
Appendix Four

The Value to Families of the Social Services

with John Bond

This appendix sets out our methods of valuing public social services supplied to households. We will first discuss an official method used hitherto. The valuation of the direct and indirect benefits to families of the social services by the Central Statistical Office has become a regular feature of the analyses of successive Family Expenditure Surveys.¹ The estimates which were used by the office for 1968² were based on the findings of the Family Expenditure Survey in that year.³ The surveys have been carried out annually since 1957 by the Department of Employment and Productivity. The samples for the Family Expenditure Survey do not include residents in hotels, boarding houses and other institutions, or members of the armed forces and the merchant navy who are stationed away from home for the duration of the survey. Detailed information about all forms of income, including national insurance and other cash benefits received from the state, is recorded. In addition, details of income tax and surtax paid, the type of dwelling occupied, family structure, types of education received and details of other variables affecting income and expenditure are collected. In 1968, over 7,000 households among the sample provided information.

Definitions and Methods Used by the Central Statistical Office⁴

The taxes and benefits included in the CSO estimates are divided into five groups: direct taxes, direct benefits, indirect benefits, indirect taxes on final consumer goods and services, and indirect taxes on intermediate products. We are concerned here only with direct and indirect benefits.

Direct Benefits

There are two groups of direct benefit which a household might receive: cash benefits and benefits in kind. Cash benefits include family allowances, national insurance benefits

¹ These were published in *Economic Trends* in November 1962, February 1964, August 1966, February 1968, February 1969, February 1970 and February 1971, and additional information about low-income households in July 1968.

² Central Statistical Office, 'The Incidence of Taxes and Social Service Benefits in 1968', *Economic Trends*, February 1970.

³ Department of Employment and Productivity, *Family Expenditure Survey*, Report for 1968, HMSO, London, 1969.

⁴ For a fuller account of the methods used in estimating taxes and benefits, see Nicholson, J. L., *Redistribution of Income in the United Kingdom in 1959, 1957 and 1953*, Bowes & Bowes, Cambridge, 1965; and *Economic Trends*, February 1970, pp. xxv-xxvi.

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(pensions; sickness, unemployment, industrial injury, maternity benefits, etc.; death grants), non-contributory old-age pensions, supplementary pensions and allowances, war pensions, service grants and allowances. The value of each cash benefit (and of scholarships and education grants from public funds) is the amount stated to have been received by the household during the twelve months prior to the interview. Benefits in kind include state education, scholarships and education grants, school meals, milk and other welfare foods, school health services and national health services.

Education: the benefit of state education is taken to be the estimated average expenditure per child by public authorities according to the type of school or college attended -special schools, primary, secondary modern, other secondary and direct-grant schools, universities, colleges of advanced technology and teachers' training colleges. The value of the benefit is taken to be the same for all pupils attending any of these educational establishments, except that the benefit of secondary and direct-grant schools makes no allowance for differential expenditure on different types of school. A lower benefit is ascribed to children over 16, since a larger proportion of expenditure is allocated to children over 16. In 1968 but not in 1969,¹ children attending private schools were allotted a benefit equal to the average cost per child of either state primary or all state secondary schools.

National Health Service: detailed information about the use made by the family of the National Health Service is not collected in the Family Expenditure Survey. The values of the benefits assumed to be obtained are estimated in the following way. The current cost of maternity services is estimated separately and the average cost per birth allocated to each household reporting the receipt of national insurance maternity benefit. The values of the benefits from all other national health services combined are based on rough estimates of the differences in the extent to which these services are used by, first, children, secondly, by adults below retirement age, and thirdly, by adults above retirement age. In each case, estimates are made for males and females separately. The value of benefit assigned to each household is the average net cost to the state of providing national health services. This procedure has limitations which the Central Statistical Office recognizes. There is considerable variation in the utilization of the National Health Service, and therefore in the value to families of the service.

Indirect Benefits

The only indirect benefit which is estimated is the housing subsidy. This is defined for each local-authority dwelling as the excess of the economic rent over the actual rent paid by the tenant. For 1968, the economic rent is calculated by marking up the rateable value of the dwelling in the ratio of the total current account expenditure on all dwellings owned by the local authority to the rateable value of these dwellings. As a result, the subsidy can in exceptional cases be negative.

Limitations of the Central Statistical Office Methods of Estimating the Value of Social Services

The Central Statistical Office recognizes that the methods which have been adopted are very crude. It is difficult to know how far they distort the true picture of redistribution. The problem is not just that broad estimates of value for large sections of the population, as, for example, for

¹ In 1969, fee-paying pupils to private schools were excluded. See *Economic Trends*, February 1971.

the National Health Service, conceal marked variations in practice between different families. It is that some types of benefit are not recognized. These include child tax allowances and tax relief on the interest included in mortgage payments, both of which have been recognized lately by successive governments to be integral features of social policy.¹ But a number of ordinary public social services are also left out of the reckoning, mainly because they do not feature in the questionnaires used in the Family Expenditure Survey. These include local-authority welfare and child-care services and legal aid.

