aggregate supply from August 1940 to March 1941 was largely on the level of 1937-38, because during that period withdrawals of unmanufactured tobacco from bond had been restricted by order of the Board of Trade to 90 per cent of the withdrawals during the fiscal year 1939-40. The great increase in aggregate consumption induced the Government in April 1941 to release more tobacco from bond. It was estimated that the annual rate of consumption in July 1941 was from 35 to 40 million lb. more than in the year before the war. As the Tobacco Controller stated: 'Before the war we were smoking from 195 to 197 million lb. . . . In the present twelve months, if the rate at which tobacco is being released from bond is maintained, the consumption will be from 230 to 240 million lb.' (*The Times*, 17 June 1941). On this basis total consumption in 1941-42 would be from 20 to 25 per cent. above that of 1937-38. In the calculation of the duty burden for 1941-42 it was advisable to assume an increase of 20 per cent in individual consumption as compared with 1937-38.

This increase in consumption can be explained by the fact that regular smokers maintained, if not increased, their pre-war consumption level, in spite of the considerable rise in retail prices, although they may have tended to consume less expensive brands. In addition, the number of regular smokers increased. Both these factors are direct consequences of war-time conditions. New consumers are recruited from the members of the fighting forces, the civil defence services and industrial workers with increased purchasing power. Long hours of black-out during the winter, fewer sweets, the spending of time in shelters, etc., all act as incentives to more intensive smoking.

The national expenditure on tobacco at retail prices current in

1941-42 was of the order of £340 millions per year. This amounted to a yearly expenditure of £26 per family (including non-smokers) or to approximately 10s. per week. With the exclusion of non-smokers the average may have been at least £30 per year, or 12s. per week per family.

For 1941-42 the price, weight and estimated division of consumption between the two categories of cigarettes given in section (2) above have been taken to be as follows:

	Price in 1941-42	Number per lb.	Division of total consumption in count
Category (1)	10 for 9d.	420	47 %
Category (2)	10 for 6½d.	520	53 %

The average number of cigarettes to the lb. can be put at 470. This increase since 1937-38 is attributable in the main to a transfer of demand to the smaller and less expensive brands. There were also a few adjustments in size necessitated by duty changes, but these did not have an important effect on average weight.

The burden of the duty for 1941-42 is given in Table 37. The partial switch-over to cheaper brands and a further increase in the use of Empire leaf have been taken into account. The duty for the lower income group has been taken at 19s. and for the higher income group at 19s. 3d. per lb. For pipe tobacco the duty was taken at 17s. 8d. per lb. for the lower income group and at 18s. 8d. for the higher group.

The burden for 1941-42 calculated on these lines is as follows:

(A) A man in the lower income group if a moderate smoker paid £10. 7s. 9d., if a light smoker £4. 5s. 6d. and if a heavy smoker £29. 6s. 11d. per annum.

A woman in this category if a moderate smoker paid £2. 17s. 7d., if a light smoker £1. 3s. 0d. and if a heavy smoker £8. 1s. 4d. per annum.

(B) A man in the higher income group if a moderate smoker paid £14. 16s. 1d., if a light smoker £5. 13s. 5d. and if a heavy smoker £40. 10s. 11d. per annum.

A woman in this category if a moderate smoker paid £4. 3s. 4d., if a light smoker £2. 1s. 7d. and if a heavy smoker £13. 17s. 9d. per annum.



Table 38 gives an estimate of the burden of duties on incomes for a man and his wife, calculated in the same way as for 1937-38. A rough allowance has again been made for the duty on matches assumed to be paid by tobacco consumers.

TABLE 34. THE CONSUMPTION OF TOBACCO IN THE UNITED KINGDOM.  
CLEARANCES OF RAW TOBACCO

Calendar year	Mill. lb.	Lb. per head	Calendar year	Mill. lb.	Lb. per head
1913	96.1	2.10	1932	149.7	3.23
1924	128.9	2.87	1933	149.6	3.22
1925	133.5	2.96	1934	158.9	3.40
1926	135.5	3.0	1935	164.6	3.51
1927	138.1	3.4	1936	175.0	3.71
1928	141.7	3.11	1937	183.0	3.87
1929	147.8	3.24	Fiscal year		
1930	151.6	3.31	1937-38	187.0	Approx. 3.94
1931	150.5	3.27	1939-40	200.0	„ 4.19

Sources. *Statistical Abstract for the United Kingdom*, Cmd. 5903, 1939, pp. 410-13. Tobacco', *Thirty-first Report of the Imperial Economic Committee*, 1937.

TABLE 35. THE CONSUMPTION OF TOBACCO IN THE UNITED KINGDOM.  
OUTPUT OF FINISHED PRODUCTS RETAINED IN THE UNITED KINGDOM

Census	Pipe tobacco		Cigarettes		Cigars		Snuff		Total	
	Mill. lb.	%	Mill. lb.	%	Mill. lb.	%	Mill. lb.	%	Mill. lb.	%
1907 (a)	59.1	67.9	23.1	26.5	3.7	4.2	1.2	1.4	87.1	100.0
1924 (b)	51.7	39.5	77.4	59.1	1.5	1.1	0.4	0.3	131.0	100.0
1930 (c)	49.3	30.9	108.3	67.8	1.2	0.7	1.0	0.6	159.8	100.0
1935 (c)	43.9	25.7	124.7	73.2	1.1	0.6	0.9	0.5	170.6	100.0

(a) Great Britain and Ireland. (b) Great Britain.

(c) Great Britain and Northern Ireland.

Source. Census of Production figures, minus exports and ships' stores, as given in the Imperial Economic Committee's *Report on Tobacco* (London, 1937). Adjustments for 1930 and 1935 were based on the 1935 *Census of Production* (London, 1940). The Census of Production figures for both years included weight of cigarette paper; approximate deductions were made to allow for this, and the figures therefore represent weight of tobacco.

Apart from cigars, retained manufactured imports are of very small account.

TABLE 36. THE BURDEN OF TOBACCO DUTIES ON INCOMES. 1937-38  
(Consumption of tobacco expressed in terms of cigarettes and pipe smoking)

	Light		Moderate		Heavy	
	Lower income group	Higher income group	Lower income group	Higher income group	Lower income group	Higher income group
MEN						
<i>Cigarettes</i>						
No. per week	25	30	70	85	150	175
No. per annum	1,300	1,560	3,640	4,420	7,800	9,100
Lb. per annum	2.74	3.90	7.66	11.0	16.42	22.75
Average rate of duty per lb.	9s. 2d.	9s. 5d.	9s. 2d.	9s. 5d.	9s. 2d.	9s. 5d.
Approx. lb. weight on which duty is paid <sup>1</sup>	2.66	3.79	7.44	10.68	15.95	22.10
Duty payable	£1. 4s. 5d.	£1. 15s. 8d.	£3. 8s. 2d.	£5. 0s. 7d.	£7. 6s. 3d.	£10. 8s. 1d.
<i>Pipe Tobaccos</i>						
Lb. per annum	1.5	1.5	2.5	3	13	16.25
Average rate of duty per lb.	8s.	9s.	8s.	9s.	8s.	9s.
Approx. lb. weight on which duty is paid <sup>1</sup>	1.33	1.37	2.21	2.73	11.50	14.79
Duty payable	10s. 8d.	12s. 4d.	17s. 8d.	£1. 4s. 7d.	£4. 12s. 0d.	£6. 13s. 1d.
<i>Cigarettes and Pipe Tobacco</i>						
TOTAL DUTY PAYABLE	£1. 15s. 1d.	£2. 8s. 0d.	£4. 5s. 10d.	£6. 5s. 2d.	£11. 18s. 3d.	£17. 1s. 2d.
WOMEN						
<i>Cigarettes</i>						
No. per week	10	15	25	30	70	100
No. per annum	520	780	1,300	1,560	3,640	5,200
Lb. per annum	1.09	1.95	2.74	3.90	7.66	13.0
Average rate of duty per lb.	9s. 2d.	9s. 5d.	9s. 2d.	9s. 5d.	9s. 2d.	9s. 5d.
Approx. lb. weight on which duty is paid <sup>1</sup>	1.06	1.89	2.66	3.78	7.44	12.62
Duty payable	9s. 9d.	17s. 10d.	£1. 4s. 5d.	£1. 15s. 7d.	£3. 8s. 2d.	£5. 18s. 10d.

<sup>1</sup> Allowing for variation of weight in manufacture. Vide Appendix I, Note 2, of the Imperial Economic Committee's *Report on Tobacco*, 1937.

TABLE 37. THE BURDEN OF TOBACCO DUTIES ON INCOMES. 1941-42  
(Consumption of tobacco expressed in terms of cigarettes and pipe smoking)

	Light		Moderate		Heavy	
	Lower income group	Higher income group	Lower income group	Higher income group	Lower income group	Higher income group
<b>MEN</b>						
<i>Cigarettes</i>						
No. per week	30	36	84	102	180	210
No. per annum	1,560	1,872	4,368	5,304	9,360	10,920
Lb. per annum	3.12	4.46	8.74	12.63	18.72	26.0
Average rate of duty per lb.	19s.	19s. 3d.	19s.	19s. 3d.	19s.	19s. 3d.
Approx. lb. weight on which duty is paid <sup>1</sup>	3.03	4.33	8.49	12.26	18.17	25.24
Duty payable	£2. 17s. 7d.	£4. 3s. 4d.	£8. 1s. 4d.	£11. 16s. 0d.	£17. 5s. 3d.	£24. 5s. 11d.
<i>Pipe Tobaccos</i>						
Lb. per annum	1.8	1.8	3.0	3.6	15.6	19.5
Average rate of duty per lb.	17s. 8d.	18s. 8d.	17s. 8d.	18s. 8d.	17s. 8d.	18s. 8d.
Approx. lb. weight on which duty is paid <sup>1</sup>	1.58	1.61	2.63	3.22	13.68	17.41
Duty payable	£1. 7s. 11d.	£1. 10s. 1d.	£2. 6s. 5d.	£3. 0s. 1d.	£12. 1s. 8d.	£16. 5s. 0d.
<i>Cigarettes and Pipe Tobacco</i>						
TOTAL DUTY PAYABLE	£4. 5s. 6d.	£5. 13s. 5d.	£10. 7s. 9d.	£14. 16s. 1d.	£29. 6s. 11d.	£40. 10s. 11d.
<b>WOMEN</b>						
<i>Cigarettes</i>						
No. per week	12	18	30	36	84	120
No. per annum	624	936	1,560	1,872	4,368	6,240
Lb. per annum	1.25	2.23	3.12	4.46	8.74	14.86
Average rate of duty per lb.	19s.	19s. 3d.	19s.	19s. 3d.	19s.	19s. 3d.
Approx. lb. weight on which duty is paid <sup>1</sup>	1.21	2.17	3.03	4.33	8.49	14.43
Duty payable	£1. 3s. 0d.	£2. 1s. 7d.	£2. 17s. 7d.	£4. 3s. 4d.	£8. 1s. 4d.	£13. 17s. 9d.

<sup>1</sup> Allowing for variation of weight in manufacture. Vide Appendix I, Note 2, of the Imperial Economic Committee's *Report on Tobacco, 1937*.

TABLE 38. THE BURDEN OF TOBACCO DUTIES ON INCOMES,  
WITH ALLOWANCE FOR THE DUTY ON MATCHES

(Moderate consumption of man and wife assumed)

Income	1937-38	1941-42	Income	1937-38	1941-42
£	£ s.	£ s.	£	£ s.	£ s.
100	3 0	7 0	350	7 0	15 15
150	4 0	9 5	500	8 0	18 0
200	5 0	11 5	1,000	8 10	20 0
250	5 15	13 0	2,000	9 0	21 0
300	6 10	14 10	and over		

## CHAPTER X. THE DUTIES ON ALCOHOLIC DRINKS

### 1. *Introduction.*

The burden of the duties on alcoholic drinks depends on the nature and amount of the consumption. Little information is available as to the expenditure by particular individuals or groups of individuals on alcoholic drinks, or as to the variations in drinking habits from one group to another. Family budgets are of little assistance, since these as a rule give only the consumption in the home or the consumption paid for out of family expenditure.<sup>1</sup> This consumption, as in the case of tobacco, is only a small part of the total consumption of the tax-paying family.

The making of an estimate of the consumption of alcoholic drinks (and the duty paid on them) is even more complicated than in the case of tobacco. Quite apart from abstainers, drinkers have a greater variety of choice than smokers. They may choose between beer, spirits and wine, which are partly complementary and partly substitutes for each other, without there being any general rule.

The consumption of alcoholic drinks either in the form of beer, spirits or wine, although not independent of income, is to a large degree a matter of personal taste and social habit. Occupation is another factor. It is well known that in agricultural areas consumption is light, while in the heavy industries such as iron and steel and shipbuilding, and in mining areas, consumption is heavy. Again, we know that in north-east England consumption is heavier than in the south of England, and also that the consumption of spirits in Scotland is heavier than in England. In this chapter, however, the results given are those for the country as a whole, and are intended to be representative for the majority. With the help of the known facts and with a few reasonable estimates, an attempt has been made to work out the limits within which the burden of the duty on alcohol falls on the different income groups.

<sup>1</sup> The recent family budget enquiry of the Ministry of Labour puts the average expenditure on drinks in working-class households at 9½*d.* per week (about £2 per annum) for industrial households, and at 4½*d.* per week (about £1 per annum) for agricultural households.

## 2. *The Consumption of Alcohol.*

There has been a spectacular decrease in the consumption of alcohol since the beginning of the century, with only slight cyclical increases, as for example in the last few years immediately before the present war (see Table 40). The decrease in the consumption of spirits has been remarkable, and far greater than the decrease in the consumption of beer, which has also been very noticeable. There has been an increase in the consumption of wine, mainly on account of the introduction of Empire and British wines. In 1939 about 80 per cent of the total proof spirit was consumed in the form of beer, about 12 per cent in spirits and 8 per cent in wine. At the beginning of the present century the consumption was 71 per cent, 26 per cent and 3 per cent respectively.<sup>1</sup> The total amount of proof spirit consumed to-day by the community in the form of different alcoholic drinks is two-thirds of the amount consumed at the beginning of the century. The fall as compared with 1920 is nearly 25 per cent. The reasons for this change are many—the social changes that have taken place, the rising standard of living with the development of counter-attractions to drink such as cinemas, wireless and motoring, the increase in education, legal restrictions, and, not least, the great increase in prices mainly as a result of increased duties.<sup>2</sup> The changes in drinking habits have very probably resulted in an increase in the number of abstainers and casual drinkers. Regular drinking has become more largely confined to the adult population than before, and excessive drinking has also decreased to a large extent. It is difficult to measure these changes by any statistical data, but some evidence of the decrease in insobriety is provided by the great decline in the number of convictions for drunkenness.

These changes in drinking habits (such as the decrease in excessive drinking, particularly noticeable amongst the younger people) were corroborated by the *Report* of the Royal Commission on Licensing. It is of interest to give also the opinion of a representative of the Brewers on this question. He believed that in

<sup>1</sup> Based on Table 18 and Note on p. 363 of *The Brewers' Almanack*, 1941. The proof spirit content of wine and British wine is put at 30 per cent on the average, the proof spirit content of beer at 10 per cent on the average for pre-war years.

<sup>2</sup> A detailed analysis of the problem goes beyond the scope of this chapter. Vide the *Report of the Royal Commission on Licensing in England and Wales*, 1929-31, Cmd. 3988, 1932, pp. 7-12.

1933 the chief customers of public houses were elderly and middle-aged men,<sup>1</sup> and this is borne out by evidence given by representatives of the spirit trade before the Royal Commission. It is of special interest to quote the two social surveys dealing with drinking and drinking habits in the middle thirties. According to the *New Survey of London Life and Labour*,<sup>2</sup> 'it is certain that a smaller proportion of the population habitually frequents public houses [in 1934] than was the case forty years ago . . .' (p. 246). 'There are fewer women to be seen in the public houses than before the [1914-18] war, and there is general agreement both within and outside the trade that the average age of the customers of a typical London public house is higher (probably ten years higher) than in 1913/14' (p. 248). The same survey points out some increase in drinking at home, probably a stronger tendency among women, but says it is still quantitatively unimportant. 'The outstanding points are the decrease in the amount of drinking per head . . . and the decreased extent to which actual excess . . . is found' (p. 249).

Mr Seebohm Rowntree's survey<sup>3</sup> in York for 1938 confirms that the regular drinkers are mainly the older men and women and that the number of new regulars is dwindling. His survey shows, however, that a considerable number of young people of both sexes are visiting public houses, more especially the fashionable ones, hotel bars, etc. Further, those with whom he discussed the subject are unanimous in their belief that the number of women, particularly young women, who make a habit of visiting public houses is on the increase. Many of them take what are called 'short' drinks, like gin, sherry, port and cocktails. On the whole it appears to us that these younger people belong to the category of casual drinkers and not to the category of regular drinkers.

Statistics on total consumption of alcoholic drinks suggest some recent extension of beer consumption. This might be explained partly by the fact that beer is now being consumed higher up in the social scale, and by persons of both sexes who previously took wine or spirits. This tendency seems to be even more accentuated at present, owing to the high prices of wines and spirits, and their growing scarcity.

1 Quoted by G. B. Wilson, *Alcohol and the Nation* (London, 1940), p. 258.

2 Vol. ix (London, 1935).

3 *Poverty and Progress* (London, 1941), p. 350.

The changes in wine consumption require special attention. At the beginning of the century almost all the wine consumed in this country was imported foreign wine, and consumption amounted to about 17 million gallons per annum. There was a big drop in the consumption before 1905. Since then the clearances of such wines have generally hovered round about 11 or 12 million gallons a year (with a slump during the last war, a short spurt immediately after it, and another temporary spurt in the middle twenties). A good deal of this fall in the consumption of foreign wines has been in the categories of cheaper ports and tarragonas, which have been replaced by Empire and British wines. The quantities of Empire wines consumed were, however, relatively small (under 1 million gallons a year) prior to the preferential rates of duty given to them in 1925. British wines have come into prominence only during the last ten years or so.<sup>1</sup> The great increase in the consumption of both Empire and British wines during the last decade before the war is illustrated by the following figures:

*Duty Paid on Different Types of Wines*

	Foreign mill. gall.	Empire mill. gall.	British mill. gall.	Total mill. gall.
1928-29	11.0	2.4	2.9	16.3
1938-39	10.2	5.0	6.4	21.6

While foreign wines were, and to a very great extent are still, consumed mainly by the middle and higher classes, Empire and British wines (especially the latter) are doubtless consumed largely by the lower strata of society. It is of interest to quote from a letter from the President of the Wine and Food Society: 'In 1900 . . . Wine was the beverage of the *leisured* classes, which included not only the rich people, but the academic profession, the medical profession, the lawyers and the upper middle class. Not *idle* people, but people with sufficient intelligence to find and to make use of leisure, when business and cares were laid aside for the time, friends were entertained, holidays enjoyed, and a glass of wine sipped with appreciation—and there can be no appreciation where there is no leisure. Manual workers and the lower grades of society (intellectually more than financially) ignored any such appreciation of wine, and sought in beer and spirits the surest and

<sup>1</sup> It should be borne in mind that British wines, 'sweets', are not wines in the proper sense, although this distinction may not be as clear to the average consumer as it is to experts.



cheapest way to intoxication.' British wines have owed their popularity to the fact that they have been very cheap.<sup>1</sup>

Further aspects of the consumption of alcoholic drinks are illustrated by the annual drink bills containing estimates of national expenditure on alcohol. These estimates have been published from 1910 onwards by Dr G. B. Wilson, author of *Alcohol and the Nation*<sup>2</sup> (see Table 41). Quantities are based on official figures, while prices are unofficial estimates of average retail prices paid throughout the United Kingdom, and the figures represent the minimum expenditure incurred. It is remarkable to note that the decrease in expenditure on drinks is small, compared with the great fall in the volume of drinking. Dr Wilson put the total drink bill at retail prices for 1937, including the amount paid for liquor licences, at £259 millions. He estimated that out of a total adult population (over 20 years) of 30·5 millions in that year, about 6 millions were abstainers, and of the remainder an equally large, if not a larger number of persons, say 8 millions, although not professedly abstainers, did not spend, either on themselves or on guests, £2 a year on intoxicants. This leaves about 16·5 million regular consumers with a total expenditure of £243 millions, or

1 Another factor worth mentioning is that the consumption of cider, although not taxed, is popular among certain sections of the population, and may slightly affect the consumption of other alcoholic drinks and thus the duty burden. It is difficult to estimate the quantities of cider sold. The total factory production of cider and perry was put in the *Final Report of the Fifth Census of Production* (1935) at 8·4 million gallons for 1930 and 11·2 million gallons for 1935. On the whole this is a small item, when compared with a yearly consumption of beer of, say, around 800 to 900 million gallons.

2 G. B. Wilson, *Alcohol and the Nation* (London, 1940). Dr Wilson's estimates are published annually (the latest estimate was for 1940) by the United Kingdom Alliance (for the suppression of the liquor traffic), in continuation of similar calculations previously made by the late Mr W. Hoyle and Dr Dawson Burns. *The Brewers' Almanack* for 1941 states that 'the calculations are made on a basis the accuracy of which is not generally agreed; as down to 1901 they were calculated each year in the same manner, they are useful for purposes of comparison. Unfortunately, in 1902, the basis of calculation was suddenly changed, and the cost arbitrarily increased by about 15 per cent' (p. 364). The figures were used in the *Report of the Royal Commission on Licensing*, and as the *Report* states, they did 'not appear to be substantially disputed'. The value of the drink-bill figures seems to us considerable, while no means of checking Dr Wilson's estimates of the number of abstainers and casual drinkers are available. The *New Survey of London Life and Labour* puts forward a guess of 10 per cent for men and 20 per cent for women of adult workpeople being abstainers (vol. ix, London, 1935, p. 267).

an average expenditure of £15 per regular consumer. This average expenditure represents a yearly consumption of approximately 400 pints of beer, 5 bottles of whisky and 10 bottles of wine, and the average amount of duty borne by the regular consumer was roughly £6·5 at 1937-38 rates. The total average expenditure expressed in terms of beer would amount to 600-650 pints, and the duty paid on it to £5. 5s. 6d., in terms of whisky 24 bottles, and the duty paid on it (if consumed in bottles), £10.

It is not possible to subdivide the figure of 16·5 million consumers into males and females, or to distribute it geographically or according to income. These factors are responsible for considerable variations in the average amount consumed. Expert opinion is that the consumption of women is very probably much lower than that of men<sup>1</sup> and, as already noted, consumption in rural areas, even among regular consumers, is less than in manufacturing or mining areas or in seaports. In rural areas the gravity and price of beer are as a rule lower than elsewhere, and the consumption of spirits and wine is almost unknown. The different drinking habits of social groups and, in the higher income groups, entertaining, do not influence the average consumption to any considerable degree because the bulk of the beer and a considerable part of the spirits are consumed by the lower income groups, to which the majority of the people belong. Wine is a small item, and the drink bill, even with wine omitted, would still be over £14 per annum for the average consumer.

There is little information as to the extent of the variations in expenditure and the spread in consumption from individual to individual or from family to family. Some interesting figures were, however, brought before the Royal Commission on Licensing. The late Lord Stamp stated that in the case of heavy drinkers the expenditure of a working-class family on alcohol might be as high as £35 per annum. Dr Alfred Salter stated before the Committee that he had received estimates showing that the expenditure on drink in the industrial metropolitan borough of Bermondsey was as high as 16s. or more per week for each family (or £40 per annum), and £17 per annum for every adult over 20. Another estimate put the average expenditure in a congested district of

<sup>1</sup> E.g. the *New London Survey* states: 'The average male consumer drinks perhaps from three to four times as much as the average woman, except in the case of wine' (p. 254).

Birmingham at £10 per annum per head of the population, and the weekly family expenditure at from 18s. to £1 out of incomes ranging mostly from 35s. to 45s. per week. This latter estimate seems very high, as it would represent a weekly family consumption of approximately 40 pints of beer, even if it is remembered that all these figures refer possibly to the social family, that is, a family possibly including more than one earner and more than two adults. For a tax family of two adults only with dependent children, the corresponding figure would be somewhat lower. It is worth mentioning that the *New London Survey* estimates that an average London family (excluding abstainers) with an income of from £3 to £3. 15s. a week, spent (husband and wife combined) about 10s. to 12s. a week on drink in 1934.<sup>1</sup>

### 3. *The Duty Paid on Alcoholic Drinks.*

Having stated the known facts on consumption, we now turn to those on the duty paid on alcohol. The burden of the duties on alcohol depends not only on the total amount spent on drink, but to a considerable extent on the kind of drink. A man may spend the same amount on alcohol and still pay less in duty than another, if he happens to be a beer consumer and the other man a whisky consumer. On the average approximately 42 per cent of the national drink bill is paid in duties, including liquor licences. The duty paid on beer in 1941-42 was approximately 50 per cent of the price; in 1937-38 it was nearer 30 per cent. In the case of whisky, the duty (if consumed per bottle) was 67.7 per cent in 1937-38, and a little less in 1941-42. For wine the duty in 1941-42 was about 30 per cent of the price charged per bottle (for British wine it was as low as 15 per cent in 1937-38). For champagne the duty in 1937-38 was 22-23 per cent, and this has remained unchanged. As wine prices are at present rising, the proportion of duty in the price is decreasing and is a rather uncertain percentage.

*Beer.* The main rate of duty in 1937-38 was £1. 4s. per barrel of a specific gravity up to and including 1027°, plus a further 2s. for every degree of gravity over 1027°. Thus the unit of charge was not on the standard barrel, but on the bulk barrel (36 gallons of whatever gravity), and it varied with the gravity of the latter.

1 *Op. cit.* p. 248.

