The British Tax System

Fifth Edition

J.A.Kay and M.A.King

Import Duties
Income Tax Return
Betting
Stamp
Capital Transfer
Beer
Tobacco
Petrol
Wines & Spirits
Car Tax
Development Land Tax

OPEN UNIVERSITY SET BOOK

THE BRITISH TAX SYSTEM

FIFTH EDITION

J. A. KAY
M. A. KING

OXFORD UNIVERSITY PRESS
1990

Oxford University Press, Walton Street, Oxford OX2 6DP
Oxford New York Toronto
Delhi Bombay Calcutta Madras Karachi
Petaling Jaya Singapore Hong Kong Tokyo
Nairobi Dar es Salaam Cape Town
Melbourne Auckland

and associated companies in
Berlin Ibadan

Oxford is a trade mark of Oxford University Press

Published in the United States
by Oxford University Press, New York

© J. A. Kay and M. A. King 1978, 1980, 1983, 1986, 1990

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Oxford University Press

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out or otherwise circulated without the publisher's prior consent in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser

British Library Cataloguing in Publication Data
Kay, J. A., 1948–
The British tax system.—5th ed.
1. Taxation—Great Britain
I. Title II. King, Mervyn A.
336.2'00941 HJ2601

ISBN 0–19–828312–1
ISBN 0–19–828313–X

Library of Congress Cataloging in Publication Data
Kay, J. A. (John Alexander)
The British tax system
Bibliography: p.
Includes index.
1. Taxation—Great Britain. I. King, Mervyn A.
II. Title
HJ2619.K39 1986 336.2'00941 86–21755
ISBN 0–19–828312–1
ISBN 0–19–828313–X (pbk.)

Printed and bound in
Great Britain by Biddles Ltd,
Guildford and King's Lynn

Preface

This fifth edition of *The British Tax System* is the most extensive revision since the book was first published in 1978. The revisions reflect the substantial changes both in the tax system itself and in the ways people think about tax issues that have occurred since then. There have been major shifts in rates of tax, in the taxation of savings and companies, and in the social security system, while reforms to the structure of local authority finance and the ways in which married couples are taxed are in progress. While our framework of analysis is still that which we adopted in our first edition, and our view of the appropriate direction of reform is similar, we have found that some concepts which were esoteric and unfamiliar ten years ago are now part of everyday debate, while other issues that were then controversial no longer seem to have the same urgent significance. In this latest edition we have given much more attention to the international environment within which the British tax system is set. The growing integration of the European and world economies affects many aspects of life and taxation is one of them.

Despite these changes, many common factors are even more evident. One is that the progress of tax reform in the UK is very unsatisfactory. Several years of inertia lead to a frenzy of ill-conceived change, after which torpor is restored: a cycle which has occurred five times in the last twenty-five years and which, in the absence of institutional change, is likely to recur as frequently in the next twenty. What is required is a strategy for tax reform. The warm reception initially given to the radical Budgets of 1984 and 1988 illustrates the extent of demand for reform. But the structure of the tax system is little improved and there was, in fact, no articulated strategy for such change behind these Budgets. If we sought to read one into them, it would be that of the comprehensive income tax, a strategy which could and would not work, for reasons which readers of earlier editions of this book, or the current one, should fully understand. A principal concern of this book remains the description of such a reform strategy, based on a personal expenditure tax and a cash-flow corporation tax.

Preface

Many people have helped us prepare the various editions. To those thanked in earlier Prefaces we would like to add Hayley Bell and Marta Robson.

In this edition we have brought the information up to date as of 1 January 1989.

JAK
MAK

Contents

	List of Figures	viii
	List of Tables	ix
	Introduction	1
1.	The Economics of Taxation: Some Basic Concepts	6
2.	The Income Tax Schedule	21
3.	The Income Tax Base: Income from Earnings	46
4.	Social Security and Taxation	61
5.	The Income Tax Base: Savings and Investment Income	79
6.	The Choice of the Tax Base	89
7.	The Reform of Direct Taxation	103
8.	Indirect Taxes	120
9.	Local Taxation	134
10.	Principles of Company Taxation	152
11.	Company Taxation in the UK	164
12.	Taxing Economic Rent	178
13.	The Tax System as a Whole	189
14.	The International Context of Taxation	198
15.	World Tax Reform	219
	Further Reading	228
	References	232
	Index	239

List of Figures

1.1	Alternative tax schedules	14
2.1	Marginal income tax rates, 1988/9	24
2.2	Average income tax rates, 1988/9	24
2.3	Marginal rates of employee National Insurance contributions, 1988/9	26
2.4	Average rates of employee National Insurance contributions, 1988/9	27
2.5	Marginal rates of tax on earnings, 1988/9	28
2.6	Average rates of tax on earnings, 1988/9	29
2.7	Total marginal tax rate on earnings, 1988/9	30
2.8	Total average tax rate on earnings, 1988/9	31
4.1	A social dividend scheme	75
7.1	Capital tax receipts	109
7.2	The sources of personal expenditure	112
7.3	An expenditure tax form	114
8.1	Spending on alcohol and tobacco related to household income	132
9.1	Effect of revaluation and uniform business rates on different properties	144
11.1	Mainstream corporation tax, 1966–87	167
12.1	Economic rent in a simple economy	179
13.1	Tax revenue, UK, 1966–87	192
13.2	Average tax rate by decile	193
13.3	Average tax and benefit rate by decile	194
14.1	How VAT is currently administered	212
14.2	VAT administration after 1992	213

List of Tables

4.1 Benefit levels, January 1989 — 62
4.2 The poverty trap, January 1989 — 67
4.3 Distribution of marginal tax rates for heads of tax units, January 1989 — 68
4.4 Calculating replacement rates, 1988/9 — 69
4.5 The development of replacement rates over time — 70
4.6 The efficiency of the social security system — 71
5.1 The composition of personal wealth in the UK — 79
5.2 How savings are taxed — 87
6.1 Trends in the distribution of personal wealth in the UK — 92
8.1 Accounts for a simple example using VAT at 15% — 128
8.2 Rates of VAT — 130
8.3 The incidence of tax on various commodities, 1988 — 130
9.1 Sources of income for local authorities in England, 1984/5 — 137
9.2 Relationship of rates and community charge to net household income — 140
9.3 The effects of the community charge on house prices — 142
9.4 Local authority spending, England, 1987/8 — 151
11.1 Effective marginal tax rates on corporate investment — 171
12.1 North Sea oil revenues — 183
13.1 UK tax revenue, 1988/9 — 189
13.2 Taxation levels, 1985 — 191
13.3 Linearization of UK tax system, 1988/9 — 195
13.4 The tax system as a whole, 1948/9–1988/9 for a two-earner couple — 196
14.1 VAT rates in the European Community, April 1987 — 210
14.2 Rates of excise duty in the EEC, April 1986 — 214
15.1 Changes in income tax schedules, 1975–89 — 223
15.2 Principal changes in the tax treatment of savings since 1979 — 226

Fantastic grow the evening gowns;
Agents of the Fisc pursue
Absconding tax-defaulters through
The sewers of provincial towns

Caesar's double-bed is warm
As an unimportant clerk
Writes I DO NOT LIKE MY WORK
On a pink official form.

From W. H. Auden, 'The Fall of Rome'
(*Collected Shorter Poems,* Faber & Faber, 1966)

Introduction

In this book we seek to use economic analysis to examine the problems facing the British tax system. We try to do this in a practical way by looking at real day-to-day problems. We were ourselves surprised that economics was useful to us not only in analysing the economic effect of taxes, but also in thinking about administrative problems. The reason for this is that much of the muddle and complexity of the present system derives from the absence of any clear view as to what principles do or should underlie it.

This is not to suggest that economics provides all the answers. Public finance is one of the most rapidly developing branches of economic theory, but we found much traditional theory of little help in dealing with the everyday problems of the British tax system, and it is instructive to consider why. Much of this material is concerned with evaluating the economic effects of taxes, and this is quite properly done by contrasting the characteristics of different theoretical taxes. But the ways in which actual taxes differ from these theoretical taxes are often of much greater economic significance than the ways in which theoretical taxes differ from each other. We pursue in this book the question of whether income or expenditure should be the major component of the tax base: the extent to which savings should or should not be taxed. It is conventional to think of this in terms of how aggregate savings respond to changes in taxes. But there is little evidence to suggest that aggregate savings are likely to be very sensitive to tax changes. What is more significant is that the ways in which people save are very sensitive indeed to the ways in which different savings media are taxed. The present tax system, in effect, exempts some forms of saving from tax but not others; and this, we think, has more marked economic effects than a structure in which all forms of saving are taxed or one in which none of them is taxed. We pursue this argument, and others like it, in more detail below; but we note at this stage that the loopholes and anomalies in the

tax system can often be much more significant in their effects on behaviour than the taxes themselves. The economist who thinks that because the main UK personal direct tax is called an income tax, it has the same characteristics as income taxes he encounters in public finance texts is likely to be seriously misled.

These observations are not in any way intended to question the need for any analysis of applied economic problems to be rooted firmly in economic theory; indeed, it is because we are convinced of this that we offer, in Chapter 1, a crash course in some simple, but central, economic concepts. We would like to stress that we shall only make proposals for change if we believe them to be practicable. It is necessary to spell out what this means. The most usual definition equates the impracticable with the unfamiliar. This definition is convenient for those who find adaptation to new ideas difficult or disturbing, but it is not very useful for a discussion of the tax system. It is perfectly clear that there are many other systems of all kinds which differ from those at present in operation which would work, and it would be surprising if some of them would not work better than existing systems. Those who believe that being practical involves confining attention to minor modifications of the status quo are simply showing that their minds, or the minds of those to whom they are reporting, are closed.

A related error is to confuse a practical outlook with an obsession with detail. As an example, the Inland Revenue in its memorandum on local income tax to the Layfield Committee was apparently exercised by the problem of people who live in caravans. It would be foolish to deny that there is such a problem. It would also be foolish to deny that the problem is, like the number of people who live in caravans, small. It is very unlikely that anyone would say 'I would be in favour of a local income tax if only I could think of a way of dealing with people who live in caravans'. Given that this is so, it is pointless to discuss the matter further at this stage. Not only is it unnecessary to consider the difficulty in advance of making basic decisions about the structure of such a tax (such as whether to have one); it is possibly undesirable to do so, since this kind of problem can be more sensibly tackled in the light of other, more important, decisions that would need to be taken first. The enumeration of endless lists of unimportant objections is a common administrative tactic for resisting change, and the person who seeks to deal with it by

answering them is lost. Since most people are—rightly—uninterested in the minutiae of hypothetical tax systems, we shall not take our description of alternatives beyond the point at which we are confident that we, or a competent firm of management consultants, could fill in the remaining details. It is extremely unfortunate that the Inland Revenue has cried wolf so often on the impossibility of administering reforms—including several which were subsequently implemented—that its views on what is and what is not feasible can no longer be regarded as reliable.

All this said, it must be recognized that administrative feasibility is an important constraint on tax policy and we have given it due weight in our discussion. We shall regard measures as practicable if we believe they can be operated reasonably cheaply and simply in a manner which corresponds to the underlying intention of the measure. Most things can be made to work, after a fashion, if we are prepared either to spend a good deal of effort on policing them or to accept many *ad hoc* expediencies and anomalies in their operation. Practicability is therefore a matter of degree (so that it is not easy to make firm statements about it) and we judge something to be impracticable if it would cost too much in one or other of these directions: too much administrative burden or too extensive compromise with the original objective. It should be clear from this definition that it is not only not necessary for a measure to be part of the status quo for it to be practicable; it is not sufficient either. There are substantial parts of the British tax system which do not work satisfactorily and could not, without great difficulty and expense, be made to do so. We shall return to this point in various specific contexts.

The effects of a direct tax system come from the interaction of the tax schedule with the tax base. In Chapter 2 we describe the British tax schedule as it is today. This schedule has been subject to radical change, and we go on to look at the economic principles which should govern the design of a tax schedule: the need to strike a balance between the disincentive effects of taxation on effort and the demand for equity in aiming at a fair distribution of the tax burden. In Chapter 3 we look at the tax base as it applies to earned income. The interaction between the taxation of earnings and the social security system is a topic of increasingly central policy concern, and we consider this in Chapter 4 before reverting, in Chapter 5, to the ways in which income from savings and

investment enters the tax base. In Chapter 6 we examine the choice of the tax base and the possibility of a direct tax which is levied not on income but on personal expenditure. Chapter 7 explores how such a tax might operate.

We then turn to other areas of the British tax system. Chapter 8 examines indirect taxes, while Chapter 9 looks at how local authorities are financed, considering the proposal to replace domestic rates by the community charge, or poll tax. Chapters 10 and 11 are concerned with the taxation of companies, and Chapter 12 with a particular aspect of this—the imposition of taxes on economic rent. In Chapter 13 we bring together these elements and issues and look at the British tax system as a whole.

The international context of taxation is a subject of increasing significance and this topic is reviewed in Chapter 14, which includes discussion of the possible harmonization and approximation of taxation within the EEC. Tax reform in the 1980s has taken place not only in Britain but in many other countries, and our concluding Chapter 15 assesses the future of tax reform in that international environment.

One aspect of the tax system about which we shall have little to say is the function of macro-economic stabilization and relations with other countries. Following the Keynesian revolution, much attention was directed to the use of fiscal policy as a way of controlling fluctuations in aggregate demand. Stabilization policy based on marginal changes in government expenditure and taxation was to be the means of eliminating the business cycle. Indeed, Musgrave in his classic work on public finance (1959) explains that he began with the idea of producing a tract on 'compensatory finance' dealing with the question of how the public budget affected certain key macro-economic variables such as the level of unemployment. But the gaps in the theory of public finance which he discovered, many of which still exist today, lay in the more traditional areas of the effect of taxes on income distribution and economic efficiency. In the end, stabilization policy occupied less than one-third of his treatise. This trend has continued. In a more recent book by the same author (Musgrave and Musgrave (1976)), only 100 out of 759 pages are devoted to fiscal stabilization.

Part of this decline in interest is due to the realization that macro-economic policy is more complicated than the simple

textbook Keynesian models led us to believe and that 'fine-tuning' of the economy is considerably more difficult than we might have hoped. This is because there is uncertainty as to what will happen to the economy in the future in the absence of any change in policy and because there are long delays between when a decision is made to alter taxes and when the desired effect on spending or unemployment becomes apparent. First of all there is the inevitable delay in collecting statistics, so we may only have an adequate idea of what was happening to the economy some months or even a year ago. Even when the government has looked at the statistics, deliberated, and then decided to, say, reduce taxes, there are still more lags in the system. Individuals will take time to adjust their spending decisions and, at least initially, the impact will be felt on the level of stocks in shops. Producers will probably wait before increasing their output rather than running down stocks, and the extra output will be met by overtime working until firms are convinced it is worth expanding their labour force on a more permanent basis. These lags, in conjunction with uncertainty about the future, make stabilization policy a hazardous business.

It has been seriously argued that the net effect of British government policies has been to destabilize rather than to stabilize the economy, and that they have in any case been motivated more by electoral factors than by considerations of demand management ('the political business cycle'). (See Worswick (1971) and Nordhaus (1975).) We shall not attempt to assess these views. For our purposes we may simply note that it is unlikely that the choice of the *structure* of the tax system will make these problems any easier. It is with the structures of the system that we shall be concerned, and to say that we shall not answer every question is not to say that we shall not tackle the most pressing.

1

The economics of taxation: some basic concepts

Tax incidence

Economists have long been concerned with the question of who actually pays any particular tax—the *incidence* of the tax. At first sight, it may seem surprising that this is a problem. The house-owner who is required to write out a cheque in payment of rates to his local authority, or the employee who sees income tax deducted from his wages, knows very well who is paying the tax. But things are not really so simple. The tax on tobacco is paid by the trader who withdraws it from a bonded warehouse, at some intermediate stage of the process that turns tobacco leaves into cigarettes. But no one imagines that he really pays the tax, in the sense that he is personally worse off by the amount of the duty that he regularly pays over to the Customs and Excise. The tax is paid by those who ultimately smoke the cigarettes. There is no law that requires or even entitles the tobacco distributor to recover his liabilities from them—indeed, in all probability he has no direct dealings with them and does not know who they are. He simply adjusts the terms on which he sells in order to reflect the tax that he is required to pay; so, in turn, do those who buy from him; and the final result is that the tax burden is passed on to the consumer.

We can therefore usefully distinguish the formal incidence of a tax from its effective incidence. The formal incidence falls on those who have the actual legal liability for paying the tax. The effective incidence identifies those who are, in the end, the people who are out of pocket as a result of the imposition of the tax. Naturally enough, it suits traders to encourage some confusion between the two. Suppliers will from time to time express regret that they are obliged to charge VAT on a particular invoice. But the truth of the matter is that they are not obliged to charge VAT at all: they are merely obliged to pay it, and in adding it to a bill they are seeking (as those who devised the tax intended they should) to pass that

burden of payment on to someone else. The formal incidence of VAT is on the supplier; the effective incidence (subject to some qualification) is on the purchaser.

The reason the qualification is required is that the incidence of most taxes is shared between several parties. Commodity taxes are, for example, normally assumed to be incident on the purchaser. But the reason manufacturers spend money—often very large amounts of money—arguing for more favourable treatment of the goods which they produce is not their altruistic concern for the interests of their consumers. It is that they believe the tax is, at least in part, one which falls on the company and, ultimately, its shareholders. If we impose a heavy tax on television sets, fewer television sets will be sold, with consequences for the earnings of both workers in television factories and firms which make televisions. If the tax is removed or reduced, firms will be able to sell more of the goods concerned and earn larger profits. In a similar way, the workers in the firm might expect that there would be more employment and higher earnings. And the incidence of an income tax need not always fall on those who earn the income. If a tradesman offers to work for £100 in cash or £120 by cheque, he is demonstrating that the incidence of the tax is shared with the consumer of the services he provides.

Although the general notion of incidence is an indispensable concept in the analysis of taxation, it is one which cannot easily be given a precise meaning. The reason is that it implicitly requires a counterfactual hypothesis: what would have happened if the tax had not been imposed? It is not sufficient to say 'there would have been no tax', since public expenditure would have had to be financed in some other way. So we must specify what other tax would have been imposed, or which item of public expenditure would have been reduced, or how the government would have met its borrowing requirements, and the answer to our incidence question will depend on the alternative assumption that we make. For this reason the issue is sometimes described as 'differential incidence' because we examine differences between alternative tax systems that raise the same revenue. Several different concepts of incidence can be found in the theoretical literature on public finance, each reflecting different counterfactual hypotheses; while empirical studies of tax incidence either make intolerably crude assumptions or become impossibly complicated.

Thus we noted above that a consequence of imposing a heavy tax on television sets was that some of those employed in their manufacture suffered reduced earnings and others lost their jobs; had the same tax revenue been raised in some different way, other groups of workers would probably have suffered similar hardships. But without exploring these issues in detail—as a rigorous answer would require—we can say that a significant part of the incidence of this tax fell on those who were previously employed in making televisions.

What factors govern the incidence of any particular tax? We can set out two basic principles. First, the formal incidence of a tax is generally irrelevant to its effective incidence. It makes little practical difference to the incidence of the tobacco tax whether it is levied on importers, wholesalers, manufacturers, retailers, or individual smokers; and the sensible decision is to impose the legal liability at the point at which the tax can be collected most cheaply and conveniently. Second, the harder it is for someone to substitute other things for the taxed activity, the greater the proportion of the incidence of the tax which he will bear. VAT is imposed on most goods; and since there is not very much (except leisure) that can be substituted for consumption in general, most of the burden of VAT falls on consumers. But if a specially heavy rate of VAT is imposed on one or two items, as with our tax on television sets, the situation is rather different. Consumers can substitute other things for television sets, and if the price rises sufficiently they will tend to do so. Producers, on the other hand, are in the short term stuck with capacity for manufacturing television sets; and if the only way to sell them is to keep down the price and absorb part of the tax themselves, then that is what they must do.

If the tax were more discriminatory still—if it were imposed on a single manufacturer of television sets in isolation, for example—then that manufacturer would have no alternative but to hold down his price, accept the resulting losses, and grin and bear it until in the long run he could try to move into a less adversely treated business. For most people, there is no alternative to work which is both attractive and feasible, and that is why the major part of the incidence of the income tax falls on the employee. But there are alternatives to effort, to overtime, and to increased responsibility; and to the extent that these are important and

valuable components of the package which a particular employer is buying, that employer will have to pay the price, at least to some extent, by raising the gross wage that he pays to a level that takes some account of the burden of taxation on the employee.

The first principle—the irrelevance of formal incidence—is easy to understand in abstract, but has some wide-ranging implications. For instance, it suggests that it is a matter of no practical importance whether National Insurance contributions are levied on employees or employers (see pp. 23, 25, and 26). It is not too easy to determine what the effective incidence of such a tax is—though the argument above has suggested that it mostly falls on the employee—but whatever it is, it will be the same for both kinds of contribution. When wages come to be renegotiated, the employer's concern will be with gross labour costs, inclusive of any payroll taxes to which he may be subject; and that will determine the level of employment that he will provide at any particular wage and the offer he will be prepared to make to avoid industrial trouble. On the other side of the table, the employee's interest is in his take-home pay, net of any deductions imposed on him; and that should determine the amount or quality of work that he will provide at particular wage rates and the minimum he will accept in preference to incurring the costs of a strike or other action against the employer. None of these calculations is in any way affected by the proportions in which a given tax is divided between employers' and employees' contributions, and this will therefore not have a significant effect on the final outcome.

Of course, none of this denies that the nature of formal incidence may have significant short-term effects. If a shift from employees' to employers' contributions were to be made, then next week workers would be better off and firms worse off. But this is simply to say that adjustments may take time, and that the incidence of a tax may differ in the short and long runs. In practice the restoration of net real wages to their initial level might come about as much through an uncompensated rise in prices as through a diminution in the rate of increase of money wages. But the proposition that effective incidence is independent of formal incidence in the long run is true generally. The invoice that says £60 + £9 VAT, or the pay-slip that says £200 less £30 deductions gives £170 net, may in the short run mean what it appears to say. However, it is erroneous to suppose that if these tax items were

not there, the price or the wage from which these computations start would necessarily remain unchanged, and it is likely that the price might be £64 or £66 and the wage £180 or £190.

Tax capitalization

The easiest way to see *tax capitalization* in operation is to start with a rather artificial example. Suppose there exist a range of bonds, each of which sells for £100 and yields 10% in perpetuity; income tax on this yield is levied at 50%, so that the after-tax return on each bond is £5. Now suppose that the government decides, for some reason, that among these bonds there is one particular one that should be tax-exempt. As a result, this bond—let us call it bond X—now returns £10 per annum after tax as well as before it. Because of this, it is worth twice as much to any taxpayer, and so its price rises to £200. Now look ahead a few years. By this time, most of the holders of bond X will be people who have purchased it since the tax concession was given—people who have paid £200 for it. They are only earning 5% on their investment—which is the same as they could earn from other bonds—and are therefore no better off than if this concession had never been granted. In spite of this, however, they would suffer if the concession were withdrawn—if they intended to continue holding the bond, their after-tax income would be halved, while if they intended to sell the bond, they would discover that its capital value had halved. As a result of this, even people who are deriving and have derived no direct benefit from the concession would lose if it were repealed. The holders of such a bond might include some pension funds and charities, which do not pay tax and therefore gain nothing from the apparent concession (such groups would not find bond X especially attractive, but they might have other reasons for wishing to hold it). They too would suffer capital losses as the price of bond X fell if it became again subject to tax; although they obviously gain nothing from the concession, they would suffer by its withdrawal.

This is a simple case of a capitalized tax exemption. The only people who gain from it are those who hold the favoured asset at the date when the concession is introduced (and perhaps their descendants). In the example above, the fortunate holders of bond X on the critical day when the Chancellor made his announcement

saw the capital value of their asset double. Subsequent to that, no one derives any benefit from the concession at all. Nevertheless, later holders of the bond would lose if the concession were discontinued: in effect, they have bought the right to it from the former holders, and would have the part of their savings which they have invested in this form eliminated. Indeed, they would probably lose rather more than would be generally recognized. Not only would they be worse off by virtue of the extra tax they would themselves have to pay, but they would additionally be worse off because the asset they hold would fetch much less on resale. In other words, tax capitalization is a trap. In such a situation, almost everyone could agree that it would be better if the concession had never been given in the first place. But once it has been given, it is inequitable to withdraw it, and such a course is likely to cause real hardship. Thus the apparent beneficiaries of the concession will feel insecure: although their gains from it are small, their potential losses are significant and their position is anomalous and hence vulnerable. But once a concession of this kind has been made, there is not very much that can reasonably be done except to resolve not to fall into this particular trap in future. There is no point in considering the possibility of phasing out capitalized tax concessions, or any other method of retrieving the position. The Chancellor who has made such a move is almost literally in the position of a man who has unwisely given his assets away. After the first flush of gratitude, the original recipients will have spread ownership far and wide, and there is no method, except theft, by which he can ever get them back.

Needless to say, there are numerous examples of capitalized taxes in the British tax structure. One is the effect of tax concessions to owner-occupied housing. These are discussed in more detail in Chapter 5. For present purposes, we may simply accept that investment in housing is very favourably treated relative to investment in other kinds of asset. As a result, house prices are higher than they would otherwise be. This means that the interest and capital repayments being made by current house-buyers are substantially greater than they would be if there were no tax concessions, and hence the concessions are of little net assistance to them. Nevertheless, they would be seriously injured if, for example, relief on mortgage interest were reduced or withdrawn: not only would they find they had to pay more in tax

every year but the anticipated capital gains on their houses would fail to materialize and might well be turned into capital losses. New purchasers are not gaining much from the present tax system, nor indeed has this ever happened; those who have gained have been those who have owned houses, over the thirty or forty years in which the favoured position of housing has been built up, who have seen substantial real appreciation in value of their assets. They have not benefited much either, since the gain one derives from living in the same house of ever-appreciating nominal value has very little practical utility.

Another example of capitalized taxes is rates. The Government is currently implementing radical changes in the structure of the rating system, which we discuss in Chapter 9 below. Because rates are capitalized into property prices, these changes will have substantial effects on the values of different types of asset. The replacement of domestic rates by the community charge makes expensive houses more attractive relative to cheap ones, and reduces the price of buying housing services of any kind; thus all house prices can be expected to rise and the differentials between the prices of different qualities of houses will increase. In the market for commercial and industrial property, occupiers in the south of England will tend to pay more and those in the north less. This means that the effects on non-residential property will be just the opposite: differences between desirable and less desirable property will tend to be reduced.

The progressivity of the tax system

The meaning and implications of progressivity are important to an understanding of both the distributional impact of the tax system and the way in which it affects incentives to work. Central to this is an appreciation of the difference between *average* and *marginal* rates of tax. The average tax rate is the proportion of income that is taken in tax; the marginal rate is the fraction of *additional* earnings which goes to the taxman.

A progressive tax schedule is one in which the proportion of income that is taken in tax increases with income. This definition implies that the *average* rate of tax should increase with income. It is a common error to think that this means that the *marginal* rate

of tax should also increase with income (as it in fact does in the UK and most other countries), but this is not the case. A tax system is progressive if, and only if, the marginal rate of tax is higher than the average rate of tax: if you pay a higher rate of tax on any *additional* earnings than you do on your current earnings. Figure 1.1 (*a*) illustrates one possible relationship between average and marginal rates of tax. On incomes less than OA, both marginal and average rates of tax are increasing. At incomes above OA, the marginal rate of tax begins to fall, but because it is so high the average rate of tax continues to rise. Only at incomes above OB, where the marginal tax rate falls below the average rate, does the average rate start to fall; this tax schedule is progressive throughout the range OB.

The schedule shown in Figure 1.1 (*a*) is not a very likely one, but the case illustrated in Figure 1.1 (*b*) is important. This shows a tax schedule in which a certain amount of income, OX, is exempt from tax, and earnings in excess of that are taxed at a rate of OY. Someone whose income barely exceeds OX pays virtually no tax, and hence his average tax rate is very low (although his marginal rate is OY). As income increases, the fraction of it that is taxed becomes larger and larger, until for those with very substantial incomes the allowance OX is hardly significant and their average rate of tax is nearly equal to OY. If the personal allowance is paid as a 'tax credit' to those with incomes too low to make full use of it (i.e. those with incomes below OX), then the schedules of average and marginal rates are extended as shown by the dotted lines. This is a *linear tax schedule*, and it is completely described by two parameters—the basic allowance OX (which we shall assume is greater than zero) and the tax rate OY.

A linear tax system is progressive, since the average tax rate increases steadily with income. The slope of the schedule of average rates gives the rate at which the average rate rises, and is an indication of the degree of progressivity of the schedule. If OX and OY are both increased, as to OX′ and OY′ in Figure 1.1 (*c*) then the curve of average rates becomes steeper and the rate structure is more progressive. For most taxpayers the present British tax system with its personal allowance and wide basic rate band is a linear one (if we ignore its interaction with National Insurance contributions and means-tested benefits).

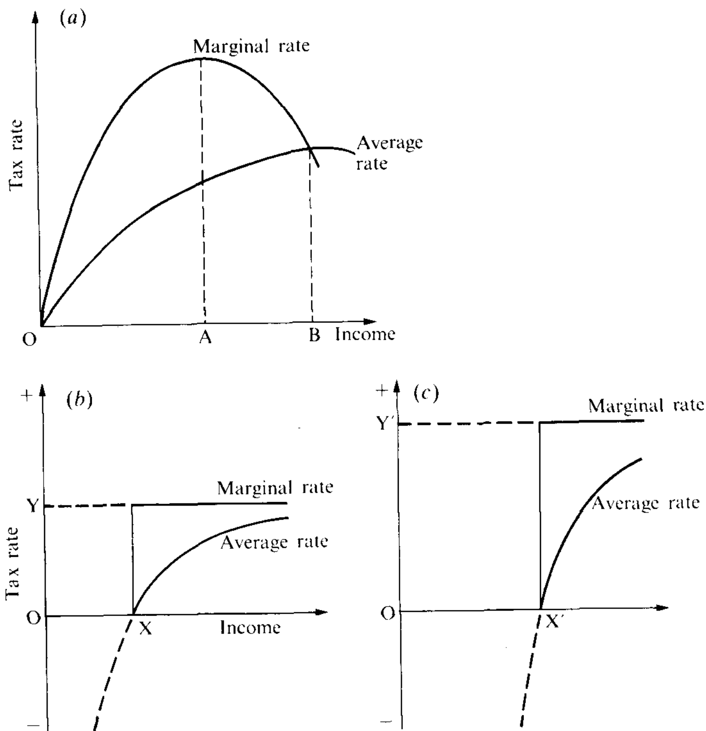


Fig. 1.1. Alternative tax schedules

Tax and welfare

What are the costs of collecting tax revenue? Some costs are obvious. Any tax diverts resources from the taxpayer to the government, and leaves him worse off by that amount. Of course, that is not the end of the story; these resources are presumably used to provide public services, which may be more or less valuable to him than the possibilities for private consumption that he loses. But there are bound to be administrative costs to tax collection, since it is necessary to provide inspectors to receive the revenues and gaols to receive those who do not pay them. There

will also be 'compliance costs' for taxpayers, who will spend time and suffer distress completing tax returns, and who may employ advisers to help them fulfil their obligations and suggest how to minimize them. All of these latter activities represent the necessary costs of tax collection and are pure social loss, simple subtractions from the total of goods and services—private and public—available to the community.

There is a less obvious cost, which has been called the 'excess burden' of taxation. Suppose I earn £2 per hour, and my employer is willing to give me as much, or as little, work as I require at this rate. However, a 25% income tax reduces my take-home pay to £1.50 per hour, and given this I choose to work forty hours per week, thus paying £20 in tax each week. For £1.50 I do not think it worth working any more than this, but if I were paid a little more I might. (Premium payments for overtime often succeed in inducing additional effort.) In fact, for £2 per hour I would stay late on one or two evenings and put in an extra three or four hours' work a week. My employer would be better off—why else would he allow this overtime? I would be better off—why else would I stay? And if the £20 that I pay in income tax were levied, not as income tax, but as a weekly contribution to public revenue which I was obliged to pay regardless of how much work I did that week or whether I did any at all, then my net earnings from overtime would be £2 per hour and I would decide to do it.

But with an income tax, I turn this opportunity away. The problem results from the way the tax depends on how much I choose to work. These disincentive effects imply that the losses imposed by the tax are greater than the £20 that I have to pay—if I had the opportunity to do so, I would prefer to pay the £20 as a lump sum, and everyone would be better off. The idea that income taxes have undesirable disincentive effects is of course familiar, and the 'excess burden' concept is simply the economist's formal expression of it. But the idea is quite general, and commodity taxes impose losses of just the same kind. If a bottle of whisky costs £1 to make but, because of tax, sells for £6 then it is easy to imagine that I do not buy it because I am willing to pay only, say, £2. If I were able to buy it at that price, I would more than cover production costs, be able to contribute something (though less than the regular £5) to the Customs and Excise, and enjoy a warm inner glow myself. Because of the tax, none of these things

happen. There is a disincentive effect here too—a disincentive to consume whisky—and this imposes an 'excess burden' or welfare loss of the same kind as disincentives to work.

It is very important to recognize that the magnitude of such effects depends on the impact of taxation at the margin—on the tax implications of a decision to work a little more or a little less, or to buy slightly more or less of a particular commodity—and not on the overall or average burden of taxation. My reluctance to put in more effort to obtain higher earnings arises because the Revenue will take such a high proportion of these additional earnings. Thus there are two basic components to the welfare effects of a tax. There is an 'income effect', which reflects the reduction in the taxpayer's net income that occurs when part of it is compulsorily transferred to the government, and which depends on the average rate of tax. There is also an 'excess burden', which reflects additional losses arising from the way in which the tax is levied. This depends on the marginal tax rate and the way in which behaviour responds to that marginal rate. The total loss is the sum of these two.