In principle, it would be possible to develop a more searching review of the distribution of social service benefits. There are other public services which are not equally available to or utilized by all sections of the population - including public environmental facilities like playgrounds, swimming baths and libraries, passenger transport subsidies, the development of new towns and public health services. The value to families in monetary terms of these services could be worked out according to certain assumptions. The indirect value to families of certain tax concessions (as under Schedule D) could also be pursued. The definition of what are and what are not social services will always be subject to argument.²

Here, it is argued only that the CSO method of allocating the imputed value of social services does not reflect a sufficiently comprehensive definition of social services because certain major forms of tax relief which have clear welfare functions are excluded; and is not sufficiently refined for services as costly as health, housing and education.

The alternative method which is described below does not meet all problems. It represents merely a serious attempt to develop the CSO method further so that the distribution of social service benefits can be traced more accurately.

Alternative Methods

In costing the social services for individuals and households, we have divided benefits into two groups : direct cash benefits and direct benefits in kind. For the first group, which includes family allowance, retirement pensions, widow's pension, sickness benefit, unemployment benefit, supplementary benefit, industrial injury benefit, industrial disablement benefit, war-disability pension, maternity allowance, maternity grant, death grant, redundancy payment, school-uniform grant, educational grants and allowances, the value of each form of benefit is taken to be the amount received by each household in the previous twelve months prior to the interview. This is the same method as that used by the Central Statistical Office, but we look at a much larger range of benefits. In addition, we can trace periods of benefit in the previous year and the amounts received at different times during the year. For the second group, estimates have been made of the cash equivalent to each household who recorded receiving

¹ For example, the Labour government introduced 'clawback' (a method of reducing the value of child tax allowances to the standard rate taxpayer) when raising family allowances in 1968, and the subsequent Conservative government adopted the same terminology in discussions in Parliament about a possible further stage of 'clawback'. Again, the White Paper *Help Towards Home Ownership* represented the first official recognition that tax relief on mortgage interest materially helps a family in purchasing a house. The Treasury has also more recently acknowledged such tax relief as a policy measure to encourage owner-occupation.

² For further discussion of the CSO definitions and methods, see Webb, A. L., and Sieve, J. E. B., *Income Redistribution and the Welfare State*, Bell, London, 1971, esp. Chapter 5.

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Table A4.1. Expenditure on health and welfare services, 1968-9 (England and Wales, Scotland) in thousands of pounds.

Type of service	Scotland			England and Wales		
	Expenditure	Charges to recipients	Net expenditure	Expenditure	Charges to recipients	Net expenditure
	177,197	5,432	172,565	1,600,000	73,000	1,527,000
<i>Central government services</i>						
Central administration	-	-	-	9,000	-	9,000
Hospitals	110,286	-	110,285	914,000	9,000	900,000
Administration of executive councils	1,175	-	1,175	10,000	-	10,000
General medical	13,134	-	13,134	120,000	-	120,000
Pharmaceutical	17,491	-	17,491	160,000	10,000	150,000
General dental	7,159	1,332	5,723	75,000	14,000	61,000
General ophthalmic	2,109	823	1,286	22,000	8,000	14,000
Welfare foods	5,005	-	5,005	35,000	2,000	33,000
Other	-	-	-	19,000	-	19,000
<i>Local-authority services</i>				236,000	30,000	206,000
Health centres	53	-	53	835	-	835
Day nurseries	†	†	†	5,807	2,784	3,623
Welfare clinics	2,420	-	2,420	10,431	-	10,431
Other	†	†	†	2,071	-	2,071
Midwifery	600	-	600	11,017	-	11,017
Health visiting	1,120	-	1,120	9,613	-	9,613
Home nursing	1,700	-	1,700	15,759	-	15,759
Home help	2,293	†	†	22,241	1,736	20,505
Ambulance	2,175	-	2,175	30,566	-	30,566
Mental Health	1,042	-	1,042	24,871	-	24,871
Other health services	1,449	†	†	9,414	263	9,151
Welfare services (aged)	4,776	†	†	51,848	23,970	27,878
Welfare services (handicapped)	564	†	†	9,074	220	8,854
Other welfare services	-	-	-	2,241	41	2,220

† = Figure not available.

SOURCE: Department of Health and Social Security, *Digest of Health Statistics*, Table 2.9; and Scottish Department of Health and Social Security, *Scottish Health Statistics*.

benefits from the social services. Estimates of national expenditure on social services have been calculated on the basis of the 1968-9 financial year. Strictly, the estimates should have been weighted between the financial years 1967-8 and 1968-9. Families in the sample were questioned about their incomes in the twelve months preceding each interview, and the interviews were spread from early 1968 to early 1969. The self-employed also had to be asked about incomes in the latest completed financial year for which information could be given. However, the balance of the data applies to the financial year 1968-9, and the great majority of interviews were actually carried out during that year.