There were higher rates for imported beer and preferential treatment for Empire beer, but the quantity of imported beer retained for consumption was less than 5 per cent of the total consumption. The bulk of this import came from Eire. The average gravity of home-made beer was  $1041.02^\circ$  in 1937-38 and thus the average duty per pint was  $2.2d$ . There were, however, considerable variations in the duty according to gravity. For the types chiefly consumed the rates were as follows:

*Rates of Duty on some types of Beer in 1937-38*

	Duty per pint	Approximate retail price per pint
On very light beer ( $30^\circ$ gravity) <sup>1</sup>	$1\frac{1}{2}d$ .	$4d$ .
On a moderately priced beer ( $36^\circ$ gravity)	$1\frac{3}{4}d$ .	$5d$ .
On beer of average strength ( $41^\circ$ gravity)	$2.2d$ .	$6d$ .
On stout ( $54^\circ$ gravity)	$3\frac{1}{2}d$ .	$9\frac{1}{2}d$ . (per pint bottle)

<sup>1</sup> In non-technical language we speak of a gravity of  $30^\circ$  instead of  $1030^\circ$ ,  $55^\circ$  instead of  $1055^\circ$ , etc., vide *The Brewers' Almanack*, 1941, p. 30.

For the year 1941-42 the main rate of duty was £4. 1s. per barrel up to  $1027^\circ$ , with an additional 3s. for every degree of gravity over  $1027^\circ$ . The average gravity was over  $2^\circ$  lower in 1940-41 than in the previous year, and the average rate of duty per pint  $4.75d$ . ( $38^\circ$  gravity).

*Rates of Duty on some types of Beer in July 1941*

	Duty per pint	Approximate retail price per pint
On very light beer ( $30^\circ$ gravity)	$3\frac{1}{2}d$ .	$7d$ .
On a moderately priced beer ( $36^\circ$ gravity)	$4\frac{1}{2}d$ .	$8d$ .
On beer of average strength (say $38^\circ$ gravity)	$4.75d$ .	$9d$ .
On stout ( $52^\circ$ gravity)	$6\frac{1}{2}d$ .	1s. $1\frac{1}{2}d$ . (per pint bottle)

As can be seen, the increase in the duty on beers of different strength is disproportionate. The increase is the greatest for light beer, and the smallest for stout.

*Spirits.* The basic rate of duty is the excise rate on home-made spirits warehoused for not less than three years, which governs the rates on imported spirits. It amounted to £3. 12s. 6d. per proof gallon in 1937-38. There was an extra charge on imported non-Empire spirits. On the average of the years 1933-34 to

1937-38, 87 per cent of the spirits consumed was home-made, more than 5 per cent imported rum (mainly from the British West Indies), and less than 5 per cent imported brandy (mainly from France).

In 1937-38 a bottle of whisky (costing 12s. 6d.) paid 8s. 5½d. in duty. The extra duty per bottle on gin or brandy was insignificant. In 1941-42 the main rate of duty was 97s. 6d. per proof gallon for British whisky. This worked out at 11s. 4½d. per bottle costing up to 17s. 6d. The extra duty on gin would be about 2d. per bottle and on brandy 5½d. if imported in bottle.

*Wine.* There are a great many variations in the rates of duty on wines, according to the spirit content (two main rates), the origin (with preferential treatment for Empire wines), and the form of import (an extra charge is made if imported in bottle and not in cask). There are surcharges on sparkling wine. Even with all these variations, however, a cheap beverage wine (ordinaire) may pay the same amount of duty as a very expensive claret or Burgundy, if the latter is imported in cask and bottled here, and only slightly less if it is imported in bottle.

At rates prevailing in 1937-38 the duty on a bottle of Dominion sweet wine amounted to 8d. per bottle, on Continental dry wines (beverage wines) to the same amount, on Continental sweet wines (port, sherry, etc.) to 1s. 4d., and on champagne to 2s. 9d. per bottle.

The quantity retained for home consumption in 1937-38 showed roughly the following distribution:

	%		%
Dominion sweet	26.5	Continental dry	18.5
Dominion dry	4.5	Champagne	4.0
Continental sweet	46.5		

In 1941-42 the rate of duty on wine gave the following tax burden per bottle:

Dominion sweet	2s.	Continental sweet	2s. 8d.
Continental dry	1s. 4d.	Champagne	3s. 5d.

*British Wine.* In 1937-38 the duty on British wine amounted to 1s. 6d. per gallon (3d. per bottle); in 1941-42 it amounted to 5s. 6d. per gallon (11d. per bottle). There were higher rates on sparkling wine, but this wine amounted to little more than 2 per cent of the total consumption.

#### 4. *The Burden of the Duty on Incomes.*

On the basis of the known facts set out in regard to consumption and duty, an attempt has been made to estimate the burden of the tax on incomes. It is proposed briefly to describe the previous enquiries into this problem and then to estimate the burden for the year 1937-38 by two methods:

(1) By the method based on national consumption and total yield of duties, similar to that followed by the Colwyn Committee.

(2) By another method based on the variations in individual consumption.

In the next section of this chapter an estimate is given of the burden of the tax for the year 1941-42.

*Previous Enquiries.* The enquiry into the incidence of taxation made by Lord Samuel,<sup>1</sup> for the years 1903-04, 1913-14 and 1918-19, gave estimates of duty paid, based on the probable expenditure of families in the different social classes. Lord Samuel's figures of expenditure and duty were based on an enquiry made in 1898 by Messrs Joseph Rowntree and Arthur Sherwell,<sup>2</sup> who came to the conclusion that the average working-class family spent 6s. a week on alcoholic drinks out of an average wage of 35s. On the results of this investigation and further enquiries, Sir Bernard Mallet made elaborate calculations<sup>3</sup> as a result of which he arrived at the conclusion that in 1904 a working-class family paid annually £3. 1s. 2½d. in taxation, a lower middle-class family paid £3. 19s. 9¾d., and a family of the income-tax class paid £14. 3s. 3½d. Lord Samuel then estimated the probable dispersion of these figures among the various income groups, and modified these estimates for 1913-14 and 1918-19. He did not attempt to calculate either the consumption or the total expenditure of the different income groups on alcohol.

The Colwyn Committee *Report* fell back on certain known data for the year 1923-24, namely the total consumption of spirits, beer

1 'The Taxation of the Various Classes of the People', Presidential Address of the Rt Hon. Herbert Samuel to the Royal Statistical Society, January 1919 (*J.R.S.S.* vol. LXXXII, 1919).

2 Joseph Rowntree and Arthur Sherwell, *The Temperance Problem and Social Reform* (1901).

3 Lord Samuel states that these calculations 'were too elaborate even to be summarized here'.

and wine, with the duty on each and the approximate numbers of the adult population, male and female. Then by a series of calculations, based on varying hypotheses, the Committee arrived at certain alternative estimates of average consumption and duty for male and female consumers in three different groups: Group A, incomes upwards of £500; Group B, incomes between £200 and £500; Group C, incomes up to £200. The average figures for the three groups were used only as a guide in framing estimates of representative consumption and duty for each of the family incomes selected by the Committee. The main hypotheses taken by the Committee<sup>1</sup> gave alternative estimates of the proportion of abstainers, male and female, in each income group, and the proportion of male to female consumption of spirits, beer and wine for each income group. As a result of these hypotheses the 'notional number of male consumers' of the three types of alcoholic drinks was worked out for each income group. The eight sub-hypotheses based on the two main hypotheses give alternative assumptions of the ratio of consumption for the males of each income group for spirits, beer and wine. On the basis of all these assumptions the total national consumption (in gallons) is then distributed among the three income groups. The total consumption of each income group arrived at in this way is then divided by the notional number of male consumers calculated on the main hypotheses, thus giving the per head consumption of a male consumer. The consumption of a female consumer in each income group is then calculated, and the per head consumption of both a male and a female consumer for each income group multiplied by the *average* rate of duty per gallon of spirits, beer and wine, in order to ascertain the duty payable per head. Finally, the results of the eight sub-hypotheses are brought together in a table which gives 'estimates of average duty borne in respect of individual male and female consumption'.

Another enquiry for the year 1925-26 was made by Mr Caradog Jones.<sup>2</sup> He did not attempt to estimate the 'average' consumption of a consumer of alcoholic drinks by any method such as estimating the number of abstainers and the ratio of male and female consumption. Mr Caradog Jones gives four 'possible' levels of consumption of beer, spirits and wine for each of four income ranges, viz. (i) £100-£200, (ii) £300-£500, (iii) £1,000-£5,000,

1 Cmd. 2800, 1927, Appendix X, pp. 53-64.

2 D. Caradog Jones, 'Pre-War and Post-War Taxation', *J.R.S.S.* vol. xc, 1927.

(iv) £10,000–£50,000. He does not give exact details of the average rates of duty which he uses for beer, spirits and wine, but states that they conform closely to those adopted by the Colwyn Committee. The majority of the figures of consumption and duty given by the Colwyn Committee for 1925–26 fall between the highest and the second highest of Mr Caradog Jones's 'possible' levels. In the £10,000 and over income group the total duty estimated by the Colwyn Committee is higher than even the highest of Mr Caradog Jones's four 'possible' levels.

An enquiry into the incidence of taxation was also made by Mr D. M. Sandral<sup>1</sup> for the year 1930–31. Estimates of total duty only are given, and the method of calculating the figures is not shown.

*The Present Enquiry.* The present enquiry attacks the problem from two different angles. These two approaches may be regarded as partly independent of each other, as the first is based mainly on the known figures of total national consumption and the total yield of the duties, while the second is based on drinking habits which are partly known and partly assumed as reasonable. The first approach shows in the broadest terms the average consumption of regular drinkers for three social groups, lower, middle and higher. The second approach shows the possible variations in these averages. It must be emphasized that both refer to the tax burden on regular consumers of alcoholic drinks, whether light, moderate or heavy.

In both approaches the total consumption of alcoholic drinks per head or per family is given as the combination of a basic drink (beer or spirits) with complementary drinks (beer, spirits or wine). It is assumed throughout that the basic drink of the working, and very probably the lower middle, classes is beer. In the middle classes (roughly £350–£1,000 per annum) spirits is taken as the basic drink, combined with a smaller beer consumption than in the working-class groups, and an increasing purchase of wine. No fundamental change in drinking habits is assumed between the middle and higher groups, but an increased allowance is made for entertaining and for the consumption of more expensive wines. It is very probable that the greater part of the consumption of

<sup>1</sup> D. M. Sandral, 'The Taxation of the Various Classes of the People', *J.R.S.S.* vol. xciv, Part 1, 1931.



champagne and the better quality sweet wines is in the higher groups, while British wine and the bulk of Empire wine is taken by the lower classes. These assumptions do not exclude the possibility of other combinations.<sup>1</sup> A consumer, in whichever group, may drink wine, beer or whisky only, or an individual's basic drink may be beer even though he belongs to a higher group. The duty burden is very naturally affected by these deviations from the drinking habits assumed to be representative. The differences in duty on that account are, however, within reasonable limits, and do not affect the validity of the whole approach.

*The first approach*, which follows closely the method adopted by the Colwyn Committee, distributes the known national consumption and the yield of duties between the three social groups on the basis of certain hypotheses, referring to:

- (1) The proportion of abstainers in the adult population over eighteen.
- (2) The proportion of female consumption to male consumption.
- (3) The changing proportions of the kind of drink consumed.

The average calculated on the eight variations (assumed in paragraphs 248-249 of the Colwyn Report) gives the following consumption and burden of duty for each social group; the consumption of man and wife is combined:

Income group	Beer (pints)	Spirits (bottles)
Lower—say up to £350	617	3·8
Middle—say £350-£1,000	310	12·6
Higher—say over £1,000	125	25·2

The burden of the 1937-38 duty on the combined consumption

<sup>1</sup> For example, spirit drinking prevails among the lower income groups in the north-east of England and in Scotland. Figures given below show the average spirit and beer consumption per head of the total population, including abstainers and children, in 1938:

	England and Wales	Scotland	Great Britain
Spirits (gallons)	0·20	0·37	0·22
Beer (gallons)	20·7	8·1	19·4

Figures on spirit consumption are based on official data (*Twenty-ninth Report of the Board of H.M. Customs and Excise*, p. 21). Beer consumption figures were estimated by Mr G. B. Wilson in *Great Britain's Drink Bill for 1938* (The United Kingdom Alliance, 12 Caxton Street, London, S.W. 1).

of beer and spirits (excluding wine) of man and wife in the above table is as follows:<sup>1</sup>

Lower: £7. 4s.    Middle: £7. 9s.    Higher: £11. 11s.

The figures resulting from this approach must be regarded as being on the low side, as they refer, following the Colwyn Committee's approach, to the adult population over 18. Owing to the great changes in wine consumption, mentioned above, no calculations have been made on the lines of the Colwyn Committee's method for the consumption of and the duty payable on wines.

*The second approach*, which is set out in Tables 42-48, shows the burden of the duty at several possible consumption and expenditure levels, selected on the basis of all available evidence and information regarding drinking habits. Although individual cases may show even greater variations than those given in the tables, it is believed that, especially in the lower income groups, which account for the greater portion of consumption, the majority of cases has been covered. The consumption and expenditure data are not so reliable for the middle and higher, as for the working-class, groups, since drinking habits in these groups are not so well known and vary to a greater extent.<sup>2</sup> The calculations in these tables refer to the consumption of the tax-paying family, that is, a family composed of husband, wife and dependent children; it can of course be assumed that the children do not drink. For this reason changes in the size of the family are not likely to affect the consumption of alcoholic drinks to any great extent. It is probable that working-class parents will reduce their consumption, pressed by family obligations, but having no information on that point, we have not varied the figures according to the size of the family. Table 42 shows the assumed consumption levels upon

1 For the method vide Colwyn Committee *Report*, Appendix X.

2 So far as we are aware, no detailed data are available on drinking habits, not even within the trade. We were unable to get much help from the trade, either in the form of checking our assumptions or commenting on them. Only one of the trade experts gave his personal impressions. He thought that our assumed levels for the light drinker of beer were probably only representative for a very light drinker; for the moderate drinker he considered them to be up to the mark, while for the heavy drinker they appeared to him to be rather on the low side. In his opinion a 'heavy drinker' occupied in the heavy industries may consume as much as 3 quarts of beer a day. As our levels refer to representative drinkers on all levels, this does not mean that on the whole they are out of order.

which the calculations of expenditure levels are based. What information is available on individual drink bills reinforces these assumptions. Thus Table 42 shows a variety of possible consumption levels for lower, middle and higher income groups. For the lower income groups a progressive increase in the quantities of beer consumed takes place from A to F, while an increase in the consumption of spirits and wine is shown from I to V. When these two scales are combined a large range of possibilities is covered. Thus, for example, it is assumed that A-I consumes  $\frac{1}{2}$  pint of beer daily plus 1 bottle of spirits and 4 bottles of wine yearly, or that D-IV consumes 2 pints of beer daily plus  $2\frac{1}{2}$  bottles of spirits and 12 bottles of wine yearly. For the middle and higher groups variations in the consumption of spirits, and in the less important item of beer, are shown from A to F, while increasing consumption of wine is shown from I to V.

In calculating the duty paid on beer, figures are given for three strengths, as there are considerable variations in the rates of duty according to gravity.<sup>1</sup> For the higher income groups, in which beer is a less important item, average strength has been taken. The duty on spirits has been calculated on the basis of the rates for whisky alone. In the case of wine it was assumed, after confirmation by expert opinion, that the working classes, if they consume wine at all, consume mainly the cheaper sorts (British and Dominion wines), while the higher income groups consume the more expensive kinds. The figures in Tables 44-48 were calculated on this basis, viz. for the lower groups on the basis of the average of (a) British wine and (b) Dominion Sweet wine; for the middle groups on the basis of the average of (a) Dominion Sweet or Continental Dry wine and (b) Continental Sweet wine; for the higher groups average duty was calculated by estimating the

<sup>1</sup> The gravity of beer consumed is not necessarily dependent on the level of income. For example, in the heavy industries and in shipbuilding, the heavier kinds of beer are consumed. At present the working man is tending to demand the stronger beers as he feels that he should make up for a reduction in food by taking heavier drinks. The average gravity of home-produced beer is known, but no information is available as to the quantities produced at each strength. According to expert opinion about two-thirds of the production was around 40° in pre-war years. Imported beer, bearing a higher rate of duty, is consumed by the higher income groups, but the amount is relatively unimportant compared with the home-produced article and it has therefore not been taken into account.

probable consumption of Continental Sweet, Continental Dry wines and Champagne.

In calculating expenditure levels (Table 43), it was assumed that beer is purchased over the counter, thus no allowance has been made for the amount lost in retailing draught beer (approximately 10 per cent). Further, only one price was taken, namely the average price. For whisky, bottle prices were taken; if whisky is purchased over the counter in public houses, and not in bottles, the consumer pays 50 per cent more for the same amount (whisky being sold in tots— $\frac{1}{8}$ th gallon, or 1 bottle = 30 tots). Wine prices were calculated at an average price, on the basis of the estimated amounts consumed by the different income groups. On the whole, expenditure on drink should be regarded as very approximate. The estimated burden of the duties is shown in Tables 44-47.

#### 5. *The Burden of the Duties for 1941-42.*

Estimates of the burden of the duties on alcoholic drinks for 1941-42 should be taken with reserve. Available statistics on aggregate consumption since the outbreak of war are scanty. Moreover, there are marked changes in consumption among different consumers in war-time, and it is difficult yet to assess the full effect of these changes.

The yield of the duties on alcoholic drinks during the relevant years was as follows:

	Fiscal years				
	1937-38	1938-39	1940-41 (Provisional receipts)	1941-42 (Budget estimate)	1941-42 (Provisional receipts)
	£ mill.	£ mill.	£ mill.	£ mill.	£ mill.
Beer	65.7	65.6	139.0	147.0	164.6
Spirits	35.8	35.7	45.5	35.0	46.8
Wine	5.0	4.8	7.9	6.5	3.8
British wine	0.5	0.5	1.6	1.5	1.1
	<u>107.0</u>	<u>106.6</u>	<u>194.0</u>	<u>190.0</u>	<u>216.3</u>

The rates of duty were first changed in September 1939 (first War Budget); the duty on beer was increased, per barrel of 1027°, from 24s., with a rise of 2s. per degree thereafter, to 48s. with a rise of 2s. per degree thereafter; then again in April 1940 the duty was increased to 65s., per barrel of 1027°, with a rise of 2s. 6d. per degree thereafter, and again in the July 1940 Budget the duty was

increased to 81s., per barrel of 1027°, with a rise of 3s. per degree thereafter.

The duty on spirits was raised from 72s. 6d. per proof gallon to 82s. 6d. in September 1939, and to 97s. 6d. in April 1940.

Wine duties were increased in September 1939 and then again in July 1940. The duty on light foreign wines was increased from 4s. per gallon to 6s., and then to 8s., while on heavy foreign wines it rose from 8s. to 12s., and then to 16s. per gallon. The duty on light Empire wines was increased from 2s. to 4s., and then to 6s. per gallon, while that on heavy Empire wines rose from 4s. to 8s., and then to 12s. per gallon. The duty on British wines was increased from 1s. 6d. per gallon to 3s. 6d. in September 1939, and to 5s. 6d. in July 1940.

Clearances, which with certain limitations may give some clue to the trend of consumption, have been as follows in recent years:

*Quantities Retained for Home Consumption*

	Fiscal year <sup>1</sup>	Fiscal year <sup>1</sup>	Pre-war year <sup>2</sup>	First war year
	1937-38	1938-39	Oct. 1938- Sept. 1939	Oct. 1939- Sept. 1940
Beer (standard barrels)	18,703,069	18,729,084	19,549,000	18,315,000
Spirits (proof gallons)	10,522,415	10,448,884	11,718,000	8,992,000
Wine (gallons)	15,766,940	15,224,906	16,277,000	12,128,000
British wine (gallons)	6,143,485	6,419,653	6,968,000	6,705,000

<sup>1</sup> Source. Board of Customs and Excise.

<sup>2</sup> Source. *Hansard*, 25 March 1941, p. 430.

As can be seen in the case of spirits and wine, there was heavy forestalling in clearances just before the outbreak of the war, and the clearances in the next year were correspondingly depressed. No figures are yet available for clearances in the fiscal year 1940-41, but the provisional receipts, taking into account the duty charges, would suggest that clearances of beer, spirits and British wines were roughly on the 1937-38 level, but they seem to show a marked decrease in the clearances of wines other than British.

The total supply of alcoholic drinks in 1941-42 can be estimated as follows, by taking into account all the known factors:

*Beer.* Budget estimates suggested that the supply of beer in 1941-42 would be somewhat below the 1937-38 level measured in standard barrels, i.e. 36 gallons at an original gravity of 1055°. It is worth mentioning that the Government decided that the

output of beer should be allowed on the level of the standard output in the year ended September 1939, which was about 19 million standard barrels. The output in 1940 was roughly 18 million standard barrels only.<sup>1</sup> The actual output in terms of bulk barrels (i.e. 36 gallons whatever the gravity) is substantially greater than the corresponding 'standard' quality and exceeded 25 million barrels in 1940.<sup>1</sup> As gravities are tending to fall the excess of 'bulk' barrelage over 'standard' barrelage tends to grow. The difference can be seen in that in 1937-38 bulk barrelage amounted to about 133 per cent of standard barrelage. By the end of 1940 this figure had gone up to 143 per cent, and it was probably at least 150 per cent by the end of 1941. The gravity of the beer decreases *pari passu*; in other words, the available supply (measured in bulk barrels) will be at least on the 1937-38 level, if not higher, but the gravity of the available beer will be lower than in the pre-war period.

*Spirits.* In order to save the raw materials from which whisky is made, the output of new whisky has been cut to one-third of the pre-war level. As a consequence, and also to release whisky for export, supplies by distilleries to the home trade were reduced to 80 per cent of the pre-war amount of leading proprietary brands in the year ended February 1941, to 65 per cent of the pre-war amount as from March 1941, and to 50 per cent as from August 1941.

The estimated revenue from spirits (including imported spirits) for 1941-42 corresponds to an allowed reduction in consumption of 30 per cent as compared with 1937-38. In regard to imported spirits, consumption, owing to shipping difficulties, has to be met largely from stocks already in bond in this country. The import of spirits, other than rum and certain spirits for making gin, just as the import of wines, has been prohibited by the Government.

<sup>1</sup> The approximate number of standard and bulk barrels of home-made and imported beer retained for home consumption in the United Kingdom in 1940, was officially given as follows:

	Year ended 31 December 1940	
	Standard barrels	Bulk barrels
Beer, home-made	17,835,000	25,125,000
Beer, imported	720,000	770,000

(*Hansard*, 16 December 1941, pp. 1839-40.)

*Wine.* The consumption of wine in 1941-42 was expected to show a considerable decrease. On the basis of revenue estimates, the fall in 1941-42 was expected to be roughly 40 per cent as compared with 1937-38. Clearances, as in the case of imported spirits, were from stocks already in bond in this country.

*British Wine.* Since the end of 1940 there has been a shortage in grape must; supplies and retailers have been rationed by the wholesalers. The trade expects a considerable decrease in consumption. Revenue estimates for 1941-42 anticipated a decrease of roughly 15 per cent as compared with 1937-38. Owing to the difficulties of the import of grape must—one of the principal materials used in the manufacture—the decrease may have been even greater.

To sum up, for the year 1941-42 as compared with the pre-rearmament year 1937-38, the aggregate consumption of beer in standard barrels was expected to show a fall, while in bulk barrels it may have been above the pre-war level. In regard to spirits, imported wines and British wines, a fall of 30-35 per cent, 40 per cent and 15 per cent respectively was anticipated. The national drink bill may be estimated for 1941-42 at approximately £380-£400 millions.<sup>1</sup>

In war-time many changes occur in individual consumption, which make it difficult to estimate the distribution of available supplies among income groups. Since the outbreak of war there has been a large increase in the number of wage-earners and also in the wages earned. Moreover, men and women have left the countryside for military service or for work in munition factories. More money is available for alcoholic drinks, and there are also

<sup>1</sup> The provisional receipts of the Exchequer suggest that the quantity of beer and spirits, duty paid, was higher (in the case of spirits much higher) than anticipated in the Budget estimate, while the clearances of wines were smaller than anticipated. It is probable therefore that the decrease in the supply of beer and spirits was smaller and the decrease in the supply of wines and of British wines greater than indicated above. The increase in the yield of alcoholic drinks taken together was a little less than 15 per cent. The limits of consumption of expenditure and of duty paid in 1941-42, as shown in Tables 47-48, are very little affected by these changes, but the summary figures of the burden in Table 37 are probably somewhat underestimated.

The Chancellor of the Exchequer in his Budget speech put the amount spent on beer at £330 millions (*Hansard*, 14 April 1942, p. 135). The total drink bill in 1941-42 must be therefore somewhat over £400 millions.

more opportunities for drinking. On the other hand, the rise in the cost of living and increased taxation have made people more careful in spending and saving, and they may have cut down their expenditure on drinks.

So far as wines and spirits are concerned it is probable that the decline in individual consumption is general. This is indicated in the middle and higher groups by the heavy direct taxation, the great increase in the prices of these drinks (mainly on account of the increased duties) and by the short supply. The two latter factors will very probably affect the consumption of wine and spirits in the lower income groups as well. The assumption that individual consumption in 1941-42 was cut down roughly in proportion to the decrease of available supplies (as compared with 1937-38) in all income groups seems not to be unreasonable.

It is far more difficult to make assumptions relating to the present distribution of beer consumption, as the factors to be taken into consideration are far more numerous, and their effect is by no means uniform. There is no doubt that, as far as free spendable income goes, those classes from which the regular consumers of beer are usually recruited are in the best position. While the saving campaign is particularly successful in these same groups, it is still very likely that those who have obtained higher wages or are in more regular employment will keep up their level of consumption or even try to increase it. Another factor which may strengthen this tendency is the rationing of many of the staple foodstuffs, and short supplies or difficulties in getting others. Beer is regarded by the working man, especially in heavy industries, as a kind of food. Factors of lesser importance, and of reverse effect, are the increase in beer prices and the limited supplies available. These supplies have to be shared by new regular consumers, recruited from members of the forces, workers newly drafted into industry, or those who have switched over from the very expensive spirits or wines to beer. One of the further factors is the general demand for all non-rationed goods, especially foods, and thus for beer. In the course of the year 1941-42 there seemed to be many signs of a shortage of beer. While it appeared first in the industrially congested Midland areas (Birmingham, etc.) where there has been an influx of industrial workers and an increase in the aggregate wage bill, it is now a general phenomenon, also to be observed even in non-industrial areas such as



the south-west. Apart from increased demand, this shortage is due to war-time changes in the distribution of the population, transport difficulties, shortage of casks, etc. The fact that in many parts of the country public houses are closed on one or more days a week may affect the consumption of those regular consumers who are willing and able to pay the higher prices and thus to keep up their pre-war consumption levels.