Tax and incentives

We have considered the question 'How do the disincentive effects of taxation on effort affect welfare?'. We now look at a different but closely related question: 'What effect would an increase in taxation have on the amount of work you do?'. Any individual considering his answer would probably feel the influence of two conflicting pressures. On the one hand, he would realize that the tax change would make him worse off. As a result, given his commitments and expectations about the style of life that he aims to enjoy, he would feel some pressure to do more work in order to earn sufficient to live up to these expectations. This effect (the *income effect* of the tax change, so called because it results from the fall in his real income) depends on the *average* rate of tax. On the other hand, he will also be conscious that the tax change reduces the amount of additional consumption that he can enjoy as a result of additional work, so that increased effort becomes less attractive relative to idleness or staying at home and redecorating the bedroom. This effect (the *substitution effect* of the tax, so called because it implies a substitution of leisure for

work) depends on the *marginal* rate of tax. The net impact of such a tax change on the work done by any individual therefore depends on the balance of these two factors: one, tending to increase effort, which is related to the average rate of tax; the other, tending to reduce it, which depends on the marginal rate of tax.

We can illustrate this by returning to the example above. We were able to eliminate the excess burden in that case by transforming the 25% income tax which reduced gross earnings from £2 to £1.50 an hour into a fixed tax of £20 per week. This revision of the tax restored the man's overtime rate to £2 and persuaded him to do more work. In this way, we eliminated the substitution effect of the tax. We could now eliminate the income effect also by abolishing the tax of £20 per week. If we did, the worker would discover that he could achieve the same standard of living—which requires a net weekly income of £60—by working for thirty rather than forty hours per week. It is very likely that he would in fact respond by reducing the amount of work he did, and this would tend to offset the increase that had resulted from the reduction in the marginal rate of tax. Thus the net effect of complete abolition of income tax on the amount of work he does may be small, and may even lead him to reduce it. This observation does not, however, upset our excess burden analysis at all. The gains we made from eliminating the excess burden—from encouraging him to do work which both he and his employer wanted—remain. Adding in the income effect—conferring on him an opportunity to enjoy a higher standard of living through increased leisure—raises his welfare further. The disincentive effects of taxation, which discourage additional work effort or other kinds of economic activity, make society worse off; the offsetting incentive effects, which force people to greater effort to maintain living standards reduced by taxation, do not make anyone better off.

Care is therefore necessary in evaluating empirical evidence on the effect of taxation on incentives. In our normative analysis—where we asked how taxation affected welfare—there was an income effect and a substitution effect, and they both operated in the same direction. The income effect is the welfare loss that results from having to pay the tax—a loss which is offset by the benefits of public expenditure—and its size is determined by the

average rate of tax paid. The substitution effect—the excess burden—is the welfare loss that results from the disincentive effects of taxation at the margin and this depends only on the marginal rate of tax. This is a pure social loss, and there is no corresponding gain to anyone. The sum of these two components gives the total loss which any tax imposes on the individual who pays it.

In our positive analysis—where we asked how taxation affected the quantity of effort—we also identified an income effect and a substitution effect, but discovered that they generally work in opposite directions. The income effect of taxation increases effort, the substitution effect reduces it, and the observed change in work effort is the net effect of the two. It follows that even if empirical studies show that tax has little effect on work effort, we cannot necessarily infer that incentive effects are not a matter for concern. Such an outcome might result from a small substitution effect offset by a small income effect, in which case our inference would be justified; or from large income and substitution effects, in which case the effects on welfare would be correspondingly large. More sophisticated analyses are required to enable us to discriminate between these possibilities.

We have used as an expository device the possibility that a person might be subject to a tax of £20 per week rather than a 25% income tax on his earnings of £80. If such a tax were related to his earning potential rather than his earnings, it would take the form of a fixed weekly sum and would, as we have seen, have no disincentive effects at all. Economists have dreamt of such 'lump-sum taxes' which eliminate the excess burden of taxation, but it is not easy to find taxes which have no disincentive effects. Nevertheless, they illustrate that it is possible to envisage a tax system where average rates are high but marginal rates are low. In practice, the easiest way to reduce marginal rates is to reduce average rates; but it is possible, by improving the structure, broadening the base, or altering the rate schedule, to achieve one without changing the other and hence to effect a more or less unequivocal improvement in the effects of the tax system on economic efficiency. We consider these effects and possibilities further in our discussion of particular taxes.

Fiscal neutrality

In discussing these issues, we shall use the concept of fiscal neutrality. In the first edition of this book, we described this concept as 'a distinctly unfamiliar idea in the UK'. Since then, it has become a political cliché, particularly among those whose conception of what it means, or what *might* be involved in achieving it, is somewhat hazy. A neutral tax system is one which seeks to raise revenue in ways that avoid the distortionary substitution effects we have described.

Fiscal neutrality does not imply that the tax system has no effect on behaviour. No tax system which collects revenue can have that property. A structure approaches fiscal neutrality to the extent that it avoids high marginal rates of tax and does not impose very different rates of tax on essentially similar activities. The effect of this is to minimize the economic inefficiency which results from taxation, over and above the inescapable losses which the need for revenue imposes on the taxpayer. As we show in subsequent chapters, considerable progress towards fiscal neutrality has been made both in Britain and in other countries; as we shall also show, there is still a long way to go.

The current vogue for fiscal neutrality involves a retreat from an older view that taxation is a central instrument of social and economic policy. The function of the tax system is in the process of raising revenue to encourage the good and discourage the bad. Even if one takes this view, there is much to be said for understanding the notion of neutrality and what a tax system which generally sought to achieve it would be like. Even if you know where you are going, it is generally valuable to know where you are starting out from, and if you are aiming to influence people in certain directions, it is useful to have an idea of what things would be like if you were not trying to do so. The neutral tax system, in effect, provides a bench-mark against which non-neutralities, intentional or otherwise, can be judged.

We have described one argument for neutrality—minimization of the excess burden of tax disincentives. But there is a more basic argument. The effects of taxation are generally not obvious, and are very often not what they seem. We shall describe in subsequent chapters the ways in which behaviour and institutions have been moulded by the British tax system—and while there is

room for argument about the desirability or undesirability of these effects, it is really very difficult to argue that many of them have ever been explicitly intended by anyone. The present state of the British tax system is the product of a series of unsystematic and *ad hoc* measures, many undertaken for excellent reasons—for administrative convenience or to encourage deserving groups and worthy activities—but whose overall effect has been to deprive the system of any consistent rationale or coherent structure. We should be rather content if a tax system can achieve its basic functions of raising revenue and relieving inequalities of income and wealth without doing too much damage in the process. Clearly, this is a good deal less than an ideal tax system, but it is a good deal better than what we have at the moment. We now turn to some description and analysis of what that is.

2
The income tax schedule

There are two taxes imposed on earned income in Britain today: income tax and National Insurance contributions.

Income tax was first introduced to Britain during the Napoleonic Wars, but it only became a permanent feature of the tax system in 1842. As part of Peel's economic reforms it was reintroduced to replace in large part the revenue previously derived from tariffs and from various archaic taxes. It was imposed at the single low rate of 7*d*. in the £ (3%) and, although this varied from time to time and ministry to ministry in the course of the nineteenth century, these essential elements never changed. The highest rates were reached during the Crimean War, when the tax threshold was an annual income of £100 and the rate 1*s*. 4*d*. (7%); but even at this time there were fewer than half a million taxpayers. Thus income tax was then an impost of no interest or relevance to the great majority of the population.

The numbers of taxpayers did not exceed a million until the early years of the twentieth century. In 1909 effective progressivity came to the income tax with Lloyd George's 'people's Budget' in which he proposed a 'supertax' on incomes over £5,000 per annum (equivalent to over £150,000 at current prices). This took the maximum rate to the unprecedented level of 1*s*. 8*d*. (8%). These proposals generated a constitutional crisis (the supertax was not the most bitterly resisted element, although it was the most quantitatively significant) and they were implemented only in association with a fundamental reform of the House of Lords. During the First World War enormously increased revenue requirements led to top rates of tax at over 50%. Although there were reductions thereafter, rates and revenue remained well in excess of pre-war levels while the supertax, renamed surtax, became a permanent and accepted feature.

Even then, however, liability to income tax was still confined to a small and affluent minority. Average wages in 1939 were around £180 per annum; there was no possible liability to tax for a married

couple with earnings below £225 at that time, and there were fewer than four million taxpayers in a working population that exceeded twenty million. The decision that Second World War expenditure should be substantially financed from taxes changed this situation radically. Tax rates were increased and thresholds lowered at a time when money wages were rising rapidly. This brought about not only a quantitative change in the significance of income tax, but also a qualitative change in its method of operation. The number of taxpayers soon exceeded twelve million, so that the majority of working people now came within the ambit of the tax. These included large numbers of households lacking significant capital resources and accustomed to budgeting on a weekly basis; so the only practical method of enforcing tax liabilities was by deduction from wages before they were received. The Inland Revenue concluded that this was impracticable, and published a White Paper (Cmd. 6348) explaining that view; simultaneously, however, it was instructed to devise a scheme for doing so. PAYE (pay-as-you-earn) was introduced and has remained the principal means of collecting income tax since then. By 1960 essentially the whole of the working population was covered by income tax, and this has remained true ever since.

National Insurance contributions were introduced as a universal tax in 1948. They are unusual in the British tax system in being a hypothecated tax, which means that the tax is designed to finance specific items of expenditure. Vehicle excise duty was once designed to generate a road fund for highway construction and maintenance, but greedy Chancellors raided the fund for general expenditure; the television licence fee continues to finance the BBC. In general, however, the Treasury has strongly resisted hypothecation, which it sees as undermining its control of public expenditure. National Insurance contributions (NICs), which pay for most of the cost of retirement pensions and unemployment and sickness benefit, are by far the most important case of hypothecation.

NICs were introduced as a flat-rate tax, payable by all those in work and by their employers. The object of this regressive structure was to convey a sense that benefits were earned by contributions, just as private insurance claims were entitlements derived from premiums paid (the social insurance principle), and it remains true today that those who have gaps in their record of payment of NICs may find their entitlement to certain social security benefits reduced. As social security expenditure grew,

however, the flat-rate contribution needed to finance the scheme became an increasingly large proportion of earnings. This bore harshly on the low paid, and in 1961 earnings-related contributions were introduced. The earnings-related element became a steadily greater fraction of the total and since 1975, NICs have been wholly earnings-related.

The tax schedule

Everyone is entitled to a personal allowance—a fixed amount which can be received free of income tax. This is currently £2,605 and a married man receives an allowance of an additional £1,490. All income above this level is taxed at the basic rate of 25%. If taxable income in a year exceeds £19,300—which means that total income is greater than £21,905 for someone who receives only the personal allowance—then tax on any extra income is payable at the higher rate of 40%.

Figures 2.1 and 2.2 illustrate the implications of this schedule in terms of marginal and average rates of tax. As we described in Chapter 1, even this simple linear structure is sufficient to achieve progressivity of the tax schedule—in the sense of a steadily increasing average rate of tax. However, the degree of progressivity as measured by the rate of increase of this average rate is rather low in the range of incomes from £10,000 to £20,000 per year. As we see below, this has strange results when its effect is combined with the second tax on earned income—National Insurance contributions.

The normal rate of NIC is 9% for employees and 10.45% for employers. Earnings below £41 per week are free of National Insurance contributions altogether and the rates are 5% for those between £41 and £70 and 7% between £70 and £105. These lower rates apply to both employers and employees. In contrast to income tax—where each band of income is subject to tax at a rate applicable to that band—your level of earnings determines the rate of National Insurance contribution applicable to your whole income. That means that you pay no NIC on earnings of £40 per week but £2.05 if you earn £41. Earnings above £305 (the ceiling) are ignored for purposes of employee National Insurance contributions, so that there is a maximum weekly payment of £27.45; employers must pay NICs on all earnings.

Figures 2.3 and 2.4 show the schedules of marginal and average

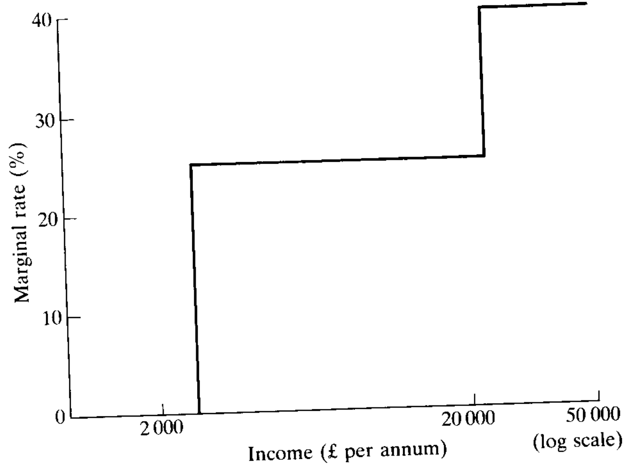


Fig. 2.1. Marginal income tax rates, 1988/9

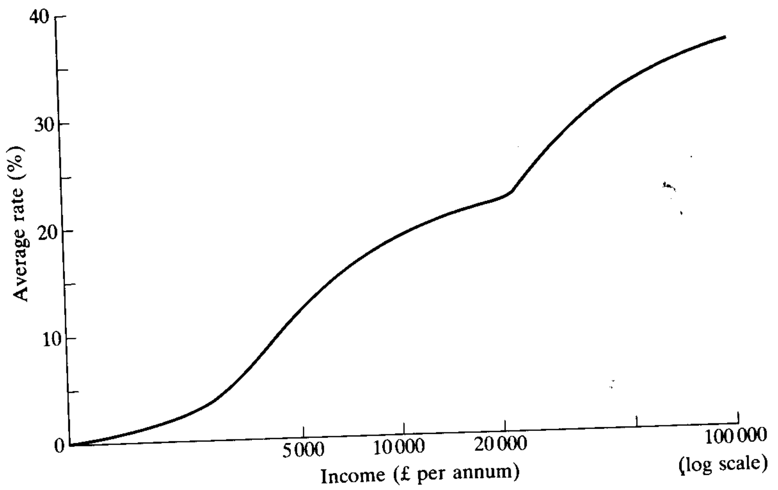


Fig. 2.2. Average income tax rates, 1988/9

rates of tax implied by National Insurance contributions. The diagrams make clear the contrast between the income tax structure —where different rates apply to successive bands of income—and the National Insurance rate schedule—where the band you are in sets the rate for the whole of your income. The income tax schedule has a pattern of stepped marginal rates, yielding smoothly increasing average rates; the NIC schedule has stepped average rates, and massive (but only local) discontinuities in marginal rates.

In Figures 2.5 and 2.6 we set these two rate schedules together and examine the schedule for the taxation of earnings taken as a whole. The pattern revealed is bizarre. Marginal rates show blips, rises, and falls; average rates rise progressively at low and at high income levels, but display no progressivity at all in the intermediate range. If, as in Figures 2.7 and 2.8, we bring in employer NICs as well to assemble the complete picture of tax on earnings, these peculiarities become even more extreme, and the overall schedule displays a significant range of regressivity.

The picture we have displayed is not the product of any rational design. It is difficult to conceive of any economic or political philosophy, or any balancing of the difficult trade-off between efficiency and incentives, which could possibly account for it. And around the world, the structure of income tax schedules is coming under increasing scrutiny. The United States has just reduced its fourteen different marginal rates to two; in New Zealand, the Finance Minister sought to establish a single marginal rate of income tax for all taxpayers but has been obliged to reach a political compromise on two. West Germany, by contrast, has a different marginal rate of tax for every level of income. Throughout the world, the maximum marginal rate of income tax has fallen sharply in the last decade: in Britain from 83% to 40%, in the US from 70% to 28%. These changes reflect, at least in part, concern for the effect of taxation on work effort. We therefore review the evidence on this subject and then examine the implications for the design of tax schedules.

Taxation and effort

The effects of income taxation on work effort are a continuing subject of concern and discussion. This is not surprising—'reduce

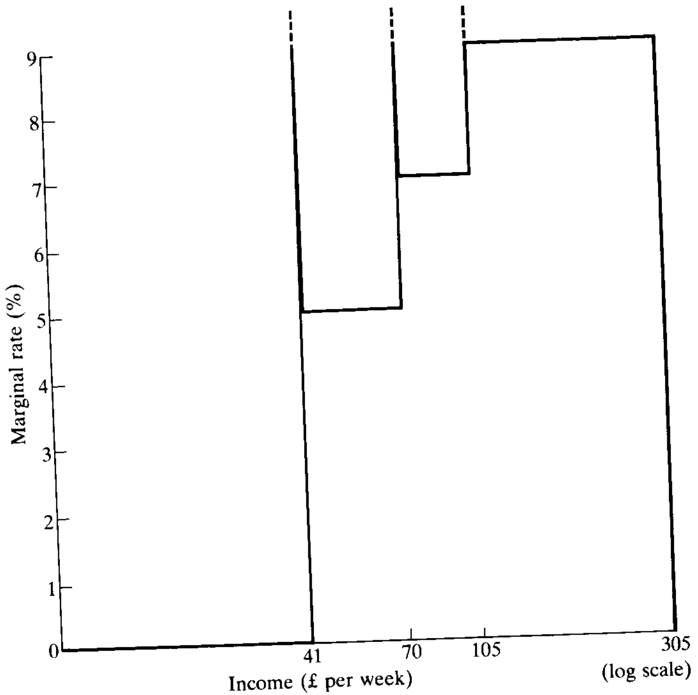


Fig. 2.3. Marginal rates of employee National Insurance contributions, 1988/9

my taxes so that I can work harder' is generally a more winning argument than 'reduce my taxes so that I can be better off'. Unfortunately, this makes this an area in which it is hard to disentangle rhetoric from evidence.

In Chapter 1 we described how an income tax would affect work effort in two ways. The income effect describes the way in which tax reduces the taxpayer's real income. It leads him to take less leisure and to do more work, in order to maintain his standard of living, and is a function of the average rate of tax. The substitution effect depends on the way in which tax makes additional work less

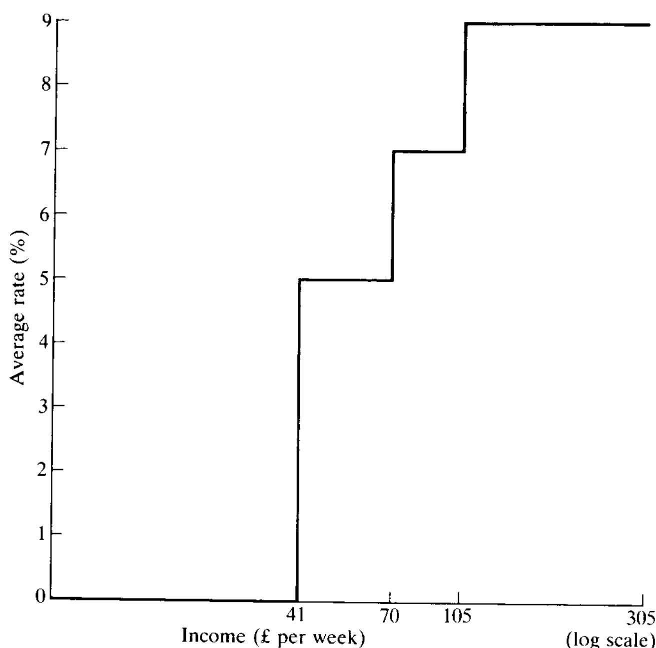


Fig. 2.4. Average rates of employee National Insurance contributions, 1988/9

attractive than additional leisure and is related to the marginal tax rate. This analysis suggests that if we wish to identify those people for whom the effects of taxation on effort are likely to be greatest, we should look at cases where the substitution effect dominates the income effect—typically, where the marginal tax rate substantially exceeds the average rate. It is not necessarily there, however, that most economic damage is likely to be done by taxation. This will occur at the points where the marginal rate of tax is highest and hence the substitution effects are greatest. The total damage done will depend on the numbers of people falling into such categories as well as the size of the effect.

We now turn to the actual British tax structure. High marginal rates of tax were traditionally a problem for relatively well-off taxpayers, but now mainly affect those with incomes well *below* average. The reason that this group may pose a problem is not due

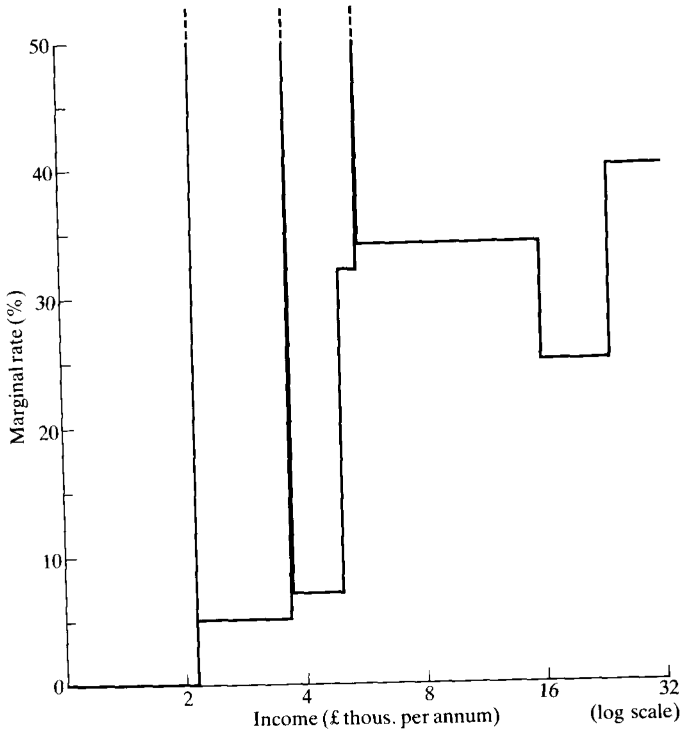


Fig. 2.5. Marginal rates of tax on earnings, 1988/9

solely to the operation of the income tax—the rate faced by people in this category is much the same as that for those on somewhat higher incomes—but to its interaction with the wide range of *ad hoc* means-tested benefits that exist in the UK. Since these benefits are gradually (or in some cases suddenly) withdrawn as income increases, there is an 'implicit tax rate' applicable to each benefit. This 'implicit tax rate' is the proportion of any rise in income which is lost as a result of an offsetting reduction in benefit. These rates vary from benefit to benefit. We describe in more detail in Chapter 4 how these interactions come about.

How will high rates of taxation influence work effort? Most people in full-time employment work just under forty hours a week, and variations in hours of work over the year come more from differences in lengths of holiday or periods of sickness than

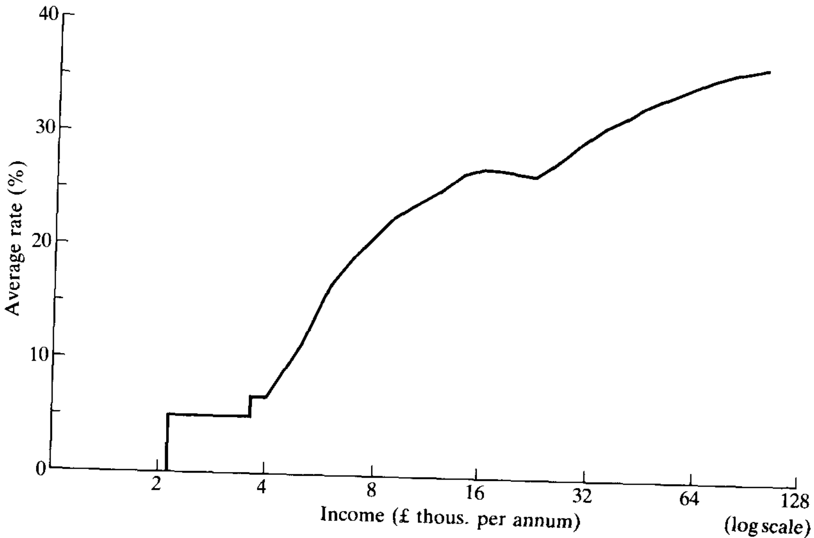


Fig. 2.6. Average rates of tax on earnings, 1988/9

from changes of hours worked per week. Individuals may not be completely free to choose their hours of work. Hence it seems likely that the number of hours worked will be relatively unresponsive to changes in wages and hence taxes. This does not mean, however, that a progressive tax system has few disincentive effects. A change in wages leads to both an income and a substitution effect. It is the substitution effect that matters when assessing the welfare consequences of progressive taxation. Only by estimating the sizes of these two effects separately can we judge the likely impact of the various tax systems. Even if hours worked remained approximately constant, if this results from offsetting income and substitution effects then the efficiency costs (deadweight loss) imposed by taxation can be substantial.

To examine this issue requires an econometric study of the effects of changes in wages on the number of hours worked. Such investigations raise rather difficult technical issues of estimation and there is, as yet, no consensus as to the likely size of the substitution effects. There are three main problems with these econometric studies. The first is that the budget constraint that a household faces is likely in practice to be highly non-linear. This is especially true of the marginal rate structure that results from the

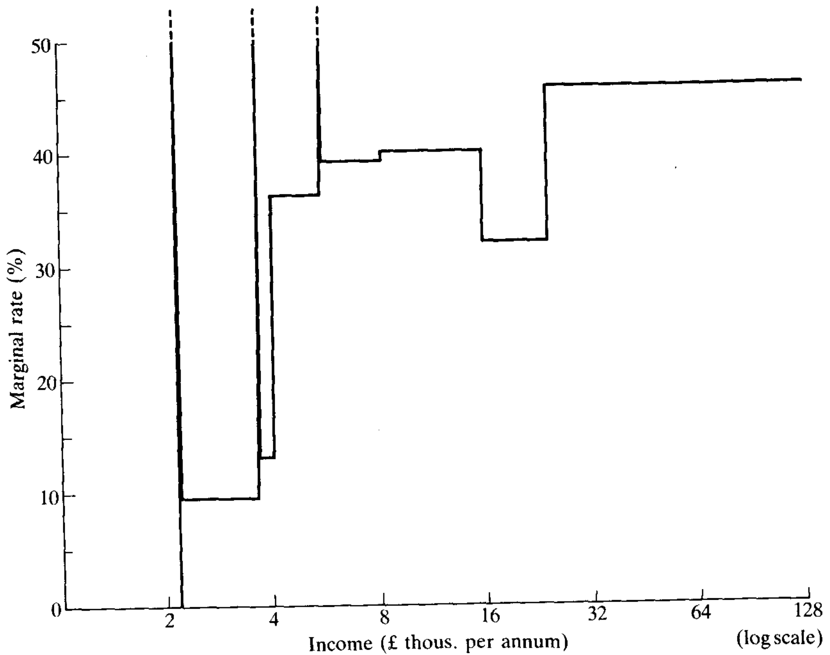


Fig. 2.7. Total marginal tax rate on earnings, 1988/9

existence of means-tested benefits and graduated National Insurance contributions. As a result, the marginal wage of an individual is determined at the same time as his hours of work. Techniques to deal with this problem have been developed by Hausman (1981) and he found substantial substitution effects which roughly offset the income effect. The second problem is that households are choosing to supply labour not just in the current period but throughout their life cycle. The effect of a change in wages on labour supply may depend upon whether that change is perceived as a permanent or a temporary change. The temporary change may induce a much larger increase in labour supply while the earner takes advantage of a transitorily high earnings opportunity. A permanent change may have much less effect and might even induce the individual to consume more leisure over his lifetime. Although it is sometimes possible to obtain data on an individual

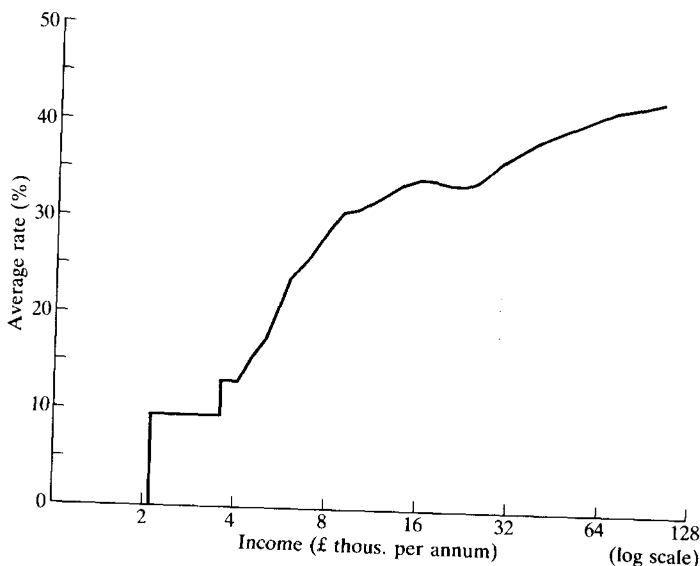


Fig. 2.8. Total average tax rate on earnings, 1988/9

for several years in succession (known as 'panel data'), it is difficult to infer from a small number of observations the likely response of labour supply over the whole lifetime. The final problem is that very few surveys actually contain observations on the wage rate. The typical survey contains an estimate of earnings and hours worked, and the wage rate is obtained by dividing one by the other. Any errors in the measurement of hours worked—the variable we are trying to explain—will lead to corresponding errors in the estimated wage rate—the explanatory variable—which can lead to serious biases in the estimated effect of wages on hours worked.

Although this econometric evidence is suggestive, it cannot be regarded as decisive. We have noted that there are technical problems involved in statistical studies of this kind and these may bias the conclusions towards insignificant results. Moreover, the studies are necessarily concerned with easily measurable dimensions of performance at work, such as hours of work or earnings in a particular occupation. If workers are deterred from seeking or accepting promotion by the effects of taxation, then this will not be

adequately measured by these methods (though it seems improbable that incentive effects, if large, would be confined to those items that cannot easily be appraised). Further, the hours and the effort that people put in at work are closely related to group norms; if these norms are influenced by the existence of taxation, as seems quite likely, then there may be effects on group behaviour which are not fully observable in the actions of individual workers. Although an individual may not be able to choose to work a seven- or a nine-hour shift rather than one that lasts for eight hours, the reason for adopting some particular shift length will be related to the wishes of workers generally; if taxes were different, it is very possible that most people would want to work for longer or shorter periods and that the normal shift length would be changed.

A final, but very important, reservation is that much of our discussion so far—theoretical and empirical—relates to what we might describe as 'primary' workers: people who may decide to work more or less but for whom the question of whether or not they enter the labour force is not in doubt. But there are also 'secondary' workers—married women are the most important group in this category—who may choose to work or not according to a range of considerations which will clearly include financial ones. For such workers, what affects their decision to enter the labour force is not any marginal rate of tax but the average rate of tax on the whole of their earnings. This may, depending on the treatment of the tax unit, be affected by the earnings of the husband (in the UK it is). The influences on these work/leisure decisions are rather different, although the operation of income and substitution effects may be similar in its end result—taxation by reducing the net earnings of the husband encourages the wife to work but by reducing the net earnings of the wife has a disincentive effect also. The empirical evidence suggests that this aspect of labour supply is much more sensitive to changes in wage rates or taxes than the hours or effort of primary workers: these are determined mainly by conventional expectations and fixed commitments of the family, while it is the wife's labour supply that provides the margin at which adjustments are made and where the main effects of changes in incentives are likely to be observed.

Somewhat different considerations arise in evaluating incentive effects at the other point in the income distribution at which they

may potentially be important—near the top. Here we are primarily concerned with managers. We are also more concerned with the quality of effort than with its quantity. The performance of a senior manager may often depend less on how long he spends in the office than on how well he works when he is there—though there may, but need not, be some correlation between the two. His incentive to do better lies not in overtime payments for extra hours but in the hope of promotion and, to a much greater extent than for lower-paid workers, in the intrinsic satisfaction of the job itself. These factors mean that it is much harder, and more subjective, to assess the effects of taxation on managerial effort. Experimental studies are excluded, and there is no body of data that is even potentially available for econometric assessment. Such evidence as exists is derived from interview surveys, which are not (here as in many other economic contexts) a very satisfactory method of investigation: they can reveal attitudes to taxation, but these are not necessarily good indicators of what people actually do. One survey (Opinion Research Centre (1977)) established that those with high incomes were more likely to consider the high rates of income tax which then prevailed 'not sensible', but that is neither surprising nor very helpful.

The most carefully designed surveys of the impact of taxation on the higher-paid are those of Break (1957) and Fields and Stanbury (1971). Both these are studies of British solicitors and accountants. These groups are likely to be relatively well informed about the tax system, and are also in a better position than most to vary their effort and hours of work. Break found that only 13% of his sample made plausible reports of disincentive effects of taxation and that the proportion credibly describing incentive effects was almost as great. However, the former (though not the latter) proportion rose substantially with income, as the theoretical analysis would suggest it should, and reached 30% for those with incomes over £5,000 a year. (This is equivalent to around £50,000 at 1988 prices. In 1956 it implied a marginal tax rate of about 70%, compared with a current 40%.) Fields and Stanbury replicated Break's work in 1968, and found that disincentive effects had significantly increased: the proportion of their sample reporting these was 19%, and this increase occurred primarily among those on moderate incomes; the fraction among the highest income group remained at 30%. These figures tell us the number of people who

plausibly claim that taxation affects their work effort. They do not, however, tell us the magnitude of the effect on those who are influenced; and they are difficult to interpret adequately because they fail to distinguish income and substitution effects. Nevertheless, they are consistent with the hypothesis that was supported for low-income earners: disincentive effects exist, but they are not substantial. A further indication is provided by the observations both of Break and of Fields and Stanbury that the hours of work of those reporting disincentives differed little from the rest of their sample. They interpreted this as implying that those most affected were by nature more hard-working; there are alternative, and less disturbing, explanations.

A somewhat different kind of interview study is that of Fiegehen and Reddaway (1981). A selection of companies were approached to ask what difficulties they had experienced as a result of the impact of taxation on their senior executives. They were particularly concerned with cases where managers emigrated, or refused to return from overseas postings, or where suitable candidates were reluctant to accept senior positions. They discovered that the incidence of such problems was negligible. This will surprise only those politicians and industrialists who have repeatedly asserted the opposite. It would be surprising if large numbers of men aged 45–55 were willing to tear up their roots and transfer their families to another country in order to earn larger salaries unless under very acute financial pressure; and even more surprising if people with successful careers in industry declined to join the Board because they thought the additional after-tax remuneration inadequate.