Health and Welfare Services

Table A4.1 gives both local-authority and central government expenditure on health and welfare services in Scotland, England and Wales. Table A4.2 gives estimates of the number of people using health and welfare services in England and Wales. Whereas the Central Statistical Office made estimates for the National Health Service as a whole, we have attempted to account for differences in the use of services. Some of the estimates are very crude because, first, the information obtained in the survey was rather general, and secondly, the detailed information about national expenditure on some individual services was not available. For example, although we obtained information about child and welfare officers' visits to families, no available detailed information concerning expenditure on these services could be traced. Other estimates are more reliable. The methods which we have adopted in making these estimates are as follows. Where estimates for the United Kingdom are not available, estimates based on England and Wales are used.

The annual value of the subsidy per person on cheap-rate and free welfare milk is estimated by dividing the net expenditure on cheap-rate milk and the gross expenditure on free welfare milk by the estimated number of individuals in receipt of the service.¹ In 1968-9, mothers with young children under 5 could obtain a pint of milk a day for 6d. a pint cheaper than retail prices. Free-milk tokens had to be claimed separately, and few parents claimed them, other than those getting supplementary benefits.

The annual value of the subsidy on welfare clinics is estimated by dividing the net expenditure by the estimated number of individuals who visited welfare clinics in 1968. The annual value of the subsidy on welfare foods such as national health orange juice and dried milk is estimated by dividing net expenditure by the estimated number of individuals in receipt of welfare foods.

The cost to the National Health Service of giving birth in hospital is estimated by taking the estimated cost per birth in a maternity hospital and adding to this the cost per birth of early discharge cases. Midwives are responsible for the care, not only of mothers and their babies born at home, but of those cases discharged early from hospital up to ten days following the birth. In 1968, midwives attended 164,477 home deliveries and 357,096 early discharge cases throughout Great Britain. Expenditure on midwifery services was divided equally by the total number of cases; 521,573.² This was taken to be the estimated value of home births

¹ In 1969, the beneficiaries, including expectant and nursing mothers, young children up to the age of 5 years and 1 month and certain handicapped children under 16 were estimated to number 4,060,000, of whom 200,000 in large families had free entitlement. DHSS, Annual Report for 1969, Cmnd 4462, HMSO, London, pp. 19-20.

² DHSS, *Digest of Health Statistics*, HMSO, London, 1970, p. 95, Table 8.1.

Table A4.2. *Estimates of the number of people using health and welfare services in 1968 (England and Wales).*

<i>Unit/Type of health of welfare service</i>	<i>Number</i>
Number of individuals in receipt of cheap-rate milk	3,560,000
Number of individuals in receipt of free welfare milk	500,000
Number of individuals using welfare clinics	1,990,000
Number of individuals receiving welfare foods through welfare clinics	1,440,000
Number of home births ^a	153,626
Number of hospital births ^a	653,107
Number of visits made by district nurses	14,270,000
Number of visits made by home help	26,280,000
Number of visits made to dentists	45,340,000
Number of individuals receiving NHS spectacles	4,690,000
Number of individuals receiving NHS hearing aids	310,000

SOURCE: ^aGeneral Register Office, *Statistical Review of England and Wales, 1968*, Part II, HMSO, London.

estimated value of midwifery services in the case of all hospital births. This method of estimating the cost of births underestimates the cost of home deliveries while overestimating the cost of early discharge cases. Although crude, this method is more reliable than allocating for each birth an average cost per birth of all maternity services.

Table A4.3 gives the estimated cost per patient for different types of hospital in England and Wales. A cost per patient per night is estimated, and the benefit to the patient calculated by

Table A4.3. *Estimated cost per in-patient week of various types of hospital, 1968-9 (England and Wales).*

<i>Type of hospital</i>	<i>Weekly cost £</i>
Teaching hospital (London)	72.58
Teaching hospital (elsewhere)	64.56
Acute	49.38
Mainly acute	43.55
Chronic sick	21.17
Maternity	51.60
Mental illness	16.07
Mental handicap	13.49

SOURCE: DHSS, *Digest of Health Statistics*, HMSO, London, 1970, Table 2.9.

scaling up this figure according to the number of nights spent in the institution. The cost per out-patient attendance was taken to be the estimated cost per outpatient attendance at an acute non-teaching hospital¹ since we did not ask questions about the types of hospital individuals

¹ DHSS, *Digest of Health Statistics*, Table 2.9.

attended as out-patients. We asked only the number of visits they made.