Another factor which has to be considered is the general reduction in the strength of the beer available, combined with the effect of the change in the tax structure since 1937-38; at present, the lighter the beer the greater has been the increase in the duty on it since 1937-38. The changes in prices of beers of differing strength have been roughly proportionate.

If all the factors enumerated above are taken into account, it is evident that any estimate of the consumption of beer and the duty paid on it in terms of the 1937-38 data must be highly conjectural; it is likely that, as one of our expert advisers put it, there will be as many opinions as readers. We have come to the conclusion that a cut of roughly one-seventh in the 1937-38 consumption levels may be taken as reasonable for the lower groups, as this seems to be in accordance with available supplies. This also leaves some margin for new consumers. In the middle groups we allowed for a slight increase in beer drinking, to make up for the cut in the consumption of spirits and wines, while for the higher groups unchanged consumption of beer was assumed. The calculations are given in Tables 47 and 48.

#### 6. *The Conjectured Burden on Incomes.*

By taking into account the results of both approaches, the total yield of the duties on alcoholic drinks, the known national consumption in 1937-38, and the estimated consumption in 1941-42, the burden on an average moderate consumer will very probably fall within the following limits:

Income group	1937-38	1941-42
Lower	£4-£11 (the average burden falls between £6 and £8)	£8-£18 (the average burden falls between £10 and £14)
Middle	£7-£11	£9-£15
Higher	£13-£30 (and over in the case of heavy entertaining)	£15-£32 (and over in the case of heavy entertaining)

By making allowances for the effect of incomes, so far as such an effect can be reasonably assumed, the following figures can be conjectured for the different income levels:

TABLE 39. THE BURDEN OF DUTIES ON ALCOHOLIC DRINKS

(On Consumption of Husband and Wife, with allowance for Liquor Licences)

Income group	1937-38	1941-42	Income group	1937-38	1941-42
£	£	£	£	£	£
100	5	8	500	11	15
150	7	11	1,000	15	18
200	8	13	2,000	30	30
250	9	15	5,000	45	42
300	10	16	10,000	60	42
350	11	18	and over		

The margin of error in these figures is shown by the results of our second approach; as can be seen, it is very considerable, and for all purposes except as a rough illustration of the aggregate burden of taxation the detailed figures given in Table 48 should be used, showing precisely the duties on many possible consumption levels.

In the figures given above, rough allowance was made for liquor licences, approximately in proportion to the duty paid on drinks. This method of allocating the burden of liquor licences assumes that they are in the long run part of the general taxation of alcoholic drinks, and therefore that they are paid by the consumer. The incidence of liquor licences is a matter of controversy. The duties, being an overhead charge, are recovered somehow if possible. It is, however, uncertain whether they can be recovered at all, and if so whether they are recoverable just as much from sales of cigarettes or sandwiches, etc. (sold to customers of public houses) as from the sale of beer or whisky. The yield of these licences amounted to £4.8 millions in 1937-38, and to £4.6 millions in 1941-42 (expressed as a percentage of alcoholic duties, 4.5 per cent and 2.3 per cent respectively). Previous enquiries excluded liquor licences from their calculations; they are a small item and the method followed hardly influences the result.

TABLE 40. CONSUMPTION OF BEER, SPIRITS AND WINE IN THE UNITED KINGDOM

(Net quantities, duty paid, for home consumption in the United Kingdom—see footnotes 1 and 2)

## A. BEER—Home-made and Imported

Year ended 31 March	Standard barrels	Gallons per head	Year ended 31 March	Standard barrels	Gallons per head
1900	36,629,031	32·3	1932	16,896,251	12·7
1910	32,390,497	26·2	1933	13,815,510	10·3
1914	35,252,375	27·8	1934	15,773,818	12·2
1920	21,691,979	17·5	1935	16,657,239	12·8
1925	21,952,443	17·3	1936	17,261,060	13·2
1929	20,300,261	15·9	1937	17,795,912	13·6
1930	20,690,031	16·3	1938	18,703,069	14·3
1931	19,611,889	15·4	1939	18,729,084	14·2

## B. SPIRITS

Year ended 31 March	British		Foreign and Colonial		Total	
	Proof gallons	Per head	Proof gallons	Per head	Proof gallons	Per head
1900	38,716,733	0·95	9,304,163	0·23	48,020,896	1·18
1910	21,446,087	0·48	4,562,121	0·10	26,008,208	0·58
1914	26,794,739	0·58	5,801,687	0·13	32,596,426	0·71
1920	17,825,871	0·39	6,441,681	0·14	24,267,552	0·53
1925	12,287,035	0·27	2,213,547	0·05	14,500,582	0·32
1929	11,271,702	0·25	1,789,004	0·04	13,060,706	0·29
1930	10,630,331	0·23	1,595,440	0·04	12,225,771	0·27
1931	10,188,919	0·22	1,478,546	0·03	11,667,465	0·25
1932	8,855,023	0·19	1,261,619	0·03	10,116,642	0·22
1933	8,821,380	0·19	1,196,635	0·03	10,018,015	0·22
1934	8,587,525	0·18	1,162,942	0·03	9,750,467	0·21
1935	8,344,346	0·18	1,091,904	0·02	9,436,250	0·20
1936	8,969,785	0·19	1,212,146	0·03	10,181,931	0·22
1937	9,289,207	0·20	1,289,170	0·03	10,578,377	0·23
1938	9,238,945	0·19	1,283,470	0·03	10,522,415	0·22
1939	9,176,007	0·19	1,272,877	0·03	10,448,884	0·22

Source. Reports of the Board of Customs and Excise.

<sup>1</sup> The figures refer to quantities of beer, spirits and wine, duty paid, in the selected financial years, and do not necessarily represent actual consumption in those years, owing to Budgetary forestallments or postponements (especially for spirits and wine), or, in the case of home-made beer, to the time allowed between the brewing of the worts on which the duty charged is assessed and the payment of the duty (this period is now about 40 days on the average). The clearances of wines are further influenced by vintages. In years when wines of very good vintages are shipped and bottled for laying down, clearances may greatly exceed consumption; vice versa when there has not been a good vintage, wines actually go into consumption.

<sup>2</sup> Eire is excluded in 1925 and onwards.

TABLE 40 (continued)

Year ended 31 March	C. WINES			Gallons per head (on total consumption)
	Imported wine gallons	British wines <sup>3</sup> gallons	Total gallons	
1900	17,146,897	—	17,146,897	0·42
1910	11,446,179	—	11,446,179	0·25
1914	11,637,316	—	11,637,316	0·25
1920	19,933,932	—	19,933,932	0·42
1925	15,653,703	—	15,653,703	0·34
1929	13,436,589	2,850,099	16,286,688	0·36
1930	15,424,462	2,795,238	18,219,700	0·40
1931	13,329,251	2,710,509	16,039,760	0·35
1932	12,761,455	2,773,561	15,535,016	0·33
1933	12,583,153	3,223,393	15,806,546	0·34
1934	13,329,557	3,700,257	17,029,814	0·36
1935	14,151,230	4,168,551	18,319,781	0·39
1936	14,881,082	5,088,722	19,969,804	0·43
1937	16,337,783	5,690,232 <sup>4</sup>	22,028,015	0·47
1938	15,766,940	6,143,485	21,910,425	0·46
1939	15,224,906	6,419,653	21,644,559	0·46

<sup>3</sup> The duty on British wines was imposed as from 25 April 1927. No reliable figures are available for consumption of British wines before that date.

<sup>4</sup> The quantity duty paid in 1936-37 covered less than a full year's clearances, because certain makers transferred from a weekly to a monthly basis in the assessment and payment of duty.

TABLE 41. EXPENDITURE ON DRINK. THE NATIONAL DRINK BILL

	National expenditure					Total expenditure per head £ s. d.
	Beer £ mill.	Spirits £ mill.	Foreign wine £ mill.	British wines <sup>1</sup> £ mill.	Total £ mill.	
United Kingdom						
1910	98·5	46·2	11·5	1·5	157·6	3 9 3
1914	103·4	49·9	9·6	1·5	164·5	3 10 10
1920	294·2	144·0	30·3	1·3	469·7	10 0 0
Great Britain						
1925	198·9	91·1	23·8	1·5	315·3	7 4 0
1926	191·5	83·6	24·7	1·5	301·3	6 17 0
1927	188·6	83·7	24·9	1·5	298·8	6 15 3
1928	185·8	80·5	19·9	2·0	288·2	6 9 10
1929	185·0	80·6	21·2	2·0	288·8	6 9 9
1930	182·1	73·3	20·2	2·0	277·5	6 4 0
1931	168·7	68·5	20·1	2·0	259·4	5 15 0
1932	149·7	62·4	18·4	2·0	232·5	5 3 0
1933	139·9	63·6	19·4	2·0	224·8	4 19 4
1934	142·9	62·2	20·9	3·0	229·0	5 1 0
1935	149·9	62·2	21·7	4·0	237·7	5 4 3
1937	162·3	68·3	23·8	5·0	259·4	5 12 9
1938	164·1	65·6	22·3	5·0	257·0	5 11 6

Source. *Alcohol and the Nation*, by George B. Wilson (Nicholson & Watson, London, 1940), p. 423.

<sup>1</sup> Including cider.

TABLE 42. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS.  
ASSUMED CONSUMPTION LEVELS. 1937-38

	Light		Moderate		Heavy	
	A	B	C	D	E	F
<b>A. LOWER INCOME GROUPS (up to £350)</b>						
Beer, pints daily	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$3\frac{1}{2}$
Beer, pints yearly	$182\frac{1}{2}$	365	$547\frac{1}{2}$	730	$912\frac{1}{2}$	$1,287\frac{1}{2}$
<i>Additional:</i>						
I Spirits, bottles yearly	1	1	1	1	2	2
Wine, bottles yearly	4	4	4	4	4	4
II Spirits, bottles yearly	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	3	3
Wine, bottles yearly	6	6	6	6	6	6
III Spirits, bottles yearly	2	2	2	2	4	4
Wine, bottles yearly	8	8	8	8	8	8
IV Spirits, bottles yearly	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	5	5
Wine, bottles yearly	12	12	12	12	12	12
V Spirits, bottles yearly	3	3	3	3	6	6
Wine, bottles yearly	16	16	16	16	16	16
<b>B. MIDDLE INCOME GROUPS (£350-£1,000)</b>						
Spirits, bottles yearly	5	10	12	15	20	30
Beer, pints daily	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1
Beer, pints yearly	$182\frac{1}{2}$	$182\frac{1}{2}$	$182\frac{1}{2}$	$182\frac{1}{2}$	365	365
<i>Additional:</i>						
I Wine, bottles yearly	10	10	10	10	10	10
II Wine, bottles yearly	20	20	20	20	20	20
III Wine, bottles yearly	30	30	30	30	30	30
IV Wine, bottles yearly	40	40	40	40	40	40
V Wine, bottles yearly	50	50	50	50	50	50
<b>C. HIGHER INCOME GROUPS (£1,000 and over)</b>						
Spirits, bottles yearly	5	10	20	30	40	50
Beer, pints yearly	100	100	100	100	100	100
<i>Additional:</i>						
I Wine, bottles yearly	50	50	50	50	50	50
II Wine, bottles yearly	100	100	100	100	100	100
III Wine, bottles yearly	150	150	150	150	150	150
IV Wine, bottles yearly	200	200	200	200	200	200
V Wine, bottles yearly	250	250	250	250	250	250

TABLE 43. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS.  
EXPENDITURE ON DRINK. 1937-38

	Light			Moderate			Heavy		
	A	B		C	D		E	F	
A. LOWER INCOME GROUPS (up to £350)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	5	5	2	9	8	10	13	12	6
II	5	15	11	9	19	7	14	3	3
III	6	6	8	10	10	4	14	14	0
IV	7	1	11	11	5	7	15	9	3
V	7	17	2	12	0	10	16	4	6
B. MIDDLE INCOME GROUPS (£350-£1,000)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	9	6	2	12	8	8	13	13	8
II	11	6	2	14	8	8	15	13	8
III	13	6	2	16	8	8	17	13	8
IV	15	6	2	18	8	8	19	13	8
V	17	6	2	20	8	8	21	13	8
C. HIGHER INCOME GROUPS (£1,000 and over)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	18	2	6	21	5	0	27	10	0
II	30	16	8	33	19	2	40	4	2
III	43	10	10	46	13	4	52	18	4
IV	56	5	0	59	7	6	65	12	6
V	68	19	2	72	1	8	78	6	8

Note. Beer: The price of 5½d. per pint was taken throughout.

Spirits: Whisky (30° under proof) was taken throughout at the price of 12s. 6d. per bottle.

Wine: In the lower group average price per bottle was taken at 2s. 3d.; in the middle group at 4s. per bottle and in the higher group at 5s. 1d. per bottle.

TABLE 44. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS.  
DUTY PAID ON CONSUMPTION. 1937-38. LOWER INCOME GROUPS (up to £350)

	Light			Moderate			Heavy		
	A	B		C	D		E	F	
(i) Beer duty at 1¼d. per pint (light beer). Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 5½d. per bottle (average of British and Empire wines)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	1	9	3½	2	8	3½	3	7	3½
II	1	14	5½	2	13	5½	4	11	5½
III	1	19	7	2	18	7	4	16	7
IV	2	5	7½	3	4	7½	5	2	7½
V	2	11	8½	3	10	8½	4	9	8½
(ii) Beer duty at 2-2d. per pint (average strength beer). Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 5½d. per bottle (average of British and Empire wines)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	2	3	9	3	17	2½	5	10	8
II	2	8	10½	4	2	4½	5	15	9½
III	2	14	0½	4	7	6	6	0	11½
IV	3	0	1½	4	13	6½	6	7	0½
V	3	6	2	4	19	7½	6	13	1
(iii) Beer duty at 3¼d. per pint (stout). Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 5½d. per bottle (average of British and Empire wines)									
	£	s.	d.	£	s.	d.	£	s.	d.
I	2	19	8½	5	9	1½	7	18	6½
II	3	4	10½	5	14	3½	8	3	8½
III	3	10	0	5	19	5	8	8	10
IV	3	16	0½	6	5	5½	8	14	10½
V	4	2	1½	6	11	6½	9	0	11½

TABLE 44 (continued)

Note. The amount of duty payable per annum on beer only was as follows:

Pints consumed daily	(i)	(ii)	(iii)
	Duty per annum at 1½d. per pint	Duty per annum at 2½d. per pint	Duty per annum at 3½d. per pint
	£ s. d.	£ s. d.	£ s. d.
A ½	19 0	1 13 6	2 9 5
B 1	1 18 0	3 7 0	4 18 10
C 1½	2 17 0	5 0 6	7 8 3
D 2	3 16 0	6 14 0	9 17 8
E 2½	4 15 0	8 7 6	12 7 1
F 3½	6 13 0	11 14 6	17 5 11

TABLE 45. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS.  
DUTY PAID ON CONSUMPTION. 1937-38. MIDDLE INCOME GROUPS (£350-£1,000)

	Light		Moderate		Heavy	
	A	B	C	D	E	F
(i) Beer duty at 1½d. per pint. Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 1s. per bottle						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
I	3 11 3	5 13 6½	6 10 5½	7 15 9½	10 17 1	15 1 8
II	4 1 3	6 3 6½	7 0 5½	8 5 9½	11 7 1	15 11 8
III	4 11 3	6 13 6½	7 10 5½	8 15 9½	11 17 1	16 1 8
IV	5 1 3	7 3 6½	8 0 5½	9 5 9½	12 7 1	16 11 8
V	5 11 3	7 13 6½	8 10 5½	9 15 9½	12 17 1	17 1 8
(ii) Beer duty at 2½d. per pint. Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 1s. per bottle						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
I	4 5 9	6 8 0½	7 4 11½	8 10 3½	12 6 1	16 10 8
II	4 15 9	6 18 0½	7 14 11½	9 0 3½	12 16 1	17 0 8
III	5 5 9	7 8 0½	8 4 11½	9 10 3½	13 6 1	17 10 8
IV	5 15 9	7 18 0½	8 14 11½	10 0 3½	13 16 1	18 0 8
V	6 5 9	8 8 0½	9 4 11½	10 10 3½	14 6 1	18 10 8
(iii) Beer duty at 3½d. per pint. Whisky (30° under proof) duty at 8s. 5½d. per bottle. Wine duty at 1s. per bottle						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
I	5 1 8	7 3 11½	8 0 10½	9 6 2½	13 17 11	18 2 6
II	5 11 8	7 13 11½	8 10 10½	9 16 2½	14 7 11	18 12 6
III	6 1 8	8 3 11½	9 0 10½	10 6 2½	14 17 11	19 2 6
IV	6 11 8	8 13 11½	9 10 10½	10 16 2½	15 7 11	19 12 6
V	7 1 8	9 3 11½	10 0 10½	11 6 2½	15 17 11	20 2 6

Note. The amount of duty payable per annum on spirits only was as follows:

Bottles per annum	Duty per annum £ s. d.	Bottles per annum	Duty per annum £ s. d.
A 5	2 2 3½	D 15	6 6 10½
B 10	4 4 7	E 20	8 9 2
C 12	5 1 6	F 30	12 13 9

TABLE 46. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS.  
DUTY PAID ON CONSUMPTION. 1937-38. HIGHER INCOME GROUPS (£1,000  
and over)

	Light			Moderate				Heavy				
	A		B	C		D		E		F		
	Beer duty at 2.2d. per pint. Whisky (30° under proof) duty at 8s. 5½d. per bottle.											
	Wine duty at 1s. 4d. per bottle											
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
I	6	7	3½	8	9	7	12	14	2	16	18	9
II	9	13	11½	11	16	3	16	0	10	20	5	5
III	13	0	7½	15	2	11	19	7	6	23	12	1
IV	16	7	3½	18	9	7	22	14	2	26	18	9
V	19	13	11½	21	16	3	26	0	10	30	5	5
	31	3	4	35	7	11	38	14	7			

Note. The amount of duty payable per annum on the separate items of beer, spirits and wine was as follows:

Beer: A-F, 100 pints yearly at 2.2d. per pint duty = 18s. 4d.

Spirits			Wine		
Bottles per annum	Duty per annum		Bottles per annum	Duty per annum	
	£	s. d.		£	s. d.
A 5	2	2 3½	I 50	3	6 8
B 10	4	4 7	II 100	6	13 4
C 20	8	9 2	III 150	10	0 0
D 30	12	13 9	IV 200	13	6 8
E 40	16	18 4	V 250	16	13 4
F 50	21	2 11			

TABLE 47. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS

1. ASSUMED CONSUMPTION LEVELS. 1941-42

	Light	Moderate	Heavy
<i>Lower Income Groups</i>			
Beer, pints yearly	150-300	450-600	800-1,000
Spirits, bottles yearly	1-2	1-2	2-4
Wine, bottles yearly	3-8	3-8	3-8
<i>Middle Income Groups</i>			
Spirits, bottles yearly	3-6	8-10	15-20
Beer, pints yearly	200	200	400
Wine, bottles yearly	7-30	7-30	7-30
<i>Higher Income Groups</i>			
Spirits, bottles yearly	3-6	15-20	25-35
Beer, pints yearly	100	100	100
Wine, bottles yearly	30-150	30-150	30-150



TABLE 47 (continued)

## 2. EXPENDITURE ON ALCOHOLIC DRINKS. 1941-42

	Light			Moderate			Heavy											
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.						
<i>Lower Income Groups</i>																		
Beer	6	5	0-12	10	0	18	15	0-25	0	0	33	6	8-41	13	4			
Spirits		17	6-	1	15	0	17	6-	1	15	0	1	15	0-	3	10	0	
Wine		12	0-	1	12	0	12	0-	1	12	0		12	0-	1	12	0	
Total	7	14	6-15	17	0	20	4	6-28	7	0	35	13	8-46	15	4			
<i>Middle Income Groups</i>																		
Beer	8	6	8-	8	6	8	8	8-	8	6	8	16	13	4-16	13	4		
Spirits	2	12	6-	5	5	0	7	0	0-	8	15	0	13	2	6-17	10	0	
Wine	1	18	6-	8	5	0	1	18	6-	8	5	0	1	18	6-	8	5	0
Total	12	17	8-21	16	8	17	5	2-25	6	8	31	14	4-42	8	4			
<i>Higher Income Groups</i>																		
Beer	4	3	4-	4	3	4	4	3	4-	4	3	4	4	3	4-	4	3	4
Spirits	2	12	6-	5	5	0	13	2	6-17	10	0	21	17	6-30	12	6		
Wine	10	10	0-52	10	0	10	10	0-52	10	0	10	10	0-52	10	0			
Total	17	5	10-61	18	4	27	15	10-74	3	4	36	10	10-87	5	10			

Note. Prices: Beer at 9d. per pint. Wine at 4s. (lower), 5s. 6d. (middle) and 7s. (higher) per bottle. Spirits at 17s. 6d. per bottle.

TABLE 48. POSSIBLE LEVELS OF CONSUMPTION OF ALCOHOLIC DRINKS. DUTY PAID ON ALCOHOLIC DRINKS. 1941-42

## A. LOWER INCOME GROUPS (up to £350)

	Light			Moderate			Heavy											
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.						
Duties: Beer, 3½d. per pint. Wine, 1s. 6d. per bottle. Spirits, 11s. 4½d. per bottle																		
Beer	2	6	10½	4	13	9	7	0	7½	9	7	6	12	10	0-15	12	6	
Spirits		11	4½	1	2	9		11	4½	1	2	9		1	2	0-2	5	6
Wine		4	6-	12	0			4	6-	12	0			4	6-	12	0	
Total	3	2	9-6	8	6	7	16	6-11	2	3	13	16	6-18	10	0			
Duties: Beer, 4½d. per pint. Wine, 1s. 6d. per bottle. Spirits, 11s. 4½d. per bottle																		
Beer	2	19	4½	5	18	9	8	18	1½	11	17	6	15	16	8-19	15	10	
Spirits		11	4½	1	2	9		11	4½	1	2	9		1	2	9-2	5	6
Wine		4	6-	12	0			4	6-	12	0			4	6-	12	0	
Total	3	15	3-7	13	6	9	14	0-13	12	3	17	3	11-22	13	4			
Duties: Beer, 6½d. per pint. Wine, 1s. 6d. per bottle. Spirits, 11s. 4½d. per bottle																		
Beer	4	1	3-	8	2	6	12	3	9-	16	5	0	21	13	4-27	1	8	
Spirits		11	4½	1	2	9		11	4½	1	2	9		1	2	9-2	5	6
Wine		4	6-	12	0			4	6-	12	0			4	6-	12	0	
Total	4	17	1½	9	17	3	12	19	7½	17	19	9	23	0	7-29	19	2	

TABLE 48 (continued)

## B. MIDDLE INCOME GROUPS (£350-£1,000)

	Light			Moderate						Heavy					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Duties: Beer, 3½d. per pint. Wine, 2s. 6d. per bottle. Spirits, 11s. 4½d. per bottle															
Beer	3	2	6	3	2	6	3	2	6	3	2	6	6	5	0
Spirits	1	14	1½	3	8	3	4	11	0	5	13	9	8	10	7½
Wine		14	0	3	0	0	14	0	3	0	0	0	14	0	3
Total	5	10	7½	9	10	9	8	7	6	11	16	3	15	9	7½
Duties: Beer, 4½d. per pint. Wine, 2s. 6d. per bottle. Spirits, 11s. 4½d. per bottle															
Beer	3	19	2	3	19	2	3	19	2	3	19	2	7	18	4
Spirits	1	14	1½	3	8	3	4	11	0	5	13	9	8	10	7½
Wine		14	0	3	0	0	14	0	3	0	0	0	14	0	3
Total	6	7	3½	10	7	5	9	4	2	12	12	11	17	2	11½
Duties: Beer, 6½d. per pint. Wine, 2s. 6d. per bottle. Spirits, 11s. 4½d. per bottle															
Beer	5	8	4	5	8	4	5	8	4	5	8	4	10	16	8
Spirits	1	14	1½	3	8	3	4	11	0	5	13	9	8	10	7½
Wine		14	0	3	0	0	14	0	3	0	0	0	14	0	3
Total	7	16	5½	11	16	7	10	13	4	14	2	1	20	1	3½

## C. HIGHER INCOME GROUPS (£1,000 and over)

Duties: Beer, 4½d. per pint. Wine, 2s. 6d. per bottle. Spirits, 11s. 4½d. per bottle															
Beer	1	19	7	1	19	7	1	19	7	1	19	7	1	19	7
Spirits	1	14	1½	3	8	3	8	10	7½	11	7	6	14	4	4½
Wine		3	15	0	18	15	0	3	15	0	18	15	0	3	15
Total	7	8	8½	24	2	10	14	5	2½	32	2	1	19	18	11½

## CHAPTER XI. THE ENTERTAINMENTS DUTY

The entertainments duty has been a prominent feature of the British tax system since 1916, and produces something of the order of £10 millions per annum.

Owing to the lack of detailed data relating to the frequency of visits and the prices paid by different income groups, any method of allocating the burden of the entertainments duty on specimen incomes involves a considerable degree of arbitrariness. This was the case in all previous enquiries. The Colwyn Committee for example stated that their figures relating to the burden of the entertainments duty were 'a matter of conjecture'. The present estimates have been made on the basis of a consideration of (1) the total receipts from the entertainments duty, (2) the rates of duty, and (3) the national and individual expenditure on entertainments.

There are two scales of duty in force. Admissions to cinemas, sports, etc. are liable to the higher, or full, rate of duty, whereas admissions to theatres, music-halls (i.e. 'living entertainments') are at the lower, or reduced, rate. There is, further, a tax-free limit, which was 6*d.* in 1937-38 and 3*d.* in 1941-42.

On the basis of the scale of rates in force in 1937-38 and in 1941-42, the proportion of the duty in typical entrance fees for cinemas, football matches and other sports, and living entertainments such as music-halls and theatres, has been calculated as in Table 49.