This does not demonstrate that high rates of tax on senior managers have no adverse effects. It is evident from Britain's economic performance that the quality of industrial management in the UK has been relatively poor, while Britain's international reputation in the professions, the provision of financial services, and academic studies is comparatively high. It is possible to argue that industrial management is intrinsically less attractive than these alternative careers, and that the British tax system has made it difficult to offer the material rewards which are used in other countries to offset this.

Our discussion of disincentive effects so far relates to the

amount of work that people do, given that they choose some particular occupation. But the effects of taxation on whether they choose that occupation at all may be of as much or more practical importance. There are three levels of choice in this decision. First, there is the issue of whether people choose to live in the UK rather than in some more lightly taxed jurisdiction—the effects of taxation on the decision to emigrate. We defer a brief discussion of this issue to Chapter 14. Second, given that people live in the UK, there is the question of whether they choose to work at all or not; we have already noted this possibility for 'secondary' workers, but retirement is also a decision that may be postponed or brought forward in the light of financial considerations influenced by taxation, and this was one of the effects noted by Break. There is a growing body of evidence to suggest that the retirement decision is sensitive both to tax rates and to the relationship between pension entitlement and earnings from work done after the official retirement age (the 'earnings rule' and similar provisions) (Zabalza *et al.* (1979)). Unlike most disincentive effects, which depend on marginal rates of tax, 'all-or-nothing' decisions to emigrate or to retire are principally determined by average rates of tax on the whole of earnings—it is difficult for most people to retire a little more or a little less and impossible to emigrate a little more or a little less.

A further issue is the way in which taxation affects choices between jobs. It is well known (for example, Goldthorpe *et al.* (1970)) that car factories, as one example, tend to recruit workers who attach especially great importance to financial rewards and give low priority to a satisfying work environment. Income taxes substantially reduce the differential between jobs like these and others which are less well paid but more congenial. Some friends of the authors are badly paid academics rather than well-paid tax inspectors because they do not feel that the net addition to their income would compensate them for the loss of their friends and fulfilment in their work. High marginal tax rates will make it more difficult to recruit people to these less attractive occupations, though it is important to note that a society that feels it needs to recruit a certain number of tax inspectors will therefore be forced to raise their pre-tax salaries and thus part of the incidence of the income tax will fall on the employer rather than the employee.

Designing a tax schedule

The appropriate structure for a tax schedule was extensively discussed in the nineteenth century, in an era when the view was widely held that the utilities enjoyed by different individuals could be measured and compared in much the same way as their heights. Debate raged between the principle of equal sacrifice (by which tax should be computed so as to impose equal utility losses on all), the principle of equiproportional sacrifice (everyone should lose the same fraction of their utility), and the principle of minimum aggregate sacrifice (the total utility loss of the community as a whole should be minimized). The objective of minimum aggregate sacrifice might have won the day, were it not rather easy to show that if one adds the assumptions (i) that everyone has the same capacity to enjoy income, (ii) that utility increases with income but at a decreasing rate, and (iii) that the tax schedule does not modify behaviour in ways that would change incomes before tax (there are no disincentive effects), the conclusion is that everyone should have the same income, net of tax: 'the crowning height of the utilitarian principle, from which the steps of a sublime deduction lead to the high tableland of equality', as Edgeworth put it (1897, p. 553).

Since neither the objective nor the assumptions are very plausible, this analysis received as little attention as it deserved; and until recently economists had little constructive to say about tax schedules. But this ignores an important problem. Progressivity requires high marginal tax rates, but it is precisely this aspect of the tax system which generates disincentive effects. Thus there is a basic conflict between equity and efficiency considerations in the design of tax schedules, and it is important to understand the interrelationships and the empirical information that are needed to determine these issues. While few people now happily accept the utilitarian objective or the assumption of identical tastes, it is nevertheless necessary to express some view on the consequences of drawing tax revenue from people at one income level rather than another. We might start by characterizing two extreme positions. In one, the government is simply indifferent to the source of its tax revenue; a pound is a pound and valued equally whether it is in the wallet of a rich man or a poor man. The other extreme, often attributed to Rawls (1971), only looks at the

welfare of the least advantaged; the fate of others matters only in so far as their activities have effects on him (which mainly take the form of generating tax revenue for his benefit). In effect, one position ignores considerations of income distribution altogether; the other thinks of nothing else. It is possible to go beyond either of these extreme viewpoints: to argue that inequality built Versailles and commissioned Beethoven's late string quartets and is desirable for its own sake, or that inequality is so offensive that the rich should be made worse off even if no one else's standard of living rises as a result. But many people might be willing to agree that an appropriate stance was somewhere between these two.

Even the Rawlsian view, however, implies less than perfect egalitarianism. Under it, public policy is concerned with the interests of the rich only in their function as milch cows for the poor, valued only for the tax revenue they provide. But the interests of the poor require that tax revenue from the rich be maximized, and this is not achieved by 100% rates. People who find themselves paying 100% of income, or additional income, in tax are unlikely to trouble to earn much of it; and we would obtain more tax revenue if we retained some incentive by allowing them to keep part of their earnings for themselves. In fact it is possible to go beyond this and show that the marginal tax rate faced by the man with the highest income should, under an optimal rate schedule, be zero. The argument hinges on the point that tax revenue depends on average rates of tax but disincentives on marginal rates. If we lower the *marginal* tax rate on the richest man, we reduce disincentive effects on him without reducing the amount of tax that he (or anyone else) pays. So if these disincentives are of any significance, earnings will increase and so will tax revenue. It does not matter if we attach no value to the welfare of this man, so that we give no weight to the increase in his post-tax income. So long as we do not actually wish to see him made worse off, whether anyone else benefits or not, the increase in tax revenue allows lower average tax rates on everyone else and an unequivocal all-round gain. This argument should not be taken absolutely literally. We cannot have different tax rates for each individual, and it tells us nothing even about the appropriate tax rate on the second-richest man. But it does show that even a firm belief in progressive taxation does not imply that marginal, as distinct from average, rates should increase with income.

A rather similar argument may be applied at the opposite end of the distribution: the marginal tax rate faced by the lowest income group should also be very low. This is not the same as saying that the average tax rate on the lowest income group should be very low—as most people would agree it should—since it is quite possible to have low (or negative) average rates of tax on low incomes but high marginal rates. We shall see in Chapter 4 that this is precisely what the 'poverty trap', and a number of proposed social security reforms entail. The case for low marginal rates is different, and derived from efficiency rather than distributional considerations. The problem with reducing marginal tax rates on low incomes, as Chancellors have discovered, is that it reduces the average tax rate faced by absolutely everyone, and so is extremely costly in revenue. Various proposals to introduce reduced rate bands have had to face this difficulty. We can offset the cost by lowering the tax threshold, so that the lower rate is payable from a lower level of income; the problem with this is that while it has desirable effects on incentives and reduces the 'poverty trap', it raises the amount of tax payable by people with low incomes who are now brought into the system as a result of the reduction in the basic allowance. But at the lowest levels of income there is no one 'below' who will be caught up in the tax net; and it is therefore possible to reduce marginal rates of tax without compromising distributional objectives.

The principles that emerge—that marginal tax rates should be low at both the highest and the lowest levels of income—contrast sharply with what most people have previously believed (ourselves included). But the arguments that lie behind them are in fact familiar, and we have only focused sharply on points that have been widely if indistinctly appreciated. High marginal tax rates on the largest incomes bring in very little revenue, and are not worth pursuing if they have any adverse consequences. Measures of support for low-income families achieve rather less than nothing if their receipts are recouped by high marginal rates of tax. But it is of particular interest that the conclusions reached remain valid over a catholic range of views about the ethical importance and empirical significance of distributional factors and tax disincentives—for any, in fact, between the extreme Rawlsian and extreme output maximization positions we have described.

However, this is not quite as encouraging as it might appear. A

major difficulty with these arguments is that although they tell us about marginal tax rates at the very top and very bottom of the income scale, they tell us little about the rates in between, even at income levels close to these extremes. In answering this question, the relative weights that are given to disincentives and to distribution are absolutely crucial. But it is important to see that the answer is likely to go in the same direction at both ends of the scale. If we think disincentive effects are probably not too substantial, or that equality of after-tax incomes is very important, then we would want to select rather high *marginal* tax rates throughout the intermediate range. We would be anxious to narrow the gap between the poor and the very poor, the rich and the very rich, and would not be unduly concerned by the disincentive effects that stem from the high marginal tax rates necessary to do it. We would in this way compress the whole distribution of income after tax. If, on the other hand, we attach a lot of emphasis to incentives and are not much worried about the resulting distribution, then we would choose low marginal rates throughout. It does not follow from this that the marginal rate would, in either case, be the same throughout the distribution, and in general the appropriate tax structure is a rather complicated function of the two underlying objectives—distribution and incentives—and the distribution of earning capacities in the population. But since this information is not easily obtained, and a linear tax schedule has obvious administrative advantages, it is worth examining further the properties of such a system.

Linear tax systems

One of the commonest criticisms of the British tax system is that too wide a range of income is taxed at the basic rate. It is often suggested that it is unfair that a man with an income of £20,000 should pay the same basic rate of tax as one with an income of only £5,000; or that someone who is only just paying tax should be charged at a rate as high as 25%.

Much of this criticism results from a simple confusion between average and marginal rates of tax. It is true that someone who earns £5,000 is liable to tax at the basic rate of 25%, and so is someone who earns £20,000. However, the man on £5,000 pays annual tax of £226—equivalent to an average rate of tax of 4.5%.

His counterpart on £20,000 has to pay £3,976, an average tax rate of 19.9%. The fact that they are both in the basic rate band does not prevent the man with the higher income from paying a much higher proportion of his income in tax.

But isn't the marginal rate too high on those with low incomes? It is clear that equity demands a lower *average* rate of tax on the poor than the rich. It is much less clear that it demands a lower *marginal* rate. Marginal rates are relevant to individuals because they determine their incentive or disincentive to work, and there is no obvious reason why it is either just or efficient to impose a greater disincentive on high-income earners than on people whose incomes are low. It is possible that disincentives have a greater impact on the work effort of poor households, but we have seen no convincing evidence.

The British tax system could certainly be made more progressive if the existing basic rate band were replaced by a more graduated pattern of marginal rates. Very similar results could be achieved, however, by simply increasing the threshold and the basic rate. Low-income households would pay less, high-income households more, in just the same way. Thus there is no inconsistency between a linear tax schedule and substantial progressivity—indeed, we can have a completely egalitarian outcome if the basic allowance is equal to average income and the marginal tax rate is 100%, though it is not likely that this is a good idea.

The fact that someone is paying tax at 83%—as used to be true of top income earners in Britain—demonstrates that he is facing a substantial disincentive to work, a strong temptation to convert his income into other forms, and that he is likely to be rather disenchanted with the way the tax system affects him; but it does not necessarily mean that he is paying a lot of tax, because that is a function of his average rather than his marginal rate. The mathematical properties of rate schedules imply that the average rate an individual pays depends not on his own marginal rate, but on the marginal tax rates of everyone below him in the income distribution. This was illustrated most clearly by the tax system as it stood before the reforms of 1979. In 1976/7, a household with net income of around £7,500 faced a marginal tax rate of 50%; to pay an average rate of tax of 50% it was necessary to have an income around £20,000. Over one million households came into the former category; 60,000 households were in the latter group

(*Inland Revenue Statistics*, 1978). A system with escalating marginal rates imposes high marginal rates on relatively many, and high average rates on relatively few.

Vertical and horizontal equity

The theory of public finance has traditionally distinguished between *vertical* and *horizontal* equity in taxation. Vertical equity is concerned with how tax liabilities are arranged among people whose circumstances are acknowledged to be different: with the distributive and redistributive implications of taxation, with the 'rich' and the 'poor'. So our discussion of tax schedules has so far been concerned with the search for vertical equity. Horizontal equity is derived from the application of the axiom that similar individuals should be treated similarly. This axiom seems compelling, though it may conflict with other objectives. (Two men are in a lifeboat with only enough water for one. The only horizontally equitable outcome is that both die.)

In practice, horizontal equity is most frequently violated when administrative arrangements are unsatisfactory; when tax impinges heavily on some transactions but can be avoided on others; when tax is paid principally by the honest, or those without effective tax advisers or the readiness to reorganize their affairs so as to minimize their liabilities; when borderlines between activities or commodities cannot be satisfactorily defined. A high proportion of popular complaints about the tax system result from inequities of this kind. There are serious difficulties here in the UK income tax. They arose to a scandalous extent with the old estate duty, and this has been true also of capital transfer tax and inheritance tax.

The difficulty of principle in applying horizontal equity is that the identification of 'similar circumstances' raises awkward problems of fact and of values. In general, most people seem to take the view that the tax (and benefit) system should recognize differences where they are involuntary but not where they are a matter of choice. We want to take account of differences in endowments of wealth or skill but would resist more favourable treatment of those who are unlucky enough to have expensive tastes, although the approach is not (and cannot be) pushed very far. The most pressing problem of horizontal equity is to decide

how the tax system should take account of household composition and arrangements in defining 'similar circumstances'. This is difficult because these matters involve both choice and necessity. Is having children more akin to losing a leg (which it is agreed should reduce the contribution one is expected to make to national revenue) or to buying a Rolls-Royce (which it is agreed should not)? We shall not attempt to answer this question.

In fact the principle of horizontal equity has practical import only in so far as it places constraints on the sorts of taxes that may be used. No two individuals are ever likely to be in exactly similar circumstances, and the real issue is how we should treat people in dissimilar circumstances. For example, should married couples face the same schedule as two single people? Of course, we could postulate hypothetical cases in which there is no difficulty in defining 'similar circumstances'. If in our previous example the two men in the lifeboat had tossed a coin to see who survived, some people might claim that horizontal equity had been achieved. But the introduction of the random element in taxation would generally be regarded as unacceptable. More realistically, horizontal equity limits the way in which taxes are determined. Taxes are not a function of race or colour, nor even the football team one supports (though the supporters of more successful teams undoubtedly experience more 'utility' than those of repeatedly unsuccessful teams). In practice, the major practical problem raised by the concept of horizontal equity concerns the definition of the tax unit.

The tax unit

How should households be taxed relative to individuals? The British tax and social security system has traditionally encouraged the poor to cohabit, those on average incomes to marry, and the rich to get divorced. It is hard to see why anyone would intend this combination of outcomes, and reform is at last in prospect.

The British tax system has for long been based on the dependency principle. The income of a married woman is simply treated as if it were her husband's, and in recognition of the burden she imposes on him, he receives a specially enhanced married man's allowance. Social pressures have led to two important modifications of this principle. A wife is entitled to a

single personal allowance against her own earnings. The household can opt for separate taxation of husband's and wife's earnings. However, this involves loss of the married man's allowance. Hence unless the household is paying substantial amounts of tax at 40%, so that aggregation of joint incomes involves a tax penalty, it does not pay to choose this option. The underlying concept is self-evidently anachronistic; it dates from a time when Soames Forsyte was the representative taxpayer.

And the specific failings of the regime have been evident, if not since the days of Galsworthy, at least since the days of television adaptation of *The Forsyte Saga*. The explicit sex discrimination involved is offensive. The outcome is excessively generous to working couples without dependent children. The penalties imposed on marriage between high earners or, particularly, those with large investment incomes are objectionable. Green Papers in both 1980 and 1985 proposed changes, but the specific reforms put forward—for a system of optional individual taxation in the first and for a complex scheme of transferable allowances in the second—won little support.

There are two basic possibilities for household taxation. One is to adopt an *individual* basis, which 'looks through' the household and taxes each member of it as an individual in his or her own right. The other is a *unit* basis, under which husband and wife or perhaps the complete household are taxed together by reference to their joint—or collective—income. The case for the individual basis rests on the view—which many people hold strongly—that they are individuals and their tax position should depend on their own earnings and circumstances and not on the earnings and circumstances of others, even those others with whom they may choose to live. But it is difficult to overlook the fact that in many cases the interdependence of these factors is absolutely fundamental. It is clear that we would wish to discriminate between the millionaire's wife who has no income because she stays at home to oversee the servants and the inebriate woman who sleeps under the arches at Charing Cross, or used to sleep there before they were redeveloped by the millionaire's property company, even though on paper their personal financial circumstances may appear to be identical. There is a tension between our desire to respect the rights of an individual to independent treatment, and the desire to relate liabilities and benefits to the whole of that individual's circumstances.

The individual basis has the further disadvantage that the way in which partners choose to arrange their financial affairs within marriage may have important consequences for their joint tax liability. It is easy to reduce tax liabilities by transferring investment income from a high-income spouse to a low-income spouse. This will cost a lot of tax revenue; nor does it seem desirable that tax avoidance should become a part of everyday family life. It is only necessary to envisage the conversation that runs 'Why don't you transfer your property to me, darling, and we shall pay less tax?', 'I love you, darling, but not as much as that' to see some of the difficulties. There is a fundamental conflict between the axiom that marriage should affect tax payments little, if at all, and the axiom that arrangements within marriage should affect tax payments little, if at all.

In 1988 the Government announced a new set of proposals, to be effective from 1990. The basic principle is an individual one. Everyone is liable for tax in his or her own right, on both earnings and investment income. There is one major exception to this rule, and a number of minor ones. The major exception is that each married couple will receive a special married couple's allowance, equal to the present difference between the single person's allowance and the married man's allowance. Thus marriage is to be a twice-blessed state: spouses are to benefit not only from the joy of each other's company and the economies of scale derived from living together, but also from tax relief at the expense of the single, widowed, and divorced.

Very few households will find their tax liabilities much affected by the changes. There will be benefits to couples where the wife does not work but does have some investment income, since the wife's earnings allowance is not available against investment income but the personal allowance to which she will be entitled after 1990 is. Rich couples will also benefit since the wife's investment income will no longer be aggregated with her husband's in computing their liability to higher rate tax. Households with bread-winner wives will find that they are worse off, since at present they obtain the benefit of both the married man's allowance and an allowance against the earnings of the wife. For most couples, however, the existing married man's allowance will simply be replaced by a single person's allowance and a married couple's allowance of equal total value.

The married couple's allowance makes sense only as a transitional measure to allow a new, more principled, system to be introduced with minimum disruption to the pattern of existing tax liabilities, and for the large majority of taxpayers the planned changes will have no significant effect on the amount of tax actually paid. A sensible longer-term solution would be to phase out the married couple's allowance, while providing some continued relief through the tax system or other benefits for those couples where the second earner has small or no earnings, especially as a result of the requirements of child support.

3

The income tax base: income from earnings

It is obvious what most people earn. Once a week, or once a month, they receive a pay-packet or a cheque. With it comes a pay-slip that shows an agreed sum as gross pay. Both income tax and National Insurance contributions are deducted from that total. That is nearly the end of the matter, but not quite. There are allowances which you may be able to deduct in computing your tax bill. And there are items which are benefits of employment but which do not enter your pay-packet—the fringe benefits you receive. These may also be taken into account in assessing your liability to tax.

Allowances against earnings

The British tax system is restrictive in the range of allowances it gives against taxable income. The rules are particularly rigid for employees, for whom very few of the expenses incurred in holding a job are deductible. In general, you need to argue that you would be dismissed if you did not incur the expenditure, and for the costs of travelling to work even that is not sufficient justification. So the expenses of child care, for example, although very obviously a cost of earning income rather than an item of expenditure, are not deductible. The self-employed are treated less harshly. Nevertheless, a female barrister who argued that she could not wear the dowdy clothes she was obliged to don for court appearances on any other occasion lost her claim for tax relief on the cost. Expenditure on business entertainment is now never tax-deductible. It would be an unimaginative small-business man who never succeeded in charging part of his personal spending to the taxman, but the law is unhelpful. Some other deductions are permitted, but almost all of them (other than the structural personal allowances which we described in Chapter 2) relate to the

taxation of savings rather than the taxation of earnings. We therefore discuss them in Chapter 5.

Fringe benefits

If cash income is taxed, then employers have an incentive to pay in kind rather than in money. Tax law has come to recognize this, and if a firm pays for its employees' groceries they will find that they have to pay tax just as they would if they had been given cash to settle the supermarket bill. But a rigid boundary between personal and business expenditure cannot be defined. The light and heat provided in an office or a factory substitute for the light and heat you would otherwise need to pay for at home, but no one would seriously propose you be taxed on the benefit you derive from them. But what about the space where you park your car, or the meals that you eat while at work, or the nursery that looks after your children—all areas of contention?

The most important of these kinds of fringe benefit are company cars. There are some employees—such as travelling salesmen—for whom a car is a tool of the trade. But cars are now provided by companies for the majority of executives in the private sector. Such provision is subject to tax based on a scale charge related to the size or cost of the car, and the tax saving from company car provision, though real, is now modest (Ashworth and Dilnot (1987)). These savings may, moreover, be dissipated in the two kinds of inefficiency generated by fringe benefit provision. Because the tax advantage makes the good that is the subject of the fringe benefit relatively cheap, too much of it will be consumed relative to other commodities. Companies may buy more expensive cars for their employees than the employees would buy for themselves from taxed income, and there is clear evidence that this is what they do. At the same time, the type and perhaps even the make of cars individuals have will be determined by their status in the company rather than by their—variable—personal preferences for cars. It is because it both distorts and diminishes choice that payment through fringe benefits is an inefficient method of employee remuneration.

Some fringe benefits are job-related—concessionary coal for miners, or air travel for airline employees, or discounts for shop workers—and the tax system tends to take a benign view of these.

Others are legitimated by explicit concession, such as pensions, life insurance, and other dependants' benefits. The incentive to provide fringe benefits increases with the marginal rate of tax, and so we would expect fringe benefits to increase as a proportion of total salary as incomes increase. Traditionally this has indeed been true, and it is still common for those recruiting executives or other well-paid employees to talk of a 'remuneration package' rather than a salary. But the reduction in the top rates of tax to 40% has changed attitudes. Money in the pay-packet is now a more valuable commodity.

For senior management, stock options have become the most valuable form of fringe benefit, and have been as significant as the reductions in the rates of tax themselves in making many top executives rich men in the course of the 1980s. Suppose a company's shares stand at 120p. The company may decide to give its executives an option on its shares. Suppose the option allows them to buy 100,000 shares at 100p in five years' time. This means that the executives may, if they wish, buy the shares at that date at that price. Imagine the company has done well and the shares are worth 200p. Then the managers can exercise their options, and realize an immediate profit of £100,000. If, on the other hand, the company has performed badly and the share price is only 50p, then they do not have to exercise the option. They may, and should, choose to throw it away, in which case they gain nothing and lose nothing.

It is apparent that an option is a valuable asset, and indeed there are options markets in which rights of this kind are bought and sold. Prior to 1980, anyone receiving such an option would have to pay tax on its value. Now, however, you pay tax only on the gain you make if you eventually exercise the option. This concession has made such options very attractive to managers, and most large companies now have option schemes. The result is that managers have made profits very substantially larger than anything they might have received in salary. Sir Michael Edwardes, for example, was given 21.9 million options at 14p per share on becoming Chairman of Dunlop. Within weeks a bid was made for the company at a much higher price, and Sir Michael had made a paper profit of over £3 million. Under pressure from other shareholders, he agreed to relinquish the options but many other business men have been able to realize large, if less spectacular, capital gains.

The option is only valuable if the company's share price rises, so that the manager has an incentive to see the company do well; and indeed this is often used as justification for such schemes. The incentive would, however, be greater if the manager lost money if the shares went down, as well as making money if the shares went up—as he would if he were in the same position as other shareholders. Moreover, a firm that paid its executives a substantial salary, or a profit-related bonus, would be able to deduct the sum against corporation tax; whereas no such deduction is available for the cost of share options. While these schemes have often been defended by reference to the tax savings they imply, these advantages have been marginal: since the equalization of income tax and capital gains tax rates in 1988, options are a fiscally inefficient means of remunerating executives. It is possible that the popularity of such schemes reflects as much the opportunity to pay large sums to managers in politically inconspicuous ways as any other advantages they may have.

How tax is collected

For the vast majority of taxpayers, all or virtually all their earnings are from employment, and income tax is deducted by their employers under PAYE procedures. People in this category, with simple incomes and modest earnings, are normally required to make a return of income only every five years. When they first become potentially subject to tax, they will be asked to file a tax return. This is in general somewhat confusing, since the form appears to be principally concerned with their past income when in fact its actual purpose is to elicit their present circumstances with a view to establishing their future allowances. On the basis of this information the Revenue issues a 'notice of coding' to the taxpayer and to his employer. The notice of coding is a cryptic document, which concludes with a code number of the form 400H. The numerical part of this code is one-tenth of the taxpayer's total allowances for the year; the letter indicates marital status (H, higher for married men; L, lower for single persons or married women). But no action is required from the taxpayer: his employer will now deduct tax in the light of this coding using the tax tables with which he is supplied.

This procedure is necessary because most people are paid weekly or monthly while income tax is based on annual earnings.

National Insurance contributions for employees by contrast relate to the payment period. A monthly-paid worker is liable for NICs on his earnings in that month, and that is the end of the matter. For income tax, however, each monthly deduction can be seen as a provisional payment on account of his prospective liability on his annual earnings. It is this difference between monthly and annual bases for assessment that explains why people—like students—who may work for only a few weeks in the year will pay NICs but not income tax, and why those who start work half-way through the tax year pay less tax in their first few months of employment than they do subsequently. At the end of the year, when his total receipts can be calculated, an adjustment in one direction or another may be necessary.

It is a distinctive feature of the British system that it attempts to reduce the need for such adjustments to a minimum. Most countries levy tax on earnings in each pay period at the level which would apply if earnings continued at that rate for the whole of the tax year. Thus deductions are non-cumulative—made without reference to earnings in earlier or later pay periods—just as NIC liability is non-cumulative. If an adjustment is necessary when the whole year's income is assessed (as is often the case for those with fluctuating earnings), this is done at the end of the year.

The British tax system, by contrast, tries to ensure that at each point in the tax year an appropriate proportion of the whole year's liability has been paid. A non-cumulative system credits the taxpayer each week with one fifty-second of his annual allowances. The cumulative system does this also; but if income in any week is less than the allowance for the week then the excess is credited against tax that has previously been paid in the year, and a tax refund becomes due. If all the tax previously paid has been refunded, or at the beginning of the tax year when little or no tax has been paid, these unused allowances cannot be credited against earlier tax payments and are carried forward to be offset against taxable income in future weeks. It is therefore necessary to maintain throughout the year for each taxpayer a record of the total tax he has paid so far and the total allowances ('free pay') for which he has already been given credit. If these procedures work well, they ensure that by the end of the year the taxpayer will have paid the right amount of tax and no significant adjustment to his liability will be required. The advantage of a system that reaches

the right answer in this automatic way are obvious. So are the problems: each taxpayer must carry with him from week to week and employment to employment records of his tax position for the year so far, and this is an expensive administrative operation.

The system works less smoothly when an individual's allowances change during the year (perhaps a male taxpayer marries). He must then inform the Inland Revenue which will revise his coding. He receives an immediate refund which reflects the tax he has overpaid in each week of the tax year so far. This system cannot operate in reverse for someone whose allowances go down (because he gets divorced, for example); if it did the taxpayer might have no net income for several weeks as previously underpaid tax was recouped. Broadly, he will be credited with the tax he *should* have paid so far, and the deficiency collected by a reduction in his allowances in future tax years. Fortunately, allowances rise in practice much more often than they fall.

Earnings from employment are taxed under what is known as schedule E. Earnings from business are taxed under schedule D. (The authors' salaries are taxed on schedule E but any royalties from this book fall under schedule D.) Schedule D earnings are subject to a different National Insurance contribution schedule. If annual earnings are over £2,250, there is a flat-rate charge of £210.60. In addition, there is an additional earnings-related charge of 6.3% of earnings between £4,750 and £15,860. As a further complication, 50% of the earnings-related charge is deductible against income tax (NICs in general are not deductible). If we learn of a rational explanation for these figures, and their relationship to the NIC schedule used for schedule E earnings, we will include it in the next edition of this book.

The administrative procedures for collection under the two schedules are quite different. Tax under schedule D is paid in two lump sums—for the tax year 1988/9 these would be due on 1 January 1989 and 1 July 1989. Liability is calculated on a 'preceding year' basis; thus these assessments would be based on earnings in the year 1987/8. Since business accounts take time to compile, there is some reason for this. The tax therefore appears to be paid a year in arrears, which sounds a rather favourable option. However, the system is in fact much more complicated and less advantageous to the self-employed than this would suggest. It is impossible to provide a brief and intelligible—or indeed lengthy

and intelligible—description of the rules, but a consequence is that in the early years of a business some components of income may be taxed two or even three times while others will not be taxed at all. This is obviously a licence for inequity and abuse.

The scope for this is much increased where partnership taxation is involved. The reason is that tax is in theory levied on the partnership rather than on the individual partners. Of course it is not really possible to do this in a system where there are personal allowances and progressive rates on individual income, but the appearance is maintained by an elaborate apparatus which first disaggregates the calculation to the level of the individual partner and then adds up the answers. But a consequence is that the partnership may be deemed to have closed down and restarted when partners are added or leave (which in the case of a large partnership happens all the time). By a suitable choice of closing and restarting dates, a partnership with fluctuating profits can arrange to pay tax twice on their poor years and not at all on their good years. A sample of partnership accounts examined by the Comptroller and Auditor General showed that these partnerships had paid tax on 77 per cent of the profits that they had actually earned in the period in question (Public Accounts Committee (1977–8)). The 1985 Finance Act reduced opportunities for this kind of avoidance without altering the underlying problem.

Administrative problems

The administration of any tax system is an inevitable butt for criticism, but there are two characteristics of British tax administration that can be given objective description. Few people understand how it works, and it is very expensive. The first of these propositions is easily documented.

In the 1950s the Government Social Survey concluded that 'our evidence suggests that if productivity is related to income tax in any way it can only be related to misconceptions about the system. It cannot be related to the system because only 3 or 4 per cent are sufficiently informed of the system' (Radcliffe Report (1954), App. 1, para. 129). Brown (1968) also found almost total ignorance of the rates or operation of the tax structure; though Lewis (1978) indicates that the administrative changes of 1973 (the unified tax system) may have increased understanding. And in

spite of the apparent advantages to him of a wholly automatic system of tax deduction, the bewildered British taxpayer is in contact with the Inland Revenue more frequently than his American counterpart (four times as often, according to the estimates of Barr, James, and Prest (1977)). The American taxpayer must complete a return every year, but normally that is the only correspondence with the Internal Revenue Service that he has.

Why is British tax administration so complicated? It is easy to reply that this is because of the extensive demands made on it, and this is a continuing theme of annual Inland Revenue reports. But we do not agree that the system is so complex because it is so fair; indeed, it is complexity which is a principal source of inequity. (The taxation of partnerships is a good example—the opportunities for abuse are entirely the product of an unnecessarily tortuous administrative mechanism.) And in its central elements, the British tax system is actually rather simpler than that of most countries. The range of allowances available is very limited and the rate structure straightforward.

It is peripheral elements which are the obstacle to understanding. Although the system of cumulative PAYE has some advantages, it has the effect that the weekly deductions made from wages are computed on a basis which is not explained or in practice explicable to the average worker. The interaction of cumulative income tax deductions with non-cumulative National Insurance contributions computed on different principles aggravates this. The schedular system and the preceding year basis require professional tax expertise for adequate comprehension, and indeed description of them is to be found only in technical literature. The representative taxpayer rarely makes a tax return, and as a rule does not see any statement of how his liabilities have been computed. Filling in such a return is not a purposive activity: it does not enable the recipient to check how much tax he owes or is owed, or indeed to do anything except post the form back to the tax inspector, and it is therefore not surprising that this generates irritation rather than understanding. It is extraordinary that the design of tax forms that do allow the respondent to check his liabilities is left to commercial organizations such as the magazine *Money Which*. The appearance of both the tax return and the accompanying instructions compare very unfavourably with

similar documents in other countries (though there have been recent improvements). But it remains difficult to resist the conclusion that the Inland Revenue does not feel that its work could be helped if the taxpayer had a better understanding of the basis or methods of collection of the taxes involved.

Collection costs absorb about 2% of income tax receipts. While this proportion may not seem high, judged by either international or historical standards it is a substantial figure. It is twice as great as in Sweden or Canada and four times as great as in the USA; and the US Internal Revenue Service and the UK Inland Revenue employ similar numbers of staff although there are four times as many taxpayers in America. These calculations leave out administrative costs imposed on taxpayers (which may be higher in the USA) and on employers (which are probably higher in the UK). Sandford (1973) has suggested that the total administrative costs of UK income tax are in the range of 4 to 6 per cent of revenue.

Why are costs so much higher in the UK than in the USA? One reason that is often given is that the USA employs 'self-assessment'. It is not clear to us exactly what people have in mind when they talk about 'self-assessment', but the American system is, at least at first sight, very different from the one that operates here. At the end of year, every taxpayer is responsible for completing a tax return, calculating the tax due, and posting a cheque, or more frequently claiming a refund, from the Internal Revenue Service (IRS). But it is wrong to suppose that costs are lower in the USA because the taxpayer does the calculations instead of the taxman. In a world of microcircuitry, arithmetic is cheap, and indeed the IRS checks the calculations on every return before it accepts them. To see what the significant differences between the two administrative mechanisms are, we need to probe more deeply.

One reason that costs are so much lower in the USA than in the UK is that the IRS makes extensive use of computers while its British counterpart does not. Plans to computerize the operation of PAYE have been under discussion since the early 1960s. It seems likely that they will actually come into effect by the end of the 1980s, at the end of an extraordinary saga of delay, disaster, and policy reversal. This is not the only area in which the British Government has found large-scale computerization projects difficult to implement. Computerization of social security has also encountered substantial problems, and the history of vehicle and

driver registration is already legendary, although VAT, which has been efficiently computerized from inception, is a conspicuous exception to a generally unhappy tale. The reasons would deserve a book in themselves but two interrelated problems seem paramount. The first is that the organization and training of the British Civil Service yield almost no one who combines understanding of policy with experience of computer system design. The second is a tendency to pursue solutions that are over-centralized and over-sophisticated.