The estimated cost of a domiciliary visit by a district nurse is calculated by dividing the net expenditure of the home nursing service by the estimated number of visits made by district nurses. The benefit to the individual or household is then estimated by scaling up the cost per visit according to the number of visits each individual claimed he had received in the previous twelve months.

An estimate of the cost per case of dental services¹ cannot be used since our data are recorded in terms of the number of visits each individual made to the dentist in the previous twelve months. An estimate of the cost per visit is made by dividing the expenditure net of fees by an estimate of the total number of visits made to dentists in 1968. A more reliable method would have been to estimate the cost per visit and subtract for those fee-paying patients the amount they spent in 1968, which would have been either £1.50 or £3. But information is not available from our survey on this. Some patients receive free treatment, such as mothers of young babies and children. In these cases, an estimate of the full cost was added.

The estimate of health service hearing aids and spectacles is made separately for those paying contributions and those not. Again estimates of the benefit to fee-paying patients is calculated by dividing total net expenditure on each service by the estimated total number in receipt of each service. The benefit to those who did not contribute is estimated by dividing

Table A4.4. *Estimated value of social services per person, England and Wales, 1968-9.*

<i>Type of cost</i>	<i>Cost per person in 1968-9^a £</i>
Annual value of subsidy on cheap-rate milk	7.4
Annual value of subsidy on free welfare milk	10.0
Annual value of subsidy on welfare clinics	5.2
Annual value of subsidy on welfare foods	1.4
Cost per birth of home delivery	21.6
Cost per birth of hospital delivery	51.0
Cost per visit by district nurse	1.1
Cost per visit by home help (free)	0.8
Subsidy per visit by home help	0.7
Cost per patient of NHS spectacles (free)	4.7
Subsidy per patient of NHS spectacles	3.0
Cost per patient of NHS hearing aids (free) } average	21.3
Subsidy per patient of NHS hearing aids } subsidy	
Cost per visit of dental treatment (free)	1.7
Subsidy per visit of dental treatment	1.3
Cost per domiciliary visit by GP	1.8
Cost per surgery consultation by GP	0.6
Cost per out-patient visit	2.7

NOTE: ^aAnnual values will, of course, average the value of goods and services received by some people for only a part of the year (e.g. families in which a child reaches 5 years of age soon after the year starts and is no longer eligible for welfare milk, as well as families in which a child is born towards the end of the year and so is eligible for such milk).

¹ Estimated as £10.31 per case in 1968. See DHSS, Annual Report, 1969.

gross expenditure by the total number of individuals in receipt of the service.

An estimate of the cost per home visit and surgery consultation of health service patients is made. In 1964-5, it was found that, on average, a general practitioner took six minutes per surgery consultation, while taking on average seventeen minutes for each home visit, including travelling.¹ From this it is assumed that the average domiciliary consultation costs three times more than the average surgery consultation. In 1968-9, the average number of surgery consultations per doctor in four practices was 6,654, and the average number of domiciliary consultations per doctor in the same four practices was 1,736.² The average cost of one domiciliary consultation and three surgery consultations is calculated by dividing the estimate and annual expenditure per general practitioner by the average number of domiciliary plus one third of the average number of surgery consultations. This method, although admittedly crude, allows us to make estimates of the known differences in cost between surgery and domiciliary consultations. The estimated value of those services are given in Table A4.4. In estimating the value of the benefit of health and welfare services to individuals and households in our sample, only those receiving services through the state are included.

Education

The value of the benefit of state education is taken to be the average net cost per child to the public authorities under each of the following headings: special schools, nursery schools, primary schools, secondary modern schools, comprehensive schools, technical schools, state grammar schools, universities, teacher-training and other colleges of education. Estimates of the cost per pupil or student for special schools, nursery schools, primary schools, teacher-training colleges, universities and other colleges of education is calculated by dividing the net expenditure in 1967-8 by the number of full-time (full-time equivalents) pupils/students attending in 1967. Estimates of the cost per pupil of secondary modern, grammar, technical and comprehensive schools could not be made in the same way since expenditure on the individual types of school is not available. Estimates of the cost per pupil at grammar and secondary modern schools according to various age groups (under 15, 15 but not in sixth form, and sixth form) are available for grammar, comprehensive and secondary modern schools for 1966-7.³

¹ Eimer, I. T. S., and Pearson, R. J. C., 'Working Time in General Practice. How General Practitioners use their Time', *British Medical Journal*, December 1966.

² Lance, H., *Supplement to the Journal of the Royal College of General Practitioners* (forthcoming), September 1971.

³ *Hansard*, 13 February 1970. The following information has also been provided by the Department of Education and Science based on calculations for the year 1966-7 (in reply to a request from Mr M. Meacher, NP). The following calculations based on data for the *financial year 1966-7* show the relationship between costs per pupil, at various ages, in grammar, comprehensive and modern schools (£ per head (current expenditure)):

	(1)	(2)	(3)	(4)
	Under 15	15 not in 6th form	6th form	All pupils
Grammar	125	152	236	150
Comprehensive	119	167	251	132
Secondary modern	108	185	266	114

NOTES: (a) The fairest general comparisons are those in Columns (1) and (4). The high figures for 15-year-olds and sixth-formers in secondary modern schools and, to a lesser extent, in comprehensive schools, reflects the uneconomically small groups staying on voluntarily in such schools.