Lord Samuel stated that the bulk of receipts came from the cheap seats, and this holds good to-day.<sup>1</sup> The greater part of revenue from cinemas, etc. probably comes from seats at 1*s.* 6*d.* and under, and from theatres, etc. from seats at 3*s.* 6*d.* and under.

The national expenditure on entertainments in 1937 was of the order of £75 millions.<sup>2</sup> Its distribution between different kinds of entertainments can only be guessed on the basis of the distribution of the yield. Trade estimates put the total box-office receipts from cinemas at £45-£50 millions in 1937-38. According to these estimates seats up to and including 9*d.* accounted for one-quarter

<sup>1</sup> Vide S. Rowson, 'A Statistical Survey of the Cinema Industry of Great Britain in 1934', *J.R.S.S.* 1936.

<sup>2</sup> *The Home Market*, 1939 edition (George Allen & Unwin Ltd., London).

of the total receipts (in terms of attendance, more than half the tickets sold were at 9d. and under).

TABLE 49. THE PROPORTION OF ENTERTAINMENTS DUTY IN TICKETS OF ADMISSION. 1937-38, 1941-42

Cinemas, etc. (full rate)			Theatres, etc. (reduced rate)		
Price of ticket including tax	Tax	Tax as percentage of price	Price of ticket including tax	Tax	Tax as percentage of price
s. d.	s. d.		s. d.	s. d.	
1937-38					
6	—	—	6	—	—
9	1½	16·7	9	½	5·6
1 0	2	16·7	1 0	1	8·3
1 6	3	16·7	1 6	2	11·1
2 6	5	16·7	2 6	4	13·3
3 6	7	16·7	3 6	6	14·3
4 6	9	16·7	4 6	8	14·8
7 6	1 3	16·7	7 6	1 2	15·6
			8 6	1 4	15·6
			12 6	2 0	16·0
1941-42					
6	¾	12·5	6	¼	8·3
9	1¼	13·9	1 0	½	4·2
1 2	3	21·4	1 6	2	11·1
1 6	4	22·2	2 0	2½	10·4
1 10	5	22·7	2 6	4	13·3
2 6	7	23·3	3 6	6	14·3
3 6	11	26·2	4 6	8	14·8
4 6	1 1	24·1	7 6	1 2	15·6
7 6	1 11	25·5	10 6	1 8	15·9

The approximate receipts of duty from different kinds of entertainments in 1937-38 were as follows:

	Receipts (£000)	Percentage of total receipts
Cinemas	5,400	67·7
Football, cricket, racing	990	12·4
Theatres and music-halls	1,060	13·3
Others	530	6·6
Total	7,980	100·0

Expenditure on entertainments by working-class families was given in the recent family budget survey of the Ministry of Labour. The average weekly working-class expenditure for industrial households was put at 1s. 4½d. (out of which 10¾d. was spent on cinemas,

2½*d.* on football matches, etc., and 3*d.* on music-halls, theatres, dances, etc.). This is equivalent to a yearly expenditure of £3. 11*s.* 6*d.*, and is an underestimate, as is usually the case with family budget expenditure figures on items such as tobacco, alcoholic drinks, and entertainments. This is shown by the fact that the figure of £3. 11*s.* 6*d.*, converted in a rough way into an expenditure figure for the working classes as a whole, would account for only one-half of the national expenditure, which is contradictory to the facts mentioned in the previous paragraph. Therefore, before using the family budget figures, allowances were made for items not included in the family budgets, such as expenditure on entertainments met by the head of the family out of pocket money (e.g. for Saturday afternoon matches, etc.). On this basis the following estimates of expenditure in the four lower income groups were made:

Income group	Yearly expenditure in 1937-38	Average tax burden
£ 100	12 <i>s.</i> - 15 <i>s.</i>	—
150	£2. 10 <i>s.</i> -£3. 10 <i>s.</i>	7 <i>s.</i>
200	£4. 10 <i>s.</i> -£5. 10 <i>s.</i>	14 <i>s.</i>
250	£7. 10 <i>s.</i> -£8. 0 <i>s.</i>	£1. 3 <i>s.</i>

The next step was to estimate the expenditure of and the burden on the middle and upper classes. Here the factors considered were the total yield of the duty, the estimated part paid by the working classes, and the assumed distribution of the yield according to the price of seats. Lower middle-class expenditure on entertainments was estimated at £10-£11 per annum, and the average tax burden at £1. 10*s.*, higher middle-class expenditure and taxation at double this amount.

As in the case of tobacco and alcoholic drinks, income is not the only factor determining the frequency of visits and the admission prices paid. Alternative opportunities of recreation and relaxation have to be taken into account, especially in the higher income groups. On account of this, the burden on incomes of £1,000 per annum and over has only been varied very slightly. Owing to the optional character of expenditure on entertainments there are marked differences in individual habits, but between families these differences are not likely to be so considerable, and variations are possibly not as great as in the case of

tobacco and alcoholic drinks. Figures as given in Table 50 refer to representative attendances for a family of four.

Throughout, due attention was paid to the expenditure on entertainments liable to the higher and lower rates of duty, and to the possible use of tax-free seats in the lower income groups. It was assumed that in 1937-38 the £100 income group used tax-free seats only, although the validity of this assumption is rather questionable. The results of the allocation have as far as possible been tested from other sources, e.g. for cinema attendance on basis of information relating to the habits of cinema patrons, obtained from cinema proprietors and confirmed by studies of working-class families, such as the Merseyside survey, York survey, etc.<sup>1</sup>

The present estimates in Table 50 refer to the burden on the tax-paying family of four. The burden on a tax-paying family (including dependent children only), so far as the lower income

TABLE 50. THE BURDEN OF THE ENTERTAINMENTS DUTY ON INCOMES

Income group	Colwyn Committee estimates (family of five—three children under the age of 16)		Our estimates (tax family of four) 1937-38
	1918-19	1925-26	
£	£ s. d.	£ s. d.	£ s. d.
100	5 6	3 0	—
150	7 0	4 0	6 0
200	7 6	5 0	12 0
250	—	—	1 0 0
300	—	—	1 4 0
350	—	—	1 8 0
500	11 6	12 0	2 0 0
1,000	17 6	1 0 0	3 0 0
2,000	1 10 0	1 12 0	4 0 0
5,000	2 0 0	2 5 0	5 0 0
10,000 and over	2 10 0	2 15 0	5 0 0

groups are concerned, is slightly lower than on a social family. The Colwyn Committee pointed out that a family, consisting of a man, his wife and dependent children, would usually spend less

<sup>1</sup> It is of interest to note that the Merseyside survey shows e.g. that 'something like 40 per cent of the total population goes to the cinema in any one week; of these about two-thirds go twice or more' (vol. III, p. 281, Liverpool, 1934). The York survey estimates the weekly attendance for 1939 at half of the population of York (Rowntree, *Progress and Poverty*, p. 413). The average weekly cinema attendances throughout the year 1934 were put at about 18½ millions for the whole country by Mr S. Rowson (*J.R.S.S.* 1936, p. 115).

on entertainments than a household of the same size with more than one wage-earner. In the same table comparative figures are given showing the estimates of the Colwyn Committee.

It will be noticed that the figures, although referring to a smaller family than that of the Colwyn Committee, are nevertheless higher. One of the reasons may be the fact that in 1937-38 people were spending more on entertainments than in 1925-26, owing chiefly to the rise in the standard of living. The Colwyn Committee assumed that the lowest income group (£100) paid entertainments duty in 1925-26, although the cheaper tickets of admission were free of tax. The figures given by the Committee for the £150 and £200 groups, on the other hand, appear to be on the low side.

The rates of duty were increased as from 6 October 1940. The proportion of duty in entrance fees in 1941-42 is given in Table 49. The main factors to be taken into account are the increase in the duty on cinema entrance fees, and the lowering of the tax-free limits. War-time conditions have brought many changes in cinema attendance. On balance the decrease, especially in terms of box-office receipts, has not been considerable; in fact at present (July 1941) the level appears to be somewhat above that of 1937-38. The black-out and air raids have cut down late evening attendances, but this reduction has been to some extent balanced by increased afternoon attendances, and box-office receipts have been helped by the curtailment or abolition of reduced matinee prices. Moreover, the steep fall in attendance in certain coastal, evacuated or 'blitzed' areas, has to some extent been made up for by large increases in attendance in reception and 'safe' areas. On the whole, the total decrease in attendance at cinemas since the outbreak of war has been estimated at from 10 to 15 per cent for 1940-41. In terms of box-office receipts the decrease is certainly smaller. It is even possible that the total of receipts was higher in 1941-42 than in 1937-38. No similar estimates are available for theatres, etc. It is well known, however, that such entertainments have been hit by war-time conditions to a far greater extent than cinemas. This has very probably influenced the burden of the duty in the higher income groups, and it is likely that a higher proportion of the entertainments duty is now received on account of cinemas than in 1937-38.

The estimated yield of the entertainments duty was budgeted at £10 millions for 1941-42, as compared with £8 millions col-

lected in 1937-38.<sup>1</sup> The following estimate of the burden of the duty on incomes has been made for 1941-42 on this basis:

TABLE 51. THE BURDEN OF THE ENTERTAINMENTS DUTY ON INCOMES. 1941-42

Income group	Burden of duty (tax family of four)	Income group	Burden of duty (tax family of four)
£	£ s. d.	£	£ s. d.
100	3 0	350	1 15 0
150	8 0	500	2 5 0
200	15 0	1,000	3 0 0
250	1 5 0	2,000	3 10 0
300	1 10 0	5,000 and over	4 0 0

<sup>1</sup> The provisional receipts of the Exchequer for 1941-42 amounted to £16 millions, and the figures shown in Table 51 are therefore underestimated.

Some interesting facts on cinema attendances were revealed by the Chancellor of the Exchequer in his Budget speech, which largely confirm our findings. He pointed out that at present 'nearly 90 per cent of the existing revenue from Entertainments Duty was from attendances at the cinemas, and at present admissions to cinemas are estimated to be of the order of 1,400,000,000 a year. Over 90 per cent of admissions to cinemas and other full-duty entertainments are to seats whose present price, inclusive of the existing duty, does not exceed 1s. 6d.' (*Hansard*, 14 April 1942, p. 136).



## CHAPTER XII. MOTOR VEHICLE DUTIES AND FUEL DUTIES

### 1. *Previous Investigations.*

None of the previous enquiries into the incidence of taxation included the burden of motor taxation. So far as fuel duties are concerned, in the early post-war years, when Lord Samuel made his calculations, motoring was still undeveloped. The number of private cars was of the order of 100,000, and the number of all motor vehicles double this figure, consequently the motor spirit duties paid were insignificant (£0·8 million in 1913 and £1·35 millions in 1918-19). From 1922 to 1928 the petrol tax was suspended; thus in the years to which the calculations of the Colwyn Committee refer, there was no such tax. So far as licence duties are concerned, up to 1937-38 the motor vehicle duty (for licences) was separately administered under the Road Fund, and only a small contribution went to the Exchequer receipts proper. This was, of course, only a formal distinction, as it was none the less a tax, but it was excluded from several calculations for this reason.

The scope of the present chapter includes both the fuel and the licence duties. It excludes, however, the protective duties on motor cars and the cost of compulsory insurance against third-party risks.<sup>1</sup> The calculations take into account the total amount of motor licence duties, whether spent on roads or used by the

<sup>1</sup> In a revision of the Colwyn calculations by Mr D. M. Sandral for the year 1930-31, in his paper 'The Taxation of the Various Classes of the People' *J.R.S.S.* (vol. xciv, 1931), the author added to the protective duties on motor cars the total yield of the petrol tax and the amount which the Exchequer received from motor vehicle taxation. He placed the burden of this lump sum on the income tax-paying classes in proportion to their income (*op. cit.* p. 89). As in 1937-38, 97 per cent of the home consumption was supplied by British made cars (*The Motor Industry of Great Britain, 1939*—issued by the Society of Motor Manufacturers and Traders), the protective duties cannot be regarded as levies of the same character on the owners of private cars as the other duties. They are allocated together with other protective duties in Chapter xvi. The third-party insurance costs, although a compulsory burden on the motorist, are not taxes or levies paid to any public authority. They are, however, included as a tax in the international comparison of the Society of Motor Manufacturers and Traders.

Exchequer, as it has been decided to exclude from this enquiry the complications of the incidence of benefit from public expenditure. On the other hand, only that part of the Exchequer receipts from motor vehicle duties which is paid for licences of private cars will be allocated directly on individual incomes. An attempt will be made to find out which part of the petrol duties (in the official terminology 'duties on hydrocarbon oils'<sup>1</sup>) is paid (1) by the motoring community as a whole and (2) by the owners of private cars within the motoring community. Thus the total receipts of the Exchequer from motor vehicle duties and the duties on hydrocarbon oil will be divided into several categories (see paragraph 7). So far as concerns the allocation of the burden of motor taxation, this chapter deals mainly with motor and fuel duties paid on private motoring. In paragraph 9 an estimate is conjectured showing the burden of these duties on account of buses and taxis on individual incomes.

## 2. *Data on which the Present Enquiry is Based.*

The burden of the motor levies on private cars (both the aggregate burden and the average burden on different types of cars) can be estimated with considerable accuracy for pre-war years. This is due mainly to the fact that the total number of cars taxed on horse-power, and the precise proportion and distribution of these according to horse-power, were available from the registration figures of the Ministry of Transport. In addition, valuable data were furnished by non-official sources—the Petroleum Information Bureau, the Society of Motor Manufacturers and Traders, the Petroleum Board, etc.

The calculations are based mainly on the following data:

(1) The number of private cars registered in September 1937 in each horse-power class, as ascertainable from the Ministry of Transport records. As there is a seasonal fluctuation in the number of cars registered, a more exact calculation could be based on average numbers used in the fiscal year. The error, however, is very small.

(2) The average mileage per gallon according to horse-power. These figures were arrived at on a detailed basis (taking into

<sup>1</sup> *Twenty-ninth Report of the Board of H.M. Customs and Excise*, p. 36.

account the weight of the cars, their cubic capacity in litres, etc.) and are in general use for all calculations including rationing of petrol. The private cars registered (as mentioned under (1)) were classified into eight groups, A-H, on the basis of the average mileage per gallon (see Table 52).

(3) The average mileage covered per annum for all private cars. This is estimated by the Petroleum Information Bureau at 9,000 miles and by the Society of Motor Manufacturers and Traders at 8,000 miles for the year 1937-38. Evidence shows that the mileage varies ordinarily between 8,000 and 12,000 miles for all cars concerned. For the present enquiry an average of 9,000 miles covered per annum has been assumed. It was calculated that every additional 1,000 miles covered would increase the burden of fuel duties by approximately 11 per cent, and the aggregate of motor and fuel duties by 6 per cent of the amount paid for 9,000 miles. If the mileage covered is less than 9,000 miles per annum, the rate of decrease per 1,000 miles is similarly 11 per cent and 6 per cent respectively of the amount paid for 9,000 miles.

(4) The proportion of lubricating oil to petrol used was given by experts as 2.2 per cent for 1937-38.

(5) The rates of duties are known to be:

(a) 15s. per horse-power for a licence for a private car in 1937-38; 25s. in 1941-42.

(b) 8d. per gallon for petrol in 1937-38; 9d. in 1941-42. 1d. per gallon for oil in 1937-38; 1d. in 1941-42.

(c) 5s. per annum for a driver's licence in both years.

### 3. *The Burden of the Motor Duties on Private Cars.*

On the basis of the above data, it is possible to calculate with accuracy the licence duty paid by each car, thus the aggregate duty paid by all private cars; the weighted average paid by each group of cars, and by all groups together, can also be calculated, as also can the duty paid on the petrol and oil used (see Table 52). The results of these calculations can be presented in a simplified form by reducing the number of categories from eight to three—showing the burden for the small car (up to 11 h.p.), for the medium car (12-19 h.p.) and for the big car (over 20 h.p.) (see Table 53). These figures refer to cars actually in use in 1937-38

and are weighted averages. The same table shows the aggregate burden for the average car in use in 1937-38.

#### 4. *The Tax Burden on Private Cars allocated to Individual Incomes.*

After calculating with some accuracy the tax burden on the small, medium-sized and big car in use in 1937-38, the next step is to allocate this burden to the different income groups. In other words, the owners have to be discovered for roughly 1·8 million cars, and assumptions must be made in regard to the size of car used by different income groups. A proportion of the private cars is obviously used for commercial purposes, etc. These cars are partly registered under the names of firms; they are, however, partly registered under individual names and used for commercial purposes (e.g. cars of commercial travellers, etc.). The exact proportion of private cars used for commercial purposes is not known. Mr Feavearyear<sup>1</sup> estimated for 1932 that 25 per cent of the expenditure on private cars could be taken as chargeable to business expenses. There is no basis for verifying this figure, but if Mr Feavearyear's estimate is accepted the percentage was certainly lower for 1937-38, as in the intervening five years the number of private cars used for non-business purposes greatly increased. An estimate of, say, 15 per cent for 1937-38 would be more reasonable. For 1941-42 the proportion is higher again (say 20 per cent), owing to the laying up of many private cars.

On the above basis, private cars in private use may be put at 1·5 millions in 1937-38, and at 1·0-1·1 millions in 1941-42.

It may be assumed that the owners of private cars are to be found within the income tax-paying classes, or even more probably within the group of people with yearly incomes of £250 or over. The number of these for 1937-38 can be estimated at roughly 2·6 millions. It may further be assumed that all income tax-paying families in the higher and high middle income groups own a car; the difficulty is to make reasonable assumptions about the income levels at which the keeping of a car is financially possible and probable. In this respect some clue is provided by the cost of running a small car which—paid out of current income—amounted to some 20-25s. weekly in 1937-38 (see Table 54). This figure includes taxes, petrol for 9,000 miles, third-party

<sup>1</sup> A. E. Feavearyear, 'The National Expenditure, 1932', *Economic Journal*, March 1934.

insurance, depreciation and small repairs and garage costs outside London. On the level of income taxes, etc. in 1937-38 it can be assumed that a single man with a weekly income of £7 could have afforded on the average to run a car, a married couple without children with a weekly income of £8, a married couple with one child with £9 weekly, and with two or three children with £10 weekly. Thus for the purpose of these calculations motor levies will be added to the tax burden on a single man or a married couple with an income of £350, and to all specimen incomes of £500 and over (it should be noticed that the maximum tax-free income in 1937-38, that of a married couple with three children, was £450).

To calculate the burden on the different income groups, it is necessary to allocate the different-sized cars to these groups. The simple assumption is made that in 1937-38 the big cars (133,202 in number) were owned by the surtax payers (roughly 100,000 in number) and that each member of this group may have owned more than one car; the medium-sized cars (656,773 in number) by earners of medium-sized incomes—from £500 to £2,000 (roughly 600,000 in number); and the small cars by earners of smaller incomes in those cases where the keeping of a car has been assumed (£350 to £500 per annum). These assumptions are, of course, arbitrary. In the opinion of the motor trade, people with small incomes may occasionally have big cars, but this seems to be the exception. A few types of big cars were so cheap in the pre-war period (e.g. the Ford V-8—30 horse-power or over), that even people with small incomes could have afforded to buy such a car, as part of the costs of running the car (including taxes) might have been paid out of capital. It is more frequently the case that well-to-do people own small cars. The possible error is minimized by the fact that the tax burden on a small car and a medium-sized car together exactly equals the tax burden on a big car (see Table 53). The assumption that people in the highest income groups may keep several cars is justified by the fact that in 1937-38, according to expert opinion, about 100,000 individuals owned more than one car; although a proportion of these second or third cars may have been used for business purposes. Cases where one car is shared by two families cannot be so numerous as to influence the calculations, and therefore these cases are not considered.

The burden of motor duties (licence and fuel) on incomes is

shown in Table 55. Allowance has been made for drivers' licences. For a single person one licence per car has been assumed; for all other categories two licences (except in those cases where the ownership of several cars has been assumed). In the higher groups allowance has been made for an increasing number of cars; it was considered reasonable to base the calculations on the assumption of a maximum ownership of three cars.

As the keeping of a car is quite optional, all the calculations are no more than reasonable guesses. They are an indication of which income groups run cars, and what is the size of car appropriate to these incomes. They are true only on the assumption that the family (or individual) is running a car, that the car is of the specified size, and that it is being run, on an average, 9,000 miles per annum. The calculations, however, do give a fairly clear idea of the burden of licence and of fuel duties, for all possible cases, thus providing a basis for working out actual differences from the case assumed to be representative.

##### 5. *The Burden of Motor Taxation on Incomes in 1941-42.*

It is not possible to make calculations for 1941-42 similar to those for 1937-38, as the publication of the number of cars registered according to horse-power was stopped at the outbreak of war and the receipts from the motor vehicle duties are the only guide to the number of cars still on the road. All that we know is that a considerable decrease in the number of private cars in use has taken place, owing mainly to the rationing of petrol. Even people who would be inclined to pay the greatly increased motor licence duty (25s. per horse-power instead of 15s.) are giving up motoring, as owing to the restricted use of their cars the overhead cost per mile—licence, insurance, etc.—is much too high. For the same reason it is likely that many cars are used only in the spring and summer months, and are laid up during the winter.

The total number of private cars in use can be estimated at roughly 1.5 millions (excluding military cars); the number used for private purposes only can be put at, say, 1.0-1.1 millions. As the distribution of these cars in horse-power categories is not known, the figures of the burden of licence duties, as calculated in Table 55, are approximations only, although the margin of error is not likely to be large. The burden of fuel duties is calculated on the

use of the basic rations only, taking into account the recent changes in basic rations, announced in July 1941 and in October 1941.<sup>1</sup> The amount and distribution of supplementary rations—the issue of which has recently been further restricted—is unknown; we assume that these supplementary rations are granted and used for business purposes, and in such cases they are not personal taxes.

Table 55 shows the burden of motor duties (licence and fuel) for the year 1941-42 for three categories designed to show the burden in a simplified form. These simplified figures showing the burden for 1941-42 can be compared with the burden in 1937-38 as shown in Table 53. It should be noted that the difference is due not only to the increase in the burden, but also to the reduction in the mileage covered per annum in the current year.

Owing to war-time changes the use of cars has become less dependent upon income than it was in the pre-war period. It is likely that such factors as distance from house or office, personal circumstances, etc. have proved decisive in the consideration of whether or not a car should be laid up for the duration. Thus many people in the lower income groups may still be running their cars, just as many in the higher income groups have laid them up owing to the great increase in the burden of direct taxation. The assumption therefore that most of the families above a certain income level are keeping a car is less likely to be true for 1941-42, than it was for 1937-38. The optional character of motor taxation—which is more obvious in war-time than in peace-time—should be borne in mind. Table 56 shows the burden of motor duties at different income levels on families, who are actually keeping a car. The possibility that people in the higher income groups may at the moment be running more than one car has not been taken into account.<sup>2</sup>

#### 6. *The Burden of Taxation on Motor Cycles.*

There were roughly 400,000 motor cycles in use in 1937-38. As the distribution of motor cycles according to size in c.c. is unknown, the tax burden on the average size only (350 c.c.) has been calculated.

<sup>1</sup> Vide footnotes to Table 55.

<sup>2</sup> In a number of cases it is likely that people are taking out licences for more than one car for the sole reason of getting more petrol. These cases, however, cannot be very numerous, and can be safely disregarded.

The total tax on this average-sized motor cycle in 1937-38 was made up of:

	£	s.	d.
1. Motor licence duty	2	5	0
2. Petrol used for 10,000 miles (70 miles per gallon), i.e. 145 gallons. Duty at 8d. per gallon	4	15	4
3. Oil used for 10,000 miles (1,500 miles per gallon), i.e. 7 gallons. Duty at 1d. per gallon			7
4. Driver's licence		5	0
Total	7	5	11

For 1941-42 the total tax on the same-sized motor cycle is made up as follows:

1. Motor licence duty	3	15	0
2. Petrol used (ration 3 gallons per month in the category), i.e. 36 gallons. Duty at 9d. per gallon	1	7	0
3. Oil duty			2
4. Driver's licence		5	0
Total	5	7	2

No attempt has been made to allocate the tax burden of keeping a motor cycle to specimen incomes. The total costs of upkeep are so low (roughly 7s. 6d. per week for the year 1937-38) that even the earner of a very low income can afford to use a motor cycle. The users of motor cycles are mainly young people under thirty and those in the lower income groups (under £250 per annum). As the assumed number of incomes is, even for these income categories, many times the number of the motor cycles in use, any allocation of the tax to income levels would grossly exaggerate the aggregate burden of the tax on the community.

#### 7. *The Distribution of Motor Duties (Licence and Fuel) among different Tax Groups in 1937-38.*

Taxes on private motoring—which were allocated on incomes in sections 1-6 of this chapter—are a part only of the total receipts of the Exchequer from motor duties (motor vehicle duties and duties on hydrocarbon oil). A detailed analysis of this item will enable us to enlarge our classification.

(i) *Distribution of Licence Duties.* The Ministry of Transport used to publish the gross receipts of motor vehicle taxation, allocated to the different classes of vehicles.<sup>1</sup> On this basis the distribution

<sup>1</sup> Reprinted in *The Motor Industry of Great Britain*, 1939, p. 101.



of duties for 1937-38 for the purpose of the present calculation was estimated as follows:

	£ mill.	Percentage
(a) Personal taxes:		
(1) Licence duties on private cars (including private cars used commercially)	16.0	46.3
Drivers' licences	<u>0.8</u>	<u>2.3</u>
Total	16.8	48.6
(2) Licence duties on motor cycles, together with drivers' licences	1.0	2.9
(b) Licences paid for omnibuses and taxis, together with drivers' licences	3.5	10.1
(c) Licences paid on goods-carrying vehicles, etc.	<u>13.3</u>	<u>38.4</u>
Total	34.6	100.0

(ii) *Distribution of Fuel Duties (Duties on Hydrocarbon Oil)*. Official statistics of receipts from petrol duties can be presented for our purpose in the following way:<sup>1</sup>

	1937-38	
	Mill. gallons	£ mill.
Light hydrocarbon oils (motor spirit)	1350.2	44.95
	(1319.1)	(44.00)
Heavy hydrocarbon oils, for use as fuel in road vehicles	69.3	2.31
Oil	<u>703.1</u>	<u>2.93</u>
Total (excluding bracketed figures)	2122.6	50.19

According to *The Motor Industry of Great Britain* (1939), 97 per cent of the motor spirit used is consumed by the motoring community, and the total amount paid in fuel duty in 1937-38 is put by them at £44.8 millions. On the basis of the official figures given above, our estimates show a slightly higher amount, roughly £45 millions. Of this amount—as can be calculated from Table 52—roughly £19.9 millions were paid by private car owners, and £2.2 millions is the probable estimate of the sum paid by motor-cycle owners.