Both characteristics are evident in Inland Revenue computerization. The delay in implementing a strategy has not been used as an opportunity to consider new administrative or policy options, but rather as an excuse for postponing them. The scheme to be used involves a small network of very large computers with sophisticated communications between them and to local offices. Something of this kind was necessary when the sheer volume of computation involved in tax assessment was beyond the capacity of any but the largest of computers, but this is no longer the case. We believe a more flexible system, and one better adapted to the greater integration with social security, which we discuss in Chapter 4, would be achieved by the provision of intelligent terminals in local offices.

The second major reason that American administrative costs are lower than British is derived from a major difference of overall approach. In the USA, the primary source of information is the taxpayer's annual return, and although there is an extensive network of reporting of income paid and of deducting tax at source, this is for the purposes of detecting fraud and facilitating collection. In the UK, payers of income are the primary information source, the system seeks to extract the exact amount of tax due at this stage, and the annual return of income is subsidiary (which is why many taxpayers are not required to make one). The origins of this difference are historical. Britain was the first country in the world to adopt an income tax, and it was then a flat-rate tax on certain kinds of income. Because there was considerable resistance to the disclosure of personal affairs involved in making a return of income, it was natural to collect it from those who paid the income rather than those who received it —and this indirect method of collection was how all taxes had previously been administered.

By contrast, the American federal income tax was introduced in

1913 and was conceived from the beginning as a progressive tax on the total income of individuals. It was therefore an obvious procedure to require an annual return of that income from the individuals concerned. The British income tax was in the process of acquiring a similar character. But there had never been a fundamental review of the suitability of the whole administrative structure for the purposes of a modern fiscal system, and there has still never been one. The framework of tax legislation and administration is still based on Addington's construction of 1803.

Thus Britain imposes extensive responsibilities on those who pay income, and the administrative mechanisms seek to ensure that as far as possible the exact amount of tax due is deducted at that stage. Most other countries impose some reporting obligations on payers of income and require some 'withholding' of tax to ensure that the tax is collected before the associated income has been spent. But since they ultimately rely on the taxpayer's own returns of income, they are not too concerned if the reporting mechanisms are occasionally imperfect or the amounts withheld are inaccurate. The major contrast is between exact withholding without general end-of-year assessment—the British system—and approximate withholding with universal end-of-year assessment—the American system, which is usually favoured elsewhere.

The principal merit of the British system is that it imposes minimal demands on the taxpayer. He does not know how it is that he pays what he does, but he does not need to know. But there are a range of substantial disadvantages. If withholding is to work, it is necessary to have a single basic rate for the vast majority of taxpayers—a company cannot be notified of the different marginal rates of tax of all of its shareholders. We shall argue in subsequent chapters that this is not an unduly serious restriction. More seriously, the absence of any general end-of-year assessment constrains the solution to a whole series of problems. How can we reform local authority finance? How can we achieve a sensible relationship between the tax and social security systems? How can we establish independent sources of finance for devolved assemblies? And the experience of other countries suggests very clearly that it is more expensive to maintain the apparatus required to achieve exact withholding than to accept lower standards of withholding and process an annual return from every taxpayer. For these reasons, Eire is the only other country to have followed the British model.

The black economy

There is evidence of increasing concern about the growth of the 'black economy'. The black economy includes the moonlighting plumber who expects to be paid in cash, the waiter who fails to declare his tips, the barmaid who is paid from the till at the end of the evening; all those areas of legal activity from which tax is properly due but from which it is not collected because the income in question is not declared. By the nature of the phenomenon itself, it is hard to find evidence on the extent of the black economy. But in research, as elsewhere, fools rush in where angels fear to tread. In order to protect ourselves from possible libel actions, we leave it to the reader to distinguish one from the other in the following account of evidence on the subject.

It is sometimes suggested that trends in the black economy can be inferred from movements in the use of notes and coin in payments. The most obvious point to be made is that for a long period the volume of transactions has increased more rapidly than the use of notes and coin. Thus the prima-facie case to be made from these data is that the black economy has been steadily declining. A much more likely explanation is that changes in money transmission habits in the legitimate economy, particularly the increased use of cheques and credit cards, have reduced people's needs for cash. With some strain on credulity, writers such as Feige (1979) have reinterpreted this information to assert that the black economy is large and growing. While that might be true, the problem of estimating demand for money functions has already produced one of the largest and least conclusive literatures in economics, and the notion that this can be done with sufficient accuracy to enable trends in the black economy to be inferred from the residual is absurd.

The Central Statistical Office has claimed to have detected 'a glimpse of the hidden economy in the national accounts' by comparing income- and expenditure-based estimates of national product (MacAfee (1980)). While at first sight this seems promising, more careful consideration of how black economy transactions are recorded, if at all, suggests that some would be recorded as income only, others as expenditure only, and some as neither, depending on the precise measurement techniques employed. It is also unfortunate, if not surprising, that statistical revisions subsequent to the publication of the article have largely

eliminated the discrepancies on which its findings were based. The article's title, though modest, is perhaps not modest enough. The Chairman of the Board of Inland Revenue suggested in 1979 that the black economy might be 7.5% of national income, a figure subsequently modified to a 6 to 8 per cent range. This figure, although often repeated, does not appear to be based on any survey or on other evidence, and in the absence of any substantiation no real weight can be given to it.

A different approach was adopted by Dilnot and Morris (1981) who examined the income and expenditure records of households that spent significantly more than they claimed to earn. Discrepancies of this sort for which there was no other apparent justification were sufficient to account for between 2 and 3 per cent of recorded income. This painstaking micro-economic research seems to us much more likely to identify the black economy than generalizations based on broad aggregates or anecdotes, but it suffers from the difficulty that people engaged in large-scale tax fraud are unlikely to participate voluntarily in surveys of their income and expenditure, whatever guarantees of confidentiality they may be given.

All these approaches to the measurement of the black economy were reviewed by Smith (1986) in what is the most careful assessment of the UK evidence so far. He concluded that 'an act of faith' was required to support any belief that the black economy could account for more than 5% of national income.

Tax authorities have the great advantage that, unlike academic researchers, they can compel people to have their income surveyed. By far the most substantial study of the black economy is the American Taxpayer Compliance Measurement Programme (IRS (1979)). This computes the additional income recorded, and tax assessed, when households are subject to detailed audit of their affairs, and uses statistical techniques to estimate the total income and revenue which would be obtained if the whole population could be subjected to infinitely detailed scrutiny. The Internal Revenue Service concludes that between 91 and 94 per cent of income from legal sources is reported to it.

These indications that the black economy may be quite small may come as a surprise to the many people who bore their friends, and the authors of this book, with endless stories about people who demand payment in cash, although the view that all cash

transactions are outside the formal economy is as fallacious as the belief that all cheque transactions are reported to the Inland Revenue. It is a fact that most economic activity in the UK is in the hands of large organizations which as a matter of course comply with legal requirements to report income and output and to withhold tax. This concentration is not wholly a desirable fact; and the black economy, if kept within very limited bounds, is not necessarily to be regretted. The existence of small amounts of economic activity on which the marginal rate of tax is zero, much of which would simply not be undertaken at all if it were confined to the formal economy, may reduce the disincentive effects of taxation. When this achieves proportions that encourage large-scale fraud or lead to a cumulative collapse of the moral force of the tax system, our reactions should be rather different; what is the honest taxpayer in Italy to do? But there is nothing more likely to encourage such fraud and such collapse than the wide circulation of exaggerated, and unfounded, reports of the extent of 'black' activities.

Nor, it should be stressed, is it worth spending £1 to collect £1 in tax. The money paid in salary to the Revenue investigator, or the social security snooper, represents resources diverted from productive activity. The money they retrieve from the illicit window-cleaner is simply a transfer from his pocket to the wallets of better-disciplined taxpayers. The proper measure of the product of such expenditure is the cost—in administrative costs, in compliance costs, and in the resulting distortion of economic activity—of collecting that same revenue by other means.

Tax avoidance

Poor people who engage in the black economy are illegally evading tax. Richer people diminish their tax liabilities by legal tax avoidance. Like the black economy, tax avoidance has come under increasing scrutiny. The mechanisms by which Lord Vestey, the 'master butcher' and one of Britain's richest men, has avoided paying any significant amounts of tax over an extended period have been given much publicity. So too have the activities of Roy Tucker and his Rossminster Group, who were leaders in the construction of elaborate avoidance schemes in which convoluted series of artificial transactions were devised with no ultimate consequence other than

the creation of a tax deduction for the customer, a profit to the inventor of the schemes, and a loss to other taxpayers. However, extreme cases of tax avoidance have sharply diminished in the last decade. This is partly the result of administrative action—Tucker's schemes came to an end after a dawn raid on his premises by Inland Revenue officials. The House of Lords brought down a series of rulings unsympathetic to tax avoidance, most notably the case of *Furniss* v. *Dawson* which suggested that transactions with no commercial motive were ineffective for tax purposes. And the reduction in tax rates has simply made avoidance less necessary and less attractive.

We shall stress at other points in this book the importance of looking at how the tax system actually works, and that this is particularly important in examining its effects at the upper end of the income distribution. But we should make the general observation that, as Kaldor put it, 'the existence of widespread tax avoidance is evidence that the system, not the taxpayer, stands in need of radical reform' (Kaldor (1980), p. 18). Tax avoidance cannot be defeated by appeals to the conscience of taxpayers—nor should it. The annual accretion of new provisions to deal with recently discovered avoidance devices is inevitably ineffective also; the Revenue puts itself in the position of men who go to shut the stable-door every time they see a horse bolting.

4
Social security and taxation

Before the Second World War a married couple on average earnings paid no income tax. Nor did they receive any state benefits, although they might have been eligible for a modest retirement pension. Tax and social security were entirely separate activities, administered by different departments with very different styles of operation, for different groups of clients.

All this has changed. Almost everyone in employment is now a taxpayer, and post-war reforms based on the Beveridge plan extended the benefit system to the whole population. Initially, the relationship between tax and social security was not a major concern. Most benefits were contingent—they were paid on the occurrence of a specific event, like unemployment, old age, or sickness. But as pressure grew to achieve value for money within the social security system, benefits were increasingly tailored to household needs and resources. Thus the information needed to assess benefits came to look like the information needed to assess tax. And as the range and scope of benefit paid to low-income working households grew, so did the range within which the tax and benefit systems overlapped. A recurring theme in the debate on social security in Britain has been the choice between means-tested and universal benefits. A surprising feature of this debate has been that those most in favour of universal social security benefits have advocated more progressivity ('means-testing') in the tax system, whilst those advocating reductions in marginal rates of income tax have argued strongly for higher implicit tax rates on those in receipt of benefits. The *administrative* separation of tax and social security—for which there were many good reasons historically—led to the unfortunate neglect of the *economic* interaction of the two types of payment. But by the late 1980s the interaction of tax and social security—an issue that no one would have imagined could arise fifty years earlier—had become one of the principal questions in tax policy.

A major overhaul of the system took place in 1988—the

Fowler–Moore reforms. These were designed to reduce the costs of social security support and to lower some of the most extreme tax rates levied on poor families (which exceeded 100% in some cases). But, as we describe below, little real progress was made in integrating tax and social security.

The present system

Table 4.1 shows the values of the main benefits, the numbers receiving benefit, and their estimated cost in 1988/9. Most adults who are not in work are in this position because they are elderly, or sick, or unemployed. There are contingent benefits designed to deal with each of these situations. A single man or woman is entitled to a retirement pension of £41.15 a week. Most married women have little pension entitlement of their own and so their pensioner husbands receive an additional £24.75 a week; on the death of her husband, a widow is entitled to a pension of £41.15 of her own. Since 1978, however, married women can no longer opt out of the state pension system and may credit up to twenty years of family responsibilities towards their career record; this means that in due course most married women will receive single pensions in their own right.

Table 4.1: *Benefit levels, January 1989*

	Weekly rate (£)	Number of families in receipt (m.)	Cost 1988/9 (£b.)
Retirement pension		9.70	18.80
Single	41.15		
Couple	65.90		
Income support		3.60	5.00
Single	33.40		
Couple	51.45		
Unemployment benefit		0.80	1.40
Single	32.75		
Couple	52.95		
Family credit		0.20	0.20
Housing benefit		2.60	3.80
Child benefit	7.25	6.70	5.10

Note: Estimated total number of families—29.7m.
Source:TAXMOD model of the tax and benefit system (Atkinson and Sutherland (1988)) and HM Treasury (1988).

If you are unemployed, but have worked for at least half the previous fiscal year, you will be entitled to unemployment benefit at the weekly rate of £32.75, increased to £52.95 if you have a dependent spouse. You can receive unemployment benefit for up to a year. You are not entitled to unemployment benefit at the end of this period of a year, or if you did not have a job before you became unemployed. The long-term unemployed, school-leavers who have never held a permanent job, and those with an intermittent employment history are therefore excluded.

Most employers provide some sick pay during a short spell of illness. For the first eight weeks, the cost of this is partly defrayed through the Statutory Sick Pay scheme. Thereafter a worker may be entitled to sickness benefit, at rates slightly lower than those paid to the unemployed. Sickness benefit can last for a year and, depending on the cause of your illness, you may be able to obtain other benefits thereafter. Special payments are made to the disabled.

All these benefits are purely contingent benefits. Even if you are a millionaire and receive dividend cheques in the post every day, or are married to someone whose income makes him or her liable to a higher rate of tax, you will receive these benefits provided you are elderly, or sick, or unemployed, and meet the other conditions (in terms of contribution record, for example). However, most people who are elderly or unemployed, and many who are sick, have very few resources other than state benefits. For such people, these benefits are generally insufficient. Certainly they are below the safety net provided for everyone by income support.

Income support (which replaced supplementary benefit in 1988) is available to anyone who is not in work (to be precise, it is not paid to those who are in paid work for twenty-four hours or more a week). It is paid at a rate of £33.40 a week to a single person aged 25 or over (£26.05 to those under 25) and £51.45 a week to a married couple. There are premiums for the elderly (those over 60) and single parents.

Those who are in work are not entitled to income support. But all households are eligible for additional payments related to (i) children and (ii) housing costs. All families, whatever their income or work status, are entitled to child benefit of £7.25 per child per week. One-parent families receive a premium of £4.90 a week. Low-income working households may be entitled to family credit. This provides for a payment of 70% of the difference between a

prescribed amount—also related to household size—and income net of tax and NICs. Families in receipt of income support do not receive family credit but instead receive additional payments based on the number and age of the children. For example, a family on income support with two children aged 8 and 12 would receive an additional £18.50 a week over and above child benefit. Since child benefit is taken into account in assessing income support payments, an increase in the rate of child benefit, with no corresponding change in the parameters of the income support scheme, would not increase the net income of poor non-working families.

Housing benefit provides a subsidy to both rent and rates for low-income families. If net income (defined as income after tax, NICs, child benefit, and family credit) is below a family's income support level, then benefit is paid equal to 100% of rent and 80% of rates. For every pound by which net income increases, benefit is reduced by 65p for rent and 20p for rates.

Earnings-related state pensions

The 1950s saw a rapid increase in the proportion of pensioners in the population. This continued in the two following decades, although stability can now be expected till the end of the century as the low inter-war birth rate which caused so much concern in the 1930s results in a correspondingly small number of people reaching retirement age. With unemployment at much lower levels than had been anticipated—or had been believed possible—the focus of attention in the development of social security policy became the position of the elderly.

There was concern that an increasingly large proportion of poor households were elderly people with inadequate pensions, and that the rapid extension of occupational pension schemes in the public sector and among middle-class employees would leave other workers behind and exacerbate inequality in old age. In 1959 the Labour Party proposed an ambitious scheme of national superannuation and although Labour lost that election, the architect of the proposals, Richard Crossman, advanced a similar scheme when he became Secretary of State for Social Services in 1968. Although approved by Parliament, the Crossman proposals were abandoned after the Conservatives won power in 1970. A

new scheme was devised, giving a much greater role to the private sector. This too passed into legislation, and was also abandoned when its sponsors were defeated in the 1974 election.

With this history, the primary concern thereafter was not to find the best pension scheme but to find a scheme on which everyone could agree; and this was reflected in the design of the State Earnings-Related Pension Scheme (SERPS) which came into operation in 1978. It provided for a pension based on average revalued lifetime earnings. Good occupational pension schemes could 'contract out' of SERPS, which meant that your state pension was reduced but the private scheme must guarantee at least to make up the difference. Contracted-out workers pay a rate of National Insurance contribution reduced by 2% and so do their employers.

The scheme was extremely complicated and was not adequately costed at the time of adoption. Projections of the expenditure involved (Hemming and Kay (1982) and Government Actuary (1983)) caused increasing concern as to whether the proposed pensions could be afforded. Following the 1985 Social Security Reviews, the Government announced the scaling-down of SERPS and a reduction of the benefits available under the scheme. A new scheme—the personal pension scheme—was introduced on 1 July 1988 to enable individuals to opt out of both employer-based pensions and SERPS. Tax relief is available on contributions to an individual pension plan. Such schemes must be operated by an approved financial institution (e.g. an insurance company, bank, or building society). Personal pensions offer a payment in retirement that is dependent on the return earned on the assets in which the contributions have been invested; whereas occupational pension schemes provide benefits that are typically linked to final salary. It is normally not possible to be in both an occupational pension scheme and a personal pension scheme.

The interaction of tax and benefits

The interaction between the tax and social security systems is a difficult issue. For many, it may seem surprising that there is any interaction at all. Is it not absurd that people with incomes below the income support level should be liable for income tax? Surely it is nonsensical that many households are simultaneously paying

income tax and receiving means-tested benefits? The interrelationship appears to be the product of some administrative muddle in which the left hand of the government—the Department of Social Security—does not know what the right hand—the Inland Revenue—is doing.

This picture is too simple. If the tax threshold were raised to a level at which no one who was poor was liable for tax, this would benefit not only the poor but everyone who paid income tax, whatever their income level. As a result, increasing the threshold is a very expensive method of helping the poor. We might try to claw back the gains from those with incomes above the tax threshold, but this involves sharply increasing the marginal rate of tax paid at this point in the income distribution. This would make it difficult for poor households to escape poverty by increasing their earnings—it would exacerbate the poverty trap, which we discuss below. Related difficulties would arise in trying to eliminate the overlap between tax and means-tested benefits. It is important to recognize that most of those taxpayers whose incomes are at or a little above the tax threshold are not poor at all. The tax thresholds—around £50 per week for a single man and £79 for a married couple—are very low, and very few breadwinners have incomes as low as that. Most of the people who do are secondary earners—married women working part-time, juveniles, people moving into retirement (Kay (1984)). There is nothing irrational about collecting tax from all of these people and refunding part or all of it through family credit or housing benefit to the small minority of them who do indeed have household responsibilities. It may therefore be a perfectly economical administrative procedure to have some people who both pay tax and receive benefits.

Nevertheless, some aspects of this interaction of tax and social security are clearly unsatisfactory. The poverty trap is one of these. As income increases, entitlement to means-tested benefits falls, and this imposes an implicit marginal tax rate on extra earnings additional to the explicit rate imposed by the tax system itself. The combined effect is shown in Table 4.2. A household with a gross income of £150 per week could actually be very little better off than one with only £50 per week—an implicit marginal tax rate over this range of close to 100%.

Before 1988 the implicit tax rates associated with the poverty

Table 4.2: *The poverty trap, January 1989* (pounds per week)

		50.00	100.00	150.00	200.00
Gross earnings		50.00	100.00	150.00	200.00
Plus:	Child benefit	14.50	14.50	14.50	14.50
	Family credit	49.55	24.18	2.48	0.00
	Housing benefit	25.07	12.47	4.57	0.00
Less:	Income tax	0.00	5.31	17.81	30.31
	National Insurance	2.50	7.00	13.50	18.00
Net income		136.62	138.84	140.24	166.19

Note: Calculations are for a married man with two children aged 10 and 13, rent of £30 a week, and rates of £12 a week.

trap were, in some cases, greater than 100%. It is now normally impossible for the rate to exceed 100%. This is because from 1988 benefits are related to net income after tax and previous benefits paid are taken into account. Although the reform eliminated the possibility of tax rates in excess of 100%, it did not prevent the situation depicted in Table 4.2 with rates of close to 100% over quite long ranges at low levels of income. The number of families where the head faced an implicit marginal tax rate greater than 70% in fact doubled to over half a million.

Although the poverty trap covers a wide range of incomes, the number of people affected by it is not large. Table 4.3 shows the estimated distribution of marginal rates of tax faced by heads of households in 1988/9. These marginal rates include not only the direct taxes—income tax and National Insurance contributions—but also the implicit taxes which result from the withdrawal of means-tested benefits. It is apparent that most households face a rate between 30 and 50 per cent. Higher rates apply only to those affected by the withdrawal of means-tested benefits; only a very small minority are in the position of the hypothetical household of Table 4.2 which is subject to a rate of nearly 100%.

The poverty trap is a rather intractable problem, and one to which there is no simple solution. We have shown how it is possible that a man with gross earnings of £150 per week is hardly better off than someone with £50 per week. We can reduce the poverty trap either by making the £50 per week man worse off or by making the £150 per week man better off. The first of these is

Table 4.3: *Distribution of marginal tax rates for heads of tax units, January 1989*

Marginal tax rate (%)	Percentage of population
<10	3.0
10–30	15.9
30–50	79.0
50–70	0.1
>70	2.1
Average: 32.8	

Source: TAXMOD model.

presumably unacceptable—it relieves the poverty trap by exacerbating poverty. The second of these can only be done at reasonable cost if we avoid making people with incomes a little over £150 per week any better off—which means extending high marginal rates of tax into a broader range of the income distribution, and one in which much larger numbers of households are to be found.

The unemployment trap—often confused with the poverty trap—refers to a different set of benefits. The poverty trap affects households in work; the unemployment trap affects households out of work. The poverty trap reflects the lack of incentive for low-income households to increase their earnings. The unemployment trap reflects their lack of incentive to find a job at all. This affects people who have high *replacement rates*. The replacement rate is the proportion of your net income that will be 'replaced' by the benefit system if you lose your job (or, for someone who is already out of work, the ratio of current income to expected net wage). A simple illustration of how a replacement rate is calculated is given in Table 4.4. Since there are usually costs associated with holding a job, such as travel to work and meals while there, someone with a replacement rate of 90% or more is probably better off on the dole. Of course, many people dislike work and might welcome the opportunity to give it up even if they were somewhat (but not too much) poorer, and the benefit system attempts to restrict the entitlement of people who quit jobs voluntarily or refuse or do not

Table 4.4: *Calculating replacement rates, 1988/9* (pounds per week)

In work		Out of work	
Gross income	150.00	Unemployment benefit	52.95
Child benefit	14.50	Child benefit	14.50
Housing benefit	4.57	Housing benefit	0.00
Family credit	2.48	Income support	56.60
		Passport benefits	4.50
Income tax	(17.81)		
National Insurance	(13.50)		
Net income	140.23	Net income	128.55
Replacement rate = 128.55/140.23 = 92%			

Note: Household as in Table 4.2.

seek reasonable offers of employment. There are other people who might want to work even if it made them worse off.

The household shown in Table 4.4 is worse off out of work than it would have been in work, and Table 4.2 suggests that it would be about £10 per week better off in almost any job, however poorly paid. This suggests that some scepticism about claims that the relationship between tax and social security is the cause of high levels of unemployment (see, for example, Minford (1982)) is in order. However, the size of the possible disincentive effects cannot be deduced from hypothetical examples; it is necessary to look at the actual distribution of replacement rates over the population as a whole.

Careful calculation of replacement rates is an extremely complicated exercise. The figures in Table 4.4 reflect a snapshot of an early week of unemployment, which may be misleading. Because both earnings and benefits are taxable, but in different ways, a spell of unemployment can have effects on tax liabilities after it has ended (or before it started). Benefit entitlements are themselves a function of the length of the spell of unemployment. To measure a replacement rate accurately, it is necessary to specify the length of time for which a household is unemployed and past work experience, and to measure its effect on net income over a period which may extend for several years.

Table 4.5: *The development of replacement rates over time*

	13-week average			53-week average		
	Average	% with >0.9	% with <0.5	Average	% with >0.9	% with <0.5
1968	0.870	35.2	0.5	0.537	2.8	30.7
1975	0.751	17.2	5.9	0.498	2.5	50.5
1978	0.790	21.0	2.3	0.519	2.2	44.0
1980	0.727	12.0	8.0	0.503	1.9	47.8
1982	0.597	3.2	28.0	0.510	2.2	52.3
1983	0.600	2.9	21.0	0.504	1.9	53.2

Source: Dilnot, Kay, and Morris (1984).

These calculations form the basis of the figures reported in Table 4.5. The thirteen-week average replacement rate reflects the experience of someone who is unemployed for a relatively short period. In 1968, 35% of the population had replacement rates in excess of 90%, and the average for the population as a whole was 87%. Ten years later, 21% were still above 90% and the population average was 79%; but by 1983 this average was only 60% and very few people had high replacement rates.

There are three main reasons for this. The level of benefits has fallen by about 20% relative to wages over the last ten years. Earnings-related supplements to National Insurance benefits have been abolished. Most importantly, unemployment benefit became taxable in 1982. This does not mean that large amounts of tax are collected from the unemployed—someone who is out of work for a lengthy period will not normally receive enough benefit to incur a tax liability. But for someone who had both earnings and unemployment benefit receipts in the course of a fiscal year, the fact that additional earnings might be taxed at around 40% while benefits were not taxed at all made short-term replacement rates high for many taxpayers, and this anomaly has now been removed (see Atkinson and Micklewright (1988)).

The efficiency of the social security system

The efficiency of the social security system can be measured in a variety of ways, and in Table 4.6 we attempt to summarize several

Table 4.6: *The efficiency of the social security system*

	Administrative cost as percentage of benefits paid, 1986	Take-up, 1984 (%)	Percentage to non-poor 1981
Income support or SB	11.3	76	—
Family credit or FIS	3.8	54	—
Housing benefit	3.2	77	50
Retirement pensions	1.4	→100	41
Unemployment benefit	10.1	→100	58
Child benefit	1.9	→100	75

Source: HM Treasury (1988) and Dilnot, Kay, and Morris (1984).

indicators. The narrowest concept is concerned with direct administrative costs. These are costs of social security which do not result in any direct gain to the recipients. The cheapest benefits to administer are retirement pensions. The entitlement of a beneficiary need only be determined once, and then continues for the rest of his or her life—the procedure thereafter is more or less automatic. The costs per pound of means-tested income support are up to ten times higher. Assessing entitlement is a more complex process, the circumstances of beneficiaries are more likely to change, and while retirement pensions are usually the recipient's main source of income, many people obtain—as the names suggest—only small amounts of income support or supplementary pension to top up other benefits or sources of income. These variations in administrative cost are likely to be reflected also in variations in compliance costs to recipients. The costs of operating sickness and unemployment benefit are closer to those of income support than to other National Insurance benefits.

Do those who are entitled to benefits actually receive them? This is another measure of the efficiency of the system, and one that is generally described as the problem of 'take-up'. For pensions and child benefit, take-up approaches 100%; but for means-tested benefits it is generally much lower: official estimates put the figure for family credit (previously family income supplement) as low as 50%. As noted above, however, many households have quite small entitlements to means-tested benefit. It is less surprising, and less disturbing, if these entitlements are not pursued than if people fail to claim benefits on which they are almost wholly dependent.

Take-up examines whether people who need benefits receive

them; do those who receive benefits need them? The final column of Table 4.6 considers what proportion of each benefit is paid to households that are not poor. The procedure adopted in calculating these figures is to estimate for each household a poverty line based on its income support entitlement and then to measure the extent to which benefits are paid to those who are already above the poverty line or that are in excess of the amount needed to take them to it. The design of income support and family credit ensures that practically all of these benefits accrue to the poor. However, most other benefits are paid to households that are not poor, and for child benefit the proportion of them rises to three-quarters. Of course, benefits have objectives other than the relief of poverty, but these estimates provide a measure of the efficiency of different ways of achieving this primary objective.

Contingent benefits are relatively cheap to administer, have high take-up rates, but are not very effective per pound spent at relieving poverty. Means-tested benefits are more costly to operate, and are not always received by those who need them, but are relatively efficient at targeting assistance on those who are poor.

Fundamental reforms

We have seen that the present UK social security system is a mixture of two different concepts—contingent (and universal) and income-related benefits. Most proposals for fundamental reform of social security choose to pursue one or other of these two alternatives. There are those that reduce the number of contingent benefits, and rely on a single means-tested system to deliver support to those with inadequate resources. Tax credit proposals, social dividend or minimum income guarantee, and negative income tax schemes are in this group. The opposite direction of reform is to plan a more generous and extensive network of contingent benefits and to reduce the number and extent of means-tested benefits. This is frequently described as a 'back to Beveridge' plan, although what is proposed is generally rather far removed from the austere pursuit of the social insurance concept which characterized the Beveridge Report.

Before considering either of these groups of proposals in more specific detail, we should note a fundamental problem common to

both. The merit of contingent benefits is that it is easy to see that the unemployed or the old have, as a class, greater need for income support than the working population. The merit of income-related benefit is that within any of these categories there are some people who need state support to achieve adequate income levels and others who do not. It follows that a move to a system that predominantly relies on one kind of benefit at the expense of the other involves discarding information about either means or status that enables the social security system to be targeted more effectively on those with the greatest needs.

For this reason both types of proposal tend to be less cost-effective than the present system. Moreover, schemes in the negative income tax or social dividend group tend to hurt the poorest people in needy categories—such as the old or unemployed with no other source of income—and to help poor people in less needy categories—such as households in work but with low incomes. Conversely, 'back to Beveridge'-type schemes tend to favour rich people in needy categories—affluent pensioners or large families—and to hurt poor people in less needy categories—low-income working households. For these reasons, those who support predominantly income-related schemes often retain some contingent benefits, and those who favour contingent benefits recognize that adequate levels are difficult to achieve if they are paid to all. Proposals that begin as fundamental reforms therefore tend to become modified in ways which lead to results not necessarily much less complex than, or different in effect from, the present system.

The appeal of one single comprehensive scheme of income maintenance is obvious. One such proposal (originally put forward by Lady Rhys Williams during the last war) is to scrap all existing social security benefits and replace them by a single payment for each member of the household. This payment would be a kind of 'social dividend'. It would be paid automatically to all households regardless of circumstances, and would be tax-free, thus representing a guaranteed minimum income for each household. All personal tax allowances would disappear and income tax would be imposed on all income other than the social dividend. We shall assume for purposes of exposition that all income is taxed at the single basic rate. The operation of a social dividend scheme is illustrated in Figure 4.1. This shows how a family's income after

tax depends on its income before tax and the social dividend. If there were no tax or benefit system at all, each family would find itself on the 'no-tax' line on which income before tax equals income after tax. With the social dividend scheme, a family receives the guaranteed minimum income shown by the distance OA in the figure. As its earnings rise, part of the increase is taxed away and so net income rises less fast than gross income—the slope of the line AD is less than the slope of the no-tax line. At some level of income, shown in the figure as OC, the amount of tax paid equals the social dividend received. This is the break-even level of income. Below this level of income families are net recipients and above it they are net contributors to the public purse.

A universal tax credit scheme would have just the same effect. The idea of a tax credit is that instead of receiving a personal income tax allowance of say £50, an individual would be given a weekly tax credit of £12.50 (which is simply the value of a £50 allowance to someone who pays a basic rate of 25%). All income would be taxable but he could offset the credit against his liability; so that if his income for the week was £100 he would pay £25 − £12.50 = £12.50. For someone who earned as much as this, the system would work just as it does at present; the difference is that those with low incomes could reclaim the credit, so that a man with an income of £30 and a tax liability of £7.50 would receive a refund of £5. If the scheme were extended to the whole population, then it is exactly equivalent to a social dividend for everyone of £12.50.

An alternative approach, but one which is again the same in its effects, is a negative income tax. The basic idea behind this is to extend the tax system to cover people whose incomes are below the tax threshold. With a negative income tax the liability would become negative; while others continue to have tax deducted from their earnings, they would receive weekly additions to their income from the government. The amount of these payments would be the basic rate of tax multiplied by the shortfall of the taxpayer's income from the tax threshold. The equivalence of negative income tax and social dividend can be seen from Figure 4.1. The tax threshold is the point at which no net tax is paid, and is therefore the break-even point of the social dividend scheme. This is at gross income OC. Above this point tax is paid and net income increases along the line of BD. Below the threshold a

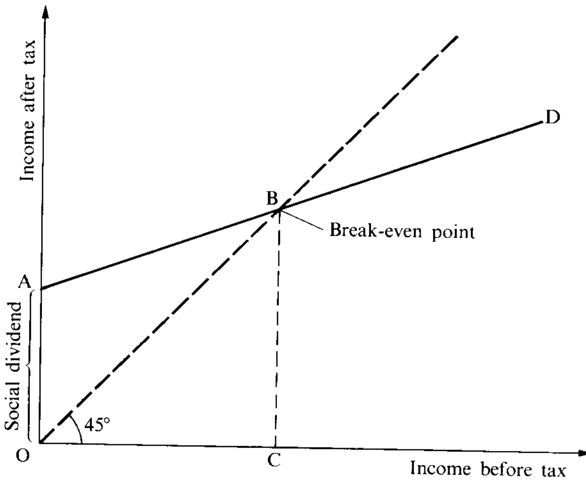


Fig. 4.1. A social dividend scheme

family receives payments of negative tax which help to offset the fall in its earnings and it moves down the line AB. A family with no income has a negative tax payment of OA, equal to the tax rate multiplied by the tax threshold. This is precisely equivalent to a social dividend OA. These systems appear simple, easy to understand, and capable of providing a minimum income for all. Their drawback is obvious. The existing personal income tax allowances imply a universal tax credit, or a social dividend, or maximum payment of negative income tax of £12.50 per week for a single person and £20 for a married couple. This is quite inadequate for subsistence of any kind; the corresponding income support rates (including average housing costs) are between £50 and £100 depending upon family circumstances. In order to bring these rates into line, it is necessary to be enormously more generous to those in work, or very much more parsimonious to those out of work; the system either becomes much more costly, or is much less effective in relieving poverty. We must either contemplate basic rates of tax of 50 to 60 per cent, or be less ambitious in our view of what the social security system can achieve.