(b) The figures for comprehensive schools show increased expenditure per pupil, compared with secondary

The cost per pupil in secondary modern schools is smaller than grammar schools. Since the ratio of teachers to pupils is similar for both grammar and technical schools, it is assumed that the cost per pupil is similar.

The ratio of pupils to teachers in comprehensive schools is higher than in grammar schools, but still less than in secondary modern schools. It was assumed that the cost per pupil at comprehensive schools is equivalent to the average cost per pupil of all secondary schools. Clearly this method of estimation is open to criticism. Yet there is little alternative open to us since the Department of Education and Science seems reluctant to obtain regular estimates of expenditure on the different types of secondary school. Until this information is available, no alternative methods can be adopted in place of the method described by the Central Statistical Office and the method put forward very tentatively here.

The value of the benefit of school meals to the household differs according to whether the meals are subsidized or free. The annual value of free school meals is estimated by dividing the gross expenditure on school meals by the number of children taking school meals. The annual value of subsidized school meals is estimated by dividing the gross expenditure on school meals by the number of children taking them and subtracting from this amount the average annual contribution families make for each child. The estimated value of school milk is calculated by dividing the gross expenditure on the school milk service by the number of children taking school milk. The estimated value of these services and the estimated cost per pupil at educational institutions are shown in Table A4.5.

Table A4.5. Annual value per person of educational services, England and Wales, 1968-9.

Type of cost	Value per person 1968-9 £
Nursery schools (cost per pupil)	63
Primary schools (cost per pupil)	90
State grammar schools (cost per pupil)	
(a) under 15	144
(b) over 15	222
Technical school (cost per pupil)	
(a) under 15	144
(b) over 15	222
Comprehensive school (cost per pupil)	
(a) under 15	137
(b) over 15	225
Secondary modern school (cost per pupil)	
(a) under 15	125
(b) over 15	257
Teacher-training college (cost per student)	751
University or college of advanced technology (cost per student)	1,219
Other college of further education	680
Adult and further education	107
Value of free school meals	27.2
Value of subsidized school meals	18.4
Value of free school milk	6.0

SOURCES: Department of Education and Science, *Statistics of Education*, vols. I, V and VI; private communication to Mr M. Meacher, MP, supplementing *Hansard*, 13 February 1970.

modern schools. It is reasonable to expect that the cost per pupil staying on voluntarily in comprehensive schools would now be relatively lower.

Housing Subsidies : Owner-occupiers

There are at least two approaches to the calculation of housing subsidies to owner-occupiers. One is to calculate the amount of tax relief given to individual households on the interest paid on their mortgages,¹ with or without the further addition of that part of any capital gain enjoyed in the year which can be attributed to such relief. The approach can be justified on grounds that the tax relief raises the capital value of houses and makes it more difficult for poorer families to obtain a house. For example, a house might have been bought in 1968-9 without tax concessions on a mortgage for an annual outgoing of £489, which would have fixed the capital price of the house and land at about £4,500-£5,000. If £489 was the maximum amount most households could afford to pay for this size of house, the price for most houses of this size would have been less than £5,200. By getting income-tax payments reduced because of their mortgage repayments, these households would have been able to afford to bid up the price of the house and contract to pay, say, £590 in mortgage repayments, knowing they would get back approximately £100 through tax concession.

We did, in fact, operationalize this approach. The amount of housing subsidy enjoyed by each owner-occupier was estimated by multiplying the amount paid in annual interest repayments on a mortgage by the standard rate of tax using information supplied in interviews about incomes and housing costs. To this sum, we added an estimate for the capital gain enjoyed by the household in the year because of the tax relief. The estimate of capital gains was calculated by multiplying the value of the house in 1968-9, as estimated by the owner (revised, where necessary, on the basis of information supplied by the interviewer), by the average percentage rise in house prices for that year. The value of tax relief was then expressed as a percentage of the household's total housing cost in the previous twelve months, and this percentage was applied to the capital gain on the house.

This method has a number of disadvantages. Those whose interest repayments are heavy in relation to the value, or the future value, of their homes are made out to be enjoying the heaviest subsidies. No account is taken, especially in the early years of repayments, of exceptional costs of repairs. And no 'subsidy' is attributed to outright owners (or for the years of occupation following repayments). In recent years, the advantages of owner-occupation in comparison with other forms of tenure have begun to be documented. In an article which compares the costs of an owner-occupier with those of a council tenant in Scotland, Hare² estimated that the value of buying a house in 1970 rather than renting a council house of similar standard was £298.42 after six years or £49.74 per annum. His estimates were based on the average costs facing first-time buyers assuming conservative inflation rates of 4 per cent for retail prices and 10 per cent for house prices.