A further approximate calculation can be made to ascertain the petrol used and duty paid by omnibuses and taxicabs in use in September 1937. The average mileage per annum covered by a coach or omnibus is given as 32,730 miles, by a taxi as 16,000 miles. The mileage per gallon may be taken as 6 miles for omnibuses and 20 miles for taxis. The number of omnibuses in use was

<sup>1</sup> *Report of the Board of H.M. Customs and Excise*, Cmd. 5876, 1938, pp. 100-1.

approximately 51,000, and of taxis approximately 35,000, in 1937-38. By making allowance for the more extended use of Diesel oil in the case of one-third of the omnibuses, the two categories together may have paid from £8 millions to £10 millions in petrol duties.

In 1937-38, 40.4 per cent of all fuel (hydrocarbon oil) duties were paid by the owners of private cars, 4.4 per cent by the owners of motor cycles, approximately 20 per cent by omnibuses and taxis, 10.8 per cent by industry as oil for industrial use, and the remaining 24.4 per cent by industry for both petrol and oil for commercial vehicles. Petrol used by other types of vehicles, e.g. invalid vehicles, tractors (about 25,000) and cars exempted from licence (about 44,000), is omitted; it cannot be very significant.

If in both categories (motor licence duty and fuel duty) allowance is made for private cars in commercial use, the motor duties paid in 1937-38 can be classified as follows:

	Licence £ mill. (approx.)	Fuel £ mill. (approx.)	Total £ mill. (approx.)
(a) Personal taxes:			
(1) Private cars in private use	14.5	17.0	31.5
(2) Motor cycles	1.0	2.2	3.2
(b) Taxes paid for omnibuses and taxis	3.5	9.0	12.5
(c) General industrial tax (including private cars in commercial use)	15.6	22.0	37.6
Total	34.6	50.2	84.8

It should be emphasized that sections 1-8 and Tables 52-56 of this chapter deal exclusively with the allocation of the first of these categories to individual incomes. In section 9 an attempt is made to allocate the burden of the second category to individual incomes. The third category is dealt with in Chapter XVI.

#### 8. *The Distribution of Motor Duties (on Licence and Fuel) among different Tax Groups, 1941-42.*

The distribution of motor duties (licence and fuel taxes) among private, commercial, and other motoring, taking into account the progressive reduction in the basic ration of petrol, can be estimated on the following lines.

The total number of private cars in use can be estimated at 1.5 million, while those in private use amount to, say, 1 million. So far as the tax on fuel and lubricants is concerned, it is reasonable

to assume that the basic ration of all the 1·5 million cars was used for private purposes (since supplementary rations have been disregarded on the grounds that they were used for business purposes). The average size of car can be taken as 12 horse-power and the quarterly ration allowance of petrol at 18 gallons per car for April–July 1941, 15 gallons for August–October, 16 gallons for November–January 1942, and the same amount for the following quarter.

The figures for taxation on fuel and lubricants appear to be as follows for 1941–42:

<i>Petrol Tax at 9d. per gallon</i>			
No. of cars	Average gallons per car per annum	Average tax per car per annum	Total petrol tax (£1,000)
1,500,000	64·66	= £2. 8s. od.	£3,600–£3,700
	Lubricating oil tax at 1d. per gallon at 2·2 per cent of petrol consumption		£9
	Total fuel duty		<hr style="width: 100%; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> £3,609–£3,709

The amount paid for licence duties on the 1–1·1 million private cars in private use can be estimated at £15 to £16·5 millions, while the licence duties paid by the (say) 400,000 private owners who use their cars both for business and pleasure are regarded as general taxes on production.

A third item in the burden on private motoring is on account of motor cycles in private use. A reasonably safe estimate puts the minimum number of private motor cycles still in use at 297,000. On the basis of calculations given in paragraph 7, after allowing for a reduction in the basic ration, the taxation payable in respect of motor cycles may be taken as £1 million.

For 1941–42 the Budget estimate puts the revenue from motor vehicle (licence) duties at £39 millions, and from hydrocarbon oil (fuel) duties at £52 millions, making a total of £91 millions.<sup>1</sup> Out of this total taxation of £91 millions, £20–£21·5 millions, or roughly 22–22·5 per cent, is paid on private motoring. The remainder is paid on omnibuses and taxis, by industry, and partly, so far as fuel duties are concerned, by the Government. The latter item is of course far more important in the current year than it was in 1937–38.

<sup>1</sup> Receipts amounted to £92·4 millions.

9. *The Burden of Motor Vehicle and Fuel Duties on Buses and Taxis.*

In section 7 we estimated the amount paid in 1937-38 on buses and taxis on account of motor vehicle duties at £3.5 millions and on account of fuel duties at £9 millions.

We can calculate further that out of this £12.5 millions approximately £2.0 millions was paid on account of taxis, and £10.5 millions on account of buses and coaches. In September 1937 there were 35,906 taxis and 51,568 buses and coaches in use.

The burden of these duties on buses and coaches is on the users of these facilities, thus the bulk is on the lower income groups. The duty is felt also by those who are using other means of communications or change their place of residence to evade such duties (e.g. they pay higher rents in order to live nearer to their place of work, on account of the high bus fares). The actual incidence as opposed to burden of the motor and fuel duties on taxes is beyond the scope of the present enquiry. It is assumed by disregarding the problem of incidence that every family bears some burden of the duties or in other words that each family uses buses and other means of communication in the same proportion as the whole community. The average burden per head was calculated in the following manner. The information relating to bus and coach operation as published by the Traffic Commissioners<sup>1</sup> gives us the basis to estimate total expenditure on bus fares, which amounted to some £70 millions or £75 millions in 1937-38. It is also possible to calculate the average number of journeys in buses per head per annum, which was about 140 or 145 for the country as a whole. (It was far higher in the area covered by the London Passenger Transport Board, viz. over 200, while the number of journeys in all facilities in the London area (railway, tram trolley and buses) was 441 per head per annum.) From the same source we know also the average receipts per passenger per journey, which was 2.44d. for 1937. The average expenditure, therefore, on buses per head per annum amounted to approximately £1. 5s., and for a family of four to £6. If we assume further that the proportion

<sup>1</sup> Quoted in *The Motor Industry of Great Britain*, 1939, p. 95. The total number of vehicles (buses and coaches) owned is given as 49,574 in *Coach and Bus Operation* for December 1937, while it is given as 51,568 for September 1937 in the tables on 'registration' in *The Motor Industry of Great Britain*, 1939, p. 65. This difference in the tables on registration was taken into account in the calculations.

of motor and fuel taxes in this amount is the same as in the total amount expended on buses and coaches, the average burden of duty per family of four—in all probability the typical middle-class family—can be estimated at 17s.

With the assistance of the family budget survey of the Ministry of Labour for industrial workers we calculated further the approximate burden of the duties on buses and coaches paid by an average industrial working-class household. The family budget survey estimates the amount expended per week by an industrial household as follows:

Bus, tram and coach fares to and from work	11d.
Railway fares to and from work	7½d.
Other rail, bus, tram and coach fares	8½d.
Total travelling expenses	2s. 3d.

We estimated that, taking into account the total amount expended on bus and coach fares by the community, about 1s. 4d. to 1s. 6d. is the amount spent per week on bus fares alone by a working-class family. It amounts to £3. 9s. to £3. 18s. per annum and the duty paid on it to 10s. or 11s. There is probably little difference between one working-class family and another at different income levels.

Taxis are mainly used by the higher middle and upper classes. Part of the amount paid in duty on account of both buses and taxis is a business expense, and is added to the taxes falling on production in general (vide Chapter xvi).

The distribution of taxes on account of buses and taxis for 1937-38 was accordingly estimated as follows:

£	s.	£	s.
100	9	350	17
150	10	500	19
200	11	1,000	30
250	12	2,000, etc.	40
300	15		

The keeping of a private car obviously influences the use of other means of communications. It is likely, however, that, taking families with four members, buses and taxis will be used to some extent in addition to the running of a car. The error involved is minimized by the fact that the estimated burden of duties on buses paid by the higher income groups is very small as compared with their burden on account of keeping private cars, and quite infinitesimal as compared with their total burden of all taxes.

TABLE 52. THE BURDEN OF MOTOR TAXATION (LICENCE AND FUEL DUTIES) ACCORDING TO HORSE-POWER CATEGORIES. 1937-38

	Classification according to horse-power								Average (A.) or Total (T.)
	1-9 A	10-11 B	12-14 C	15-19 D	20-24 E	25-30 F	31-39 G	40 and over H	
1. Average mileage per gallon of petrol	36.40 (38)	30.35 (32½)	22.25 (23½)	20.22 (21)	15.18 (16½)	12.16 (14)	12	10.12 (11)	A. 23½
2. No. of cars in each class	606,503	401,614	459,427	197,346	70,580	50,256	9,276	3,090	T. 1,798,092
3. Proportion of cars in the classes (%)	33.7	22.3	25.6	11.0	3.9	2.8	0.5	0.2	T. 100
4. Petrol used per 1,000 miles (in gallons)	26.3	30.8	42.65	47.6	60.6	71.4	83.3	90.9	A. 36.7
5. Lubricating oil used per 1,000 miles (in gallons)	0.58	0.68	0.94	1.05	1.33	1.57	1.83	2.00	A. 0.81
6. Total amount of licence duty (in £ mill.)	3.71	3.03	4.39	2.40	1.14	1.05	0.24	0.09	T. 16.05
7. Total amount of petrol duty (in £ mill.) <sup>1</sup>	4.77	3.70	5.87	2.82	1.28	1.08	0.23	0.08	T. 19.83
8. Total amount of oil duty (in £ mill.)	0.012	0.012	0.018	0.004	0.004	0.003	0.0007	0.0003	T. 0.054
9. Average amount of licence duty paid per car (in £)	6.11	7.54	9.55	12.15	16.09	20.85	25.36	29.09	A. 8.91
10. Average amount of petrol duty (in £)	7.89	9.23	12.77	14.29	18.18	21.43	25.00	27.27	A. 11.01
11. Average amount of oil duty (in £)	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	A. 0.03
12. Average amount of licence and fuel duties per car (in £) 9 + 10 + 11	14.02	16.80	22.36	26.48	35.32	42.34	50.43	56.43	A. 19.95

Estimated, assuming an average of 9,000 miles covered per annum.

TABLE 53. THE BURDEN OF MOTOR TAXATION (LICENCE AND FUEL DUTIES) ON DIFFERENT-SIZED CARS (WEIGHTED AVERAGES). 1937-38

	Duty paid on a private car in 1937-38			
	Small car (7-11 h.p.)	Medium-sized car (12-19 h.p.)	Large car (20 h.p. and over)	Average car in use (12 h.p.)
No. of cars in the class	1,008,117	656,773	133,202	—
Proportion of cars in the class	56.0 %	36.6 %	7.4 %	—
Licence duty	£ 6 13 7	£ 10 6 7	£ 18 17 5	£ 8 18 2
Petrol duty	8 8 5	13 4 7	20 2 2	11 0 2
Oil duty	7	10	1 0	8
Total of duties	15 2 7	23 12 0	39 0 7	19 19 0

TABLE 54. SOME COST ELEMENTS OF RUNNING A CAR IN 1937-38

	Small car (7-11 h.p.)	Medium-sized car (12-19 h.p.)	Large car (20 h.p. and over)	Average car in use (12 h.p.)
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Motor licence duty	6 13 7	10 6 7	18 17 5	8 18 2
2. Fuel duty	8 9 0	13 5 5	20 3 2	11 0 10
3. Price of petrol used ( <i>ex tax</i> )	11 13 0	18 5 7	27 16 2	15 4 5
4. Third-party insurance (approx.)	5 10 0	7 12 6	9 15 0	5 12 6
	32 5 7	49 10 1	76 11 9	40 15 11

TABLE 55. APPROXIMATE BURDEN OF MOTOR TAXATION ON SMALL, MEDIUM-SIZED AND LARGE CARS. 1941-42

	Small car (6-9 h.p.)	Medium-sized car (10-19 h.p.)	Large car (20 h.p. and over)
	£ s. d.	£ s. d.	£ s. d.
Licence duty <sup>1</sup>	10 4 0	15 5 7	30 2 0
Petrol duty <sup>2</sup>	2 0 0	2 11 8	4 0 0
Oil duty	2	2	3
Driver's licence	10 0	10 0	10 0
	12 14 2	18 7 5	34 12 3

<sup>1</sup> Weighted average, calculated on the basis of the number of cars registered in September 1938 (last figures available), with due allowances in each horse-power class for the probable laying up of cars in the current year.

<sup>2</sup> Based on basic ration of petrol. It amounted, from April-July 1941, to 5 gallons per month for 6-9 h.p. cars, 6 gallons for 10-12 h.p., 7 gallons for 13-15 h.p., 8 gallons for 16-19 h.p., and 10 gallons for 20 h.p. cars and over. This ration was cut by one-sixth for the quarter August-October 1941, the whole cut being deducted in October. For the November-January 1942 quarter the general reduction of one-sixth was continued, but horse-power categories were slightly altered. New basic rations for the November-January quarter were 13 gallons per quarter for 1-9 h.p. cars, 15 gallons for 10 h.p., 16 gallons for 11-12 h.p., 18 gallons for 13-15 h.p., 20 gallons for 16-1 h.p. and 24 gallons for 20 h.p. cars and over.

TABLE 56. THE BURDEN OF MOTOR TAXATION (LICENCE AND FUEL DUTIES AND DRIVERS' LICENCES) ON INCOMES. ALL FAMILY CATEGORIES

Income per annum	1937-38		1941-42		Income per annum	1937-38		1941-42	
	£	s. d.	£	s. d.		£	s. d.	£	s. d.
350 <sup>1</sup>	15	12 7	12	14 2	5,000	63	2 7	34	12 3
500	15	12 7	12	14 2	10,000	78	11 2	34	12 3
1,000	24	2 0	18	7 5	20,000	102	3 2	34	12 3
2,000	39	10 7	34	12 3	50,000	117	11 9	34	12 3

<sup>1</sup> For single people and married couples only.

*Note.* (i) Mileage covered in 1937-38: 9,000 miles (assumed). Mileage covered in 1941-42: 1,800-2,200 miles (limited by basic ration of petrol).

(ii) For 1941-42 the keeping of one car only was assumed in all income groups.

Few data are available for estimating the burden of motor and fuel duties on buses and taxis for 1941-42. The decrease in the number of buses was not considerable, while the average mileage covered per annum is in all probability curtailed by running fewer buses in the black-out and for other purposes than for going to work. Another factor to be taken into account is the increase in the petrol duty, and the decrease in the use of buses for pleasure purposes. It is not possible to take into account in the calculations the big changes in the use of means of communications owing to war-time changes in residence and occupation by a great part of the population.

The licence and fuel duties falling on buses and taxis may be estimated at approximately £10 millions for 1941-42. A conjectural distribution of the burden—allowing again for the use of the depleted number of taxis in the higher incomes—may be estimated as follows:

*For a family of four (in shillings)*

£	s.	£	s.
100	8	350	14
150	9	500	15
200	10	1,000	16
250	11	2,000, etc.	20
300	12		



## CHAPTER XIII. SMALL INDIRECT TAXES

### 1. *Yield and Rates of the Duties on Cocoa, Coffee, Chicory, Dried Fruits, Patent Medicines and Table Waters.*

Previous investigations into the incidence of taxation calculated an aggregate figure for the burden of the duties on cocoa, coffee, chicory, dried fruits, etc. The fiscal importance of these small duties is illustrated in the following table:

*The Yield of Duties on Cocoa, Coffee, etc.*

Commodity	1913-14 £ mill.	1925-26 £ mill.	1937-38 £ mill.	1941-42	
				(Budget estimate) £ mill.	(Provisional receipts) £ mill.
Cocoa	0·3	0·7	0·9	1·75	2·20
Coffee and chicory	0·2	0·2	0·1	0·23	0·34
Dried fruits	0·5	0·6	0·7	0·6	1·52
Patent medicines	0·4	1·3	0·7	0·2 <sup>1</sup>	—
Table waters	—	0·4	0·3	0·2	0·21
	1·4	3·2	2·7	2·98	4·27

<sup>1</sup> The duty on patent medicines was repealed as from 2 September 1941.

Lord Samuel<sup>1</sup> used the family budgets of 1904, and the findings of Lord Sumner's Committee on the Cost of Living of the Working Classes in 1918, in order to show the relative amount consumed at different income levels. The Colwyn Committee mainly followed Lord Samuel's method, and in addition compared the distribution of the consumption of raw cocoa, coffee and chicory with that of the consumption of tea. The Committee assumed that dried fruits and table waters probably affected in a greater degree the larger incomes, and patent medicines the smaller incomes.

### 2. *The Present Calculations.*

The following tables show (a) the national *per capita* consumption, and (b) some representative figures of expenditure at two

<sup>1</sup> The Presidential Address of the Rt Hon. Herbert Samuel delivered to the Royal Statistical Society for the session 1918-19.

income levels (working and middle classes), based on family budgets:

(a) *National Consumption of Raw Cocoa, Coffee and Chicory, and Dried Fruits (quantities retained for home consumption in ounces per head per week)*<sup>1</sup>

Items	1925	1936	1937	1938
Raw cocoa	0.73	1.11	1.00	1.01
Coffee and chicory	0.29	0.23	0.23	0.23
Dried fruits (currants and raisins only)	1.84	1.83	1.75	1.98

(b) *Expenditure per head per week on Drinking Cocoa, Coffee and Dried Fruits, at different income levels (in pence; consumption figures, where available, in brackets)*

	Drinking cocoa	Coffee	Dried fruits
1. Crawford budgets, 1936 <sup>1</sup>			
Working classes	0.78 (0.68 oz.)	0.44	0.64 (1.54 oz.)
Middle classes	0.7 (0.5 oz.)	1.5	1.3 (2.9 oz.)
2. Ministry of Labour budgets, 1937-38 <sup>2</sup>			
Industrial working-class households	0.4	0.27	1.06
3. Middle-class budgets, 1938-39	0.36 (0.24 oz.)	0.86 (0.5 oz.)	—

<sup>1</sup> Sir William Crawford and H. Broadley, *The People's Food* (Heinemann, London, 1938).

<sup>2</sup> 'Weekly Expenditure of Working Class Households in the United Kingdom in 1937-38', *Ministry of Labour Gazette*, December 1940 (H.M. Stationery Office, London).

The results of family budget surveys—though differing in so far as absolute expenditure and consumption are concerned—may indicate that the working classes consume more cocoa as a drink than the middle classes, whereas the middle classes consume a far larger quantity of coffee. The bulk of raw cocoa is of course consumed in the form of chocolate and other manufactures. This item is not, however, included in the family budget figures. Chocolate consumption, as shown in the sugar memorandum, increases as income rises. It is impossible to give exact figures of the amount of raw cocoa used in drinking preparations and in other manufactured goods. Figures relating to the proportionate output of the different cocoa preparations, as given in the Census of Production for 1935 (published 1940), are not helpful, as they include

<sup>1</sup> Customs and Excise publications, H.M. Stationery Office, London.

other raw materials (principally sugar, nuts, condensed milk and milk powder).

Following the method of Lord Samuel, we calculated, on the basis of the yield, the average duty paid per family, and estimated then its distribution among the different income groups on the basis of their expenditure on these goods, as ascertained from the family budget surveys. The Crawford budget figures were used for the higher income groups, i.e. above £250, and the Ministry of Labour figures for the lower groups, i.e. below £250. The expenditure figures were weighted according to the yield of the various duties. In this way the relative expenditure on cocoa preparations, coffee and dried fruits was obtained for the different income groups.

### 3. Estimates for 1937-38.

The average yield per family for 1937-38 was approximately 4s. This figure makes allowance for those persons who do not live in a family. To allocate the average burden per family to the different income groups, we took into account the relative amounts of cocoa preparations, coffee and dried fruits consumed by the different income groups, as mentioned above. Other factors, namely the consumption of coffee outside the home, the consumption of Empire dried fruits,<sup>1</sup> the duty on table waters and medicines, and the distribution of families into income groups, were also taken into consideration. The following figures of the burden of these items for different families were estimated:

TABLE 57. THE BURDEN OF SMALL INDIRECT TAXES  
(COCOA, COFFEE, ETC.) ON INCOMES. 1937-38

Income group	Number of persons in family									
	One		Two		Three		Four		Five	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
£										
100	1	6	2	0	2	3	2	6	3	0
150	2	0	2	6	3	0	3	6	4	0
200	2	6	3	0	3	6	4	0	4	6
250	3	0	3	6	4	3	5	0	5	6
300	3	6	4	0	5	0	5	6	6	6
350	4	0	4	6	5	6	6	6	7	0
500 and over	4	6	5	6	7	0	7	6	8	0

### 4. Estimates for 1941-42.

For 1941-42 there were no changes in the rates of these duties, but the duty on patent medicines was repealed. The estimated

<sup>1</sup> Empire dried fruits and home-grown chicory are free of tax.

yield is roughly on the 1937-38 level. War-time conditions have brought several changes in consumption. The rationing of tea has given an incentive to coffee drinking, and changes have taken place in chocolate consumption (dealt with in the sugar memorandum). The aggregate of these changes, however, is not considerable, as their influence is not all in the same direction. The figures given in the above table are therefore representative for 1941-42 as well as for 1937-38.<sup>1</sup>

### 5. Comparison with Previous Enquiries.

The following table shows at a glance the burden of the small indirect taxes hitherto mentioned in various previous enquiries as compared with the present enquiry:

TABLE 58. THE BURDEN OF SMALL INDIRECT TAXES (COCOA, COFFEE, ETC.) ON INCOMES. A COMPARISON WITH PREVIOUS ENQUIRIES

(Family of five)

Income group	1903-04 and 1913-14 (Lord Samuel and Colwyn Committee)	1918-19 (Colwyn Committee)	1923-34 (Colwyn Committee)	1925-26 (Colwyn Committee)	1937-38 (this enquiry)
	s. d.	s. d.	s. d.	s. d.	s. d.
£					
50	1 0	—	—	—	—
100	2 0	10 0	8 3	6 0	3 0
150	3 0	11 6	9 0	6 6	4 0
200	4 0	14 0	9 9	6 9	4 6
250	4 0	—	—	6 9	5 6
300	4 0	—	—	6 9	6 6
350	4 0	—	—	6 9	7 0
500 and over	4 0	15 0	10 6	6 9	8 0

### 6. The Duty on Matches.

Part of the burden of this duty falls on private households, while the greater part falls on consumers of tobacco. The Colwyn Committee allocated the total burden in the same proportion as the duty paid on tobacco by each income group. Other enquiries added its yield to the small indirect taxes and allocated it arbitrarily to incomes. The yield of the duty on matches amounted to £4.4 millions in 1937-38. In spite of the very considerable increase of the rates in April 1940, provisional receipts for 1941-42 were only £5.5 millions, as practically all imports were cut

<sup>1</sup> As provisional receipts for 1941-42 show increased yields of these duties above the 1937-38 level, the burden for 1941-42 is underestimated.

off. It can be arbitrarily estimated that in 1937-38, say, £3 millions should be allocated on tobacco consumers, and £1.4 millions on households. In 1941-42, taking into account the prevailing shortage, a more probable division would be an allocation of £3.5 millions on smokers and £2 millions on households.

#### 7. *The Processing Tax on Milling (Wheat Levy).*

The Wheat Act of 1932 provided for a wheat subsidy of the deficiency payment type, to be paid out of a processing tax on milling. Every sack of flour milled in Great Britain or imported into the country paid the levy; the aim of the subsidy was to bring up the price of home-grown wheat to 10s. per cwt. The subsidy therefore fell when the price of wheat rose. Although the figures for this tax do not enter into Budget estimates, it is an indirect tax, borne by the community, in every sense except in form, and it is therefore included in the present calculation. Quota payments, as enacted by the Wheat Acts, varied considerably, fluctuating in the cereal year 1937-38 from 2.4d. to 9.6d. per cwt., in 1938-39 from 16.8d. to 31.2d. per cwt., and in 1939-40 from 16.8d. to 26.4d. per cwt. The Revenue figures, as given by the Wheat Commission, were approximately £1.7 millions for 1937-38, £9.2 millions for 1938-39, and £5.5 millions for 1939-40. Taking into account the negligible variation in flour consumption between the different income groups, the estimated tax burden on the average family (of 3.6 members) was 2s. 9d. in 1937-38.

By the Agriculture Act, 1940 (in the Wheat Order under that Act),<sup>1</sup> quota payments were suspended as from 5 May 1940. This tax does not therefore figure in our estimates for 1941-42.