Regarded as a social dividend scheme, the present system in

effect pays a much lower social dividend to those in work than to those out of work. Since most people are in work, this saves a great deal of money; but it is unfavourable to those in work with very low earnings. Anyone with earnings of less than £40 per week is likely to be better off on income support; but because virtually no one in full-time work does in fact earn as little as this, the anomaly is not particularly serious.

For these reasons the Meade Committee contemplated a 'two-tier' social dividend scheme, under which a lower rate of dividend would be paid to those in employment. This illustrates the general point made at the beginning of this section. By making the rate of social dividend contingent, rather than universal, we can make the system offer better value for money. We begin to consider different rates of social dividend for the old, for single parents, for the chronically sick, and so on. We have moved steadily back from the pristine simplicity of the social dividend to a system of partly contingent benefits much closer to the present system.

The alternative radical reform proposal is 'back to Beveridge'; this implies raising purely contingent benefits to levels which ensure that those who receive them always have incomes above the income support (IS) level. National Insurance benefits would be set clearly above IS scale rates, and child benefit would be increased (broadly doubled) in line with the provision for children in the IS scale. The main difficulty with this approach is obvious—cost. Raising pensions or child benefit is very expensive; and it is expensive because the money is distributed to all pensioners or all families with children, most of whom are not poor. Just as discarding contingent information raised the cost of relieving poverty by means of income support mechanisms, so discarding information on incomes raises the cost of relieving poverty through contingent benefits. It is cheaper to support poor families by providing higher payments to the children—as happens with family credit and income support—than to support all children. One means of financing higher child benefits is, as we suggested in Chapter 2, to phase out the new married couple's allowance.

Integrating tax and social security

We have described how the tax and benefit systems have become more like each other—in the information that they

require, in the ways in which they use it, and in the clientele with which they deal. We have noted the arbitrary and unintended interactions in the way taxes and benefits relate to each other. We have concluded that it is necessary that a well-designed benefit system, like a well-designed tax system, should make use of information both about contingencies and about household incomes and resources. All these arguments point to the integration of tax and social security.

The first proposals of this kind were contained in the tax credit scheme, proposed in a Green Paper in 1972. This would have transformed the personal allowance into tax credits in precisely the manner described above. This immediately encountered the difficulties we described: the tax credit that this permitted was very low, and so the scheme could only apply to those in work. Even then, the credits were insufficient for those on low earnings, who would have lost more from the abolition of the—then newly introduced and rather limited—family income supplement (the forerunner of family credit) than they would have gained from the credit. This problem was to be met in part by increasing the rates of credit, at a considerable net revenue cost; and as critics of the scheme pointed out (Atkinson (1973c)), because the credit went to everyone most of this additional expenditure went to households that were not at all poor. Even so, very low earners were excluded from the proposals.

An alternative way of dealing with this difficulty is to give higher rates of credit which are then withdrawn more rapidly against the first tranche of earnings. This proposal, as put forward in Dilnot, Kay, and Morris (1984), would enable both a wider range of benefits and a wider range of households to be brought into the system. By differentiating credits in line with factors that now determine benefits—principally family composition and housing costs—a tax credit or 'benefit credit' scheme on these lines could replace the majority of existing benefits and achieve a wide-ranging integration of tax and social security benefits.

The 1988 reforms did not move very far in the direction of integration. They did take account of the interaction between taxes and benefits in the case of housing benefit by ensuring that housing costs are met on a common basis for those in and out of work. But the initial idea of integrating the payment—though not the assessment—of family credit and tax was dropped. The

reasons for this throw light on the advantages and disadvantages of integration. First, integrating payment of family credit and tax would have transferred payments made to the mother to the pay-packets of fathers. This was felt to be politically unattractive. Secondly, to redesign the PAYE system so that employers had information on family size (and possibly housing costs) would lead to a duplication of effort that would be justified only if family credit (and possibly housing benefit) were paid to a much larger number of families. In turn this would imply higher marginal tax rates for many households. But if there were a shift away from child benefit and toward family credit ('targeting benefits'), the case for integration would be greatly strengthened. Finally, to integrate assessment of tax and benefits would be to alter a long-standing distinction between the annual basis of assessment for income tax and a weekly assessment of need for benefit purposes. Integration, like so much in the area of social security, is a matter of trade-offs between conflicting criteria. What is certain is that, despite the 1988 reforms, the present system leaves much to be desired.

5

The income tax base: savings and investment income

Individuals in Britain save in many different ways. Table 5.1 shows the assets of the personal sector and the extent to which households have been adding to them. In this chapter, we consider each of the principal ways of saving and outline the different ways in which these forms of savings are taxed.

Housing

Investment in housing is the most important form of personal saving. Over 60% of all British households own the house they live in and the total value of this property is now around £350 billion. Most people need to take out a mortgage to buy a house and this may often amount to 80% or 90% of the price they pay. Over time, however, the value of the house increases while the mortgage debt may fall and will ultimately be repaid. This creates what is known as the owner's equity in the house—an accumulated

Table 5.1: *The composition of personal wealth in the UK* (per cent)

	1957	1981
Housing (less mortgages)	16.9	38.6
Pension funds	4.3	15.6
Life insurance	7.8	9.4
Equities[a]	16.7	6.3
Bonds and government securities	20.6	4.3
Cash and deposits	18.4	16.5
Other	15.3	9.3
Total net worth	100.0	100.0

[a] Equities include unit and investment trusts.
Source: Hills (1984) and *Inland Revenue Statistics 1987*, Table 7.2.

pool of savings which he could realize and reinvest (if he sold the house), may borrow against, and will usually ultimately leave to his children.

The income derived from owning a house is not taxed. This statement seems puzzling at first sight, since it is not obvious that house ownership generates any income at all—is not a house an item of expenditure rather than a source of income? But if the owner and occupier of a house were two separate people, rather than a single individual, rent would pass between them on which tax would be paid. So the 'income' from the ownership of a house is the right to live in it, rent-free, and it is because this is valuable that people go on investing their resources in this way. Until 1963 there was, in fact, a tax on imputed income from owner-occupation—the so-called schedule A tax—and such a levy still exists in some other countries. The basis of the tax was notionally the rental value of the property, although the figures assessed had been fixed in 1939 and had not been subsequently adjusted for inflation. In 1963 it was necessary either to bring the basis up to date or to abolish completely what was by then a rather modest tax. The Government preferred the latter option.

Although this 'income' is not taxed, the household obtains tax relief on the interest it pays on its mortgage. Such interest may be offset against earned income, and relief at the basic rate is usually paid directly to the lender through a system known as MIRAS (mortgage interest relief at source). Interest relief is limited to the first £30,000 of any loan. When this limit was introduced (at £25,000) in 1974, only a small number of expensive properties were affected. Now most houses (and new mortgages) are worth more than £30,000.

Over recent decades, home ownership has generated substantial capital gains. In general these gains are not subject to tax, although a capital gains tax was introduced in 1965. The capital gains on the first house owned by any individual (or married couple) are free of tax. A second home is subject to capital gains tax, although only when it is sold, and not at all if it is sold on the death of the owner. Capital gains are calculated after indexation. If you buy a country cottage for £50,000, and retail prices generally have risen by 20% between the date of purchase and the date on which you sell it, you will be subject to tax only on the amount by which the sale proceeds exceed £60,000. Indexation was intro-

duced in 1982 and subsequently extended in scope: gains made before 1982 are now free of tax altogether.

Pensions

Everyone who has worked in Britain acquires some state pension rights. We describe these entitlements in Chapter 4. In addition, however, over 10 million people are, or have been, members of occupational pension schemes. The pension rights they acquire in this way, although intangible, are often the most valuable asset they have. Most occupational pension schemes—including virtually all of those run by companies, and many of those established in the public sector—are *funded*. This means that the employer establishes a pool of assets—stocks and shares, property, government securities—to meet his future liabilities under the scheme. The total value of such funds is now around £173 billion.

Pension funds are completely free of tax on their income and capital gains. Individuals can obtain tax relief against contributions they make from their earnings, and are not liable for tax on contributions which employers pay on their behalf. There are limits on how generous a scheme may be if it is to qualify for these concessions; broadly, these mean that no private pension scheme may be more generous than that provided for Civil Servants. This allows a pension of one-eightieth of final salary for each year's service (so that someone who has worked for 40 years will retire on a pension of half his salary) and a lump sum of three times the pension. The pension is subject to income tax but the lump sum is not.

Recent legislation prevents employers from insisting that their workers should join their pension scheme. An employee who chooses to opt out can provide a personal pension for himself, and a similar opportunity has always been available to the self-employed. A personal pension must be bought from an insurance company or similar institution. Contributions (which may not be more than 17½% of earnings) attract income tax relief and the insurance company obtains the benefit of the same exemption from income, corporation, and capital gains taxes which applies to an occupational scheme. Up to one-quarter of the proceeds of a personal pension scheme can be taken as a tax-free lump sum.

Life insurance

While most firms make some provision through a pension scheme for the retirement or death in service of their employees, many people wish to supplement this by savings or insurance of their own (or are persuaded to do so by the high-pressure salesmanship which has long been characteristic of the industry). The most usual means of doing this is an endowment insurance policy. The policy holder agrees to pay the insurance company a fixed weekly, monthly, or annual sum for a period, normally between 10 and 25 years. The insurance company will pay a specified sum at the end of the period, or on the earlier death of the policy holder. This sum has a low guaranteed minimum, but is increased every year by bonuses which are paid from the returns on the investments which the company makes with the premiums which it receives. Most householders now repay their mortgages by means of an endowment insurance policy.

These policies are often described as 'tax-free' and it is indeed true that the proceeds of a life insurance policy are usually free of tax when the policy holder receives them. The tax-free appellation is misleading, however, because the company itself is liable to tax on the returns which it earns on invested funds. It pays corporation tax on the interest income it receives, income tax at the basic rate on dividends, and a special 30% rate of tax on its capital gains. These rates are higher than those which apply to a basic rate taxpayer (although lower than those imposed on a higher rate taxpayer): however, because of the Byzantine complexity of the detail of these regulations, the amounts of tax paid in practice by life insurance companies are not very large. These rules are, not surprisingly, currently under review, but we hold out little hope that the outcome will be any more comprehensible than the present position.

Shares

Ordinary shares are company securities which pay dividends which may be increased or reduced depending on the performance of the company. Most shares are now owned by institutions (principally life insurance and pension funds) but there are still

many individuals who own shares and their number has greatly increased since privatization issues have been structured so as to encourage very small savers. Individuals can also buy shares indirectly, through unit or investment trusts, which own portfolios of securities on behalf of their investors.

The tax treatment of dividends on shares is closely bound up with the way in which companies themselves are taxed, and we discuss this in more detail in Chapters 10 and 11. From the shareholder's perspective, any dividend he receives is accompanied by a tax credit, whose value will be one-third of the amount of the dividend. This tax credit deals with his liability for basic rate tax on the dividend. People buy shares, however, in the hope of making capital gains as well as in order to receive dividends. The price of a company's shares will vary in line with the market's assessment of the prospects for the economy as a whole and that company in particular. Such capital gains are taxed in just the same way as capital gains tax is levied on second homes. Tax is charged when securities are sold. The original purchase price is adjusted to reflect inflation during the period, the first £5,000 of total gains is exempt, and the balance is subject to tax at income tax rates.

Losses on one security may be used to offset gains on another. Indexation may turn apparent gains into real losses. Suppose, for example, I buy shares for £10,000 and sell them a few years later for £12,000. In the mean time, prices have risen by 25%. Then my purchase price becomes £12,500 and my gain of £2,000 becomes a loss of £500. Such a loss can be offset against capital gains which have been made on other holdings (but not against other income).

This is the standard tax treatment of shareholdings. In order to encourage wider share ownership, a variety of special schemes have been introduced. Some of them are specific to the company for which you work. We described in Chapter 3 how share options had become an important executive perk. A less generously conceived scheme—the SAYE (save as you earn) share option scheme—has been implemented by many companies and to qualify for tax benefits this must be made available to all employees: many large companies have done this. A number of other measures have been implemented to stimulate employee share ownership and profit-related pay but these have not been widely taken up.

Other opportunities to buy shares on tax-advantageous terms are available—indeed, the most generous, the Business Expansion Scheme (BES), excludes employees from participation. The BES favours investment in unquoted companies—mostly small and often newly formed companies whose shares have not yet been listed on the Stock Exchange. A taxpayer can obtain income tax relief on the whole of his contribution to a company which meets the conditions of the BES, provided he holds the shares for five years. Any capital gain he makes will be free of tax also. This makes saving in this way very attractive. Indeed, its weakness is that its attractiveness derives so much from the tax concessions made to it that it encourages investment in companies which do little more than sit on assets for the five-year period.

Bonds and government stocks

Gilt-edged securities are government bonds which are issued for a fixed period. Thus Treasury 13% 2000 is a stock which pays its holder an annual interest rate of 13% until the year 2000 when the stock will be redeemed for its face value of £100. The interest rate is fixed at the date at which the bond was issued, and this means that in the mean time the price of the bond will fluctuate with the level of current interest rates. If interest rates rise, the value of the bond will be less than the original price. But this can operate in reverse.

Companies may also issue bonds, and this used to be an important market, but the high and variable level of inflation over the last twenty years appears to have made such instruments unattractive. There is, however, an international market in corporate bonds, in which British companies issue securities in many different currencies.

Bank and building society deposits

Most people use these for their everyday savings. A deposit in a bank or a building society pays a predetermined rate of interest and the amount of the deposit may be withdrawn in full either on demand or by giving—say—one month's notice to the bank or building society. These deposits therefore generate income but no capital gains.

In inflationary periods, however, they generate real capital losses. When the deposit is withdrawn, its purchasing power is less than that of the money which was put in. Rates of interest may rise to reflect this—certainly interest rates were much higher in the inflationary 1970s than in earlier decades—but there will be no exact correspondence. And even if there were, the fact that different assets yield income and capital gains in different proportions implies that variations in the tax treatment will give rise to distortions which we discuss in more detail below.

Income from bank and building society deposits is tax-free to basic rate taxpayers. The financial institution concerned, however, pays tax on its total deposits by reference to what is known as the 'composite rate'—an estimate of the average rate of tax on *all* bank and building society depositors. The higher rate of tax is, however, excluded in making this computation. With a basic rate of tax of 25%, this composite rate is likely to be around 21%, reflecting the comparatively small number of savers who are not liable to income tax.

These savers are not able to obtain any refund of composite rate tax and would generally be well advised to deposit their money elsewhere (but are often not well advised). Higher rate taxpayers, however, must pay additional tax: their interest is grossed up as if it had been taxed at 25% (rather than the 21% at which it has actually been taxed) and higher rate tax levied on the total notional amount. Thus if a building society pays £79 in interest, it must pay composite rate tax of £21. The basic rate taxpayer, and someone who is not liable for tax (such as an old age pensioner with modest savings) each receive £79. Someone who pays tax at 40% is treated as if he had received £105.33 (the grossed up value of £79) on which he would be liable for tax of £42.13: he is supposed already to have paid £26.33 (25% of £105.33) and hence is liable for £15.80 of higher rate tax.

Rates of tax on investment income

Where the return from investment is taxed as income, it is simply added to the taxpayer's earnings for income tax purposes, and so taxed at 25% or 40%. No National Insurance contributions are charged on investment income. Until 1984, investment income above a threshold was subject to a surcharge of 15%. Thus until

1979, the top rate of tax on investment income, based on an 83% income tax and the 15% surcharge, was an absurd 98%. The reduction in this rate to 40% over a decade is therefore a spectacular change. It is, however, less dramatic than it might seem, because the 98% rate was tolerable—indeed could persist—only because it was easily avoided. The conversion of income into capital gains, taxed at a maximum of 30%, was only one of the means by which the effective burden of this tax could be substantially relieved.

The effect of the abolition of the investment income surcharge on the one hand, and the steady increase in the rates of National Insurance contribution on the other, has been to reverse the relative burdens of taxation on earnings and investment income. Investment income used to be more heavily taxed. This was a legacy of a nineteenth-century view that earnings were more precarious than investment income—a curious notion in the twentieth century, but one with which readers of Jane Austen, and the contemporaneous architects of the British income tax system, will be familiar. The more compelling argument in the inflationary twentieth century—that earnings were the return to effort—led to its continuance.

Capital gains tax was introduced at a flat rate of 30%. Partly to reduce the administrative burden of collection and partly as compensation for the absence (until 1982) of any relief for the inflationary component in gains, the threshold at which tax was payable was steadily increased and by 1988 had risen to £6,600. As one of the reforms of the 1988 Budget, this allowance was reduced to £5,000 and gains (after indexation and other allowances) were taxed as income. Thus the rate of capital gains tax became 25% or 40% depending on the other income of the taxpayer.

The overall effect

In Table 5.2 we attempt to summarize the description of the tax regime contained in this chapter. We have used three principal criteria: how is income taxed, how are capital gains taxed, and is allowance made for the effects of inflation? For the reader who has stayed the course of this chapter so far, it should hardly be necessary to belabour the point that no two of the principal forms of saving in the UK receive the same trio of answers. Nor is it

possible to discern any coherent set of principles on which these differences are based. In each case, they reflect a mixture of historical accident and political and administrative expediency.

Two questions are posed immediately—does it matter, and is it getting better or worse? Is the search for coherence and consistency merely a quest for intellectual purism? It may be remarked that the incoherence and inconsistency we have observed is not a matter of a few anomalous corners. It is characteristic of the fundamentals of the system, and a tax system whose essentials are incomprehensible except to specialists is gravely flawed even if there are no other practical consequences.

But there are major practical consequences. The arbitrariness of the tax treatment of savings means that ingenuity which should properly be directed to finding the most profitable form of investment—in terms of the underlying returns on investment—is instead devoted to clothing investment in the most tax-efficient form. A glance at the financial advertising in any quality Saturday newspaper will confirm the extent to which it is the tax treatment of a savings medium, rather than its intrinsic profitability, that is the principal basis on which the funds of savers are attracted. When modern fraudsters offer implausible rates of return to greedy investors, they do not—as earlier generations of embezzlers did—claim access to the riches of the Orient or the secrets of perpetual motion: they profess superior understanding of the intricacies of the tax system.

More fundamental, however, is that the distortion of the pattern of savings not only imposes direct costs on consumers but influences the flow of investment funds across the economy. The diversion of savings towards the housing market has obvious

Table 5.2: *How savings are taxed*

Form of savings	Is income taxed?	Are capital gains taxed?	Is inflation relieved?
Owner-occupied housing	No	Some	Yes
Pension funds	No	No	Not applicable
Life insurance	Yes: varying rates	Yes	Some
Company shares	Yes	Yes	Yes
Government securities and corporate bonds	Yes	Some	No
Bank and building society deposits	Yes	No	No

effects. The institutionalization of personal saving—heavily promoted over an extended period by the tax system—encourages property investment and the concentration of resources into larger firms. There are arguments for and against these developments, but they should not be promoted as a fortuitous by-product of the inadequacies of the tax system. We have seen how much the direct taxation of individuals in Britain today lacks a basis of clearly articulated principle. It is time now to consider what that principle should be.

6

The choice of the tax base

It should be clear from the previous chapter that many of the weaknesses of the UK tax system arise from the absence of a coherent view as to what should constitute an individual's 'taxable income'. We have illustrated this by pointing to several difficulties in the existing structure of the tax system which have become increasingly evident in recent years. Suppose we go back to square one and ask the question 'What principles should determine the choice of the tax base?'. In the theory of taxation two different lines of thought may be detected.

One traditional approach is to say that since taxes are levied to finance collective expenditure on services that either cannot be provided by the market or the government of the day chooses to supply from public funds, then the amount of tax paid by an individual should be related to the benefit that he derives from public expenditure. This school of thought has become known as the 'benefit theory' of taxation. But it is very difficult to measure these benefits because people can rarely be excluded from enjoying the benefits of many forms of public expenditure. Financing national defence or public television by voluntary subscription is usually found to be impracticable, and the tax authorities and detector vans are called in to help out the State.

The objection to the benefit theory of taxation is not, however, based only on its impossible demands of human nature. We simply do not know the distribution of benefits of public expenditure, and there is little prospect of discovering it. How can we measure the benefits that any particular individual derives from defence, the police, or the Department of Industry? An alternative approach is to say that for a given level of public expenditure, the total cost of financing it should be divided among individuals according to their 'ability to pay'. The idea behind this is that an individual should make a contribution according to the 'sacrifice' which the tax burden imposes upon him, and that individuals should make equal sacrifices. This is not equivalent to saying that each individual

should pay the same amount of tax because a rich man can pay much more tax than a poor man while being said to suffer the same 'sacrifice'. The evident difficulty of defining exactly what is meant by 'equal sacrifice' explains why the 'ability to pay' approach, like the benefit theory, has not contributed a great deal to the resolution of practical problems.

One reason for this is the confusion of two quite distinct issues. The first is the question of what is the best index of an individual's 'ability to pay'. Obvious candidates include income, wealth, and consumption. The second question arises once we have chosen a particular index, income for example. How should the tax burden be distributed among people with different incomes? In other words, how progressive should the income tax be? For the moment we shall consider the former issue.

A natural way to measure an individual's ability to pay is his ability to earn. This, however, contravenes a basic criterion for a feasible index, which is that we must be able to *measure* it. What someone actually earns is not necessarily a good guide to what he could earn. A man who has the ability to produce a great deal but chooses to lie on a beach all year round will pay no tax. It would be difficult to prove that he had the ability to earn enormous sums, and impossible to measure at all accurately what he might have earned. Before this approach to the taxation of potential earnings is condemned as unjust and illiberal, we should recall the widely held belief that owners of property should pay full rates even if the property concerned is empty. The owner of an empty office-block is regarded as just as worthy an object of taxation as the owner of a building that is fully used.

Politicians and administrators charged with the responsibility for collecting taxes will be more interested in what measurable indices or tax bases they could use. At this stage we may distinguish three potential tax bases—*wealth*, *income*, and *expenditure*—the values of which measure how much an individual owns, earns, and spends respectively.

Wealth as a tax base

Wealth taxes have a longer history than income taxes. This may seem surprising to those people who regard the idea of a wealth tax as a recent left-wing idea, but monarchs found it easier to

measure their subjects' wealth than to perform the more sophisticated calculations that are necessary to compute income. Representatives of the monarch would estimate an individual's visible wealth (acres of land of different types, numbers of servants and cattle), and levy a wealth tax at regular or irregular intervals depending on the Crown's needs.

More recently, wealth taxes have been used in many European countries as a substitute, or partial replacement, for taxes on investment income. A wealth tax was proposed by the Labour Government in a Green Paper in 1974 (Cmnd. 5704), and this was examined in detail in a report of a Select Committee of the House of Commons (HMSO (1975): HC 696–2). The Committee was, however, unable to agree upon a report, and the published document contains several minority reports.

One of the motives for the idea of a wealth tax was concern that the distribution of wealth was too unequal. There is no doubt that there is substantial inequality in the distribution of wealth in the UK today. The top 1% of the population owns around 20% of total personal wealth, depending upon the precise definition of wealth (see Table 6.1). (It is difficult both to produce such numbers and to evaluate them; for a careful analysis of the evidence on wealth distribution, and on the difficulties of measurement, see Atkinson and Harrison (1978).) The standard of comparison against which such concentration should be judged is uncertain. We would expect that older people who have saved for retirement and, for many of them, owned houses for longer would be significantly wealthier than younger people entering the labour market.

It is important to note that Table 6.1 omits any reference to the two most important forms of wealth that most families own. This is because these two components of wealth cannot be measured. The first is simply the present value of the future earnings that an individual may earn, sometimes described as 'human capital'. Apart from the special cases of slaves and football players, there are no markets to enable us to put a precise monetary value on the stock of human capital. For this reason it is clear that such wealth is not included in statistical analyses of personal wealth nor is it suitable as a component of taxable wealth.

The second form of wealth that is difficult to measure is wealth held in the form of rights to future pensions. Although an

Table 6.1: *Trends in the distribution of personal wealth in the UK*

	Share of different percentile groups in total wealth (%) England and Wales, adult population[a]			UK over 18			
	1911–13	1938	1966	1971	1976	1981	1985[b]
Top 1%	69	55	31	31	24	21	20
Top 5%	87	77	56	52	45	40	40
Top 10%	92	85	69	65	60	54	54

[a] Taken as over 25 in 1911–13, 23 in 1938, 19 in 1966. Figures for 1938 and 1966 (England and Wales) not strictly comparable.
[b] Provisional.
Sources: Revell (1965), Atkinson and Harrison (1978), and *Inland Revenue Statistics 1987*, Table 7.5.

individual cannot sell his or her pension rights (he or she must live at least to retirement age for them to be of any value), they have an actuarial value, and most people would be very upset if their pension rights were taken away. To value a pension right of an individual we have to estimate his chance of survival until the year when the pension will start to be paid, the size of the pension that will be paid after retirement, and the tax treatment of the pension payments that will be in force at the time. Since for most people the pension that they will receive is linked to their final salary, it is very difficult to make accurate estimates of the value of pension rights. In some cases it may be impossible to value such rights at all if there is no contractual arrangement to provide a pension. For example, a director of a small company may have no formal right to a pension but a very high expectation of a good pension, not least because the other directors could decide to award him such payments after retirement. In these cases no valuation could reasonably be made and if formal pension rights were taxed, informal schemes would proliferate. But if pension rights were not regarded as taxable wealth there would be inequities between those with occupational pension rights and those, such as the self-employed, who had to provide their own pension, and, equally important, inequities between those in generous pension schemes and those in poor schemes. The Inland Revenue has estimated

how the distribution of wealth would be affected by the inclusion of the rights to both private occupational and state pensions. Allowing for pensions lowers the share of the top 1% from 20% to 11% in 1985. The shares of the top 5% and 10% fall to 25% and 36%, respectively. Pension rights pose a very serious problem for a wealth tax.

Because of the difficulties that we have outlined, wealth taxes in practice do not attempt to tax either human capital or pension rights. For this reason they are better described as taxes on assets rather than on wealth in its widest sense. A tax that is levied only on assets that can be easily identified and valued is by no means the same thing as a tax on a household's net worth.

Nevertheless, it has been argued that wealth in the form of visible assets gives rise to 'taxable capacity' in its own right. Kaldor (1956), when discussing tax reform in India, cited the example of a beggar and a man who hoarded gold, both of whom received no current monetary income. But it is clear that in some ill-defined sense the man with greater wealth has a larger taxable capacity. If by this is meant that the wealthy man can enjoy a higher standard of living then, although this is obviously true, it is an argument for a tax on expenditure rather than a wealth tax as such. It may be argued that wealth confers power, influence, and security as well as monetary benefits. But it is difficult to relate these non-pecuniary benefits to any monetary evaluation of wealth, and power derives from sources other than wealth. Nevertheless, it suggests the idea that a tax on wealth could be used to tax all the benefits of wealth-holding, both pecuniary and non-pecuniary. With this idea a wealth tax would replace all existing taxes on the holding (though not the transfer) of wealth and the income that derives from it. Taxes on unearned income and on capital gains would be replaced by an annual tax on wealth.

Such a proposal was put forward by Flemming and Little (1974), and it has evident attractions in principle. But in order to work it would have to be applied to everybody, and this would entail the daunting task of valuing the wealth of each individual every year. Since the two largest components of wealth for most people—human capital and pension rights—cannot easily be taxed, it is evident that wealth is not suitable as the base of the main personal tax. This is borne out by the practice of all developed countries.

Income and expenditure as tax bases

In more recent times, income was used as the index of ability to pay, and this has become the norm in all countries. Nevertheless, there has always been a strong intellectual tradition ranging right across the political spectrum, including such figures as Hobbes, Mill, Fisher, and, more recently, Kaldor, that has argued in favour of the use of expenditure as the measure of an individual's ability to pay. In this tradition two arguments have been deployed for the superiority of a tax based on expenditure over income tax.

The first justification for taxing an individual on his consumption is that it is more just to tax someone on the value of what he takes out of society in terms of the goods and services that he consumes, than on the value of what he contributes to society, whether in the form of earnings in return for labour services or interest in return for the supply of capital services. This argument is usually supported by reference to the famous question of Hobbes,

> What reason is there, that he which laboureth much, and sparing the fruits of his labour, consumeth little, should be more charged, than he that liveth idlely getteth little, and spendeth all he gets: Seeing the one hath no more protection from the commonwealth than the other? (Hobbes (1651), *Leviathan*, Chapter XXX)

The answer to Hobbes is twofold. Firstly, there is no obvious reason to regard a tax on what an individual actually consumes as evidently more *just* than a tax on the total economic opportunities of the individual which measure his potential consumption. A one-legged unemployed man who manages to maintain a low level of consumption by begging is unlikely to be seen as just as suitable an object of taxation as a wealthy miser who chooses to spend very little and counts his money each night. A tax on potential consumption has as much claim for the title of a fair tax base as a tax on actual consumption. Secondly, Hobbes's example is very misleading. The injustice arises, so it would appear, because one individual enjoys a good deal of leisure ('liveth idlely' while his neighbour 'laboureth much') and this is not taken account of when his tax bill is computed. This, however, has nothing to do with the distinction between income and consumption. If we consider Hobbes's example and look a year or two into the future, then the

man who had worked hard, saved, and now wanted to enjoy the fruits of his work and saving in the form of consumption would, under Hobbes's regime of an expenditure-based tax, find himself facing a heavy tax liability. Both an income tax and an expenditure tax discriminate in favour of the 'idle', and unless we are prepared to tax people on the basis of what they *could* earn, there is nothing we can do about it.

A more relevant distinction between an income tax and an expenditure tax is their treatment of saving, and this has been used as the second main argument for a tax on consumption. With an expenditure tax, consumption incurs the same tax liability (for a given schedule of tax rates) regardless of the year in which the individual chooses to consume. There is no discrimination between those who prefer to spend while young and active, and those who prefer to spend in retirement. An income tax, on the other hand, is said to discriminate against saving because it gives rise to the 'double taxation of savings'. The reason for this is the following. Consider a world in which the only tax is an income tax, and two individuals who earn the same amount and hence pay the same tax. The first decides to spend everything this year and pays no more tax. The second decides to save up and spend the money next year. Because he saves he receives some interest on his savings, but under an income tax he is required to pay further tax on his interest income, and this has been described as double taxation. Although there is some force in this argument the position is more complicated than the simple label of 'double taxation' might imply. It should be obvious that what matters is not the number of times tax is paid (whether it be double, treble, or quadruple taxation), but the total tax burden. The important questions are whether taxing interest income discriminates between immediate consumption and deferred consumption, and whether this discrimination is a serious problem. On the first point, we have to decide whether the after-tax interest that the individual receives is less than the rate of return that the nation earns on investment which can be financed out of the individual's savings. In fact this is a complicated issue which depends on, among other things, the taxes and subsidies on investment by companies. Before 1984 the tax system provided, on *average*, no disincentive to saving, although this resulted from a subsidy to

institutional savings and a tax on individual saving. Following the 1984 Budget, there is now a positive tax on capital income on average, and hence a disincentive to saving (see Chapter 11).

It is necessary to correct a common, but mistaken, impression that the main argument for an expenditure tax is that it would encourage saving. There have been very large changes in real interest rates over the last decade. In the mid- and late 1970s real interest rates, especially after tax, were negative and often significantly so. In the 1980s real interest rates rose to levels that were almost unprecedented. Yet the private sector savings rate did not exhibit such volatility. It seems implausible, therefore, that the response of savings to changes in interest rates is large. Studies in the United States by Boskin (1977) and Howrey and Hymans (1978) yield conflicting evidence about the response of aggregate saving to interest rates, and it seems unlikely that changes in the tax system would have a major effect on savings. The important thing is to distort individual decisions no more than is necessary, and the attraction of an expenditure tax is not so much that it would remove a disincentive to saving in general but that it offers a practicable way of eliminating the differential taxation of particular forms of saving and capital income.

Given that it is unrealistic to think of calculating a special tax rate for each form of saving and each type of income, and given the anomalies that have been introduced into the present system by 'special concessions', there is a powerful case for choosing as the tax base either income or expenditure, but not a mixture of the two. The arguments in principle for choosing between income and expenditure, which we have discussed above, do not seem to us to lean heavily in one direction or the other. Either base can be defended and the decisive arguments come from a consideration of what the respective tax bases imply in practice.

The definition of income and the 'comprehensive income tax'

It may seem trite to observe that to operate an income tax it is necessary to have a clear definition of what constitutes 'income', but the sad truth is that no single definition of income commands universal assent. Those who either doubt, or are surprised by, this statement are referred to the voluminous literature on the subject

(some of which has been brought together in the volume edited by Parker and Harcourt (1969)).

One of the most popular definitions of income remains that of Hicks (1939) who suggested that 'income is the maximum value which a man can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning' (p. 172). Unfortunately, it is not an operational definition, either for an accountant or a tax inspector. The difficulty lies in the word 'expect'. How can other people possibly determine what I expect? And what are they to do if my expectations are unreasonable? Accountants and revenue officers must work with verifiable facts, and hence they must look, not at what I could have *expected* to consume during a week or a tax year, but rather at what I could *in fact* have consumed while still remaining as well off at the end as at the beginning.