Making estimates about the comparative costs of renting and owning over a six-year period is relatively simple providing one's assumptions are correct. For one particular household type, and over the period defined, it could be argued that this £298.42 represents an income from house-ownership. To try and calculate for each household in the sample an income from house-

¹ This form of subsidy was discussed by Nevitt, A. A., *Housing, Taxation and Subsidies*, Nelson, London, 1966, p. 146.

² Hare, P. H., 'Comparing the Costs of Owning and Renting in Scotland', *Housing Review*, 22(3), 1973, pp. 113-17.

ownership would rely on a good estimate of an equivalent rent for a council house in the different years that the household owned the property. Such information was not collected during interviews and estimates would be hazardous to make. If it could be done, it would then be difficult to decide how much house-ownership earned in any particular year.

A similar approach, which would use information collected during interviews, also deviates from the traditional concept of a housing subsidy and looks at the financial value of owner-occupation in terms of a 'social' subsidy. This method calculates for each household an estimate of an 'imputed income'. This could be calculated as the amount in rent that the owner-occupier would expect to pay for his house, deducting expenses for maintenance and then estimating the amount of tax which he would otherwise have had to pay on this 'income', making an allowance for interest included in any mortgage repayments.

The 'Imputed Income' Approach

With the abolition of Schedule A tax in 1963, owner-occupiers no longer had to pay tax on the imputed rent of their homes, although they still receive the tax relief on the interest element of their mortgage repayments. A man who bought a house in 1968 for £5,000 lives rent free, while the man who invested £5,000 to yield £300 gross per annum (assuming 6 per cent interest rate), the sum required to pay the rent of an identical house, would have been left after tax with only £175, since his income from investment was taxed whereas the owner-occupier's income from his investment was not. Both men would have had a gross annual income of £300 on their investment, but one paid tax of £125 and the other paid none.

Since the withdrawal of Schedule A tax in 1963, the use of the concept of 'imputed rental income' would be both comprehensive and rational. However, it poses awkward questions of principle and practice. If rent is to be calculated on a house that is owned, then this principle might be extended to other forms of property, and there is room for considerable argument as to the forms of property to which the principle should be applied. There are also real problems in agreeing values according to rateable, gross 'market' or replacement value. However, there is a case for treating housing differently from at least some other forms of property. First, it is something everyone needs. Secondly, buyers of other forms of property, such as antiques, were not, in 1968, receiving tax relief on the interest for money which they borrowed in order to purchase such property, whereas house buyers were receiving tax relief on the interest element of their mortgages. This tax relief was not originally seen as a subsidy to owner-occupiers, but since the abolition of Schedule A tax has increasingly been seen as such. Under Schedule A, the owner-occupier's taxable income was increased by an imputed rent and then lowered by the actual costs of obtaining the imputed rental income.¹

By adopting this method in the calculation of subsidies to owner-occupiers, estimates are thereby made of the benefit to outright owner-occupiers as well as home buyers.

The subsidy to outright owner-occupiers is estimated by multiplying the value of the house by a rate of interest, deducting from this total housing cost (repairs), and applying the standard

¹ Nevitt, *Housing, Taxation and Subsidies*, p. 72.

Table A4.6. *Housing subsidy of owner-occupiers in sample (outright) (£).*

1	2	3	4	5
<i>Value of house</i>	<i>Imputed rental income at 7 %</i>	<i>Total housing cost (repairs)</i>	<i>2-3</i>	<i>Estimated subsidy (i.e. 33½% of 4)</i>
1,500	105	50.00	55	18.33
5,800	406	90.00	316	105.33
7,000	490	125.00	365	121.67
7,500	525	140.00	385	128.33
7,800	546	90.00	456	152.00
10,000	700	275.00	415	138.33

rate of tax. Table A4.6 shows the calculation of this subsidy for six outright owner-occupiers in the sample.

The subsidy to house buyers is estimated by multiplying the value of the house by a rate of interest, deducting from this an allowance for repairs and the interest element of mortgage repayments and applying the standard rate of tax. Table A4.7 shows the calculation of this subsidy for five mortgage payers.