#### 8. *The Coal Levies.*

There are at the moment two coal levies in operation: (a) the coal mines guaranteed wage levy,<sup>2</sup> and (b) the coal mines war levy.<sup>3</sup> The guaranteed wage levy is raised for the purpose of paying the costs of the guaranteed working week under the Essential Work Order, 1941. It amounts to 6d. per ton (which is the maximum amount allowed to be raised) and is payable to the Central Compensation Fund, established by the Central Council of Colliery Owners. It came into force at the beginning of June 1941 and its total yield in a year, at a rate of 6d. on the basis of the total turnover

1 S.R. & O. 626.

2 Cmd. 6278.

3 Cmd. 6236.

during the first quarter of 1941-42, has been estimated at £4.5-£4.75 millions per annum.<sup>1</sup> The coal mines war levy (not exceeding 6d. per ton on all coal sold) is raised in order to pay compensation to collieries which have suffered loss of trade in consequence of the war loss of export markets to a greater extent than the average loss of trade sustained by the industry as a whole. The scheme has been in force since the beginning of January 1941, although it did not come into operation until much later. The actual amount collected for the Central Scheme was originally 3d. per ton, reduced in September 1941 to 2d. per ton.<sup>2</sup>

It was intended that the first levy should be included in the prices charged to consumers,<sup>3</sup> but the second levy has not been specifically included in any price increase, and the extent to which it may be included will depend upon the financial results of each district. (There is no differentiation in this respect between household and industrial coal. The only differentiation hitherto adopted was in regard to the Lancashire price increase on 15 May 1941, which provided for an increase of 2s. 3d. on industrial coal and 10d. on domestic coal.) Owing to this factor and to the different forms of coal consumption of households, as well as to the differing incidence of the levy on industrial coal, and to the differential method of price regulation, it is not possible to make reliable estimates of the burden of these levies on different income groups. It is very probable that both levies will ultimately be shifted on to the consumer, and that this will be so in whatever form coal is used in the household, whether directly or in the form of gas, electricity, etc. In addition, the levy on industrial coal may also be shifted on to consumers in the prices of goods. Taking into account the prospective yield of the levies (at rates actually collected), the usual outlay on fuel by different households (partly ascertained by family budgets) and including allowances for the burden of the levy on industrial coal, it appears that the burden of the coal levies per family may be of the order of 3s.-6s. per annum. These levies have been taken into account in our estimates

1 *The Economist*, 31 May 1941, p. 722. As the levy is collected at a much lower rate, the yield will be correspondingly much smaller.

2 The operation of this levy in regard to payments to the collieries was altered in a recent order of the Board of Trade. (Vide *The Economist*, 17 January 1942.)

3 In practice the Mines Department withholds its authority for price increases, except when the need for them is proved. The actual rate of the levy was 1½d. per ton in September 1941. (Vide *The Economist*, 20 September 1941.)

for 1941-42. But it must be confessed that they represent a marginal case, and opinions may vary on the propriety of including them. The difference made to the estimates of the total burden of taxation is, of course, negligible.

9. The combined burden of the duties on household matches and on flour for 1937-38 can be put at 5s. for all income groups, while the combined burden of the duty on household matches and on coal in 1941-42 will vary from 10s. 6d. to 15s., according to income level. The combined burden of these levies and of the small indirect taxes on a family of four can be estimated as follows:

TABLE 59

THE BURDEN OF SMALL INDIRECT TAXES, INCLUDING  
WHEAT LEVY AND DUTY ON MATCHES. 1937-38

Income group £ per annum	Duty payable s. d.	Income group £ per annum	Duty payable s. d.
100	7 6	300	10 6
150	8 6	350	11 6
200	9 0	500 and over	12 6
250	10 0		

THE BURDEN OF SMALL INDIRECT TAXES, INCLUDING  
COAL LEVIES AND DUTY ON MATCHES. 1941-42

Income group £ per annum	Duty payable s. d.	Income group £ per annum	Duty payable s. d.
100	8 6	300	13 6
150	10 6	350	14 6
200	11 6	500 and over	15 6
250	12 6		

## CHAPTER XIV. SOCIAL INSURANCE CONTRIBUTIONS

For the purposes of the present enquiry social insurance contributions are regarded as taxes, a procedure similar to that followed in the White Papers<sup>1</sup> on National Income and Expenditure. It can be argued that social insurance contributions are not taxes because there is a *quid pro quo* for them, but it is not intended to enter into discussion of this controversy. Nor is it intended, by including the burden of social service contributions, to evaluate the addition made to working-class incomes by expenditure on the social services, as this is outside the scope of the present enquiry.

The burden of the contributions on employees has been allocated in the present enquiry to the incomes of the contributors, while the contributions of the employers have been regarded as taxes falling on production generally. The term 'social insurance contributions' is used in the narrower sense of the term, viz. to include only contributions to Unemployment Insurance, National Health Insurance, and Widows', Orphans' and Old Age Contributory Pensions. All three schemes have the common feature that they are compulsory, are based on actual employment, and involve regular contributions from employees and employers. The weekly rates of contributions for 1937-38 and 1941-42 are given in Table 62. The rates of Unemployment Insurance contributions refer to the so-called 'General' Scheme (mainly industrial workers), and therefore those insured under the Agricultural and Special Schemes are excluded.

Table 60, based on the rates as given in Table 62, shows the yearly contributions payable by employees in 1937-38 and 1941-42. The figures, which are calculated on the basis of 52 weekly contributions a year, show the maximum burden per person. Owing to sickness and unemployment, during which no contributions are payable by the employee, the average number of weekly contributions was taken with 44 for 1937-38 and with 48 for 1941-42.

<sup>1</sup> Cmd. 6261, 1941 and Cmd. 6347, 1942.



TABLE 60. THE BURDEN OF EMPLOYEES' SOCIAL INSURANCE CONTRIBUTIONS  
(52 weeks' contributions)

		1937-38			1941-42 <sup>1</sup>		
		£	s.	d.	£	s.	d.
Males	21-64	4	2	4	4	15	4
	18-20	3	18	0	4	11	0
	16-17	3	5	0	4	13	8
	14-15		17	4		17	4
Females	21-60	3	5	0	4	2	4
	18-20	3	0	8	3	18	0
	16-17	2	9	10	3	2	10
	14-15		17	4		17	4

<sup>1</sup> At current annual rates, as in force on and after 5 January 1942.

The figures in Table 61 illustrate the percentage burden of social insurance contributions on wages. As can be seen, the burden is light, although, as it is levied at flat rates, it is regressive on individual incomes.

TABLE 61. THE PERCENTAGE BURDEN OF SOCIAL INSURANCE CONTRIBUTIONS ON WEEKLY EARNINGS

Weekly earnings (shillings)	Percentage paid in contributions for the three social insurance schemes by adult males	
	1937-38	1941-42
35	4.5	5.0
40	4.0	4.4
45	3.5	3.9
50	3.2	3.5
55	2.9	3.2
60	2.6	2.9
65	2.4	2.7
70	2.3	2.5
75	2.1	2.3
80	2.0	2.2

The receipts from social insurance contributions in Great Britain for 1937-38 made a total of £104.5 millions, of which £42.5 millions were from Unemployment Insurance (General Scheme only), £29.8 millions from the National Health Scheme, and £32.2 millions from the Contributory Pensions Scheme.<sup>1</sup> Half the total (£52.25 millions) was contributed by employees, the other half by employers. The number of persons insured for the same year (July 1937) was 13,244,000 under the Unemployment

<sup>1</sup> On the basis of the annual Reports of the Ministries concerned.

Insurance (General) Scheme,<sup>1</sup> and 21,127,000 under the combined Health and Pensions Scheme. The average annual burden per insured person was therefore £1. 12s. 0d. under the Unemployment Scheme, and £1. 9s. 3d. under the Health and Pensions Scheme, making the average total burden £3. 1s. 3d.

The aggregate burden of social insurance contributions on any particular social family depends upon the number of earners on the one hand, and their age and sex on the other. We know that the average number of earners in working-class families in 1937-38 was 1.75; this figure may vary, however, between different income levels, and there is reason to believe that the average number is less than 1.75 in the lowest group. Moreover, the differences in the rates of contribution due to sex and age, as can be seen in Table 60, are so considerable that no theoretical calculation of the burden on the social family can be made. It is worth mentioning that according to the Ministry of Labour family budget survey the burden of social insurance contributions amounts to 2 per cent of the total expenditure (and probably also of the income) in industrial households. A survey on spending in Gloucester found the same percentage for a recent date (April 1941). It was 2.2 per cent in Glasgow (June 1941) and 2.1 per cent in Leeds (January 1942).<sup>2</sup>

For the purpose of this enquiry, which is to calculate the burden on a tax-paying family, the problem presents itself in a simplified form. The children included in this family, as defined by income-tax laws, are dependent children under 16 years of age; they are therefore not wage-earners and do not pay social insurance contributions.<sup>3</sup> The definition of the tax-paying family does not exclude the earnings of a wife. A typical case in working-class families is that of a wife doing some casual domestic work. In this case she is liable to the Health and Pensions Scheme only, and her share of the contributions is frequently, in fact though not in law, paid by her employer. In allocating the burden of social insurance contributions to tax-paying families at different income

1 The figures refer to insured persons aged 16-64 under the General Scheme. They exclude juveniles, and persons insured under the Agricultural Scheme and the Special Schemes for insurance and banking.

2 These surveys were conducted by Mr C. Madge, under the aegis of the National Institute.

3 Income-tax laws allow an annual income of up to £50 per dependent child, but this can in practice be disregarded when calculating tax burdens.

levels, only the contributions of the head of the family have been taken into account. The shortcomings of this assumption are illustrated by the fact that in the pre-war years more than one-fourth of all women insured under the Unemployment Scheme were married; and their proportion was a fourth to a fifth under the Health and Pensions Scheme. For 1937-38 the burden of the social insurance contributions has been allocated to all incomes up to £250 per annum, as all three schemes were, generally speaking, compulsory up to this level. For 1941-42 the burden has been allocated to each of the standard incomes selected for this enquiry up to and including £350 per annum. This is justified by the increase in earnings on the one hand (all three schemes are compulsory for manual workers, whatever their earnings), and on the other hand by the inclusion of non-manual workers with incomes up to £420 per annum in the Unemployment Insurance Scheme as from 2 September 1940, and in the Health and Pensions Scheme as from January 1942.

The employers' contributions to the social insurance schemes amounted to £52.25 millions in 1937-38.<sup>1</sup> This sum can be regarded as a burden falling on production generally, and has therefore been added to the lump sum of other general industrial taxes, such as the duty on industrial petrol, the motor vehicle duties so far as these relate to commercial vehicles, and Post Office net receipts from business (see Chapter xvi).

Another factor worth mentioning is that all men aged 16 or over serving in the ranks of H.M. Forces are, irrespective of their pay, insured under the National Health Insurance and Contributory Pensions Acts. Their weekly rates of contributions are lower than the normal rates. They are—as in force from 5 January 1942—health insurance 4*d.*, paid by the State; pensions 1*s.* 1*d.*, out of which 6½*d.* is payable by the insured. The same rates and conditions are in force for the insurance of men engaged in so-called 'war occupations'. For women in 'war occupations' the rates in force are 3½*d.* for health insurance and 6½*d.* for pensions; out of the latter 5*d.* is payable by the insured person.

<sup>1</sup> The charge on industry on account of Workmen's Compensation was not regarded as a tax for the purposes of the present enquiry. The charge on industry on that account was estimated at £13 millions for 1937. (*Wide Workmen's Compensation Statistics, Home Office, Cmd. 5955, 1939.*)

TABLE 62. THE WEEKLY RATES OF SOCIAL INSURANCE CONTRIBUTIONS

		Insured persons								
		1937-38			1941-42 <sup>1</sup>					
		Unem- ployment	Health & Pensions	Total	Unem- ployment	Health & Pensions	Total			
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Males aged	21-64	9	10	1 7	10	1 0	1 10			
	18-20	8	10	1 6	9	1 0	1 9			
	16-17	5	10	1 3	5	1 0	1 5			
	14-15	2	2 <sup>2</sup>	4	2	2	4			
Females aged	21-64 <sup>3</sup>	8	7	1 3	9	10	1 7			
	18-20	7	7	1 2	8	10	1 6			
	16-17	4½	7	11½	4½	10	1 2½			
	14-15	2	2 <sup>2</sup>	4	2	2	4			
		Employer								
		1937-38			1941-42 <sup>1</sup>					
		Unem- ployment	Health & Pensions	Total	Unem- ployment	Health & Pensions	Total			
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Males aged	21-64	9	10	1 7	10	1 0	1 10			
	18-20	8	10	1 6	9	1 0	1 9			
	16-17	5	10	1 3	5	1 0	1 5			
	14-15	2	2 <sup>2</sup>	4	2	2	4			
Females aged	21-64 <sup>3</sup>	8	7	1 3	9	9	1 6			
	18-20	7	7	1 2	8	9	1 5			
	16-17	4½	7	11½	4½	9	1 1½			
	14-15	2	2 <sup>2</sup>	4	2	2	4			

<sup>1</sup> At current annual rates, as in force at 5 January 1942. The rates as shown for 1937-38 were in force up to 5 August 1940 for Unemployment Insurance and up to 1 July 1940 for Health and Pensions. Contributions to the National Health Scheme were increased by 2d. (shared equally by employers and employees) as from 5 January 1942 under the National Health, etc. Act of 1941.

<sup>2</sup> Since December 1937.

<sup>3</sup> It may be mentioned that for women aged 60 and over and men aged 65 and over, the employer's share only of the contribution has to be paid, as from 1 July 1940.

*Note.* Concerning Unemployment Insurance, the rates for the General Scheme only are taken into account. The Agricultural Scheme, which is of minor importance for our purposes, is disregarded. Its relative importance is illustrated by the fact that contributions to the General Scheme are of the order of £40-45 millions, whereas those to the Agricultural Scheme are of the order of £0.8 million (rates of contribution to the Agricultural Scheme are approximately one-third of the rates for the General Scheme).

## CHAPTER XV. POST OFFICE NET REVENUE

Previous investigations into the incidence of taxation, with the exception of that of Lord Samuel, described in his Paper on 'The Taxation of the various classes of the People',<sup>1</sup> did not deal with the receipts of the Post Office. The Colwyn Committee's *Report* excluded Post Office net revenue on the grounds that Post Office receipts were not classified as tax revenue.

The first question to decide is how far Post Office receipts can be regarded as a tax. Lord Samuel paid great attention to this in his Paper. He rightly rejected the view that total receipts should be regarded as revenue drawn from the public, and the expenditure of the Post Office taken as part of the expenses of government, as also the view that none of the revenue of the Post Office represented taxation. Whether or not the revenue should be regarded as made up of an ordinary rate of commercial profit (non-tax revenue), and anything above that as taxation, was more difficult to decide. 'If', to quote Lord Samuel, 'the matter were to be treated on commercial lines, the whole profit would be distributed, sooner or later, among the proprietors. The State, however, withholds it from the citizens to whom it belongs, and by keeping that profit is able to abstain from imposing taxation of equal amount in other ways. In other words, if the Post Office were run so as to pay its expenses and nothing more, additional taxation would have to be imposed to make up the revenue which is required.' Lord Samuel came to the conclusion that the net revenue only should be regarded as a tax. 'This conclusion was reached by most of the authorities who were consulted by the Royal Commission on Local Taxation—Sir E. Hamilton, Lord Courtney, Professors Bastable, Marshall and Sidgwick, and Mr Sanger. It has subsequently been adopted also by Sir Bernard Mallet.'

Lord Samuel went on to point out that 'the data for allocating this burden' (i.e. the burden of the net revenue) 'among the various classes of the population are scanty. In his book *British Budgets* (published in 1913) Sir Bernard Mallet estimated that the income tax-paying classes contributed thirteen-eighteenths of this revenue, and the other classes five-eighteenths. Sir Charles King,

<sup>1</sup> Presidential Address to the Royal Statistical Society, 21 January 1919.

the experienced Comptroller and Accountant-General of the Post Office, tells me that, although there are no figures in his Department on which a reliable estimate can be based, he has come to the conclusion that the income tax-paying classes contribute "at least three-fourths" of the net revenue. The two estimates, therefore, correspond very closely, and we may accept the figure of thirteen-eighteenths for our present purpose. Sir Bernard Mallet estimated also that the income tax-paying classes number one-ninth of the population. . . . For allocating this head of taxation among the sub-divisions of the population there are here, again, no trustworthy data. Our variations from the two main figures must necessarily be arbitrary. It should be remembered that almost all the Post Office profit is derived from the letter post, and that this in turn consists in an overwhelming proportion of business communications. A small tradesman with £300 a year is likely to contribute to this head of revenue a much larger sum than a clerk with an equal income. It may be contended also that the cost of postage, in the case of businesses, is a trade expense which is distributed, in the long run, over the community. It is hardly necessary, however, to pursue the question of incidence to this further stage, for the sums involved are comparatively so small that our main conclusions cannot be appreciably affected.'

It is not clear from Lord Samuel's figures how far, if at all, the principle of the Post Office charges as a trade expense has been taken into account, and whether the figures given by Lord Samuel refer to the distribution of the total net revenue, which seems to be the case, or only to the net revenue of non-business origin.

For the purpose of the present calculation net receipts have been regarded, in accordance with Lord Samuel's views, as the tax paid on account of the use of postal services. It should be noted that the Chancellor of the Exchequer's net receipts on account of Post Office revenue are not identical with the net receipts of the Post Office. Although the Post Office pays over the whole of its surplus to the Treasury, for the years 1933-34 to 1939-40 only a standard sum was retained by the Exchequer, the remainder being handed back to the Post Office for commercial development and any shortage being made good by the Post Office so far as the balance of the accumulated excesses permitted. The net receipts of the Exchequer include wireless net receipts, and (until its exhaustion in 1939-40) a certain sum from the Post Office Fund. The Ex-

chequer's net receipts on account of the Post Office amounted to £11.3 millions in 1937-28 and £15.3 millions in 1940-41. The Budget estimate for 1941-42 was £3.3 millions. The figures for 1940-41 and 1941-42, however, do not represent the true position, as actual net receipts (in other words, the tax burden for the use of postal services) are higher, if allowance is made for the cost of services rendered to other Government Departments without payment. These services are distinctly paid for by the public, as each year a certain sum is included in the expenditure of the Post Office on their account, against which there is no corresponding sum under income (i.e. the expenditure and income figures used for the calculation of the net receipts). In pre-war years, and therefore in 1937-38, this sum (about £2.5 millions) was regarded as roughly offset by the cost of services rendered to the Post Office by other Departments without payment. Under war-time conditions, however, this sum has grown rapidly, as the services of the Post Office are used to an increasing extent by other Government Departments. The figures are further complicated by a change in the Exchequer accounts in the allocation of expenditure between Votes and Votes of Credit. Allowing for both these disturbances the adjusted figures of net receipts (representing the taxation borne by the users of postal services) can be put at £19 millions for 1940-41, and tentatively estimated at £14 millions for 1941-42.

The total receipts of the Post Office for the year 1937-38 amounted to £86.6 millions, of which approximately £40 millions represented private expenditure on all services of the Post Office.<sup>1</sup> On the basis of the Ministry of Labour family budgets, collected during 1937-38, the average working-class family spent 5*d.* per week on postal services, making a total expenditure of approximately £11 millions for this social class. To this amount the proceeds of wireless licences have to be added. Two families out of every three in 1937-38 took out such licences, the number of licences being 8,187,398 on 30 June 1938, and the number of families over 12 millions in that year. £3-3½ millions should therefore be added on account of wireless licences to the £11

<sup>1</sup> Mr Feavearyear's Paper on 'The National Expenditure, 1932', in the *Economic Journal* of March 1934; Colin Clark, *National Income and Outlay* (Macmillan & Co. 1937); *The Home Market*, published under the aegis of the London Press Exchange (Allen & Unwin Ltd., London, 1939).

millions spent by the working classes on postal services, making a total expenditure for the working classes of £14-15 millions, or roughly 35 per cent of the total Post Office receipts on account of private expenditure. The remaining £25-£26 millions, or roughly 65 per cent, was contributed by the middle and upper classes. These figures relate to total receipts, and are therefore only of indirect interest, as it is the net receipts which it is necessary to allocate to the various incomes.

Lord Samuel stated in his Paper that almost all the profit of the Post Office was derived from the letter post. Since then the telephone has rapidly developed, while the telegraph service has continued to show a loss. There has been a great development in broadcasting, with a consequent increase in the net revenue accruing to the Exchequer on account of wireless licences. In spite of this the greater part of the net revenue still comes from postal receipts (stamps, money orders and postal orders), the profit of the Telephone Department only lately being greater than the loss of the Telegraph Department. Taking an average of the years 1931-37 the rate of profit on the turnover was 24.56 per cent for postal services, 5 per cent for the telephone service, and the deficit on account of the telegraph service was nearly 20 per cent. It can thus be seen that the postal services are still the main net revenue producers, and that these services in turn are used overwhelmingly by business. The contribution of business to the net revenue, taking into account the loss in telegraph services (used mainly by business), has been estimated at £6.3 millions, leaving £5 millions on account of private use of the services of the Post Office. Working-class expenditure on Post Office services is mainly on postage stamps, postal orders and money orders, and wireless licences. As the rate of profit on the total turnover for postal services and for the turnover of the working classes have been estimated, the working-class share in the production of the net revenue can be put at £2 millions, and that of all other classes at £3 millions. On this basis the burden on an average working-class family amounts approximately to 4s., on an average family to 8s., and on an average well-to-do family to £1. 2s. A further distribution was attempted on the basis of Lord Samuel's figures, and the shape of the curve was found to be less steep in the higher groups. It was not considered right to assume, as did Lord Samuel, that the income tax-paying classes are paying such a high proportion of



non-business net revenue. Table 63 shows estimates of the burden of the Post Office net revenue:

TABLE 63. THE BURDEN OF POST OFFICE NET REVENUE ON INCOMES

(Net Receipts for the different years in brackets)

Income group	Lord Samuel (family of five)						Our estimates (average family)					
	1903-04 (£4.3 mill.)			1913-14 (£6.2 mill.)			1918-19 (£6 mill.)			1937-38 (£11.3 mill.)		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
50		1	0		1	4						
100		2	0		2	8		2	0			
150		4	0		5	4		3	0			
200		6	0		8	0		4	0			
250		—			—			5	0			
300		—			—			7	0			
350		—			—			9	0			
500	1	0	0		1	6	0		15	0		
1,000	4	0	0		5	6	0		1	10	0	
2,000 and over	8	0	0		10	10	0		1	10	0	

It should be emphasized that columns 2, 3 and 4 in Table 63 are not strictly comparable, as Lord Samuel's figures very probably involve the distribution of the whole of the net revenue, whereas our figures refer only to the revenue which is of non-business origin. In our calculation, to take Lord Samuel's example, the burden on a small trader and the burden on a clerk in the same income group are the same, as the expenses of the small trader on account of his business are allocated to the whole community, since he is likely to shift such expenses on to the community in the prices which he charges for his goods.

#### *The Burden of Post Office Net Revenue in 1941-42*

Postal charges were increased in the Budget of April 1940. The percentage increase was not similar for the different services. It was lowest in the case of telephone services (e.g. 15 per cent on subscribers' rentals). The basic rate for inland ordinary telegrams (9 words or less) was raised from 6d. to 9d. The main postage increases were 1d. per packet on each inland and Imperial letter or postcard,  $\frac{1}{2}$ d. on each letter or packet of other classes, and 1d. on each inland parcel. Adjusted Post Office net receipts were estimated, as mentioned above, at £14 millions for the current

year.<sup>1</sup> Expert opinion considers that the whole of this amount will be derived from the postal service.

Owing to war-time conditions the position of the telegraph and telephone services has changed since 1937-38, and it is reasonable to assume that, notwithstanding the increased charges, the private user pays for his services and no more. Also there has been a marked change in the position of wireless licence receipts, and generally speaking it can be assumed that the revenue is sufficient to meet the expenses of the broadcasting services provided for the domestic listener, but leaves no margin. These assumptions leave only the postal service for consideration. The net revenue for the current year is received on a smaller postal traffic than in 1937-38, although on a higher scale of charges than in that period. While the decrease in traffic is mainly on account of loss of business traffic, the increased charges have no doubt hit the business users harder than the general public. It does not seem unreasonable to assume that the diverging factors very roughly offset one another, and that business and private users have both been subject to the same percentage increase in the burden.

We assume that out of the £14 millions net revenue, say £7·5 millions is on account of business use of postal services, and the remaining £6·5 millions is on account of private use. The distribution of the burden on the latter account among different income groups is probably the same as in 1937-38. At present all groups are being taxed only in so far as postal services are concerned, whereas in the case of wireless charges (an important item for the lower groups) and telephone services (an important item for the higher groups) only the costs of operation are covered.

The burden for 1941-42 on the average family may be estimated as follows:

TABLE 64. THE BURDEN OF POST OFFICE NET REVENUE ON INCOMES. 1941-42

Income group	£	s.	d.	Income group	£	s.	d.
£				£			
100	2	6		300	8	6	
150	3	9		350	11	0	
200	5	0		500	18	6	
250	7	3		1,000	1	17	0

<sup>1</sup> Exchequer receipts for 1941-42 amounted to £13·7 millions, instead of the estimated £3·3 millions. It is probable therefore that adjusted Post Office net receipts were higher than the estimates given above. In consequence the figures in Table 64 are underestimates.

## CHAPTER XVI. TAXES ALLOCATED ON GENERAL EXPENDITURE

### (PROTECTIVE DUTIES, TAXES ON PRODUCTION IN GENERAL, AND THE PURCHASE TAX)

#### 1. *Introduction.*

The burden of several indirect taxes, such as the protective duties, the taxes falling on production in general and the purchase tax, cannot be allocated on personal incomes in the same way as tea and sugar duties. The goods and services on which these taxes are levied—or at least the great majority of them<sup>1</sup>—although in general use by all classes of the people, are not purchased at regular intervals. Thus the actual amount spent on these goods will differ not only from one income group to the other, but also from one family to another on the same income level, owing not so much to differences in taste, as in the case of tobacco, but rather to differences in family circumstances. Thus any estimate of the average burden of these duties at different income levels that is based on average periodic expenditure on the goods and services involved must be largely hypothetical.

Among the difficulties of calculating the burden may be mentioned the following. In the first place it is not possible to delimit the precise scope of these taxes. Protective duties, for example, are levied on many hundreds of imported goods. Some of these are final goods ready for consumption, such as imported fruit; others enter into consumption combined with home-produced goods, such as imported silk. Imported raw materials, such as timber, are used in varying degrees in the production of a large number of home-produced goods. As regards employers' social insurance contributions, it is assumed in this Report that they enter into the prices of goods and services; it is probable that they affect to some degree all goods and services sold, although a searching analysis might find certain kinds of services which are unaffected by them. We have attempted to overcome this difficulty of calculation by relating the burden of these taxes to broad categories of expenditure. Thus protective duties were related to expenditure

<sup>1</sup> Foodstuffs are a conspicuous exception.

on consumption goods, and industrial taxes to expenditure on goods and services in general. The possible error in using broad categories instead of strictly limited categories, like expenditure on entertainments or on tobacco, is obvious.