Unfortunately, these two concepts are not the same. If things always materialized as I expected, then there would be no divergence between them; but of course things never do. Consequently, if events go well for me in some particular year—I win the pools, my shares prosper, and my forgotten rich Australian uncle dies—my receipts in that year will be greater than I could have expected them to be, or can expect them to be next year. My 'income', defined in terms of what I could have consumed in that year, will be greater than my income in the Hicksian sense of what I could have expected to consume and greater than my long-run spending capacity. Conversely, if I have an unexpectedly bad year, in which my shares collapse, I lose my job, and my wallet is stolen, my receipts fall below my permanent income; anyone who looks at my accounts will see a gloomy picture, but an unduly gloomy one, because these unexpected adversities are unlikely to happen again. An omniscient auditor or tax inspector would seek to remove from the published figures the influence of such events.

Of course, there is no practicable method of doing this; but in raising the problem we can see why the taxation of capital gains, and capital receipts generally, has posed such difficulties for the income and corporation taxes of this and other countries. The problem is that capital gains may arise for a variety of reasons and we would wish to differentiate between the components of capital gains, some of which are equivalent to other components of income and others of which are not. This is clearly impossible and

in practice we can only adopt some rather crude categorization which is based on things we can actually measure. The distinction between the expected and the unexpected can never be observed, and after a careful consideration of the problems involved Hicks came to the following conclusion about concepts of income, including his own: 'They are bad tools, which break in our hands' (1939, p. 177).

Nevertheless, the rationale behind the recent tax reforms in both the UK and the US is the idea that an individual should be taxed on his 'comprehensive income', which is defined as the amount that an individual could consume without running down the value of his wealth. Simons has suggested that 'Personal income may be defined as the algebraic sum of (a) the market value of rights exercised in consumption and (b) the change in the value of the store of property rights between the beginning and end of the period in question' (1938, p. 50). It is this definition of personal income that has come to be known as comprehensive income and we can measure it by the value of what the individual does consume plus the change in the value of his wealth.

A comprehensive income tax would require that all investment income currently earned by institutions is attributed, by one means or another, to the individual to whom it will ultimately accrue and is then taxed accordingly; only by this means can we reduce the large-scale avoidance of the present investment income tax and reverse the increasing institutionalization of savings. These procedures would have to be applied to trusts, to corporations, to pension funds, and to life insurance companies. This would mean that the income of a pension fund, for example, would be regarded as accruing to the individual who had rights in the fund, although most taxpayers would not appreciate a letter from the Inland Revenue demanding tax on income that they had never seen and that had been received by a distant pension fund. And how could we deal with unfunded schemes (such as that for Civil Servants) or inadequately funded schemes (such as virtually all UK occupational pension schemes)? The problems involved in 'unmasking' other institutions such as trusts are hardly less acute. In a rather similar way, but with equal difficulty, we could assess rich taxpayers on the 'income' that they derive from the durable goods which they presently buy in preference to more productive assets that yield taxable income; we might reimpose 'schedule A' on

houses and extend it to other valuable items like pictures and jewellery.

It is true that what we have been describing is a rather idealized income tax, and that some of these difficulties could be avoided by not following the definition of 'comprehensive income' to the letter. But a pragmatic approach means that it is only too easy to lose sight of what it is that we are trying to tax, and to ignore the fundamental interrelations between the different parts of the system or to be blind to their consequences.

An expenditure tax

One advantage of choosing consumption expenditure as the tax base is that we require no valuations of an individual's wealth, and hence we avoid all the problems of measuring depreciation of assets, of indexing for inflation, and of our inability to measure some important components of wealth, such as pension rights or human capital. There are two important differences between a personal expenditure tax such as we have outlined and existing taxes on expenditure often called 'indirect' taxes. A common objection to the imposition of indirect taxes is that they take no account of an individual's personal circumstances, and indeed are often, though not always, regressive. What progressivity does exist is achieved by taxing at higher rates of VAT or excise duties those commodities that are consumed relatively more by the rich than by the poor. Since consumption patterns vary between individuals this is a rather arbitrary and haphazard method of redistribution, which is a blessing to the rich man who loves plain cooking and reading, and hard on the poor man who rejects conventional standards of attire and nutrition and adopts consumption patterns more usually associated with the rich by devoting himself to the consumption of whisky. It is important to realize that this objection cannot be levelled at an expenditure tax that is a tax on the total value of an individual's consumption expenditure during the course of a year. In itself it does not discriminate between consumption on different commodities, and can be as progressive as desired in exactly the same way as an income tax is progressive; that is, by the existence of personal allowances and higher rates of tax. The degree of progressivity in the personal tax system is a

quite separate issue from that of whether the tax base is to be income or expenditure.

The second difference between an expenditure tax and existing taxes on expenditure concerns the method of collection, and follows directly from the first. Because indirect taxes depend only on the total value of sales of a commodity and not on the identity and circumstances of those purchasing the commodity, they can be collected in the shops at the retail stage, or from the wholesalers (as was the case with the old purchase tax), or from the purchaser at the various stages of production (as occurs with VAT). With an expenditure tax, however, the amount of tax depends upon the personal circumstances of the consumer, and the tax cannot be collected in the shops in the form of an addition to the bill.

How then can the tax authorities measure the value in any given year of an individual's expenditure? The first thing to say is that it does not require the taxman to follow housewives into the supermarket and surreptitiously observe the figures being rung up on the till. We can measure an individual's expenditure by observing what he does with the various cash receipts arising during the course of the year. He might receive amounts in the form of wages and salaries, tips, interest and dividend payments, gifts and bequests from other people, and he might receive cash from the sale of some of his assets (for example, shares or a house) or from borrowing money. Taken together these items form his total cash 'incomings'. We must also be careful to include items received not in the form of cash but 'in kind', whether they be inherited goods (such as houses, paintings, or shares) or perks like free motor cars, lunches, and other fringe benefits. (These problems of identifying transactions and of policing the line between personal and business expenditures arise to the same extent and in just the same way with all taxes—income tax, expenditure tax, or VAT.) The total 'incomings' are matched by an equal total for 'outgoings' which describe what the individual does with his receipts. Some of these he may give away (to relatives or to charity), some he will use to meet the interest payments or repayments of the principal on loans taken out in the past, and some to save by placing his money in a building society account or by purchasing assets of various types (shares, for example). The remainder will be used to finance his personal

consumption. In this way we can see that it is possible to calculate the value of an individual's expenditure by computing his various receipts and payments during the year.

It is also clear that some of the problems associated with an income tax arise from the difficulty of defining an acceptable measure of an individual's *annual* income. In fact we shall now see that if we take a longer view and think of an individual's income over his lifetime, the difference between income and expenditure disappears. To see this let us consider an individual's lifetime accounts and imagine a very careful man who kept a complete record of all his receipts and all his expenditures. On the day after his death we enter his study and find in the left-hand drawer of his desk a complete record of all his receipts over his lifetime filed according to the year in which they were received. We find his salary slips and notes of interest on bank deposits, perhaps some dividends, his pension while in retirement, and all the amounts that he inherited or received by way of gifts from others. In the right-hand drawer we find a similar set of notes, again filed by year, of all his expenditures and payments over the years, including gifts made by him to others. We also find a statement prepared immediately before his death of his net wealth (assets net of liabilities) which is to be bequeathed to his descendants. Into the left-hand drawer we then insert a file with the sale proceeds of the estate and into the right-hand drawer a file containing the same figure which is equal to the value of the estate passed on to his descendants.

Since the items of 'outgoings' in the right-hand drawer must have been financed in one way or another from the 'incomings' in the left-hand drawer, the total of all the figures in the left-hand drawer equals the total of the entries in the right-hand drawer. We enter the world with nothing, and we leave the world with nothing. Our lifetime accounts must balance. The total of the entries in the right-hand drawer is simply the total value of the man's own consumption and gifts and bequests to others over his lifetime. The total in the left-hand drawer consists of his lifetime earnings, gifts received from others, investment income, and the sum of the net sales of assets over his lifetime including the value of his estate. Since we enter the world with nothing the value of net sales is equal to the capital gain the man has made on his assets over his

lifetime. Hence the total in the left-hand drawer can be said to measure the man's total lifetime income, and is equal to the total of what he spends on consumption and gifts to others.

From this we can deduce that the effect of collecting a tax on consumption and gifts made on an annual basis is to impose a tax on lifetime income. We might propose an expenditure tax (including gifts in the tax base) as a superior form of income tax!

In effect, what this tax does is to tax an individual on his lifetime use of resources and for this reason we may describe it as a lifetime expenditure tax (LET). The intellectual basis for the LET is different from that of the pure expenditure tax, although its operation is very similar. It is superior to a comprehensive income tax in that, although it can be described as a tax on lifetime income, it avoids all the problems associated with an annual income tax which we discussed above—the unequal treatment of human and financial capital, the double taxation of savings, and the difficulty of measuring 'income' in times of inflation.

The arguments advanced here are the reverse of those normally associated with the debate over income versus expenditure. It is usual to argue that in principle expenditure has many conceptual attractions over income for the tax base, but that there are too many practical difficulties involved in measuring an individual's annual expenditure. We have argued that the choice in principle between income and expenditure is finely balanced, that we prefer lifetime income, but that to measure this the appropriate annual tax base is expenditure including gifts made, and that the compelling argument against a conventional income tax is the administrative complexity of measuring an individual's annual income.

How does the direct tax system in Britain today measure up to the principles that we have discussed in this chapter? It is to this question that we now turn.

7
The reform of direct taxation

In the last chapter we contrasted two principal approaches to direct taxation—a comprehensive income tax and an expenditure tax. We have stressed also the need to base any actual programme of tax reform on a set of clearly articulated principles. In practice, as we showed in Chapter 6, tax changes in the UK have been motivated by one approach or the other with rather little consistency. Some forms of savings are taxed as under an expenditure tax and others as implied by an income tax—we have a 'hybrid' income tax. The result is the existence of tax avoidance opportunities, on the one hand, and distortion of savings and investment decisions, on the other.

Reductions in tax rates ameliorate, but do not eliminate, the problem. Over the last ten years the maximum rate of tax on investment income has been reduced from 98% in 1978/9 to 40% in 1988/9. This was achieved by the reduction in the higher rates of tax in the 1979 and 1988 Budgets and the abolition of investment income surcharge in the 1984 Budget. At the same time, the top tax rate on capital gains has risen from 30% to 40%, and since 1982 the tax has been levied on real (indexed) rather than nominal gains. It is clear that the incentive to invest in schemes designed solely for their tax avoidance properties has been dramatically reduced. At a tax rate of 98%, for every £1 received net of tax by the taxpayer, the Inland Revenue receives £49. At a tax rate of 40%, the amount received by the Inland Revenue is only 67p for each £1 received by the taxpayer. Most tax avoidance schemes are possible only because there are differences not only between the tax rates levied on different assets but also between the rates on different investors. A comprehensive income tax and an expenditure tax both aim to impose a uniform tax treatment of different assets. A hybrid income tax could be made to work by charging the same rate of tax on all investors, with disparities existing across assets (Mervyn King (1988)). But governments have demonstrated a desire to levy a progressive rate structure on investment

income, and so fiscal neutrality requires careful design of the tax base.

The direction of reform contained in the two major tax reforms of the last decade—the 1984 and 1988 Budgets—was mainly, but not uniformly, toward a comprehensive income tax. One of the most significant measures in the 1988 Budget was to equate the tax rates on capital gains and investment income. As was discussed in Chapter 6, this is an important part of a truly 'comprehensive' income tax. Now that capital gains are taxed at a marginal rate of either 25% or 40%, in only rare cases will it be worth while to attempt to convert income into capital gains.

A major distortion in the treatment of income from capital has thus been removed. There remain, however, four potential sources of distortions in the current system. First, many important assets are exempt. These include owner-occupied housing, most UK corporate bonds, and government securities. It now seems absurd to relieve gains on bonds and gilts from capital gains tax, only to charge them to income tax under complex anti-avoidance schemes (the accrued income and deep discount schemes). Second, certain transfers are either exempted or relieved. The most striking is the general exemption on death introduced in 1971. Any capital gain accruing during the lifetime of an investor is forgiven if the asset is not sold but bequeathed. This provides a large incentive to hold on to assets until death—the 'lock-in' effect. Coupled with the exemption for all gifts, which dates from 1980, the effect is that many transfers of assets between individuals will never give rise to a capital gain or loss for tax purposes at all. Third, capital gains accrue over time as asset prices rise and fall. Since it would be impracticable to collect tax on changes in values as they occurred, a capital gains tax charge is computed only when an asset is sold. As a result, long-term capital gains are taxed at a lower effective rate than short-term gains, because the investor receives the benefit of an interest-free loan from the Revenue between the time when the gain accrues and the time when it is realized. The size of the benefit depends upon the length of time for which an asset is held and upon the level of interest rates. However, the full indexation of capital gains tax in 1985 reduced the value of the benefit of deferral very substantially. Finally, in addition to the reliefs for particular assets, there is an annual exempt amount of gains which may be realized tax-free. In 1988/9 this threshold was £5,000 for each tax unit.

These four weaknesses in the operation of capital gains tax raise a question mark over its ability to limit the attraction of traditional tax avoidance schemes that were designed to exploit the difference between the taxation of investment income and capital gains. In particular, many of the problems arise when the existence of income or a capital gain does not correspond to any observable flow of cash—when assets are transferred on death or when individuals finance consumption by borrowing against unrealized capital gains, for example.

In some areas the tax system makes no attempt to impose the principle of an income tax. The most notable is the tax treatment of pension funds. Provided that the fund meets a series of Inland Revenue criteria, pension contributions (whether made by the employer or by the employee) are excluded from taxable income, and in addition no taxes are levied on the investment income of pension funds themselves. But payments made out of a fund are taxable in full as earned income (except for that portion that may be commuted as a lump sum). In effect, savings made through a pension fund are a means of accumulating free of tax, and their treatment is the same as that which would be applied to all savings under an expenditure tax.

As we described in Chapter 5, tax concessions have also been extended to saving in owner-occupied housing, through life insurance policies, and a variety of schemes to promote share ownership by small investors. As a result of these tax privileges, there have been dramatic changes in the structure and composition of personal wealth in the UK. Over a period of twenty-five years, the proportion of personal wealth accounted for by the three main forms of privileged assets—houses, life insurance policies, and pension funds—has risen from 29% to 64%. In the same period, personal holdings of equities and other marketable securities fell, as a proportion of wealth, by almost three-quarters, a truly dramatic switch in household portfolios. So the aim of moving the tax system nearer to a comprehensive income tax has done little to alter the tax treatment of the most important types of saving. In fact, the net effect of the changes over the last few years has been to *reinforce* the special and privileged position of housing and pension funds as vehicles for personal saving. Unless the fiscal advantages of these assets are removed, a more realistic prospect of a neutral tax system is to tax cash flows. It is this principle which underlies the case for an expenditure tax. Before turning to the

implications of adopting an expenditure tax approach for the UK, we examine the only significant wealth tax that is levied today. This is inheritance tax, a tax on wealth that is transferred from one taxpayer to another.

Taxes on gifts and bequests

We saw that one of the major loopholes in capital gains tax at present is the forgiveness of tax when an asset is transferred on death. An important reason for this concession was the existence of other tax charges arising on death. Assets passed on at death are liable to inheritance tax. The idea of death duties goes back many centuries. Modern legislation dates from the introduction of probate duty in 1694, which lasted until the famous Budget of Sir William Harcourt in 1894 which brought in estate duty. In the eighteenth and nineteenth centuries, two other taxes on transfers at death were enacted—legacy duty and succession duty—and these survived until 1949. These two latter duties embodied the principle that the tax paid should reflect the circumstances of the recipient, or donee, rather than the size of the estate. Estate duty related the tax paid on transfers of wealth only to the circumstances of the donor. There were many suggestions for replacing estate duty with a tax on the receipts of beneficiaries. Such a tax is often called an accessions tax, and in 1972 the Government published a Green Paper (Cmnd. 4930) to stimulate discussion on the idea of moving towards inheritance taxation. But when estate duty was finally overhauled in 1975, it was transformed into capital transfer tax which continued to relate tax liability to the size of the estate.

Capital transfer tax did, however, bring one very important change to the system of taxing transfers of wealth in Britain. For the first time it extended the taxation of estates to cover gifts. Under the old estate duty the principle was not to tax gifts at all, but in order to prevent gifts made 'in contemplation of death' avoiding tax altogether, it was necessary to include gifts made just before death (gifts *inter vivos*) in the taxable estate. If the only loophole were death-bed gifts, then a rule including gifts made within a few weeks of death would be sufficient. But wealthy individuals and their wealthy advisers are sufficiently ingenious to plan to give away at least part of the estate well before the

expected date of death, and by so doing they were able to avoid tax altogether. The Government responded by extending the length of the period before death within which gifts made were taxable from nothing to three months, then to a year, three years, five years, . . .! Before it was replaced, estate duty covered gifts made within seven years of death. Clearly, the taxman favoured the healthy, wealthy, and well-advised.

The addition of gifts to the base of the transfer tax was a logical and necessary step, although after the introduction of capital transfer tax the Government saw fit to reduce the tax rate on gifts to considerably less than the rate applying to transfers on death. Allegedly this was to help ease the problems of the transfer of small private businesses, but it increased the possibility of tax avoidance and reintroduced the creation of rules to prevent death-bed gifts. In 1986 capital transfer tax was renamed inheritance tax (though it remains a tax on bequests rather than inheritances) and lifetime gifts once again became exempt from tax provided that the donor survived seven years. The system had turned full circle.

Inheritance tax is levied at a flat rate of 40% on transfers above the threshold which, in 1988/9, was £110,000. The numerous possibilities for avoidance mean the system raises little revenue and average tax rates are rather low. An example will illustrate the possibilities. A wealthy man who gives away most of his estate will pay no tax at all as long as he survives for seven years. Unfortunately the timing of death is normally uncertain. But he can take out a life insurance policy to cover the tax liability should he not survive for seven years. The size of the premium is a measure of the effective tax rate. For a 70-year-old man the premium is equivalent to an effective tax of less than 4% compared with the statutory rate of 40%, and that is before taking into account any of the special reliefs for particular assets, such as businesses and agricultural land, that have lowered the burden of the tax in the past. Far from being progressive, the rates payable on very large transfers seem ridiculously low.

It is clear that individuals who are obviously far from being paupers may die leaving estates for tax purposes that bear little relation to their real wealth. It is generally believed that the largest sum ever paid in death duties, by a considerable margin, was the £11 million paid on an estate estimated at between £40 million and £60 million on the death of the third Duke of Westminster in 1953.

On the subsequent death of the fourth Duke, his reported estate was a little over £4 million, on which estate duty came to around £1 million. In fact not even this sum was paid, since after a protracted legal case it was resolved that the Duke (who was partially disabled by war wounds received in 1942 and who died of cancer in 1967) was entitled to the benefit of an exemption from estate duty for those killed on active military service. The fifth Duke died in 1979, and press reports then estimated that the family fortune controlled by the new Duke of Westminster was between £300 million and £800 million. Again the reported estate was expected to be less than £5 million (*Daily Telegraph*, 20 February 1979).

Avoidance opportunities of these kinds are reflected in the yield of transfer taxes. Figure 7.1 shows the yield of estate duty, capital transfer tax, and inheritance tax at constant 1987 prices over the last twenty years. There has been a significant fall in the real yield, and the concessions introduced in 1986 have yet to have an impact on the revenue figures. Inheritance taxation is now an insignificant source of revenue and yields little more than the equivalent of one-half of one percentage point on the basic rate of income tax. It plays a very minor role in altering the distribution of wealth.

A lifetime expenditure tax

It has been generally assumed that whatever the theoretical attractions of the expenditure tax, the administrative problems of operating it were overwhelming. Certainly the historical record is not encouraging. The only country to have recent experience of operating a personal expenditure tax—Sri Lanka—has abandoned it. The US Treasury proposed such a tax in 1942, but the reception it received in Congress was so hostile that within a week the suggestion was withdrawn. Kaldor, distinguished dissentient member of the Radcliffe Committee of the early 1950s on the taxation of profits and income, invited consideration of the tax. The Committee consulted the then Chancellor of the Exchequer, and was doubtless relieved when he concluded that such a proposal was much too radical to fall within the terms of reference of a Royal Commission. Kaldor put forward his ideas subsequently (1955), but his work received more attention for its masterly analysis of concepts of income than for its description of taxes on expenditure. Only in India were his arguments found persuasive,

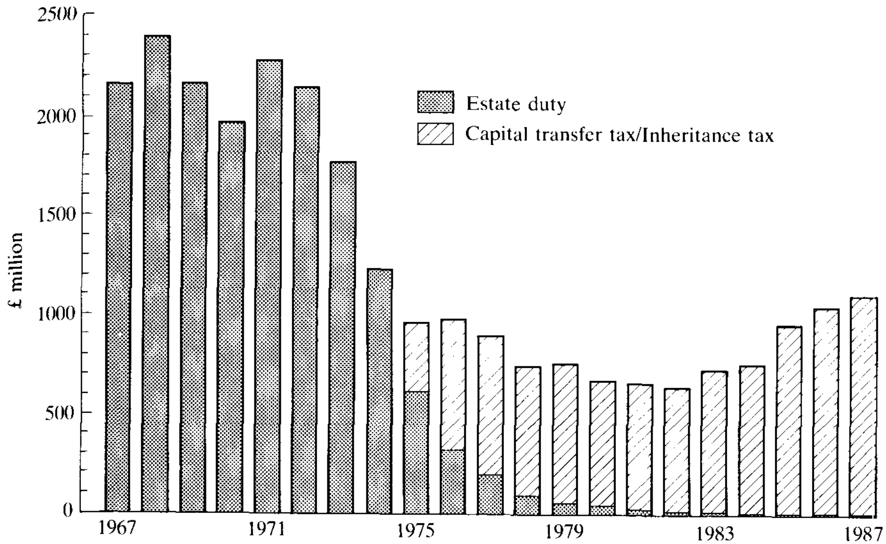


Fig. 7.1. Capital tax receipts (1987 prices)

but the tax was never a serious one (the number of taxpayers never exceeded 1,000) and was withdrawn in 1966 (Chawla (1972)). But we believe an expenditure tax is a practical proposition, and this is no longer an eccentric minority view. Official reports in Sweden, the USA, and Ireland have shown how such proposals might be implemented in these countries (Lodin (1978), US Treasury (1977), and Irish Commission on Taxation (1982a)), and the Meade Committee has analysed the possibilities and problems in the UK context.

We should stress that an expenditure tax does not operate by requiring an exhaustive listing of every purchase that has been made during the year of assessment. Many people will be familiar with the rueful reckoning of their expenditure on a foreign holiday. It is certainly possible to try to relive your experiences, recording everything you spent—counting the drinks by the swimming-pool, the tip to the taxi-driver, and so on. If your recollections are sufficiently comprehensive, the resulting total will

be a good estimate of your total expenditure. But there is a much easier way of reaching a more accurate answer. You simply measure how much foreign currency you took with you, add the amount of currency you bought while abroad, and subtract what was left when you got back. You measure, not the expenditure itself, but the sources of the expenditure, and can thus achieve a simple and reliable measure on the basis of a small number of recorded (and readily verifiable) transactions.

A personal expenditure tax would apply just the same principle. It taxes the sources of expenditure rather than the expenditure. All receipts—whatever their source or nature—are taxable; but any part of them that remains unspent can be deducted in computing liability. We can regard currency you buy as a taxable receipt; the currency you sell back attracts relief. But one problem remains. Some of the things you bring back from holiday have a value that extends beyond the period of the holiday itself. Your expenditure on a bottle of duty-free sherry or on the bullfight poster that permanently adorns the wall is attributable not so much to the holiday as to the subsequent days and years in which you drink the sherry and admire the poster. An accurate measure of holiday consumption would require that you list and value every asset of enduring value which you purchased on holiday and subtract that valuation from the provisional estimate of your spending.

Clearly, this is a daunting administrative task, though a necessary one if an accurate measure of that particular period's consumption is required. But the key to devising a feasible expenditure tax is the realization that it is not important, nor even particularly desirable, that this valuation be comprehensive. Suppose a few pesetas are left in your beach shorts until the following summer; then the allocation of expenditure to particular years is inaccurate but nevertheless expenditure over a period of years is correctly measured. And the same would be true if you kept a wallet full of foreign currency for next year's holiday (or purchased a Picasso etching or a bullfight poster). This year's expenditure would be overestimated, and hence a liability to expenditure tax so computed would be excessive; but all you would have done would have been to make a prepayment on account of your liability next year or in subsequent years, and there is no general reason why a tax authority should take

exception to that. Normally people would not want to prepay tax in this way, and indeed you can always ensure that your holiday expenditure is accurately measured by returning your unspent notes to the bank so that the amount you did not spend is recorded. But there may be good reasons why taxpayers may choose to make prepayments. It might simply be convenient to do so—and in the case of durable goods (the poster or the Picasso) such prepayment when the purchase occurs is much the easiest way to collect the tax due. Or they might wish to prepay because they expect to pay tax at higher rates in future as their expenditure rises, and they would rather incur liability at their lower current rates. In all these cases, prepayment of tax would be acceptable—and indeed desirable, since it provides an opportunity for those with uneven patterns of expenditure to average their taxable expenditure. The objective of progressive taxation is to impose a higher average rate of tax on those with a higher average level of income (or expenditure). An incidental side-effect is that those whose average income (or expenditure) is no higher but is more variable also pay a higher average rate of tax. The possibility of prepayment diminishes this inequity.

The introduction of a lifetime expenditure tax would involve the creation of a class of 'registered assets'. These would include business assets and negotiable securities; some deposit accounts with banks, building societies, and other financial institutions would be registered, though we anticipate that current accounts with banks and balances held for day-to-day requirements and short-term savings would not normally be registered assets. The basic principle is that all receipts obtained during a year would be subject to tax, but after summing these receipts, the taxpayer would deduct his net purchases of registered assets during the year. The resultant figure would be his taxable expenditure. The structure of the tax is illustrated in Figure 7.2. Arrows indicate flows of receipts and payments. Transactions that cross unbroken lines are the subject of tax payments or deductions, and it is these transactions and these only that the tax collector monitors. Those that cross broken lines do not interest him. It is important to note that these criteria relate simply to cash flows, and that there is never any inquiry into or distinction between flows of capital and flows of income. The tax base is simply the sum of all net receipts which come across the unbroken lines: earnings and gifts, net

surpluses from trading, and net receipts from dealing in registered assets. Since lifetime accounts balance, this is equal, over the lifetime, to the sum of all personal expenditures and gifts to others.

The easy questions on the present income tax form would go over to an expenditure tax form more or less unchanged. The first question would still be 'How much did your employer pay you during the year?', and people with incomes only from employment and negligible savings or dissavings would notice no real difference. It is the treatment of savings and investment income that is drastically altered, and the changes mostly represent simplifications. At present, the taxpayer must record the proceeds of sales of securities during the year of assessment, and obtain from his records the corresponding acquisition costs at various different dates in the past. The gains thus computed are then taxed on a separate basis with a number of available optional treatments and complications (indexation relief, for example). Under an expenditure tax he would simply write down the gross figures for sales and purchases during the year and the net proceeds would be added to his other receipts. The questions would relate to this year's transactions alone.

Similarly, the tax treatment of his trading activities would be much simplified. Tax would be based on the cash accounts of the business, and the proprietor would simply pay tax on the net

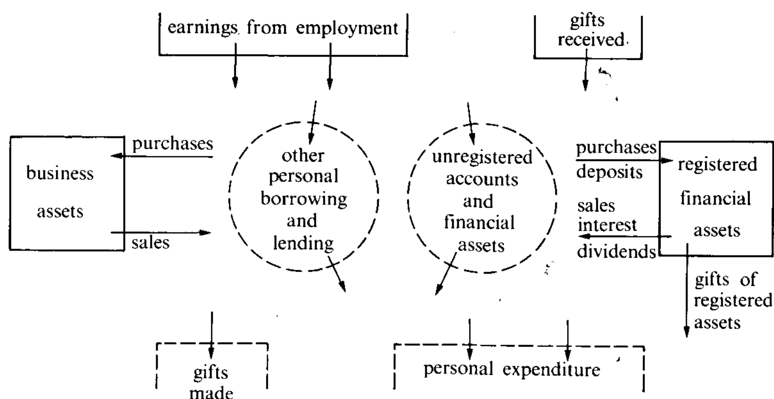


Fig. 7.2. The sources of personal expenditure

amount that he withdrew from the business during the year. Life insurance policies would generally be registered assets, so that the whole of any premiums paid would be deductible against tax, but all receipts from policies would be taxable. This would seem to impose a heavy liability when a policy matured, and if the proceeds were spent there would (and should) be such a liability. But if they were not all dissipated immediately, tax could be deferred until they were used for expenditure by depositing them in registered accounts, and life insurance companies would no doubt be quick to facilitate such arrangements. Figure 7.3 gives some impression of what an expenditure tax return might be like.

There would be two new sets of questions. One would ask for details of gifts received during the year, including gifts of valuable assets, subject of course to some exemption limit. Receipts would no longer escape tax simply because they had not been earned. Details of accrued interest would not be requested (so those with forgotten bank accounts would no longer be embarrassed when they or the Revenue remembered). Instead, institutions authorized to operate registered accounts would at the end of each tax year notify both taxpayer and Revenue of the amount of net additions or withdrawals, and the form would ask for this information.

The simplifications involved in moving from an income basis to an expenditure base arise principally from the shift from an accruals base to a cash-flow base. It does not matter whether a receipt is an item of capital or income. It is unnecessary to determine the date of the transaction to which any particular item relates; the issue is simply when and whether a particular cash payment occurred. Every question on the expenditure tax (ET) form asks only about actual cash payments that took place during the year of assessment. The result is that for taxpayers with simple affairs, the procedures involved in completing an ET form would differ very little from those that are required at present; and for those with more complex circumstances—people who participate in businesses and have substantial investment incomes—the return in Figure 7.3 would be easier to complete.

Expenditure Tax: Assessment Year 1988

Receipts

1. *Employments* Enter here the total of all payments form your employer (attach form E2)

   Taxable benefits in kind: see note X
2. *Businesses* Enter here the gross sales proceeds of all businesses owned or operated by you (list details on form B1)
3. *Partnerships* If you are a partner in any business, enter here the total of all distributions to you
4. *Gifts* Enter the total of all gifts and inheritances received. You may neglect the first £100 from any person (list details on form G1)
5. *Pensions, social security, and National Insurance benefits*

   See note 5
6. *Securities* Enter the total sales proceeds of securities sold during the year

   Enter here the total of all dividends and interest payments received

   (List details on form S1)
7. *Registered accounts*

   Total of net withdrawals from each account (list on form R1 and attach forms R2)
8. *Life insurance policies*

   Total of maturities (attach forms L2)
9. *All other receipts*

   See Notes
10. *TOTAL RECEIPTS* (Total of lines 1–9)

Payments

11. *Employments* All admissible expenses connected with your work (see note Y) (list on form E1 unless you claim the standard deduction)
12. *Businesses* Total admissible expenses of businesses owned or operated by you (give details on form B1)
13. *Securities* Total acquisition cost of securities purchased (list on form S1)
14. *Registered accounts*

    Total net deposits in registered accounts (list on form R1 and attach forms R3)
15. *Life insurance policies*

    Total premiums paid in the year (if the policy is a new one, attach form L3)

16. *Other payments*
    See notes (give details on form P1) ☐

17. *TOTAL PAYMENTS* (Total of lines 11–16) ☐

18. *NET TAXABLE EXPENDITURE* (Subtract line 17 from line 10) ☐

Extracts from notes to taxpayers

4. Gifts of registered assets that you have received must be listed on form G1 but need not be included in the total.
5. If you received a pension or social security or National Insurance benefits in 1988, you should have received form SS1 at the end of the year. If so, enter the total from it in line 5. If you have not received SS1, contact your local tax or social security office.
6. Gifts of registered assets that you have made count as disposals for this purpose.
9. You must list here all other receipts in 1988 unless (i) they are returns of or on money you have yourself already paid and (ii) you have not claimed tax relief on that payment in this or any previous year (e.g. tips and bonuses must be entered; receipts of principal or interest on loans need not be included *unless* you claimed tax relief when you made them).
11. You may claim a standard deduction of £50. If you wish to claim more you must provide full details on form E1.

Notes to reader

Forms B1, G1, S1, R1 etc. are supplementary statements which need be completed only by those who have items in these categories; the total is then brought forward to the main form.

Forms E2, R2, etc. are supplied by the institutions involved, and the taxpayer need only transfer the total figures to his tax return.

Fig. 7.3. An expenditure tax form

Towards an expenditure tax

Unsatisfactory though the present income tax system is, a few individuals and most accountants have experience and understanding of its operation. No such expertise is presently available for an expenditure tax system. The transitional problem is a serious one. We have described how an expenditure tax could be operated by simply monitoring those transactions that cross the solid lines of Figure 7.2, and once the new tax system was fully functioning this would indeed be true. Expenditure could only be financed out of sources that were either the subject of a tax charge now, or that had been the subject of such a charge at some date in the past: present or past employment income, trading surplus or gifts, or withdrawals from registered accounts. But this would not be true on the day when the expenditure tax was introduced. On that day there would exist a substantial stock of assets which could, unless some procedure were devised for recording its existence and monitoring its subsequent disposition, be used for subsequent consumption and which could be spent without involving its holder in any liability to expenditure tax at any time.

Not all wealth is held in a form that creates a transitional problem. Pension funds are already taxed on LET principles—contributions are exempt but the proceeds are taxed—and therefore no change in these arrangements would be required. But there are at present substantial restrictions on the benefits which can be provided from schemes that qualify for Inland Revenue approval; these restrictions could be abandoned and the associated administrative machinery abolished, since if people can save in this way for themselves there is no need to limit the amount they save in this way via a pension fund. Equally, once people have the opportunity to save in this way for themselves there is little reason to compel them to make such provision through a pension fund. Under an expenditure tax, it is very much easier for people to make 'life-cycle savings' to ensure that part of their income is available to them after their retirement. So we expect that there would be less demand for extensive occupational pension schemes, and people who were offered good schemes of this kind would no longer be at a great advantage relative to those who were not. We expect that state and private schemes would continue to provide basic pensions to ensure against poverty in old age, but would

envisage that more elaborate provisions might become voluntary. If this happened, the present extreme complexity of pension fund administration could be reduced, and the proportion of personal wealth that was held in pension funds would diminish while that held directly by individuals would rise.