Table A4.7. *Housing subsidy of mortgage payers in sample (£).*

1	2	3	4	5
<i>Value of house</i>	<i>Imputed rental income at 7 %</i>	<i>Total housing cost (repairs)</i>	<i>2-3</i>	<i>Estimated subsidy (i.e. 33½% of 4)</i>
2,100	147	62.00	85	28.33
2,500	175	92.00	83	27.67
5,000	350	316.00	34	11.33
5,500	385	392.00	-7	-
6,500	455	159.00	296	98.67

Capital Gains

Calculating subsidies in this way can produce, as can be seen from one case in Table A4.7, some negative estimates. No allowance for the effect of capital gain has been made so far. It can be argued that, by calculating the imputed *rental* income, it would not be correct to calculate an estimate of capital gain in addition. There are two elements of capital gain. First, the element of capital gain which mortgage buyers enjoy because of the tax relief on their interest repayments. It would not seem right to include this since the principle of Schedule A tax was to increase the taxable income by the imputed rent and then lower it by the actual cost of obtaining this imputed rental income. However, it could be argued that if the tax concession was not given, and if imputed rental income was taxed without allowances being made, the house buyer would not be able to bid up the price of the property. Hence the capital-gain

element still exists when tax relief is given.

The second element of capital gain is on the profits of selling the house. When an owner-occupier sells, he will normally realize considerably more than he paid for his house, even when allowance is made for retail price inflation. The house is an asset which appreciates faster than most other classes of assets.¹ It has been argued that the appreciation of house value should not be taken into account on considering housing costs. The reasoning put forward is that the 'paper profits' of house price-inflation cannot be realized because to realize them the owner-occupier must sell his house, and if he sells his house he must reinvest the profits in another house. However, as Harrington² has pointed out, if by owning people cannot realize a capital gain, they can avoid a capital loss. In any case, capital gains on houses are eventually realized, if only by heirs of the home owner. Also, when people do sell and have to reinvest their profits in another house, it is normally bigger or in a better neighbourhood.³ The proceeds of the first house enable owner-occupiers to increase their housing consumption and increase appreciation on the second, more expensive, home. The exception of this pattern might be some older people who sell their houses and who do, in fact, realize their 'paper' profits by moving to a smaller house. It is, then, feasible to add to the value of housing subsidy estimated from an imputed rent an estimate of the capital gain enjoyed by owner-occupiers during the year. This could be calculated by multiplying the value of the house by an appreciation value and applying the standard rate of tax.⁴ In the method put into practice, we adopted an appreciation value of 6 per cent. Therefore the 'capital-gain subsidy' was 2 per cent of the estimated market value of the home. For the examples given in Tables A4.6 and A4.7, the subsidy ranged from £42 (for the home valued at £2,100) to £200 (for the home valued at £10,000).

Housing Subsidies: Council Tenants

In calculating the value of housing subsidies to the tenants of local-authority housing, the Central Statistical Office makes a very crude estimate. These subsidies are defined for each local-authority dwelling as the excess of the estimated economic rent over the actual rent paid by the tenant. They calculate the economic rent by marking up the rateable value of the dwelling in the ratio of the total current account expenditure on all dwellings owned by the local authority to the total rateable value of those dwellings. By allocating the average subsidy per local-authority dwelling to such tenants, no allowance is made for variations between local authorities. Table A4.8 shows the differences in subsidies between local authorities in England and Wales. Table A4.9 gives similar figures for Scotland. Figures for Northern Ireland are based on the average amounts of English administrative areas.

The subsidy on local-authority housing does not go directly to the tenant. The exchequer subsidy is paid into the current account of the local-authority housing account, along with rents

¹ National Economic Development Office, Building Economic Development Committee, *Low Start Mortgage Scheme*, 1972.

² Harrington, R., *Some Fundamental Economics of the Housing Problem*, paper presented at Shelter Conference on House Purchase Finance, 1972.

³ Nationwide Building Society, *Occasional Bulletin*, 99, 1970.

⁴ Feasibly, one could have used a higher rate of tax to correspond with capital-gains tax in 1968.

Table A4.8. Average Exchequer and rate subsidies per dwelling on local authority housing for individual local authorities in the sample, England and Wales,^a 1968-9.