The second difficulty involved is to find out what proportion of the price paid for any particular goods or services can be regarded as the tax, on the assumption that it fully enters into price. In the case of the purchase tax the difficulty involved is not large, as there were, until the Budget of 1942, two *ad valorem* rates only, although the average rate will vary from one income level to another. In the case of protective duties an exact solution of the problem is almost impossible, as these are a mixture of *ad valorem* and specific duties, complicated by Empire preferences and quotas. In order to make an estimate, we decided, first of all, to treat all these taxes as if they were *ad valorem* duties (which in the great majority of cases they are) and, secondly, on the basis of the actual or estimated yield and the estimated aggregate expenditure on goods liable to these imposts, to calculate the average rate of duty.

The third difficulty in the calculations is the very scanty information available about the expenditure of the community in general and of the different income groups in particular. While we made use of most of the available sources of information,<sup>1</sup> the reliability

1 Use was made mainly of the following family budget surveys: Sir John Orr, *Food, Health and Income* (London, 1937); Sir William Crawford and H. Broadley, *The People's Food* (London, 1938); 'Weekly Expenditure of Working Class Households in the United Kingdom, 1937-38', *Ministry of Labour Gazette*, December 1940; S. Rowntree, *Poverty and Progress*, 1941; *Social Survey of Merseyside* (Liverpool, 1934); *The New Survey of London Life and Labour*, 1930-35. For middle-class expenditure, etc. the following additional sources were used: D. Caradog Jones, 'Cost of Living of a Sample of Middle Class Families', *J.R.S.S.* 1928, pp. 463-502; L. R. Connor and B. Archer, *Middle Class Cost of Living* (quoted in L. R. Connor's *Statistics* (1934), p. 230 (refers to family budgets of tax inspectors)); P. K. O'Brien, 'A Middle Class Budget Enquiry', *Review of Economic Studies*, 1936-37 (refers to secondary school teachers); 'Middle Class Budgets' quoted by O'Brien; Allen and Bowley (in *Family Expenditure*, 1935); C. Clark (in *Conditions of Economic Progress*, 1940, p. 440); a recent middle-class family budget survey for 1938-39 for those working in offices, supplied confidentially for the purposes of the present enquiry; for recent working-class savings also C. Madge, 'The propensity to save in Blackburn and Bristol', *Economic Journal*, 1940. The data used were adjusted to cover our periods. We also made other allowances, if the data were contradictory to other evidence or to figures of total expenditure. Owing to the deficiencies of the existing statistics on expenditure, some arbitrariness in our procedure was inevitable.

of these data, especially as regards middle-class expenditures, is questionable. As no data are available on the expenditure of the higher classes, the estimated burden on these groups is even more conjectural than those on the other groups.

We employed, broadly speaking, the same method in estimating the burden of each of these categories. We deducted in each case from the total statutory income those parts of the income which do not bear the burden of the tax and assumed that the tax burden is in proportion to the rest of the income. The types of deductions made differ in each case; the particular procedure followed in each case is shown below. In certain cases, as in the case of the protective duties on food or the purchase tax, a more precise approximation was made.

As we have some idea of the distribution of total incomes in income groups for the typical family,<sup>1</sup> all the allocations were checked with a view to seeing whether the assumed distribution of the burden corresponded with the actual (or estimated) yield of the duties concerned.<sup>2</sup>

## 2. *Protective Duties.*

The protective duties as interpreted for the purposes of the present enquiry comprise customs duties of a protective and not of a revenue character. They are duties levied in order to protect the home producer and no corresponding excise duties therefore exist. (For the sake of convenience, the excise duties on home-made artificial silk, which have been decreasing in importance with the transformation of the silk duties from revenue duties to protective duties, especially since 1936, have been added to this group.)

The yield of the protective duties for 1937-38 and 1941-42, respectively, classified under the official headings, is shown below.<sup>3</sup>

<sup>1</sup> *The Home Market* (1939), p. 65.

<sup>2</sup> As in all cases, except the purchase tax, we estimated the average rate of duty by dividing the yield of the tax with the estimated expenditure, the check mentioned above is not entirely independent of the calculations.

<sup>3</sup> All the figures in this chapter were based on Budget estimates. Provisional receipts of the Exchequer from protective duties for 1941-42 were much higher than anticipated; they amounted to £38 millions, instead of £18 millions. It is unlikely however that the burden on personal incomes on account of these duties is very much affected by this increase. The increase was partly due to some arrears of duty from previous years, partly to increased imports of goods and materials predominantly imported for Government use.

There has been a considerable decrease, due to war-time restrictions of imports.

	Exchequer net receipts		
	1937-38	1941-42	
	(Budget estimate)	(Provisional receipts)	
£ mill.	£ mill.	£ mill.	
Silk and artificial silk <sup>1</sup>	6.3	1.8	1.0
Key industries duty	1.0	1.0	1.4
Hops	0.2	0.05	—
McKenna duties <sup>2</sup>	2.8	} 12.0	} 26.6
Duties collected under the Import Duties Act of 1932	29.7		
Ottawa duties	8.1	1.0	2.7
Beef and veal duties	3.6	3.0	6.3
Goods from Eire <sup>3</sup>	4.2	—	—
	55.9	18.85	38.0

<sup>1</sup> The silk duties as imposed originally in 1925 were revenue duties. Since 1934 home producers of artificial silk have succeeded in removing many features of the excise duty.

<sup>2</sup> In 1938 the McKenna duties were abolished and all the goods affected were taxed at the same rate under the Import Duties Act of 1932.

<sup>3</sup> Abolished from 19 May 1938.

The rates of the protective duties, which were imposed at different times under various legislative measures, differ considerably. The duties imposed under the Import Duties Act, 1932 are levied at a general *ad valorem* rate of 10 per cent. There are, however, many exceptions, preferences and also additional rates of duty. In 1937-38 a little less than two-fifths of the yield was collected at the 10 per cent *ad valorem* rate, while three-fifths was at other rates. Key Industries Duties were originally 33½ per cent *ad valorem* duties. Since then there have been many changes in the rates. The McKenna duties were originally 33½ per cent *ad valorem*. The Ottawa duties are a mixture of specific and *ad valorem* duties, the latter varying from 10 to 15 per cent. The burden of the protective duties must be allocated to the consumer of the taxed good, i.e. the consumer of the imported article. It may be—it is in fact most likely—that as a result of the duty the prices of the home-produced substitutes will be raised, or the incomes of the producers of these substitutes increased at the expense of the consumer. This problem, however, is a problem of the effects of taxation, and beyond the scope of the present enquiry. It is here assumed that it is only the consumer of the taxed imports who pays the tax. In practice, however, it is impossible to distinguish

the consumer of imports from the consumer of the home-produced substitutes. We have to assume, therefore, a random distribution of purchases, that is, to assume that each income group purchases imports and similar goods from domestic sources in the same proportion as all groups taken together. Furthermore, we assume that these duties constitute a burden on the British tax-payer and not on 'the foreigner', which was probably true in the majority of cases in the two years with which we are concerned, though in the early days of the operation of these duties it may not have been true, in particular for commodities such as beef or veal.

In order to allocate the burden of the protective duties on different income groups we classified these duties according to the goods on which they are levied:

	Net receipts in £ mill. (approx.)	
	1937-38	1941-42 <sup>1</sup>
1. Foodstuffs, etc.:		
Wheat, grain, etc.	1.6	
Butter, cheese	4.0	
Eggs	2.0	
Milk (condensed and powdered)	0.2	
Fruit	3.0	
Vegetables	1.2	
Fish	0.6	
Meat (including living animals for food and feeding stuff for animals)	8.3	
Other food	<u>1.5</u>	
Total	22.4	8.0
2. Consumption goods other than food (wholly or mainly manufactured)	21.5	5.85
3. Raw materials and machinery, etc.	<u>12.0</u>	<u>5.0</u>
	55.9	18.85

<sup>1</sup> Based on Budget estimates. The classification given is conjectural.

It was assumed that part of the burden on account of the duties on raw materials and machinery (the third category above) falls on civilian consumption, a part on expenditure on home investment and part on Government expenditure on goods and services. By estimating these proportions—mainly on the basis of the White Paper on National Income and Expenditure<sup>1</sup>—and by adding those parts which fall on civilian consumption and new investments to the second category,<sup>2</sup> we estimated that in 1937-38 about

<sup>1</sup> *An Analysis of the Sources of War Finance, etc.* Cmd. 6261, p. 15.

<sup>2</sup> The procedure adopted is not entirely correct, as part of the duties in category 3 will fall on civilian consumption of foodstuffs, and ought to be added to the first category. The error involved is in all probability very small.

£30 millions can be regarded as falling on consumption goods and in 1941-42 about £8·5 millions.

*Protective Duties on Foodstuffs.* We allocated the protective duties on foodstuffs in proportion to the expenditure on different foodstuffs, as ascertained from the different family budgets available. The surveys of Sir John Orr and of Sir William Crawford were the chief sources; the Ministry of Labour budgets for industrial households were also used as a check, though they are not available for separate income categories. Allowances were made for changes in consumption of different foodstuffs from 1934 and 1936, respectively (the basic year of the Orr and Crawford budgets), to 1937-38. On the basis of the estimated retail expenditure on these foodstuffs and their (actual or estimated) yield of the duty, the average *ad valorem* rate of duty was calculated for each separate item. The results of these calculations are set out in Tables 67 and 68.

Table 65 shows the actual amount of home consumption of these foodstuffs, the amount imported, the approximate proportion imported free of duty, and the proportion of home consumption which bears the duty. This table is therefore, to a certain extent, relevant in showing the limitations of our basic assumption that the burden of the protective duties is restricted to their effect on the price of imported goods. Table 66 shows the national average consumption compared with the working-class average consumption of the foodstuffs concerned. Table 67 shows the burden of protective duties for 1937-38 for each item separately, while Table 68 shows the burden for 1941-42. As the data available for the latter year are not sufficiently detailed we have allocated the aggregate of food duties to the aggregate of food expenditure at each level of income, as ascertained from recent family budget surveys.<sup>1</sup> In many cases, however, we have had to use pre-war figures, and to make allowances for possible changes.

*The Burden of Protective Duties on other Consumption Goods.* This burden was allocated in proportion to the expenditure on these goods at different income levels. We arrived at the expenditure data by subtracting from total incomes the following items: (a) direct taxes as ascertained by the present enquiry; (b) expendi-

<sup>1</sup> Vide especially the family budget surveys of the Oxford Institute of Statistics by Prof. A. L. Bowley and T. Schulz (*Bulletin of the Institute, passim*) and *The Cost of Living of the Working Classes* (Liverpool, 1941).



TABLE 65. PRODUCTION AND IMPORTS OF CERTAIN FOODSTUFFS IN THE UNITED KINGDOM. 1937-38<sup>1</sup>

	1	2	3	4	5
	Home-produced (thousand tons)	Imported (thousand tons)	Total	Imported from the Empire free of duty <sup>2</sup> (approx. proportion)	Percentage of total amount available for home consumption liable to duty
Wheat (as flour)	767	3,197	3,964	2/3	27
Butter	45	472	517	1/2	46
Cheese	37	146	183	9/10	8
Eggs	409	190	599	1/10	28
Milk, condensed	188	103	291	1/2	17
Beef and mutton	918	1,007	1,925	1/3	36
Bacon and ham	151	325	476		
Fruit and nuts	661	1,948	2,609	Over 1/2	36
Vegetables <sup>3</sup>	998	644	1,642	Over 1/2	18
Fish	774	186	960	Less than 1/10	2

<sup>1</sup> Sources. Sir John Orr and D. Lubbock, *Feeding the people in war-time* (Macmillan, London, 1940), p. 46 for columns 1 and 2; Foreign Trade Returns for column 4.

<sup>2</sup> All foodstuffs enjoying the Imperial Preference were imported free of duty. Some goods from Eire (mainly meat and butter) were liable to duties up to May 1938.

<sup>3</sup> Underestimate for home production since no returns are available for many common vegetables from market gardens.

TABLE 66. THE CONSUMPTION OF CERTAIN FOODSTUFFS IN THE UNITED KINGDOM. 1937-38

	National average <sup>1</sup> (lb. per head per annum)	Working-class average <sup>2</sup> (industrial households) (lb. per head per annum)
Wheat (as flour)		186.2
Bread	212	61.7
Meat: Beef, etc.		64.8
Bacon and ham	221	19.3
Fish	46	— <sup>3</sup>
Fruit and vegetables	208	— <sup>3</sup>
Butter	25	24.8
Cheese	9	9.7
Eggs (numbers)	234	194

<sup>1</sup> Sources. Orr and Lubbock, *Feeding the people in war-time* (London, 1940) and Sir John Russell, *Britain's food in war time* (Oxford Pamphlets on World Affairs, 1941).

<sup>2</sup> Source. *Ministry of Labour Gazette*, December 1940.

<sup>3</sup> Not known.

ture on food, as ascertained by different family budget surveys, mainly the Crawford survey; (c) expenditure on rent and rates, as ascertained from different budget surveys (for working classes mainly Rowntree, for middle classes the different budget surveys quoted); (d) expenditure on services (medical service, education, domestic service, entertainments, private motoring, holidays, charity) as ascertained from family budget surveys, etc.; (e) savings,

TABLE 67. ESTIMATED APPROXIMATE BURDEN OF PROTECTIVE DUTIES ON FOODSTUFFS. 1937-38

(In shillings per family of four per annum)

Income in £	Bread, flour, cakes, biscuits	Butter, cheese	Eggs	Milk (con- densed)	Fruit	Vege- tables	Meat	Fish	Total £ s.
100	3.0	2.8	1.2	0.05	1.0	0.7	6.9	0.2	16
150	3.8	5.2	1.6	0.03	1.9	1.4	10.2	0.3	1 4
200	4.3	6.2	2.1	0.03	2.8	2.1	13.5	0.7	1 12
250	4.7	7.6	2.8	0.03	4.2	2.8	16.5	1.0	2 0
300	5.2	9.0	3.5	0.03	5.0	3.3	19.9	1.4	2 7
350	5.0	9.7	6.4	0.02	5.0	5.0	20.1	1.6	2 13
500	4.8	11.1	7.3	0.02	7.3	6.6	26.5	2.3	3 6
1,000 and upwards	4.8	11.8	7.8	—	8.1	8.5	30.3	2.8	3 14

TABLE 68. ESTIMATED APPROXIMATE BURDEN OF PROTECTIVE DUTIES ON FOODSTUFFS. 1941-42

(Total for a family of four per annum)

£	(In shillings)	£	(In shillings)
100	5	300	8
150	6	350	10
200	6	500	15
250	7	1,000 and upwards	18

as ascertained from the different sources quoted above, and covering mainly contractual savings (insurance, etc.). The residue of the income after subtracting these items can be regarded, broadly speaking, as that part of the expenditure on which these duties may fall. As the basic data used in the calculations are not very reliable, and had to be adjusted to cover our periods, the error involved in this series is considerable.

We also calculated, with the help of the yield of the duty and of the aggregate expenditure on the goods affected, the average rate of duty. It was not possible to make allowances either for changes in the proportion of imported goods purchased in the

various classes, or for changes in the average rate of duty which the particular class of imported goods bear. It is not likely, however, that the error involved on this account is great, as the goods covered are, to a large extent, those in general use, and while some of them can be regarded as entirely luxury goods purchased by the wealthy, many imported goods belong to the category of cheap goods, purchased largely by the lower strata.

The burden of the protective duties for a family of four levied on consumption goods was estimated—on the basis of the considerations given above—as follows:

TABLE 69. THE BURDEN OF PROTECTIVE DUTIES ON CONSUMPTION GOODS

Income	1937-38		1941-42		Income	1937-38		1941-42	
£	£	s.	£	s.	£	£	s.	£	s.
100		10		8	1,000	7	10	2	10
150	1	4		12	2,000	12	0	3	6
200	2	8	1	4	2,500	12	14	3	10
250	3	0	1	10	5,000	15	0	6	0
300	3	10	1	15	10,000	21	0	8	0
350	3	12	1	16	20,000	32	0	10	0
500	5	10	2	8	50,000	50	0	15	0

The total estimated burden of protective duties for a family of four—adding together those falling on foodstuffs and on other consumption goods—is as follows:

TABLE 70. THE TOTAL BURDEN OF THE PROTECTIVE DUTIES

Income	1937-38		1941-42		Income	1937-38		1941-42	
£	£	s.	£	s.	£	£	s.	£	s.
100	1	6		13	1,000	11	4	3	8
150	2	8		18	2,000	15	14	4	4
200	4	0	1	10	2,500	16	8	4	8
250	5	0	1	17	5,000	18	14	6	18
300	5	17	2	3	10,000	24	14	8	18
350	6	5	2	6	20,000	35	14	10	18
500	8	16	3	3	50,000	53	14	15	18

### 3. Taxes Falling on Production in General.

Indirect taxes can be classified in two groups: (a) the great majority, such as the tobacco or sugar duties, fall on personal consumption; (b) some of them, however—such as duties on industrial oil or on goods vehicles, etc.—fall on production in general.

The following items were included in this latter group. The magnitude of these taxes was calculated on lines explained in the previous chapters.

	1937-38 £ mill. (approx.)	1941-42 £ mill. (approx.)
Duties on industrial petrol and oil; licence and fuel duties on commercial vehicles; also licence and fuel duties on private cars, buses and taxis used for business purposes <sup>1</sup>	39·0	60·0
Employers' contributions to the Social Insurance Schemes <sup>2</sup>	52·0	65·0 <sup>3</sup>
Local rates on premises other than dwelling-houses <sup>4</sup>	66·7	74·0 <sup>3</sup>
Scientific alcohol <sup>5</sup>	0·4	0·5 <sup>3</sup>
Post Office net revenue on business account <sup>6</sup>	6·3	7·5
Stamp duties on business account <sup>7</sup>	10·0	5·0
	<hr/> 174·4	<hr/> 212·0

<sup>1</sup> Vide Chapter xii.

<sup>2</sup> Vide Chapter xiv.

Estimates on basis of figures available for the last period.

<sup>4</sup> Vide Chapter ii.

<sup>5</sup> Vide Report of the Board of Customs and Excise.

<sup>6</sup> Vide Chapter xv.

<sup>7</sup> Vide Chapter vii.

We assume that the taxes falling on production in general enter into the prices of the goods and services concerned and are shifted on to the consumers of these goods and services. Part of these taxes is, therefore, a burden on civilian expenditure, another part on Government expenditure, and a third, a small part, on expenditure on home investment. The last is paid out of savings. We allocated on personal incomes the first and the third categories. Their magnitude was calculated as in the White Paper on National Income and Expenditure, quoted above. The figures were adjusted to cover the years 1937-38, 1941-42. We estimated that about £140 millions in 1937-38 and £110 millions in 1941-42 can be regarded as falling on personal incomes.

The burden of these taxes can be allocated on personal incomes, as a first approximation, in proportion to expenditure on all goods and services. We made an estimate as to the part of these taxes that can be regarded as a levy on goods and the part that can be regarded as a levy on services. The great bulk of these taxes (approximately nine-tenths in 1937-38 and probably a little less in 1941-42) is a levy on goods. The remainder, which can be regarded as a levy on services, is made up by the following items. (1) *Part of employers' social insurance contributions paid on account of*

indoor domestic servants, and on personnel in transport undertakings, banks, insurance companies (the last three categories only so far as used for personal service and not for business purposes), in hotels, boarding houses, etc., and entertainments. (2) *Part of the rates* paid by railway companies, banks, etc. (again so far only as attributable to passenger traffic and personal service respectively). (3) *Part of the motor duties* paid e.g. by doctors, etc. (4) *Part of the Post Office net receipts* on business account falling on services, especially on account of football pools.

We allocated that part of the general industrial taxes which we regarded as a levy on goods in proportion to the expenditure on these goods at different income levels. We arrived at these expenditure figures by subtracting from total incomes direct taxes, savings, amounts paid for rent and rates and expenditure on services. That part of the general industrial taxes which we regarded as levies on services we allocated in proportion to the expenditure of different classes on services.

The estimated amount of total expenditure on goods and services, together with the estimated yield of the duties on production in general, gave us again a basis to make a conjecture as to the average rate of the duty on both goods and services. It was not possible to make allowances for the possible variations of the rates at different income levels.

We arrived at the following estimates of the burden of the taxes falling on production in general for a family of four:

TABLE 71. THE BURDEN ON INCOMES OF TAXES FALLING ON PRODUCTION IN GENERAL

£	1937-38			1941-42		
	Goods	Services	Total	Goods	Services	Total
	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
100	2 8	2	2 10	1 16	1	1 17
150	4 0	3	4 3	3 0	2	3 2
200	5 12	5	5 17	4 4	3	4 7
250	6 8	8	6 16	4 16	7	5 3
300	8 0	10	8 10	5 12	10	6 2
350	8 12	16	9 8	5 16	15	6 11
500	11 8	1 18	13 6	7 16	1 5	9 1
1,000	17 0	5 0	22 0	10 10	1 16	12 6
2,000	26 0	12 10	38 10	14 8	4 0	18 8
2,500	28 0	16 0	44 0	16 0	5 0	21 0
5,000	40 0	25 0	65 0	27 0	8 0	35 0
10,000	65 0	40 0	105 0	40 0	15 0	55 0
20,000	100 0	75 0	175 0	60 0	25 0	85 0
50,000	150 0	150 0	300 0	80 0	40 0	120 0

#### 4. *The Purchase Tax.*

The purchase tax was announced by the Chancellor of the Exchequer when he introduced the Budget on 23 April 1940. It was finally imposed in the second Budget for the financial year 1940-41 and came into force on 22 October 1940. The purchase tax is a form of sales tax, levied as a percentage on the price when the goods pass from the wholesaler to the retailer. Thus an essential preliminary to the successful working of the tax was the creation of a register of the wholesalers on whose sales to unregistered persons the tax was to be levied. The legislature intended that the ultimate burden of the tax should be shifted on to the consumer, as one of its purposes was to limit civilian consumption. The consumer is furnished with certain safeguards against exploitation under cover of the tax by the Prices of Goods Act, 1941, and by the provision requiring wholesalers to disclose the amount of the purchase tax on their invoices to retailers.

The purchase tax, as incorporated in the Finance (No. 2) Act, 1940, covers a very limited range of expenditure. An overwhelming proportion of the expenditure on consumption is not liable to the tax. It is not levied on food and drink, or in general on articles already subject to a heavy duty, such as tobacco or petrol; it applies neither to services, nor to fuel, gas, electricity or water; exports and raw materials are also exempt. Moreover, there are further exemptions from the tax within the field which it covers, the most important being children's clothing and children's boots and shoes. It can be estimated that roughly 13-15 per cent of the total personal expenditure of the community is liable to the tax (see Table 78).

There were, in 1941-42, two rates of duty. The higher rate was levied on the purchase of goods which were either luxuries, or articles which, in the circumstances of war, could be dispensed with or their replacement postponed. The tax on these goods was at the rate of one-third of the wholesale price, representing an average addition of about 24 per cent to retail prices. The goods subject to this higher rate included luxuries such as furs, articles made of real silk, lace, china and porcelain, cut glassware, fancy goods, jewellery, toilet preparations including cosmetics, and articles not normally requiring immediate replacement, such as haberdashery, miscellaneous textile piece goods, and furniture. The lower rate was one-sixth, or 16½ per cent of the wholesale price, representing an average

addition of about 12 per cent to retail prices. The goods subject to the lower rate included such articles as clothing, boots and shoes (other than children's wear, which was completely exempt, and luxury clothing—furs, silk, etc.—which was subject to the higher rate) and household china and glassware. Among the complete exemptions—apart from those already mentioned—were agricultural machinery and equipment, certain medicines and medical appliances, and books, periodicals and newspapers. Medicines and drugs, other than those exempted, were taxed at the lower rate.<sup>1</sup>

The anticipated total yield of the Purchase Tax for 1941-42 was estimated at £70 millions.<sup>2</sup> It should be noted that the main factor determining the expenditure on goods liable to purchase tax, and thus the yield of the tax, is not so much the demand for these goods as the available supply. Even the rationing of clothing probably did not alter greatly the total expenditure of the community on clothing, as the scheme was not intended to affect supplies but only their distribution. The poorer classes, for example, got a fair share of the limited supplies, which might otherwise not have been possible.

One of the difficulties in estimating the tax burden—as pointed out in the introduction to this chapter—is that many of the goods subject to the impost are bought by consumers at irregular intervals or in special circumstances, and in many cases more or less regardless of income. Owing to the difficulties involved, all that we have been able to do is to make a rough guess at the average burden per family. This figure is probably representative for a lower middle-class family with the average number of persons. A further estimate has been made of the approximate burden on a working-class family.

<sup>1</sup> For details vide Seventh Schedule of Finance (No. 2) Act, 1940.

<sup>2</sup> A revised estimate by the Chancellor of the Exchequer anticipated a considerable increase in the yield of the purchase tax for 1941-42. While the reasons for this increase were not indicated, it may have been due to increase in prices, to depletion of stocks or to larger supplies than were expected or to a combination of all three factors. In the absence of information, at the time of the revision, we have made the simple assumption that all goods and all income groups were affected in the same way and that the increase is, say, 25 per cent. While the whole chapter and all the tables are necessarily based on the original estimates of the yield, allowance has been made for the anticipated increase in Table 72 and in the Summary Tables of Part I. Provisional receipts of the Exchequer for 1941-42 amounted to £98 millions. This figure includes however approximately £8 millions arrears of duty from the previous year but, for administrative reasons, the yield represents less than a full 12 months' dutiable transactions.

The estimates have been made on the following lines:

(a) Some information is available relating to the pre-war expenditure of the community on commodities now liable to purchase tax. This provides a rough guide to the expenditure per family on these goods. The figures were based mainly on *The Home Market*<sup>1</sup> calculations, checked, as far as possible, by other sources. The estimates of expenditure given in the White Paper<sup>2</sup> for 1938 and 1940 were not detailed enough to be of any use for our purposes.

(b) On the basis of such information as is available, a rough estimate was made of the current expenditure of the community on purchase tax commodities. This, combined with the figures under (a), enabled us to estimate the current expenditure per family on purchase tax goods. The results are presented in Tables 73 and 74.