In addition to these changes, it would be essential to bring other types of savings into the expenditure tax framework. The procedure for dealing with land and negotiable securities would be as follows. After some appointed day—A day—the new rules would be applied. Purchase costs would be deductible and proceeds would be taxable. (Some limits on the purchase of registered assets which would qualify for a deduction would be necessary during a transitional period.) Any seller of securities subsequent to the appointed day would therefore be liable to tax on the whole of his receipts from the sale, unless they were reinvested in other securities or registered assets. If he had purchased his securities after A day, he would obtain no relief against this liability, since he could already have claimed their cost as a tax deduction; but if he could show that they represented a pre-A-day acquisition, he might be allowed to deduct the purchase price from the proceeds. This means that for securities that he had purchased under the previous income tax regime, he would be taxed on the capital gain as at present but at income tax rates. This means that in spite of the relatively conservative nature of the transition to an expenditure tax involved in these proposals, many people spending out of accumulated wealth would pay more tax than they do under the present tax structure right from the start.

Changes would also be needed in the taxation of unincorporated businesses. The base for taxation would be shifted from the profit of the business to the net amount withdrawn from the business during the year by the proprietor, since all sales proceeds would be taxable (whether capital or current in nature) and all expenses would be deductible (whether capital or current in nature). The small-business man would pay only on that part of his profit that he chose to withdraw for his own consumption, and would be fully relieved of liability on what he reinvested in the future growth of his firm. He would therefore obtain the twin benefits of a system vastly more conducive to the expansion of small business (aided by an increase in the importance of personal saving relative to that of institutions) and a substantial reduction in the administrative

burdens involved in preparing tax accounts. There are opportunities to make similar simplifications in the taxation of incorporated businesses; we discuss these further in Chapter 11.

The other major category of personal saving is deposits in accounts with banks, building societies, and other financial institutions. In general, it seems to us undesirable that current accounts and balances used for transactions purposes should be registered assets: monitoring the balances on accounts that are the subject of frequent small transactions would be a nuisance for the taxpayer, the financial institution, and the Revenue alike. But both the logic of the tax and the desirability of allowing as much freedom of choice as possible in savings behaviour suggest that taxpayers should have the opportunity to make deposits in registered accounts. All payments into such accounts would attract relief; all withdrawals would be taxed. But these accounts would mainly be intended for long-term and contractual savings, not for day-to-day purposes. These objectives can be achieved by requiring that basic rate tax be withheld from withdrawals from registered accounts, with provision for rapid refunds from the Revenue in cases of hardship. This would have the effects of making it inconvenient to operate frequently on registered accounts and of ensuring that people who did so did not end up with tax liabilities that they could not pay because they had already spent the full amount which they had withdrawn. In due course it would be desirable to assimilate unregistered accounts fully to the expenditure tax system by abolishing tax on the interest derived from them; registered accounts would then fall within the right-hand box of Figure 7.2, unregistered accounts into the right-hand circle.

Once all these changes had been made, the British income tax would have been transformed into a direct tax on personal expenditure. It is interesting to note that, with two exceptions (the more extensive monitoring of gifts and the treatment of registered deposit accounts), every change involved is a simplification. Most of the burdensome aspects of pension fund administration disappear. The tax treatment of capital gains and of small businesses, which are the most difficult parts of the present income tax system to understand and to administer, is greatly simplified. Why do so many people believe, as we used to believe, that an expenditure tax might be fine in theory but could not work in practice, when in

reality it is likely to be rather easier to operate than the existing income tax? We think there are two reasons. One is that the expenditure tax has not been explicitly compared with the present tax structure, but rather with some idealized income tax system which was not too precisely defined but which was assumed to be working smoothly and efficiently. We had simply forgotten how complicated and unsatisfactory the system was at the moment.

The other reason is that it is common to view any proposed change to the tax system in isolation. If we take for granted that every other aspect of the tax structure is to be operated more or less as it is now, then it is almost inevitable that any change will seem difficult and expensive to make. But if we take a broader view of the system as a whole and look at sets of interrelated changes, a much wider range of possibilities is feasible. For example, we shall observe that there are many changes (such as the introduction of local income tax) that are costly with cumulative PAYE and cheap without it. This is one reason why it is essential, even for an understanding of the administration of taxation policy, to be aware of the underlying principles of taxation involved, since only then is it possible to see these interrelationships and the effects of the system as a whole. It is also for this reason that a tax system which is to be fair, simple, and efficient in administration must stick closely to a well-defined set of underlying principles. When we depart from these—for good or bad reasons—we begin to generate anomalies and loopholes; these demand *ad hoc* solutions which give rise to further anomalies and loopholes; and so on down a path of ever-increasing complexity. A principal merit of an expenditure tax is that it really can be operated in a way that is close to such basic principles. A comprehensive income tax presents many more problems; spending is easier to measure than income, and cash flows are easier to recognize than accruals. A satisfactory annual income tax would be difficult to operate even in a perfect world, which is why it does not work very well in the UK.

8
Indirect taxes

Direct and indirect taxes

The *Oxford English Dictionary* defines an indirect tax as one which is 'not levied directly upon the person on whom it ultimately falls, but charged in some other way, especially upon the production or importation of articles of use or consumption, the price of which is thereby augmented to the consumer, who thus pays the tax in the form of increased price'. We argued in Chapter 1 that the economic analysis contained in this definition is shaky, and in general such a distinction cannot be made. We mean by indirect taxes only what is usually meant by them and attach no special significance, and particularly no economic significance, to the classification.

Nevertheless, many people do. Indeed, it has almost been part of the conventional political wisdom of British fiscal policy that the tax structure relied too much on direct taxation—especially income tax—and too little on indirect taxes. In a period of inflation, a progressive income tax takes an ever-increasing proportion of real incomes while the real yield of indirect taxes (which are in many cases levied as fixed monetary amounts) declines. This shift was not intended, and it reinforces the case for indexation, which is the only way in which inflation can be prevented from accidentally bringing about changes that no one wants to bring about by design. So it is not surprising that the balance of direct and indirect taxation should have been a subject of attention.

But some of the reasons that people had for believing that the balance of direct and indirect taxation was wrong were bad ones. One is that it is thought that the disincentive effects of high rates of direct taxation can be reduced or avoided by a shift to indirect taxes. This argument is quite simply false. Ignore for the moment the role of savings, since it is the incentive to work rather than the incentive to save which is at the centre of this concern. Then

anyone considering whether to work longer hours or assume more responsibility will weigh the obvious costs against the benefits in terms of increased consumption which he or she would derive. The additional effort would, we shall assume, generate additional earnings of £10 per week. Now compare a 50% tax on all income with a 100% tax on all expenditure, since that is the rate which is needed to maintain the same revenue. Then our worker would discover that the extra £10 per week was reduced to a net £5 per week by the income tax; with taxes on expenditure, it would remain £10 but would only buy the same bundle of goods, the additional £5 being absorbed by the indirect taxes. The reality of the final outcome is exactly the same in both cases. It is possible that for a time people might be misled into working harder to earn larger monetary amounts before they noticed the reduced purchasing power of what they were receiving; but it is improbable that this irrationality would persist for long. If it did, then inflation—which puts larger quantities of less valuable money into wage-packets in just the same way—would have precisely the same beneficial effect on incentives to work, and few people would find this easy to believe.

The hope that the disincentive effects of high marginal rates of taxation can be reduced by recasting direct taxes as indirect ones is therefore quite chimerical. We should note also that the view that shifting from income tax to a payroll tax (like employers' National Insurance contributions) would confer benefits, or even make a significant difference in anything but the short run, is erroneous in just the same way and for just the same reasons. A payroll tax on all forms of employment will lead partly to employers being unable to pay the same money wage as before—and hence to lower earnings than would otherwise have occurred—and partly to an increase in labour costs which will be reflected in higher prices for all goods and services. It is not easy to say which of these effects will be predominant, but this determines only whether we have (in the first case) slightly lower wages and lower prices or (in the second case) somewhat higher wages and higher prices, and the disincentive effects will be the same regardless of whether its incidence resembles more that of an income tax or a general commodity tax. One cannot remove the disincentive effects of taxes by disguising them under a different name, and those who look at our EEC neighbours and are attracted by the combination

of lower rates of income tax and higher payroll taxes are guilty of an error which is certainly not made by continental managers and trade-unionists. What matters is the relationship between take-home pay and prices in the shops, and this seems to be understood much better by the ordinary person than by many tax experts.

There are, however, two possible grains of truth in these arguments. One is that people may be more resentful of the fact that over half of the product of their extra effort goes in tax if this fact is intimated to them on their pay-slip than if the same money is extracted by their shopkeeper in a slightly more roundabout way, and that this resentment itself leads them to do less work—that people are willing to deprive themselves if they can also see that they are simultaneously depriving the taxman. (Musgrave (1959) describes this as the 'spite effect'.) Some people may have this psychological make-up, but the Social Survey (Radcliffe Report (1954)) found that more people cited high prices than high taxes as an adverse influence on their incentive to work, and it is a weak argument for a particular tax structure that it would help to conceal the realities of the tax system from people who have pathological views about it.

The second point is that indirect taxes are generally less progressive than direct taxes—mainly, though not entirely, because there is a threshold of income which is exempt from income tax while all expenditure, however small, is vulnerable to commodity taxation: we pay tax on every penny of expenditure but not on the first £2,605 of income. This means that the marginal rate of income tax is generally substantially above the average rate, while for commodity taxes there is little difference between the two. Thus indirect taxes can yield the same revenue from lower marginal rates, and hence disincentive effects (which depend on these marginal rates) would be reduced if this substitution were made. This argument is perfectly valid, but it rests on the reduction in progressivity, not on the shift in the structure of taxation, and this reduction could be equally well—and more honestly—achieved by altering the rates of direct tax than by changes to different kinds of tax.

The second bad argument for preferring indirect to direct taxes suggests that the former are voluntary in a sense in which the latter are not; this notion is reflected in an older terminology which distinguishes 'escapable' and 'inescapable' taxes. It is true that any

particular indirect tax can be avoided by any particular individual who chooses not to consume the taxed good. But it is also true, given that a certain amount of revenue is required, that taxes in general cannot be avoided by individuals in general. So an 'escapable' tax leaves the person who escapes it worse off—since he would have preferred, in happier circumstances, to have consumed the good which is taxed—and it makes everyone else worse off too, since it requires a higher rate of tax on those who continue to consume the good. Thus the tax structure to which this argument would lead is the worst possible in terms of economic efficiency—it maximizes the welfare loss which is additional to the basic and inescapable burden of the tax.

Principles of indirect taxation

What then would an efficient system of commodity taxes be like? A first principle is that there should be no taxes on intermediate goods—on items like sheet steel or turbo-generators which are sold to other producers rather than to final customers. Taxes on things must of course ultimately be paid by people, so that levies on producers must finally be borne by taxpayers generally in one capacity or another, as consumers, workers, or owners of firms. Hence the imposition of taxes on producer goods does not reduce the tax burden in any way; in fact it will actually increase it by inducing producers to make different and (from a social viewpoint) less efficient choices of inputs. Essentially, the principal objectives for indirect taxes—raising revenue, achieving some distributional aims, or encouraging or discouraging particular consumption patterns—can all be more efficiently achieved by the imposition of taxes on final goods alone (Diamond and Mirrlees (1971)).

The burden of commodity taxation should therefore be confined to final goods; how should it be distributed among them? Economic efficiency requires that indirect taxes should be cast so as to minimize the distortion of consumer choice involved—that as far as possible, revenue should be raised without diverting taxpayers into less preferred patterns of consumption in their (collectively unsuccessful) attempts to avoid tax. At first sight, it might appear that this implies that all commodities should be taxed at the same rate and this has often been assumed, but there are at

least two reasons why such an argument is false. First, while a uniform tax on all commodities will minimize distortion of the consumer's choice between different commodities, it will nevertheless have disincentive effects on his choice between leisure and work. So if a heavier tax is levied on commodities for which demand is inelastic—goods which the consumer will buy in any case—a lower rate of tax can be imposed on other goods and the disincentive to work reduced with little consequential distortion of choice of commodities. And if heavier taxes go on goods which are in some respects substitutes for work—like camping, sports, and yachts—and lighter ones on complementary activities—like overalls, travel to work, and this book—then this too will tend to ameliorate the disincentive effects of commodity taxation. These considerations underlie the 'Ramsey rules' (Ramsey (1928) and Baumol and Bradford (1970)) which say, very roughly, that commodity taxes should have the effect of reducing demand for all commodities in the same proportion.[1]

But these rules overlook the second weakness of the case for uniform commodity taxation—that it ignores the distributional impact of such taxes. This is a basic objection not only to uniform taxation, but to the Ramsey rules themselves. These are the answers to the question 'If we are not concerned about the source of tax revenue, but simply aim to raise a given amount of revenue with minimal disincentive effect, what commodity taxes should we impose?'. But if we are really not concerned about the source of our tax revenue, we should not impose commodity taxes at all; we can simply divide public revenue requirements equally among the whole population and raise them by means of a universal poll tax which avoids distortion altogether. Of course, the distributional consequences of this would be unacceptable, and that is why we adopt income and commodity taxes instead. But this means we cannot choose rates for these taxes independently of our view of distribution, so that commodity taxes must be chosen according to principles which take account of the distributional characteristics of goods as well as their demand elasticities.

Since the commodity composition of expenditure changes as income rises, indirect taxes can be used to influence distribution by imposing higher taxes on goods that attract a higher proportion of

1. The rules take this precise form only for small tax revenue and compensated changes in demand.

the expenditure of the rich. It need hardly be said that this too cannot be accomplished without disincentive effects—if managing directors spend a larger fraction of their income on caviare than their deputies then a heavy tax on it will discourage the latter group from aspiring to the positions of the former. Empirical analysis suggests that there may not be much advantage in using commodity taxes in this way. Adjustments to income tax can achieve similar effects more sensitively, and without diverting rich and poor alike into celebrating festive occasions with cider and fish paste rather than champagne and caviare. We might still, however, see some case for taxing 'prestige goods', such as Rolls-Royces, whose attraction is derived not so much from their intrinsic utility but from the prestige that their limited availability confers on the owners.

Differential commodity taxation does not look a promising method of redistributing income, but there is a further possibility we should consider. We saw in Chapter 6 that an ideal tax system might be one that avoided disincentive effects entirely by taxing not earnings but the ability to earn. If we look at the kinds of goods that are consumed in relatively large quantities by the affluent, we might try to distinguish two categories. There are goods like large houses, expensive motor cars, and yachts that most people would like to buy if they could afford to. But there may also be other goods which are consumed only or mainly by people with high earning ability. Books and opera tickets might come into this category. We have seen that it is impossible to levy taxes on the first kind of good without disincentive effects; but it is possible to avoid them by taxing the second. Taxes of this kind represent a method—the only method—of relating tax liability to earning capacity as distinct from earnings. For example, if certain social groups send their children to public schools and if appointment to lucrative jobs in the City is made from this group, then we would wish to impose a heavy tax on public school fees. We might also redistribute by subsidizing goods which people with high earnings potential tend not to buy at any price—such as bingo sessions and certain Sunday newspapers. The difficulty with such a policy is immediately evident. We are confident that readers of this book have above-average earning capacity. But are they reading it because this is the kind of book that people of superior intellect and ability like to read, or is it that they have acquired their

superior intellect and ability as a result of their taste for reading books like this one? Probably both are true; but in the former case we should wish to tax the book heavily and in the latter case to subsidize it heavily.

Whatever category readers actually do comprise, they may by now share our scepticism as to whether there are in fact large gains to be obtained by departures from a general principle of uniformity in commodity taxation. The administrative arguments against doing so are substantial. In order to exploit differences in the distributional characteristics of goods, it will be necessary to adopt a rather fine commodity classification—to distinguish not only cheese from other dairy products but Cheddar from Camembert and White Stilton from Blue. (The 1974 cheeses subsidy scheme attempted just that.) Such distinctions are likely to lead to administrative nonsense and to large and pointless distortions of consumer choice. It is not easy to believe that the information required to devise an optimal scheme is likely to be available, or likely to be used to good effect if it is.

There remain some arguments for taxes or subsidies on particular commodities. One is simple paternalism—I, as Chancellor of the Exchequer, think that people (presumably other people) drink too little milk or too much beer and seek to remedy the situation by fiscal incentives. Another justification for these corrective taxes can arise if they allow prices to be adjusted so as to ameliorate the effect of inefficiencies elsewhere—if electricity for space-heating is too cheap, then one way to stop excessive use of such electricity is to impose a tax on space-heaters. As the example suggests, it is usually preferable (though not always possible) to tackle such problems directly rather than to adopt 'second-best' policies of this kind. A slightly different argument concerns goods whose production or consumption imposes costs or benefits on those who are not themselves directly involved in buying and selling them—goods which are made in smoky factories, transported in juggernaut lorries, or grown in attractive orchards. The 'external effects' of these goods are not fully accounted for by the person or organization who provides them. Hence they will tend to be over- or under-supplied—there will be too many juggernauts and too few orchards. Economists have long argued (with rather little practical effect) that these problems might more appropriately be dealt with by means of taxes and subsidies on the products

concerned than by administrative regulation. Taxes of these kinds are an exception to the general rule that taxes on intermediate goods should be avoided.

A further reason for indirect taxes may be to act as a tariff: to improve the balance of payments by discouraging imports and to give advantages to British producers of competitive goods. This consideration may have been one motive for the higher rate of VAT (p. 129 below), which form of protection fell heavily on imported goods. In 1983, the European Court found Britain guilty of this form of protection in taxing (mainly imported) wine more heavily than beer (which was mainly domestically produced), following a complaint by the Italian Government that Britain was engaged in discrimination which violated the Treaty of Rome. Wine drinkers benefited from a tax reduction of around 20p per bottle.

Indirect taxes in Britain

If we examine the structure of commodity taxes in the UK, we find one general sales tax—VAT—and heavy duties on three products—tobacco, alcoholic drinks, and petrol. Table 13.1 shows their relative contributions to revenue. We consider these major indirect taxes in turn.

The basic principle of VAT is that it is a sales tax chargeable to the sellers of all output, with the proviso that in computing their liability, firms may deduct any VAT that has been levied on inputs into their products. We can see how this works by considering a simple example with a standard rate of VAT of 15%. Suppose a man discovers a block of iron which with the aid of a magic wand (provided free of charge) he turns into steel worth £100. Adding VAT at 15%, he sells this to a motor car firm for £115. The firm buys additional components which cost £500 to make and on which it is charged £75 VAT, and employs labour at a cost of £400. It sells the car for £1,300, charging 15% VAT, to make up a total price to the purchaser of £1,495, and secures a profit of £300. The firm now assembles its accounts for this set of transactions, which are given in Table 8.1.

It must now account to the Customs and Excise for the difference between the VAT levied on its outputs (£195) and the VAT charged on its inputs (£90) so that it makes a payment of

Table 8.1: *Accounts for a simple example using VAT at 15%*

	Revenues (£)	VAT		Costs (£)	VAT
Car	1,300	195	Steel	100	15
			Components	500	75
			Labour	400	
			Profit	300	
				1,300	90

£105. This amounts to 15% of the £700 of *value added* in the car factory—the difference between the values of inputs and outputs, made up of £400 of labour costs plus £300 profit—and indeed it would be possible to compute the tax in this way. (This would be an *accounts* basis for the tax, in contrast to the *invoice* basis which is what we are describing and which is used in the UK and in the EEC.) At the same time as the VAT man receives the car firm's cheque for £105, he also gets £75 from the component manufacturer and £15 from the steel producer, so that in aggregate £195 (15% of the value of the final output) is levied on the sequence of transactions involved in the production of the car. It is easy to check that this amount would remain the same however few or many transactions are involved in the chain of production.

Thus the main advantage of VAT is that it is a method of levying a tax on all commodities that enter consumption while effectively exempting all intermediate goods—those who buy goods for further processing receive a refund of the tax that they have been charged, and only those who are the final consumers of the goods actually pay it. Thus it seems an ideal tax judged by the first of the principles of indirect taxation described above—the taxation of producer goods is systematically avoided. There is, however, a price to pay for this—the cost and complexity of a system which collects tax on many transactions only to refund what is collected at a later stage of production. VAT is a self-assessed tax—a form must be completed and tax paid or refunds claimed by the taxpayer himself, subject to routine checks by control officials. Total compliance costs were put by Sandford *et al.* (1982) at 10% of revenue collected. This figure pre-dates the near doubling of the tax rate in 1979 and is likely to have fallen considerably since. But

the transition in the early 1970s from purchase tax—a single-stage wholesale sales tax—to VAT increased the number of taxpayers from 74,000 to 1.4 million and the number of collectors from 2,000 to 12,500.

But it is doubtful whether purchase tax could now be operated in the form it took then. It requires a well-defined chain from manufacturer to wholesaler to retailer, and countries like Canada which still operate similar taxes find that their structure has come under increasing pressure. Nor did purchase tax ever raise the revenue that VAT now yields. Around the world, VAT has been more and more widely introduced and the proportion of revenue obtained from it has tended to increase.

There are two rates of tax—zero and the standard rate of 15%. A 25% 'luxury' rate was introduced in 1975, reduced in 1976, and abolished in 1979. Additionally, some products—such as financial services, education, and funerals—are exempt. Exemption is not the same as zero-rating, since while the exempt trader need pay no tax on his outputs, his zero-rated colleague can reclaim the tax paid on his inputs as well; so it is always better to be zero-rated than exempt, and (if the value of output sold to final consumers is less than the value of taxed inputs) it may even be more beneficial to be standard-rated than exempt. Consumption of food does not rise in proportion to income and because it is both zero-rated and a substantial part of the budgets of poorer families, the distributional impact of VAT is slightly progressive.

As Table 8.3 shows, the difference between the rates of tax imposed by VAT on the major part of consumers' expenditure and the rates on items subject to excise duty is very great: tax accounts for the major part of the price of cigarettes, petrol, and whisky, and the effective rates on other alcoholic drinks, though lower, still mean that the prices of these commodities relative to others are wildly different from what they would be if the structure of indirect taxation were non-discriminatory. The taxes on alcohol and tobacco are not, of course, imposed for reasons that are recognizably economic in character. It is sometimes argued that taxes on these goods should be high because demand is inelastic but the theoretical argument for the proposition is weak and the empirical evidence to support it slight. The unpleasant consequences that their consumption has for others may also be cited (although smokers make reduced demands on public services by

Table 8.2: *Rates of VAT*

Zero	15%	Exempt
Most food	Confectionery; meals out; snacks; pet food	Land and rent
Domestic water supply	Industrial water supply	Insurance
Fuel for heating	Road fuel	Postal services
Residential construction	Non-residential construction	Betting
Books	Most other commodities	Finance
Newspapers and magazines		Education
Exports		Health services
Public transport		Funeral services
Children's clothing		

dying prematurely and alcohol as social lubricant has beneficial as well as adverse external effects). But the real reason these taxes exist is that it is rather easy to induce feelings of guilt about these forms of consumption; and as a result it is more acceptable to raise revenue in this way than in others. Taxes on alcohol were raised very sharply during and immediately after the First World War, and those on tobacco during and just after the Second World War, in periods when such moralistic sentiments were particularly easily aroused.

The adverse consequences of smoking on health have drawn attention to the tobacco tax. A common view is that the

Table 8.3: *The incidence of tax on various commodities, 1988*

	Cigarettes	Whisky	Beer	Petrol	Wine
Factor cost	38.7	2.57	55	47	132
Specific duties	63.5	4.73	19	79	72
Ad valorem tax	32.6	—	—	—	—
VAT	20.2	1.09	11	29	31
Retail price	155.0	8.39	85	155	235
Tax as % of factor cost	301%	226%	55%	230%	78%

Notes: Cigarettes: pence per packet of king-size tipped.
Whisky: pounds per bottle of blended whisky.
Beer: pence per pint of bitter.
Petrol: pence per gallon of four star.
Wine: pence per bottle.

Source: Reports of Commissioners of Customs and Excise.

government 'cannot afford' to discourage smoking because of the loss of tax revenue which would result. A reduction in smoking would affect the government budget in a rather wide range of ways. The most immediate secondary consequence would be a reduction in medical costs and in claims for sickness benefit. These savings would grow, but over time a number of other factors would become important. Because reduced consumption of cigarettes would significantly increase life expectancy, there would be a rise in revenue from income tax, but an increase also in the cost of retirement pensions and medical treatment for larger numbers of elderly people, partly offset by a reduction in widows' pensions and benefits. Atkinson and Townsend (1977) have quantified a number of these items, which are substantial, and the effects on revenue from tobacco duties are not the only, or necessarily the dominant, element in the calculation of the effects of changes in smoking habits on the government budget. If the government cannot afford to discourage smoking, it is because of the extra cost of pensions rather than the loss of tax revenue. But as this discussion should make clear, to evaluate these factors simply from the standpoint of their effect on government revenue and expenditure is to take an extremely—indeed offensively—narrow viewpoint.

The structure of tobacco tax has been revised as a result of EEC harmonization proposals. A duty based on weight of tobacco has been replaced by a specific tax of 3.2p per cigarette and *ad valorem* tax of 21% of the retail price. Because the overall incidence of tobacco taxation is so high, the structure of the tax regime has major effects on the structure of the cigarette market. Cigarette coupons have disappeared (because they are now effectively subject to the 21% tax). Britain used to have shorter cigarettes than other countries, because the weight-based regime gave a strong incentive to reduce tobacco content; now king-size cigarettes dominate the market. The predominantly *ad valorem* tax regimes of France and Italy mean that a saving of 1 centime in manufacturing cost may reduce the retail price by 5 centimes, and hence give an artificial incentive to the use of low-quality tobacco and packaging which are characteristic of French and Italian tobacco products. Kay and Keen (1982) show that in general, specific commodity taxation creates less distortion of consumer choice per pound of revenue.

Expenditure on alcohol and tobacco as recorded in the Family

Expenditure Survey (FES) is substantially below the estimates of consumption based on output data. One reason for this is probably the embarrassment some respondents feel about revealing their true consumption, but it is also possible that people with high alcohol consumption and high incomes have a lower response rate in such surveys. Figure 8.1 shows the available data on expenditure on tobacco and alcohol as a percentage of average household expenditure. It appears that the tobacco tax is regressive (that is, it takes a higher fraction of income from the poor than from the rich), and there is some indication that this regressivity has increased over a period of time because tobacco consumption seems to have fallen more among high-income groups (London Economics (1987)). By contrast, the tax on alcohol appears to be progressive. Expenditure on alcohol increases more rapidly than income, and higher-income groups consume relatively more wines and spirits which are more heavily taxed.

It is much less easy to see why petrol should be considered a suitable subject for especially heavy taxation, though there are arguments for a somewhat higher tax than that on other

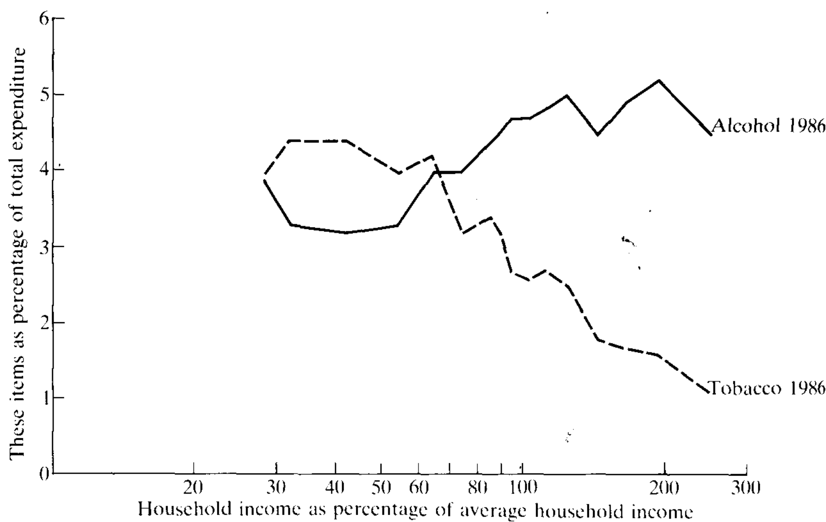


Fig. 8.1. Spending on alcohol and tobacco related to household income

commodities. Some rationale can be derived from the second-best and external effects arguments described above. Motorists impose disutility on each other and on the population at large; and since road space is costly to provide but can be used free of charge, provision will be excessive if all demands at a zero price are met. In addition, the imposition of a tariff on oil may be a rational response to the OPEC cartel by OECD countries acting collectively. To the extent that the case for petrol tax rests on these arguments, the usual objections to the taxation of intermediate goods do not apply: the demands of industry for road transport are clearly not less offensive or less pressing than those of private motorists. But it is difficult to decide what levels of tax would be justified by these considerations.

The structure of indirect taxation occasions much less criticism than do the present direct taxes, and we share this view. But we do not consider that the weaknesses of the present direct tax system would be significantly alleviated by a shift from direct to indirect taxes, and we think that the proper balance between the two is actually one of the less important questions facing current British tax policy. The prominence of this issue in current debate is, we suspect, the product of a failure to understand fully the implications of one of the basic principles of public finance which we described in Chapter 1—the irrelevance of the formal incidence of a tax to its effective incidence. It follows from this that one cannot make major improvements, or indeed large changes, simply by changing the identity of the payer of a tax. Nevertheless, there are reasons for supposing that the UK would do better to rely rather more on indirect taxes than it does at present. The most important of these is the problem of enforcement. Any tax is subject to difficulties of defining the base, of policing, or preventing avoidance and evasion. These problems increase more than proportionately with the rates of any particular tax, and indeed we have seen how at very high rates of tax they become overwhelming. If this is so, then if we are to have two broadly based taxes, it is better to have two 'medium' taxes rather than one high and one low tax.

9
Local taxation

Rates and local authority finance

British local authorities have traditionally financed their expenditure by levying taxes on the property within their area of jurisdiction. The starting-point for calculating a rates bill is an estimate by the District Valuer (an Inland Revenue official) of the amount for which a particular property could be rented. If this figure—the rateable value of the property—is, for example, set at £500 per annum, and the local authorities determine a rate of £1.50 per £, then the occupier of the property must pay an annual tax of £750.

Local rates are therefore a tax on housing, and quite a heavy tax. Table 9.3 below suggests an average tax rate of around 30%. This might be seen as compensating for the absence of VAT on houses, but the housing market is so heavily distorted by a morass of other taxes, subsidies, and controls that an assessment of the overall impact is extremely difficult to make.

The formal incidence of non-domestic rates falls on the occupiers of property, the businesses that make use of it; the effective incidence is much less certain. Rates are borne by the owners of commercial and industrial property to the extent that they are capitalized, that is, reflected in a lower capital value for the rated property (see Chapter 1). Where land prices are a principal element in property values, this is likely to be the case; thus if the rates were removed from central London office property, competition could be expected to bid rents up to very nearly the present level set by rent and rates together, and the main effect would be an increase in property prices. This will be partly true for commercial property in other city centres. Outside these areas, however, rates primarily represent an addition to the cost of one factor of production—buildings. The result of this will be that offices and factories will tend to be more cramped, less well fitted, and less well located than they would otherwise be, and

since the tax is an extremely heavy one (averaging around 200% of 1973 rental values) this effect is likely to be substantial. The incidence of the tax will largely fall on final consumers, in these cases, but since they will not be willing to pay more for goods produced in highly rated areas, deviations from the overall average level of rates will be reflected in different local levels of profits, earnings, and employment opportunities. Industrial and commercial rates are a worse tax, not a better one, for being a poorly perceived and understood tax on intermediate goods. The incidence of rates on a factory will fall partly on those who buy the products it makes, partly on those who work in it, and partly on those who own shares in the companies that own and operate the factory. The proportion of the total rate burden that falls on people living within the boundaries of the authority that levies the rate will vary widely from case to case, but will on average be small.

The rating system has come under steadily increasing strain. Rates originate from an era in which the rental value of a property might remain static for a generation. Inflation, changes in land use and in the distribution of population and economic activity, and the virtual disappearance of the market in rented housing, all created great uncertainty about the rateable values which formed the basis of the tax. Revaluations, undertaken in 1963 and 1973, led to large redistributions in the burden of rates and increased popular dissatisfaction with the rating system. With rates almost the only substantial tax paid directly by individuals, this unpopularity has increased. It is aggravated by limited understanding of the concept of economic incidence which leads many people to believe that those who occupy property without being householders pay no rates. And the regressive impact of the tax has fallen particularly on elderly people who occupy property which reflects their past income, rather than their current circumstances. A rebate scheme of increasing generosity has not been adequate to defuse these concerns.

But the central weakness of rates was simply that they were insufficiently buoyant to finance rapid expansion of local authority expenditure. More than half of local spending is on education, which grew particularly quickly in the 1960s, and even rate rises ahead of inflation were insufficient to meet the bills. Central government met the difference, and by 1970 two-thirds of local

government spending was financed from government grants. Although this percentage fell thereafter, even now local authorities meet only about 40% of their expenditure from their own resources. This increased dependency on central government came gradually to undermine the whole system of local authority finance. (Table 9.1.)

The evolving crisis

To deflect some of the criticisms which followed the rating revaluation of 1973, the Government appointed a Committee of Inquiry into Local Government Finance under Sir Frank Layfield. Its report was an incisive, and prescient, critique of the system which had emerged. Layfield identified the problems of 'fiscal imbalance'—in which local authorities' responsibilities for expenditure were far more extensive than their capacity to raise revenue. This fiscal imbalance had to be reduced, and this required a clear choice between local autonomy and central control. If local autonomy was to be pursued, local authorities must be given new sources of revenue, and Layfield saw a local income tax as the only feasible means of raising the sums required. If central control was to be chosen (and it was clear that this was not Layfield's preferred option) then central government must take much more direct authority for the services which local authorities had previously provided.