<i>County boroughs</i>	<i>Exchequer</i>	<i>Rate £s</i>	<i>Total £s</i>	<i>Urban district councils</i>	<i>Exchequer</i>	<i>Rate £s</i>	<i>Total £s</i>
Birmingham	30.9	10.3	41.2	Haltemprice	24.2	-	24.2
Bournemouth	19.1	-	19.1	Lynton	15.8	-	15.8
Bolton	19.2	4.1	23.3	Malvern	22.1	0.1	22.2
Bristol	20.9	0.1	21.0	Melton Mowbray	20.9	2.0	22.9
Coventry	29.1	5.8	34.9	Sleaford	17.7	-	17.7
Gloucester	19.1	1.5	20.6	Thornton Cleveleys	21.5	0.9	22.4
Ipswich	17.9	-	17.9	Thurrock	22.8	11.7	34.5
Leicester	20.5	2.2	22.7				
Leeds	27.6	5.4	33.0	<i>Rural district councils</i>			
Manchester	27.4	7.4	34.8	Barrow upon Soar	19.0	-	19.0
Newcastle-on-Tyne	27.1	8.6	35.7	Dartford	17.8	0.2	18.0
Salford	47.2	30.4	77.6	Garstang	22.7	-	22.7
Southport	16.2	5.2	21.4	Hambledon	20.5	0.1	20.6
South Shields	22.1	7.7	29.8	Melton Belvoir	20.7	2.3	23.0
				Neath	20.8	10.0	30.8
<i>Greater London</i>				North Cotswold	18.3	3.8	22.1
Croydon	23.9	-	23.9	Northkestevern	20.0	-	20.0
Enfield	35.7	9.0	44.7	Oswestry	29.0	0.9	29.9
Greenwich	32.9	29.6	62.5	Pershore	20.6	2.1	22.7
Havering	29.5	4.8	34.3	Ringaced and Fardingbridge	23.2	1.5	24.7
Islington	71.4	88.9	160.3	Walsingham	21.8	0.6	22.4
Lewisham	42.9	69.7	112.6	Warrington	18.5	4.0	22.5
				Yeovil	18.5	1.3	19.8
<i>Non-county boroughs</i>							
Aylesbury	31.9	7.0	38.9	<i>Summary</i>			
Bridgenorth	20.9	10.5	31.4	County boroughs	24.9	6.1	31.0
Guildford	17.5	1.2	18.7	Greater London	35.9	18.4	54.3
Lymington	25.0	-	25.0	Non-county boroughs	22.9	3.2	26.1
Lewes	25.6	4.7	30.3	Urban boroughs	22.7	3.9	26.6
Pontefract	26.1	-	26.1	Rural	22.7	2.5	25.2

NOTE: ^aFor ten wards, households, information concerning subsidies is not available. Figures have been estimated according to the type of administrative area.
SOURCE: Institute of Municipal Treasurers and Accountants, *Housing Statistics (England and Wales), 1968-69*.

Table A4.9. Average Exchequer and rate subsidies per dwelling on local-authority housing for individual local authorities in the sample, Scotland, 1968-9.

<i>Cities</i>	<i>Exchequer subsidy</i> £s	<i>Rate subsidy</i> £s	<i>Total per dwelling</i>
Aberdeen	986,121	1,605,050	95.8
Edinburgh	1,735,201	3,170,017	104.4
Glasgow	4,945,694	8,363,881	93.3
<i>Large burghs</i>			
Airdrie	315,181	760,622	126.1
Coatbridge	416,190	1,177,147	
Small burghs ^a	2,716,049	3,226,680	74.4

NOTE: ^aFigures for individual small burghs are not available. Figures have been calculated on the basis of this average figure.
SOURCE: The Institute of Municipal Treasurers and Accountants(Scottish Branch), *Rating Review*, January 1970.

and rate subsidies. It is up to each local authority how this money is spent. In practice, a higher proportion of the total subsidy will be given indirectly to tenants of modern dwellings than to the occupiers of older stock.¹ To estimate the subsidy which individual tenants receive would entail a knowledge of the economic rent of individual properties. An estimate of average economic rent is not sufficient. The true economic rent is based on the interaction of supply and demand in the short run, and not the historic cost to local authorities of providing dwellings. In the long run, economic rent is based upon the contemporary cost of replacing dwellings.² One method of estimating the subsidy to local-authority tenants would be to take the value of the dwelling discounting 25 per cent for pre-war houses and 10 per cent for pre-1955 houses. Taking interest, plus a fixed amount per annum for maintenance and management, we could calculate the economic rent for each dwelling. The difference between the real rent and the economic rent would be the amount of subsidy which each tenant receives. However, information was not collected in the survey about the value of local-authority housing so that our estimates are not based on this method.

A second approach would be to follow the Central Statistical Office, and for each individual dwelling weight the total subsidy to the local authority according to the rateable value of the dwelling. This method would not be very reliable, since the methods of applying rateable values to properties differ considerably from methods used to determine the amount of subsidy each local authority receives for individual dwellings from the central government. For example, pre-war housing lacking bathrooms and indoor WCs has a low rateable value, while subsidies are higher than subsidies on modern dwellings with bathroom and indoor WC where the rateable value is high. We are unable to adopt this method since we lack data about the rateable value of individual properties. The method we have used is to allocate to each local-authority dwelling the average subsidy, including rate subsidy, for each local authority. In this way, we have allowed for the great differences which exist between local authorities, but we

¹ Nevitt, *Housing, Taxation and Subsidies*.

² Webb and Sieve, *Income Redistribution and the Welfare State*, p. 51.

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have been unable to allow for differences between dwellings within each local authority. It is difficult to know how unreliable this method is.

In estimating housing subsidies, we have not made any estimate of the size of the subsidy, if any, that households living in privately rented accommodation receive. The subsidy is borne by the landlords. It is not possible to determine whether it is passed on to the tenants or not.