On the basis of the method outlined above the expenditure per family on purchase tax goods has been estimated at £40 per annum at retail value including the tax. It has been further estimated that about three-fifths of this amount was spent on goods liable to the lower rate, and two-fifths on goods liable to the higher (basic) rate. Thus, on the average, say, 14·2 per cent of the retail price inclusive of tax can be regarded as tax (corresponding to an average addition of about 16·5 per cent to the retail price), and the average burden of the purchase tax per family is consequently in the order of £6 per annum. As already mentioned, this figure will vary very considerably from one income group to another, owing to the great differences in expenditure. This is true in spite of the clothes rationing, although the differences have been reduced by this measure. In addition, expenditure will differ between families at the same income level, as the purchases of these families are bound to show a wide variation. It is even possible that no family exists which will purchase just the 'average' collection of goods of the 'average' quality.

A second approach was made by estimating the current expenditure of an average working-class family on commodities subject to purchase tax. In order to estimate this expenditure the following considerations were taken into account:

<sup>1</sup> *The Home Market*, 1939 edition (George Allen & Unwin Ltd., London).

<sup>2</sup> Cmd. 6261, 1941.



(a) The average decrease in expenditure on goods subject to purchase tax.

(b) The pre-war distribution of working-class expenditure on commodities now liable to the tax, as calculated from the family budget survey of the Ministry of Labour, and the estimated war-time reduction in this expenditure. For example, in the working classes a smaller proportion of the total expenditure is normally on furniture and other durable goods than in the middle and higher groups. Thus the reduction in working-class expenditure might be expected to be smaller than that of other classes. Increased wages may even encourage the purchase of durable goods, so far as these are available.

(c) The great increase in the price of clothing since 1937, and the smaller, but nevertheless considerable, increases in the price of other commodities.

(d) The influence of the clothes rationing scheme on expenditure on clothing. A tentative estimate of the resulting expenditure, based on current prices, is given in Table 77. Average expenditure for five groups, divided according to differences in quality, has been calculated on the basis of various allocations of the sixty-six coupons.

On the basis of these four considerations, an average expenditure of £25 per annum at retail value including the tax on purchase tax goods by a working-class family has been estimated. Of this £25, roughly two-thirds is spent on goods liable to the lower rate, and one-third on goods liable to the higher rate, the average percentage of tax in the retail price including tax thus being roughly 13·6 per cent (corresponding to an average addition of about 15·7 per cent to the retail value). The average burden of the tax on the expenditure of a working-class family can therefore be estimated at £3. 8s. On the basis of this estimate, and taking into account the number of working-class families, it appears that less than half of the total yield of the purchase tax is contributed by the working classes.

An estimate of the conjectured burden of the tax is given below. It is based on the two average rates (one for the working classes and the other for the other income groups) arrived at by our calculations, and on the estimated expenditure on goods liable to the tax at different income levels. For the latter purpose we

deducted from total incomes direct taxes, and the estimated proportions of the income devoted to foodstuffs, services, rates and savings. As our knowledge of the magnitude of all these items is very scanty, the calculations show nothing more than the possible magnitude of the burden. Column 1 shows the results based on the original estimate of the yield at £70 millions, while column 2 makes a proportionate all-round allowance for an estimated increase of 25 per cent. The latter figures were included in the Summary Tables on pp. 52-62.

TABLE 72. THE BURDEN OF THE PURCHASE TAX. 1941-42  
(For a family of four)

	Our original estimate based on an anticipated yield of £70 millions (approx.)	Revised estimate based on a 25 per cent increase in the yield (approx.)
£	£ s.	£ s.
100	1 10	1 17
150	2 10	3 2
200	3 2	3 7
250	3 6	4 2
300	4 0	5 0
350	5 10	6 7
500	8 0	10 0
1,000	12 0	15 0
2,000	20 0	25 0
2,500	22 0	27 10
5,000	35 0	43 15
10,000 and over	40 0	50 0

TABLE 73. ESTIMATED EXPENDITURE ON COMMODITIES (NOW) SUBJECT  
TO THE PURCHASE TAX. 1937, 1941-42

	Approximate retail value, 1937 <sup>1</sup> £ mill.	Conjectured retail value including tax, 1941-42 <sup>2</sup> £ mill.
Clothing	330	250
Furniture, soft furnishing, hardware, china, glassware, etc.	260	130
Fancy goods, drugs, etc.	200	100
Vehicles	50	10
	<u>840</u>	<u>490</u>

<sup>1</sup> Source. *The Home Market.*

TABLE 74. ESTIMATED EXPENDITURE ON COMMODITIES (NOW) SUBJECT TO THE PURCHASE TAX BY AN AVERAGE FAMILY (3·6 PERSONS). 1937, 1941-42

	Approximate retail value 1937 <sup>1</sup> £ per annum	Conjectured retail value including tax, 1941-42 £ per annum
Clothing	27	21 <sup>2</sup>
Furniture, etc.	20	10
Fancy goods, etc.	16	8
Vehicles	4	1
	<u>67</u>	<u>40</u>

<sup>1</sup> Source. *The Home Market*.<sup>2</sup> Based on Table 73, and thus on available supplies. Figures in Table 77 would suggest that this estimate is rather on the low side.TABLE 75. THE DISTRIBUTION OF NATIONAL EXPENDITURE IN 1937 COMPARED WITH THE DISTRIBUTION OF WORKING-CLASS EXPENDITURE<sup>1</sup>

	Total national expenditure (1) £ mill.	Weekly expenditure per family		Weekly expenditure per working- class family	
		(2)		(4)	
		s. d.	(3) %	s. d.	(5) %
Food	1,360	41 0	30·8	34 2½	41·8
Rent	620	18 9	14·1	10 10	13·2
Fuel	180	5 6	4·1	5 8½	7·0
Clothing	381	11 6	8·7	9 4	11·4
Small household expenses	37	1 1	0·8	1 11¼	2·4
Tobacco	160	4 10	3·6	2 6½ <sup>2</sup>	3·1
Drink	260	7 10	5·9	9½ <sup>2</sup>	0·9
Rail	170	5 1	3·8	2 3	2·8
Newspapers, books	50	1 6	1·1	1 1½	1·4
Piece goods (soft furnishing, glass, china)	67	2 0	1·5	1 3½	1·6
Furniture	118	3 7	2·7	1 1½	1·3
Hardware	75	2 3	1·7	7	0·7
Drugs and fancy goods	148	4 6	5·8	2 7	3·2
Sports and travel goods	34	1 0			
Cars and cycles	50	1 6			
Petrol and oil	25	9			
Domestic service and laundry	190	5 9	4·3	9½	0·9
Entertainments, etc.	270	8 2	6·1	2 0¼ <sup>2</sup>	2·5
Medicine	50	1 6	1·1	1 8	2·0
Postal services	40	1 3	0·9	5	0·5
Miscellaneous services	135	4 0	3·0	2 8½	3·3
TOTALS	4,420	133 4	100·0	81 9½	100·0

<sup>1</sup> Columns 1-3 are based on *The Home Market*, 1939, and refer to the calendar year 1937, while columns 4 and 5 are based on the family budget survey of the Ministry of Labour on industrial households and refer to 1937-38. The items are, of course, not strictly comparable.<sup>2</sup> Very probably underestimates.

TABLE 76. ESTIMATED EXPENDITURE BY AN AVERAGE WORKING-CLASS FAMILY ON COMMODITIES (NOW) SUBJECT TO THE PURCHASE TAX

	Average family retail value 1937-38 £ per annum	Average working-class family	
		Retail value 1937-38 £ per annum	Retail value (incl. tax) 1941-42 £ per annum
Clothing	27	21	15 <sup>1</sup>
Furniture, etc.	24	6	$\frac{4}{1}$
Fancy goods, etc.	16	9	6
	67	36	25

<sup>1</sup> With allowance for the average number of young children in the family, whose clothing is neither rationed nor liable to purchase tax.

TABLE 77. AN ESTIMATE OF EXPENDITURE ON CLOTHING UNDER THE RATIONING SCHEME (FOR FIVE GROUPS, DIVIDED ACCORDING TO DIFFERENCES IN QUALITY)<sup>1</sup>

	Working classes		Middle and higher classes		
	(1)	(2)	(3)	(4)	(5)
	£ s.	£ s.	£ s.	£ s.	£ s.
Men	3 3	5 12	9 4	15 0	25 10
Women	3 0	5 2	10 0	18 0	36 3
Children (3-12 years)	2 10	3 5	7 5	11 10	15 0

<sup>1</sup> At prices in force in August 1941.

TABLE 78. THE DISTRIBUTION OF PERSONAL EXPENDITURE IN 1937 AND 1940 ON THE BASIS OF RETAIL VALUES (ANALYSED FOR PURCHASE TAX PURPOSES)

	1937 %	1940 %
	(approx.)	(approx.)
A. <i>Commodities</i> not liable to purchase tax or any other tax (e.g. food, grocery, children's clothes, books, etc.)	31	32
B. <i>Essential Services</i> not liable to State tax (rent, fuel, etc.)	18	20
C. <i>Other Services</i> not liable to tax (rail, domestic service, laundry, medicine, etc.)	17	17
D. <i>Commodities</i> liable to other State tax (tea, sugar, coffee, cocoa, drink, tobacco, petrol and oil)	11	14
E. <i>Services</i> liable to other State tax (entertainments, postal services)	4	3
F. <i>Commodities</i> liable to purchase tax (clothes, piece goods, furniture, hardware, drugs, cars, stationery, etc.)	19	14
	100	100

APPENDIX TO PART II  
*RATES OF TAXATION IN FORCE FOR THE  
YEARS 1926-27 TO 1942-43<sup>1</sup>*

I. INLAND REVENUE DUTIES

<sup>1</sup> For previous years vide Appendices VIII and IX of the Colwyn *Report*, 1927.

1. *Income Tax in force for the years 1926-27 to 1942-43<sup>1</sup>*

	1926-27 and 1927-28	1928-29 and 1929-30	1930-31	1931-32 to 1933-34	1934-35	1935-36	1936-37
Standard rate of tax in the £	4s. od.	4s. od.	4s. 6d.	5s. od.	4s. 6d.	4s. 6d.	4s. 9d.
Allowances, deductions and reliefs granted to individuals:							
Exemption limit			See Personal allowances			£125	£125
Earned income allowance—proportion of earned income and maximum allowance	$\frac{1}{2}$ (£250)	$\frac{1}{2}$ (£250)	$\frac{1}{2}$ (£250)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)
Personal allowances:							
1. Married persons	£225	£225	£225	£150	£150	£170	£180
2. Other persons	£135	£135	£135	£100	£100	£100	£100
Children under 16 years of age or over 16 if continuing full time education:							
1. One child	£36	£60	£60	£50	£50	£50	£60
2. Each subsequent child	£27	£50	£50	£40	£40	£50	£60
Reduced rate of tax chargeable on the first portion of the taxable income	2s. od. on £225	2s. od. on £225	2s. od. on £250	2s. 6d. on £175	2s. 3d. on £175	1s. 6d. on £135	1s. 7d. on £135
			1939-40		1940-41		
	1937-38	1938-39	Finance Act 1939	Finance (No. 2) Act 1939	Finance Act 1940	Finance (No. 2) Act 1940	1941-42 and 1942-43
Standard rate of tax in the £	5s. od.	5s. 6d.	5s. 6d.	7s. od.	7s. 6d.	8s. 6d.	10s. od.
Allowances, deductions and reliefs granted to individuals:							
Exemption limit	£125	£125	£125	£125	£120	£120	£110
Earned income allowance—proportion of earned income and maximum allowance	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£300)	$\frac{1}{2}$ (£250)	$\frac{1}{2}$ (£250)	$\frac{1}{2}$ (£150)
Personal allowances:							
1. Married persons	£180	£180	£180	£180	£170	£170	£140
2. Other persons	£100	£100	£100	£100	£100	£100	£80
Children under 16 years of age or over 16 if continuing full time education:							
1. One child	£60	£60	£60	£60	£50	£50	£50
2. Each subsequent child	£60	£60	£60	£60	£50	£50	£50
Reduced rate of tax chargeable on the first portion of the taxable income	1s. 8d. on £135	1s. 8d. on £135	1s. 8d. on £135	2s. 4d. on £135	3s. 9d. on £165	5s. od. on £165	6s. 6d. on £165

<sup>1</sup> For further details (allowances for wife's earned income, life insurance premiums, etc.) vide *Income Tax Act, 1918 and Finance Acts passim*; also Reports of the Board of Inland Revenue.

2. Rates of Supertax and Surtax in force for the years 1926-27 to 1942-43<sup>1</sup>

	Rates of supertax 1926-27 to 1928-29	Surtax (excess of income tax over standard rate)				
		1928-29	1929-30	1930-31 to 1937-38	1938-39 <sup>2</sup>	1939-40 <sup>3</sup> to 1941-42
In respect of first £2,000 of income	Nil	Nil	Nil	Nil	Nil	Nil
In respect of the excess over £2,000:	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
For every £1 of the first £500 of the excess (to £2,500)	9	9	1 0	1 1·2	1 3	2 0
For every £1 of the next £500 (to £3,000)	1 0	1 0	1 3	1 4½	1 6	2 3
„ £1 „ £1,000 (to £4,000)	1 6	1 6	2 0	2 2·4	2 6	3 3
„ £1 „ £1,000 (to £5,000)	2 3	2 3	3 0	3 3·6	3 6	4 3
„ £1 „ £1,000 (to £6,000)	3 0	3 0	3 6	3 10·2	4 3	5 0
„ £1 „ £2,000 (to £8,000)	3 6	3 6	4 0	4 4·8	5 0	5 9
„ £1 „ £2,000 (to £10,000)	4 0	4 0	5 0	5 6	6 3	7 0
„ £1 „ £5,000 (to £15,000)	4 6	4 6	5 6	6 0·6	7 6	8 3
„ £1 „ £5,000 (to £20,000)	5 0	5 0	6 0	6 7·2	8 6	9 0
„ £1 „ £10,000 (to £30,000)	5 6	5 6	6 6	7 1·8	9 0	9 6
„ £1 „ £20,000 (to £50,000)	6 0	6 0	7 0	7 8·4	9 6	9 6
„ £1 of the remainder (above £50,000)	6 0	6 0	7 6	8 3	9 6	9 6

<sup>1</sup> Surtax at the rates shown e.g. for 1936-37 was payable on 1 January 1938, at the rates shown for 1940-41 was payable on 1 January 1942.

<sup>2</sup> Vide Finance (No. 2) Act, 1939.

<sup>3</sup> Vide Finance (No. 2) Act, 1940.

3. Rates of Estate Duty in force for the years 1926-27 to 1942-43<sup>1</sup>

Where the net principal value of the estate		Rate of duty per cent when the death occurred				
Exceeds £	And does not exceed £	After 29 June 1925	After 31 July 1930	After 25 April 1939	After 27 Sept. 1939	After 23 July 1940
100	500	1	1	1	1	1
500	1,000	2	2	2	2	2
1,000	5,000	3	3	3	3	3
5,000	10,000	4	4	4	4	4
10,000	12,500	5	5	5	5.5	6
12,500	15,000	6	6	6	6.6	7.2
15,000	18,000	7	7	7	7.7	8.4
18,000	21,000	8	8	8	8.8	9.6
21,000	25,000	9	9	9	9.9	10.8
25,000	30,000	10	10	10	11.0	12
30,000	35,000	11	11	11	12.1	13.2
35,000	40,000	12	12	12	13.2	14.4
40,000	45,000	13	13	13	14.3	15.6
45,000	50,000	14	14	14	15.4	16.8
50,000	55,000	15	15	16.5	18.0	19.5
55,000	65,000	16	16	17.6	19.2	20.8
65,000	75,000	17	17	18.7	20.4	22.1
75,000	85,000	18	18	19.8	21.6	23.4
85,000	100,000	19	19	20.9	22.8	24.7
100,000	120,000	20	20	22	24	26
120,000	140,000	21	22	24.2	26.4	28.6
140,000	150,000	22	22	24.2	26.4	28.6
150,000	170,000	22	24	26.4	28.8	31.2
170,000	200,000	23	24	26.4	28.8	31.2
200,000	250,000	24	26	28.6	31.2	33.8
250,000	300,000	25	28	30.8	33.6	36.4
300,000	325,000	25	30	33.0	36	39
325,000	400,000	26	30	33.0	36	39
400,000	500,000	27	32	35.2	38.4	41.6
500,000	600,000	28	34	37.4	40.8	44.2
600,000	750,000	28	36	39.6	43.2	46.8
750,000	800,000	29	36	39.6	43.2	46.8
800,000	1,000,000	29	38	41.8	45.6	49.4
1,000,000	1,250,000	30	40	44.0	48.0	52.0
1,250,000	1,500,000	32	42	46.2	50.4	54.6
1,500,000	2,000,000	35	45	49.5	54.0	58.5
2,000,000	—	40	50	55.0	60	65

<sup>1</sup> For further details vide Finance Acts passim. For rates of legacy and succession duties vide Reports of the Board of Inland Revenue.

## 4. Other Inland Revenue Duties

*Stamp duties.* Vide Stamps Act of 1891, Finance Acts passim. As a convenient source vide *Whitaker's Almanack*.

*National Defence Contribution and Excess Profits Tax.* Vide Finance Acts, 1937 and subsequently.



## II. CUSTOMS AND EXCISE DUTIES IN FORCE FOR THE YEARS 1926-27 TO 1942-43

### 1. Tea Duty<sup>1</sup>

Year ended 31 March	Rate of customs duty	
	Full (lb.)	Preferential (lb.)
	<i>d.</i>	<i>d.</i>
From 1926-27 to 1929-30 <sup>2</sup>	4	3½
1930-31	Nil	Nil
1931-32	Nil	Nil
From 1932-33 to 1935-36 <sup>3</sup>	4	2
1936-37 <sup>4</sup>	{ 4 6	{ 2 4
1937-38	6	4
1938-39 <sup>5</sup>	{ 6 8	{ 4 6
From 1939-40 to 1942-43	8	6

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 108.

<sup>2</sup> Duty repealed 22 April 1929.

<sup>3</sup> Duty reimposed 20 April 1932.

<sup>4</sup> From 22 April the higher rate was in force.

<sup>5</sup> From 27 April the higher rate was in force.

### 2. Sugar Duty<sup>1</sup>

Year ended 31 March	Main duty	
	Full (cwt.)	Preferential (cwt.)
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
From 1926-27 to 1938-39	11 8 <sup>2</sup>	5 10 <sup>3</sup>
1939-40	{ 14 0 <sup>4</sup> 23 4 <sup>5</sup>	{ 8 2 <sup>4</sup> 17 6 <sup>6</sup>
1940-41 to 1942-43	23 4	17 6

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 118. For other rates vide Reports of the Board of Customs and Excise *passim*.

<sup>2</sup> Rate on refined sugar (exceeding 98° polarization): rates on raw sugar (not exceeding 98°) are equivalent to 9s. 4*d.* per cwt. on refined.

<sup>3</sup> Rate on refined sugar (exceeding 99° polarization): rates on raw sugar (not exceeding 99°) are equivalent to 5s. 0½*d.* per cwt. on refined. For further preferences on certificated colonial sugar since 1932-33 vide Reports of the Board of Customs and Excise.

<sup>4</sup> From 25 April 1939.

<sup>5</sup> Since 27 September 1939. Equivalent rate on raw sugar is 21s.

<sup>6</sup> From 27 September 1939.

3. Tobacco Duty<sup>1</sup>

	Main duty <sup>2</sup>			
	Full		Preferential	
	(lb.)		(lb.)	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
1926-27	8	2	6	1½
1927-28	8	10	6	9½ (12 April)
1928-29	8	10	6	9½
1929-30	8	10	6	9½
1930-31	8	10	6	9½
1931-32	9	6	7	5½ (11 Sept. 1931)
From 1932-33 to 1938-39	9	6	7	5½
1939-40	11	6	9	5½ (26 April)
	13	6	11	5½ <sup>3</sup>
1940-41	17	6	15	5½ (24 April)
	19	6	17	5½ <sup>4</sup>
1941-42	19	6	17	5½
1942-43	29	6	27	3½ (15 April)

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 127 and p. 130.

<sup>2</sup> Duty on imported unmanufactured unstripped tobacco, containing 10 per cent or more moisture, which governs the other duties.

<sup>3</sup> In force as from 28 September 1939 under Finance (No. 2) Act, 1939.

<sup>4</sup> In force as from 24 July 1940 under Finance (No. 2) Act, 1940.

4. Beer Duty<sup>1</sup>Year ended  
31 MarchBasic duty<sup>2</sup>

1926-27	100s. per standard barrel less rebate of 20s. per bulk barrel
1927-28	" " " "
1928-29	" " " "
1929-30	" " " "
1930-31	103s. per standard barrel less rebate of 20s. per bulk barrel (15 April)
1931-32	134s. per standard barrel less rebate of 20s. per bulk barrel (11 Sept.)
1932-33	" " " "
1933-34	24s. per barrel at 1027° plus 2s. per additional degree (26 April)
1934-35	" " " "
1935-36	" " " "
1936-37	" " " "
1937-38	" " " "
1938-39	" " " "
1939-40	" " " "
	48s. per barrel at 1027° plus 2s. per additional degree (28 Sept.)
1940-41	65s. per barrel at 1027° plus 2s. 6d. per additional degree (24 April)
	81s. per barrel at 1027° plus 3s. per additional degree (24 July)
1941-42	" " " "
1942-43	118s. 1½d. per barrel at 1027° plus 4s. 4½d. per additional degree (15 April)

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 143 and p. 152.

<sup>2</sup> Excise duty on home-made beer. A standard barrel is 36 gallons at gravity of 1055°. A bulk barrel is 36 gallons irrespective of gravity.

5. *Spirits Duty*<sup>1</sup>

	Main duty <sup>1</sup>	
	(proof gallon)	
	s.	d.
From 1926-27 to 1938-39	72	6
1939-40	72	6
	82	6 (28 Sept.)
1940-41	97	6 (24 April)
1941-42	97	6
1942-43	137	6 (15 April)

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 144 and p. 153.

<sup>2</sup> Excise duty on home-made spirits, which governs the rates of duty on imported spirits.

6. *Wine duty*<sup>1</sup>

## Rates of duty on wine in cask

	At lower rates of duty <sup>2</sup>		At higher rates of duty <sup>3</sup>	
	Full	Preferential	Full	Preferential
	(gall.)	(gall.)	(gall.)	(gall.)
	s.	d.	s.	d.
1926-27	2	6	1	6
From 1927-28 to 1932-33 <sup>3</sup>	3	0	2	0
From 1932-33 to 1938-39 <sup>4</sup>	4	0	2	0
1939-40	4	0	2	0
1939-40 <sup>5</sup>	6	0	4	0
1940-41	6	0	4	0
1940-41 <sup>6</sup>	8	0	6	0
1941-42	8	0	6	0
1942-43 <sup>7</sup>	14	0	12	0

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 145 and p. 153.

For rates on wine imported in bottle, sparkling wine, etc. vide Reports of the Board of Customs and Excise *passim*.

<sup>2</sup> The lower rates of duty cover non-Empire wine (n.e. 25°) and Empire wine (n.e. 27°) and the higher rates cover wine exceeding those degrees.

<sup>3</sup> From 25 April 1927.

<sup>4</sup> From 17 November 1932.

<sup>5</sup> From 28 September 1939.

<sup>6</sup> From 24 July 1940.

<sup>7</sup> From 15 April 1942.

7. *British Wine Duty*<sup>1</sup>

## Rate of duty

	Rate of duty	
	(gall.)	
	s.	d.
1927-28	1	0
From 1928-29 to 1938-39	1	6
1939-40	1	6
	3	6
1940-41	3	6
	5	6
1941-42	5	6
1942-43	11	6

<sup>1</sup> For rates used for purposes of the present enquiry vide p. 145 and p. 153.

For rates on sparkling British wine vide Reports of the Board of Customs and Excise.

## 8. Hydrocarbon Oils Duty

	Light oil (gall.)	Heavy oil	
		As road fuel (gall.)	Others (gall.)
1928-29	4 <sup>1</sup>	—	—
1929-30	4	—	—
1930-31	4	—	—
1931-32	6 <sup>2</sup>	—	—
	8 <sup>3</sup>		
1932-33	8	—	—
1933-34	8	1 <sup>4</sup>	1 <sup>4</sup>
1934-35	8	1	1
1935-36	8	8 <sup>5</sup>	1
1936-37	8	8	1
1937-38	8	8	1
From 1938-39 to 1942-43 <sup>6</sup>	9	9	1

<sup>1</sup> From 25 April 1928.<sup>2</sup> From 28 April 1931.<sup>3</sup> From 10 September 1931.<sup>4</sup> From 25 April 1933.<sup>5</sup> From 8 August 1935.<sup>6</sup> From 26 April 1938.9. The Purchase Tax<sup>1</sup>

In force as from 22 October 1940:

Basic rate: one-third of the wholesale value of the goods.

Reduced rate: one-sixth of the wholesale value of the goods.

In force as from 15 April 1942:

Higher rate: two-thirds of the wholesale value of the goods.

<sup>1</sup> For details (classes of goods, etc.) vide Finance (No. 2) Act, 1940, Finance Act, 1942 and Customs and Excise Tariffs.

## 10. Other Customs and Excise Duties

For other duties, such as entertainments duty, duty on table waters, on cocoa, coffee, molasses, glucose, saccharin, dried fruits, matches, silk, protective duties, excise licence duties, etc. vide Reports of the Board of Customs and Excise passim (the latest published for the year ended 31 March 1939), Customs and Excise Tariff passim. As a convenient source of information *Whitaker's Almanack*. For entertainments duty for 1937-38 and 1941-42 vide also Table 49 in this Report.

## III. OTHER TAXES AND DUTIES

## 1. Social Insurance Contributions

(Vide Table 62 of this Report.)

## 2. Motor Vehicle Duties

Horse-power duty on private motor cars exceeding 6 horse-power:

	£	s.	d.
Up to 1 Jan. 1935	1	0	0
From 1 Jan. 1935 to 1 Jan. 1940	15	0	
As from 1 Jan. 1940	1	5	0

For details vide *Whitaker's Almanack*.

## 3. Post Office Charges

For details vide *Whitaker's Almanack*.

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