This analysis was largely ignored, but the problem of fiscal imbalance became more acute. The Government sought first to limit its own overall contribution to local government expenditure. But only a small proportion of the cost of additional spending was met by local residents. Through the grant system, the Government acted as surrogate ratepayer for much of the total. Non-domestic rates were seen as largely incident on people who lived outside the authority levying the rates, and the increased scope of the housing benefit system meant that in poor areas much of the population was insulated from the rating policy of their local authority. A Conservative government from 1979, determined to control public expenditure tightly, saw local government as an Achilles' heel of its policy. It introduced an arcane system of spending targets and penalty schedules for overspending. The results were always complex and often perverse, and tended to weaken further the

Table 9.1: *Sources of income for local authorities in England, 1984/5*

	Arrangements in force		Green Paper proposals	
	£ billion	Percentage	£ billion	Percentage
Domestic rates	4.4	15	4.4	15
Non-domestic rates	6.8	23	—	—
General grants				
- rebates	1.2	4	1.2	4
- domestic element	0.7	2	—	—
- block grant	8.4	28	15.9	54
Specific grants	2.8	10	2.8	10
Other	5.2	18	5.2	18
Total	29.5	100	29.5	100

Source: David King (1988).

connection between local policies and local taxes. By 1984 the Audit Commission (an independent body charged with helping local authorities secure value for money in their spending) was ready to repeat Layfield's comments. Having observed the negligible relationship between expenditure changes and rate increases (Audit Commission (1984)), it concluded that

> The present system is being used to try to secure at least four different objectives which are not mutually compatible: to distribute grant in a way some of which reflects local needs and resources, to control aggregate local government expenditure, to ensure that individual authorities do not exceed their spending targets *and* to limit rate rises from year to year for individual ratepayers. Moreover, this review shows that the system which now exists is producing information on current expenditure levels that is misleading to policy makers in both central and local government.

Central government's next move was to intervene directly to fix the rate levels which high-spending local authorities could set (rate-capping). The situation was aggravated by some left-wing authorities who saw fiscal irresponsibility as a means of provoking confrontation with a detested government. By the late 1980s, transactions were reported in which Brent leased its town hall, and

Camden its parking meters, to groups of financial institutions; borrowings for which there seemed no realistic prospects of repayment in the ordinary way of local government finance.

The community charge

If these events were bizarre, the central government response was hardly less so. The Government decided to abolish domestic rates and replace them with a poll tax, or community charge, on all adult residents within a local authority area. The average level of charge required for this purpose is about £200 but the figure required in some areas, particularly London boroughs, is a good deal higher. The charge is due to come into effect in April 1990 (a year earlier in Scotland). As with rates, the benefit system provides support for low-income households but there is a minimum payment for all of 20% of the general charge.

The administrative problems of making this system work seem to lie somewhere between the formidable and the overwhelming. Implementation would be a good deal easier if there were some sort of national register which could form the basis of allocation to individual authorities. Thus, for example, many countries operate a local income tax in tandem with a national income tax which identifies each taxpayer's place of residence. Alternatively, if there were a universal identity card system, as in most European countries, it would be possible to use that as a basis for ensuring that everyone living within the country was resident in one, and only one, local authority area. But neither of these mechanisms exists in Britain. And although the legislation bringing the tax into force is explicit on some politically sensitive details (such as imposing an extra charge on owners of second homes and a reduced one on students), it is vague in its definition of who precisely is liable for the tax and how they are to be identified. These matters are left largely to the responsibility of local registration offices. For the vast majority of the population—who leave their single place of residence only for an annual holiday—the question of definition has an obvious answer and evasion is difficult; but the more transient minority is substantial. Certainly the record of the two most closely analogous taxes—vehicle excise duty and television licences—is that the effectiveness of their administration is substantially lower than the average level of the

tax system as a whole, and it would be optimistic to think that the poll tax can do even as well as these.

The introduction of the community charge will have very substantial redistributive effects. Overall, these are the result of a complex mixture of factors. The existing system, and the changes to it, involve considerable redistribution between different local authorities. Broadly speaking, these appear to tend to former suburban areas, while metropolitan areas do badly; however, the likely differentials between local authorities, particularly in these metropolitan areas, are very large, reflecting the high degree of sensitivity of outcome to both actual expenditures and assessed needs.

In addition to redistribution between people who live in different parts of the country, there is major redistribution among individuals within any particular authority, and this is the aspect of the proposals which has attracted most attention. In general, rates payable increased with income, although less rapidly than income. Progressivity was further increased by the system of rebates to low-income households and the provision by which households on income support would have the whole of their rates bill met. There has been frequent criticism of the distributional incidence of the rating system, but there can be little doubt that rates bore a closer relationship to ability to pay than a flat-rate per caput charge. Table 9.2 shows the distributional impact of the reforms. A shift from a tax related loosely to housing expenditure to a flat-rate per caput payment is certainly a regressive measure. This criticism is, however, a good deal less forceful than it seems. As we shall stress in a variety of contexts, progressivity is best viewed as a characteristic of the tax system as a whole, rather than as a property of each individual element of it. If we are to require that each part of the system display the progressivity of the tax structure as a whole then we constrain the pursuit of other objectives of a desirable tax structure to an inappropriate extent.

Seen from this perspective, there is perhaps no part of the tax system where progressivity is less appropriate than local authority finance. It is not sensible that there should be more than one level of government engaged in the redistribution of income and wealth. If there are two or more, then it is probable that they will come to different conclusions on the appropriate level of equality or inequality and engage in incompatible policies which achieve

Table 9.2: *Relationship of rates and community charge to net household income* (England, 1986/7 prices)

	Range of equivalent net household income (£ per week)											
	Under 50	50–75	75–100	100–150	150–200	200–250	250–300	300–350	350–400	400–500	500+	All
Gross												
Rates	6.07	6.17	6.72	7.32	7.95	8.31	7.72	9.27	9.95	10.54	13.64	7.40
Community charge	6.00	6.36	7.27	8.03	8.12	8.01	7.59	7.36	7.09	7.42	7.00	7.41
Net												
Rates	1.64	3.04	5.94	7.18	7.90	8.29	8.71	9.27	9.95	10.50	13.62	6.37
Community charge	1.63	3.13	6.31	7.64	7.91	7.89	7.52	7.31	7.03	7.34	6.89	6.25

Source: Parliamentary Written Answer, 25 January 1988.

outcomes that neither of them desires. Elements of this conflict are very recognizable in the history of local government finance we have described. Local authorities have seen high levels of local expenditure as a means of offsetting distributional consequences of central government policies which they dislike. Central government, seeing this, then pursues more extreme policies than would be appropriate if local authorities were in co-operation rather than in conflict.

Most people find it difficult to separate the question of who should make decisions on an issue from what they think the decision should be, or will be—and indeed this is a principal obstacle to a more rational system of local authority financing. But if we can make that separation for a moment, it seems to us clear that redistribution should be the function of a national government, rather than a multitude of local governments. It would follow that the taxes which have substantial distributional effects—particularly income taxes and benefits—should be determined by central government, and that local taxes should have a form such that local authorities can make spending decisions on the basis of their perception of local needs for their services rather than on views about the appropriate distribution of local—or national—income. This is the primary merit—probably the only merit—of the community charge proposal.

If rates are a substantial tax on housing, the removal of that tax will affect both the demand for housing and its price. Until now, one of the costs of moving to a larger, better, or more favourably located house was a larger rates bill. The community charge makes housing cheaper. Since houses are assets in limited supply, part of this effect will be translated into higher house prices—another example of tax capitalization in action. In the long term, there will be some additional houses built as a result. Table 9.3 shows Hughes's (1988) estimates of the potential effects.

The weakness of this argument in practice is the near impossibility of separating arguments about structure from the anticipated consequences of the structure. The defence of the poll tax has been based on two main arguments. One, patently untenable, is that it implies a fairer sharing of the cost of local authority services. The second is that it secures greater accountability of local authorities to local residents. To assess this claim, we need to view the community charge within the context of local government finance as a whole.

Table 9.3: *The effects of the community charge on house prices*

	Domestic rates as a tax on housing (%)	Rise in house prices[a] (%)	Increase in house demand[b] (%)
North	31	18	18
Yorkshire/Humberside	31	13	13
East Midlands	27	14	14
East Anglia	26	13	13
GLC	36	13	14
South-east (excluding GLC)	30	12	12
South-west	31	12	12
Wales	26	11	12
West Midlands	36	15	15
North-west	29	16	16
Scotland	48	23	23

[a] Main estimate.
[b] Medium-term estimate.
Source: Hughes (1988).

The uniform business rate

The community charge is designed to replace domestic rates. While the share of local authority expenditure which it finances will reflect the spending levels and charges, implemented after the change takes place, it is unlikely to provide as much as 20% of total local government revenue. Most spending will be financed from the new uniform business rate and from a continuing system of grants from central government. (Table 9.1.)

The rating of non-domestic property will continue, but with two important changes. Rateable values are currently based on rents in 1973. A revaluation will be based on rents paid in 1988. Since 1973, there have been substantial differences in the behaviour of rents on different kinds of property. In general, rents of shops have risen by more than rents of offices, and offices by more than industrial property. For all types of building, increases have tended to be more rapid in the south of England than in the north.

The second change is that local authorities will no longer be free to set the level of rates which applies to business in their area. Under the present system, there is a fixed relationship between domestic and non-domestic rates—an element of the grant system is designed to permit authorities to set domestic rates at a slightly

lower level. When domestic rates disappear, business rates will be fixed, after a transitional period, at a uniform, national level.

Both these modifications will have very large effects on the distribution of tax payments by different types of business. Rate levels ranged in 1988 from 117p in Kensington and Chelsea to 346p in Manchester. Over the country as a whole, there is a broad inverse relationship between property values and rate levels. On average over the country as a whole, rents are now about four times their 1973 level, which means that the average rate poundage will fall from about £2 in the £ at present to a national figure of about 50p. It follows that industrial premises in the north of England will typically pay very much less in rates under the new system, while shops in central London will pay a great deal more (Figure 9.1).

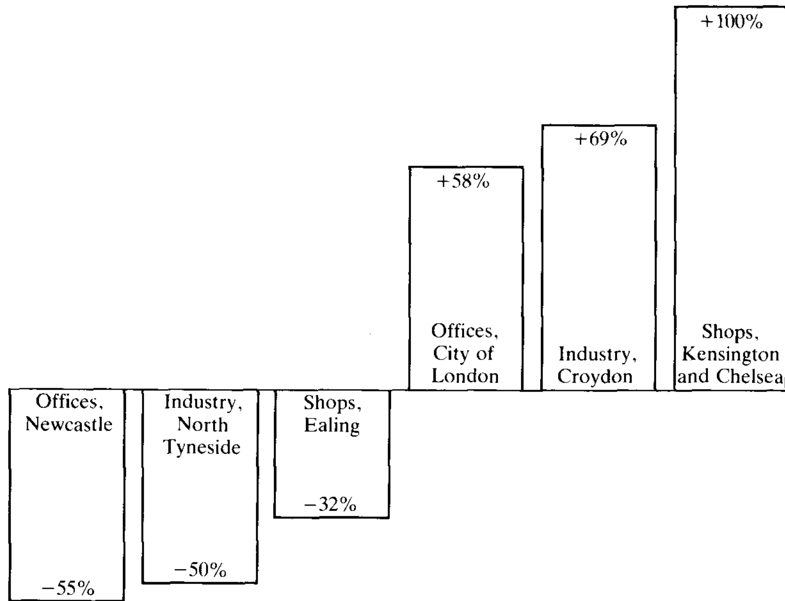
This redistribution has, in turn, major consequences for the revenue position of local authorities. Local authorities in the north of the country will tend to lose resources, because revaluation will be below average and the uniform business rate will be below their current poundage, while local authorities in the south will tend to gain.

To see how this ultimately affects the community charge, we need now to turn to the third and largest component of local revenues—grants from central government.

Grants to local authorities

As the relationship between central and local government has evolved, the objectives of the grant system have increased in number and changed in emphasis. Grants were initially mainly related to 'spill overs'—services which benefited the population at large instead of, or as well as, the residents of a particular locality. Local governments that are particularly concerned for their constituents will not undertake enough of such activities, and those that do extend them will impose an unfair burden on local residents. Such grants were therefore hypothecated grants—the Government met a proportion of expenditure on approved items, such as education and main roads, which were especially likely to generate spill overs.

As time progressed, fiscal imbalance became a more important element in government grants. If taxes are raised by that level of



Note: Effect of uniform business rate on overall average rate bill by area and category of property.
Source: Calculations by London Economics.

Fig. 9.1. Effect of revaluation and uniform business rates on different properties

government which is able to levy them most efficiently, while expenditures are determined at the level of government which is able to administer them most effectively, there is no reason to suppose that the resources and needs of any particular tier of government will match. It is the experience of the UK and of most other countries that tax collection has become more centralized than expenditure decisions, and there is therefore a need for offsetting grants from the centre to local units (revenue-sharing).

Grants can also be used to redistribute revenue among local authorities. We might ask why it is necessary or desirable to redistribute amongst governments rather than directly to persons. Whatever local tax base is chosen, local authorities will differ in

terms of resources. With a local sales tax, some authorities will have low-spending residents, and others will have shopping centres which attract customers from a wide area. With a local property tax, some areas will have better-off residents and others —often the same areas—will be in areas of the country where property values are high relative to incomes. Under a poll tax, some areas will have few residents, either because—as in the case of Cumbria—few people live there, or because—as in central London—most of the people who use the pavements, drop their litter, and park their cars go home to sleep and pay their poll tax somewhere else. Local authorities also differ in their needs. Some may have large numbers of children or old people who make extensive use of the facilities that local government provides. It may be more expensive to provide the same frequency of refuse collection or to keep the roads clear of snow in a scattered rural area than in a densely populated urban environment (although it is not obvious why town-dwellers should pay for this). An individual who lives in an area with low resources, or extensive needs, will need to pay more in order to secure the same level of local services as someone who is more favourably located. This is not only inequitable, but may lead to movements between areas which exacerbate the initial problem (as may have happened in the USA).

Designing an equalization scheme to deal with these problems is by no means easy. Just as there is no objective measure of an individual's taxable capacity, there is no objective measure of a local authority's resource base. And the needs of an individual local authority are equally a matter of judgement—if it were otherwise, why have local democracy at all?

Although there is now extensive statistical analysis of the spending patterns of local authorities, the choice of explanatory variables and the legitimacy of particular needs are inevitably matters of subjective assessment and ultimately of political whim. And what exactly is it that a redistribution scheme should equalize? Perhaps local authorities should each be able to provide the same level of services at the same cost to local residents. But what level of services should be chosen? How much of any increase or shortfall should be borne locally and how much should be reflected in changes in grant? What is meant by cost to local residents?

As each of these three functions of government grant—spill over, fiscal imbalance, and equalization—grew in importance, specific grants were replaced by an unhypothecated general grant, which contained elements related to both the needs and resources of particular authorities. In introducing a new block grant system in 1980, the Government added another objective—controlling the overall level of local authority spending—and introduced a complex penalty system aimed at this goal. The failure of the emerging regime to achieve one of its multiple objectives has been described above.

The introduction of the community charge allows some simplification in the grant system. Two objectives of the present structure—resource equalization and penalties—are no longer pursued. Under a poll tax, per caput resources of different authorities are, by definition, identical, since the resources are the people themselves. It is assumed that the deterrent effect on expenditure of increases in the community charge makes the penalty system unnecessary.

Future grants to local authorities will therefore reflect differences in needs, and fiscal imbalance. Areas with more children, or old people, or obligations to maintain rural roads and refuse collection, will receive grants whose objective is to ensure that each authority can maintain the same level of local services at the same level of community charge. The remainder of the grant and the proceeds of the uniform business rate will be distributed to all local authorities on a per caput basis.

If local authorities were, on average, self-supporting, then a 1% increase in the planned level of service would imply a 1% increase in the community charge. If, however, only around 15% of expenditure comes from the community charge, a 1% rise in expenditure on services requires a rise of between 6% and 7% in the level of the poll tax. This large multiplier has a number of implications. It means that the grant system can achieve equalization of the community charge across authorities only at one level of estimate of needs. If the Government were to choose a higher level of services in its assessment of needs, it would have to increase the level of its payment by far more to some authorities than others. This effect, together with the deterrent effect of the high multiplier itself, gives the Government a powerful, if implicit, means of controlling the level of local spending through its design

of the grant system. At the same time, the system is highly sensitive to errors in the—inevitably subjective—exercise of determining local authority needs.

Alternative sources of local authority revenues

No other country in the developed world has financed its local government by means of a poll tax, and as far as we know none has seriously contemplated it. There are four principal alternative mechanisms available and most countries use one of these or some combination of these. These are revenue-sharing with central government, a local sales tax, a modern property tax, and a local income tax. All were considered, in a somewhat discouraging tone, in a Green Paper entitled *Alternatives to Domestic Rates* published in 1981. We consider in turn what each would involve.

The development of extensive government grants to local authorities is a form of revenue-sharing, but the term is more appropriately used when central government takes responsibility for tax collection but assigns some fraction of revenues to local authorities. This is, for example, the principal mechanism for funding the provincial governments (Länder) in West Germany. A revenue-sharing formula in the UK might, for example, allocate a fraction of income tax or VAT revenue to each local authority, based on some statistical assessment of income or consumption originating in that area. A less ambitious version might assign a tax like vehicle excise duty to local government.

The advantage of such a scheme is that it relieves in an automatic way the problem of fiscal imbalance and, especially if the formula can be constitutionally protected, allows local government adequate revenues for their prospective expenditures without inviting constant central government scrutiny of local activities. Its disadvantage is that it gives local authorities no power to raise their own revenue by fixing their own tax rates, so that the local autonomy it permits is confined to the allocation of expenditure between headings and not to the level of spending overall. If, as in Britain, education spending dominates total expenditure, the degree of independence this implies may be very limited.

Many American states use local property taxes, and local sales taxes are also common sources of revenue for both states and

municipalities. Small differences in tax rates between adjoining areas persist without acute problems emerging. These taxes are levied at the retail level. Canada also has provincial sales taxes. North America is unusual, however, in its continued reliance on sales taxes. Most other countries now base their commodity tax system on VAT and this restricts the options available for the finance of local government. It is impossible to imagine VAT being levied at different rates between areas where cross-border transactions are a high proportion of total economic activity and so a local VAT is inconceivable. It would therefore be necessary to introduce a retail sales tax on top of the present VAT system, and probably independently of it. While this is not impossible, it is not an appealing option and the difficulties are compounded by the small size of many local government areas. There are thirty-two different authorities within London and over four hundred in the country as a whole.

One of the serious weaknesses of domestic rates is that the disappearance of the rented housing market has made the assessment of rateable value an arbitrary procedure. Before the community charge proposal was put forward, it was generally accepted that any future revaluation of domestic property would relate rates to the capital value, rather than the rental value, of the property. Modified in this way, a property tax has obvious merits as a source of local government finance. The occupation of property is, by its very nature, associated with a particular locality in a way that can never be true of income, consumption, or any other potential tax base. Rates have therefore been an easy tax for local authorities to administer and collect, and they allow local authorities substantial but not unlimited freedom to set their own targets for tax revenues. One of the many puzzling features of the changing structure of local government finance is that the focus of reform has been on domestic rates, in many ways the least defective of the three principal sources of local government revenues.

Nevertheless, domestic rates have occasioned much criticism. Often this criticism is less than coherent, and it sometimes seems that a principal reason for the volume of protest is simply that rates are an unusually transparent tax; there are few other cases where individual taxpayers are personally and directly responsible for making payments. The major objections expressed are that the

burden of rates is independent of the number of earners in a household; that they bear heavily on people (such as pensioners) who live in property that is large relative to their incomes; and that they are inequitable as between individuals who live in different parts of the country with different property prices. The essence of all these criticisms is that rates are not an income tax; and any attempt to modify domestic rates to respond to these criticisms would have the effect of turning them into something close to an income tax. If this is the basis of the argument on which the property tax is to be replaced, then there is one and only one alternative tax that meets the bill, and that is local income tax.

These arguments against a property tax are not as strong as they might at first sight appear. Income is a measure of taxable capacity, but it is not the only one or necessarily the best. Income, supplemented by information about housing consumption, may well give a better guide to a household's standard of living than either of these variables alone, and this is what a tax system that includes both national income tax and domestic rates achieves. The argument stresses the importance of looking at the impact of local authority taxation as part of the tax system as a whole, and not in isolation.

Local income taxes are used to finance local services in many other countries. There are, however, peculiar administrative difficulties in implementing a local income tax in Britain. The reason is that while almost all other countries make rough-and-ready deductions of income tax from pay and assess liability by means of an end-year tax return and assessment, the British system attempts to secure exact deductions of the tax due and exempts most taxpayers from an annual return. It is easy in other countries to incorporate the assessment and collection of local income tax in the annual return; in Britain it would be necessary to establish place of residence in a separate inquiry and notify this to employers for each one of their employees individually. Even on the modest proposals of the Layfield Committee, it was estimated that this would require a 15% increase in Inland Revenue staff and expenditure.

There is an obvious alternative, which is for Britain to move over to collecting its income tax in the same way as everyone else. The Green Paper notes this possibility, but observes that 'Major issues of tax policy and administration would be raised which

would need to be examined thoroughly and in detail on their own merits before any change of this kind could be made' (para. 6.23). Connoisseurs of official prose will understand that statements of this kind are intended, not as a prelude to such a thorough examination, but as a reason for not considering the issue seriously at all, and so it has proved. We suspect that in the long run—and perhaps rather quickly—a local income tax will prove the only escape route from the many unresolved problems of the poll tax.

Centralization or local autonomy?

Perhaps the most remarkable feature of the debate we have described is that the poll tax proposals are at once very radical, very controversial, and largely irrelevant to the underlying problems. In our view, the origins of the crisis in local government finance do not lie in the deficiencies in the mechanisms of taxation and financial control. The financial crisis is simply a product of more fundamental weaknesses in the structure and organization of local government in Britain, and finance is, as so often, the means by which these problems are brought to the surface. As Layfield explained, we have not yet decided how much—if any—real local autonomy we want. When we determine that, the financial consequences follow. If we fail to determine that, then changes to the system of finance mean only that the conflict between central and local government takes some different form.

Table 9.4 shows how local authorities spend their revenues. Education expenditure accounts for almost half the total. Yet local authority autonomy in education is both limited and diminishing. It is under attack both from greater centralization through a national curriculum, and from further decentralization by giving greater autonomy to the headteachers and governors of individual schools. Our own assessment is that the principles, if not the details, of these measures are right: that plurality and diversity in the education system are valuable but that their value—and the real opportunity to exercise them—lies within the school rather than within a local authority area, and that responsibility for ensuring standards within that is better exercised centrally than locally.

If local authorities are not to enjoy substantial autonomy in their education policies, then it is inappropriate for them to retain their

Table 9.4: *Local authority spending, England, 1987/8* (£ million)

Education	13,988
Law and order	4,329
Social security	3,162
Environmental services	3,036
Health and personal social services	2,927
Roads and transport	1,868
Housing	662
Arts and libraries	473
Other	349
Total	30,794

Source: HM Treasury (1988).

present involvement in education expenditure. The problem of fiscal imbalance has, in effect, been reversed, and financial responsibility should, like executive authority, be ceded up to national government and down to individual schools. If, on the other hand, we wish to make local government education authorities in a real, rather than titular, sense, it follows that they must have the freedom to determine levels of expenditure and the opportunity to raise the resources needed to pay for it. There is only one local tax capable in practice of yielding resources on the scale which that requires, and that is a local income tax. The genuine alternatives to domestic rates are two: a national education service or a local income tax.

10

Principles of company taxation

The taxes we have discussed in previous chapters are all taxes on individuals. An obvious question with which to begin a discussion of the corporate tax system is 'why tax companies at all?'. A common reply, and indeed one that was used in the US to justify the introduction of a corporate income tax, is that corporate status conveys certain privileges for which companies should pay. In particular, companies have limited liability status, thus protecting their shareholders in the event of bankruptcy. At first sight this argument has some appeal, but on closer inspection it is less attractive. There is no reason to believe that the benefits of incorporation are proportional to profits (indeed, the reverse might be the case) and one might as well argue for a licence fee for companies. More fundamentally, although limited liability is a very convenient form of contractual arrangement between shareholders and creditors, it is a voluntary agreement entered into by both sides. Before lending to the company the creditors know full well that the shareholders' liability is limited and can adjust the terms on which they are willing to lend accordingly. There is no reason to tax one party more than the other.

The mere fact that some firms are incorporated is not a very strong argument for imposing a separate tax on them. Indeed, insistence on treating companies as entities distinct from the individuals who own them has in the past provided a tax shelter for retained earnings. Another argument which has been used is that companies can afford to shoulder an extra burden, and that companies, as well as persons, should pay their fair share of taxes. Surprisingly, this viewpoint carried a good deal of weight in the USA in the debate on the 1986 Tax Reform Act which financed cuts in personal taxation by increases in the tax burden imposed on the corporate sector. The argument is completely mistaken. The effect of a tax is to reduce either leisure or consumption (whether this year or in the future via a reduction in savings) or both below the levels that would have been chosen in the absence of the tax.

Whether any given tax burden is distributed fairly can only be discussed by reference to the effects on the different individuals in society. Companies are owned by individuals and it is meaningless to talk about the 'welfare' of ICI. The fact that a company has a *legal* personality of its own quite distinct from that of its managers, shareholders, and employees cannot change the fact that a tax can only affect the well-being of those who work for or own the company, or consume its products.

The incidence of company taxes

Who then actually pays the corporation tax? Corporation tax appears to be levied on company profits, but it is important to distinguish two components which make up the figures that companies report as their profits. One is a return on the capital that companies use in conducting their business—the money they have borrowed to buy fixed assets, stock, etc. In order to attract funds—either from lenders or from those who might wish to buy their shares—companies must offer a return on those funds comparable to that which investors could obtain elsewhere. Companies typically report their gross trading profits—the return they have made before deducting any of these financing costs—and their net profits, which are computed after subtracting the cost of interest payments on the money that they have borrowed but before deducting the cost of servicing the capital that they have obtained from shareholders (the dividends that they have had to promise in order to secure these funds).

The second component corresponds to a more natural concept of profit. Many companies make a return on capital employed that appears to exceed, often by a great deal, the amount that they need to attract funds from investors. For example, in 1987 the pharmaceutical company Glaxo reported a return on capital employed of 41%, Marks and Spencer a return of 21%, and Yorkshire Television a return of 49% (figures from *Business 1000*).Rates of return on this scale are much greater than these companies would appear to have required, or to have to promise, to obtain finance for their business. In a competitive economy, it would be difficult for firms to earn such high profit rates, since other people would be attracted into the same line of business by the prospect of these enormous returns; and although many

companies seem to earn profits greater than the cost of capital, there are few that are as profitable as these. But as these examples suggest, there are at least three reasons why companies might make above-normal profits. Glaxo is a company that exists to exploit new scientific innovations, and its profits represent the rewards of being first in the field with new products (aided by patent protection). Marks and Spencer does not have any single invention that distinguishes it from other companies, but it is an exceptionally successful and efficient firm, which by virtue of effective management and carefully cultivated customer goodwill is able to earn higher profits than other retailers with whom it is competing. We might regard its profits as returns to successful organization. Yorkshire Television's profits are the result of the award by the Independent Broadcasting Authority of a franchise which gives them a local monopoly. It is interesting to note that Rank Xerox—whose 41% rate of return in 1975 we cited in the first edition of this book—saw that return fall to 13% in 1987 as competition developed in its market.

Economists describe the amount by which profits such as these exceed the cost of capital as 'pure profits'. Such profits can of course be negative for foolhardy ventures or badly managed firms. At any time some firms will be more successful than the average and others less successful, so that there will be a dispersion of realized rates of return around the cost of capital: lager producers will earn more when the summer is hot and umbrella manufacturers more when it is wet. But the major sources of pure profits are invention, organization, and monopoly, and we shall broadly describe them as returns to enterpreneurship, noting that in this title we are including activities that we should view with approbation—like successful invention—and others that we would wish to discourage—like the creation of monopolies. In practice, 'profits taxes' are normally partly a tax on pure profits and partly a tax on capital employed. We shall see that the British corporation tax is a combination of a tax on pure profits and a tax on capital.

We can therefore identify three main groups which may bear part of the burden of corporation tax. One is the people who supply entrepreneurship—Mr Marks and Mr Spencer and others who helped build up their organization, the directors of Pleasurama who won the casino licences, and those who saw the potential

of Zantac (Glaxo's highly successful anti-ulcer drug) and translated it into a marketable product. A second is the people who supply capital to companies. This group overlaps somewhat with the first—the people who supplied capital to Marks and Spencer or Glaxo in the early days of their development did very well out of it, though we might argue that by choosing to support these operations rather than others at a time when their potential was not universally recognized, these individuals were themselves supplying entrepreneurship as well as capital. It is clear, however, that the people who own shares in Marks and Spencer or Glaxo now are not entrepreneurs in this or any other sense, and there is no reason to suppose that the return they earn on their investment will be higher than they would expect from any other shares they might buy.

This point is important. The present shareholders in the company are not growing fat on its above-average rate of return on capital. This return has been capitalized; the present owners of Marks and Spencer have bought the right to it from the founders, who were thus able to sell their shares and obtain the proceeds of their entrepreneurial activities. Similarly, the present stockholders in the Xerox Corporation are those who have bought the right to Mr Carlson's invention from him and his original backers at a price that reflected the expectation of the profits which the company is currently earning.

We have so far only looked at the production side of these activities. The third group of people who may share the burden of corporation tax are those who buy goods and services which are produced by companies. If there is a tax on capital employed in the company sector, and people require a certain rate of return before they will invest in companies (because, for example, they can obtain that return by buying government bonds or investing overseas), then the tax will have to be paid by those who buy goods which are produced by companies. Part of it may also fall on those who form companies to exploit their entrepreneurial activities.

It should be clear from this that the incidence of corporation tax depends in part on the structure of the tax. If it is a tax on pure profits only, then it falls in the first instance on those who supply entrepreneurship to companies—inventors, successful organizers, would-be monopolists. If the supply of such entrepreneurship is

not too sensitive to its rewards then these entrepreneurs will pay the tax and that will be the end of the matter; but if they abandon entrepreneurship and enter routine employment instead then consumers will have to bear the burden of the tax, partly in higher prices to induce a little more entrepreneurship and more importantly through the loss of the ideas and efficiency that those people might otherwise have promoted (this is the 'excess burden' of the tax). Moreover, because of capitalization we can tax *past* entrepreneurship at rates as high as we like without the tax being shifted forward to consumers in this way or producing economic inefficiency of any kind. It is possible that if Mr Marks had known that profits would be taxed at 52%, or even 35%, he would not have bothered to think up Marks and Spencer, or that the current shareholders would have been less willing to pay so much to him for his business, but they have made their decisions and there is nothing that they can do about it now.

We can therefore see that a tax on pure profits is not without economic attractions—though these depend on the belief that desirable entrepreneurship will be inelastically supplied. (If people are deterred from seeking monopolies by the knowledge that the proceeds will be taxed, that is often to the good.) We shall describe a corporation tax that falls only on pure profits as a neutral tax. If a corporation tax is not neutral, it will fall also on those who supply capital to companies. The incidence of this part of the tax then depends on the response of firms and financiers to this charge. If there are profitable investment opportunities elsewhere—and there are activities which can be undertaken overseas outside the scope of UK corporation tax—then firms will be unable to pass the burden of the tax back to investors. They will then try to substitute other factors of production for the now more expensive capital. To the extent that this raises costs and to the extent that they cannot substitute successfully, they will have to share the tax between a reduction in any pure profits they may be making (which may be small or zero for many companies) and a higher price charged to the consumers of their products. If this happens, corporation tax will act as a general sales tax on the goods which companies produce (though at different rates on different goods). We may note that the openness of the economy to capital flows will be an important factor in determining the incidence of corporation tax. The greater this is, the greater the proportion of the tax that is likely to fall on consumers. Hence if

barriers to capital mobility within Europe are removed in the 1990s, the incidence of corporate taxes is likely to change and European governments may have an incentive to co-ordinate their corporate tax policies.

We have seen that the analysis of the incidence of corporation tax is a complicated issue—and indeed we have underestimated its complexity because we have examined only the most immediate consequences of the tax. There are likely to be further repercussions from the effects on income distribution of whatever the incidence may turn out to be. Nor have we considered adequately the problems we raised in Chapter 1—what is the alternative tax with which we are implicitly comparing the corporation tax? But in this simple framework it seems that incidence depends on empirical questions that are not easily answered, and it is not surprising that the subject has been in long-standing dispute. What we have suggested—and what has perhaps not received sufficient attention in that dispute—is that incidence is likely to be rather sensitive to the structure of the tax; and that the issue of whether the tax is or is not neutral is critical to this. We therefore turn to analyses of alternative tax structures, focusing on this issue.

But before doing so, we should notice that although corporation taxes do not emerge in a very satisfactory light from this discussion, and non-neutral corporation taxes particularly badly, the analysis suggests one argument for such a tax. This is that we have one already. To the extent that the tax falls on pure profits, and stays there, it will be capitalized in share prices: the value of Marks and Spencer is lower than it would be if there were no corporation tax, and this expectation has been reflected in the price at which shares in this company have changed hands in the past. To abolish the tax now would be to confer a windfall gain on the present shareholders.

Systems of company taxation

If there is to be a separate corporation tax, it is important to choose a tax that does not conflict with the objectives of the personal direct tax system. There are two sorts of questions about company taxes we could ask. What are the different types of company tax systems? What are the economic effects of a tax on companies? It is clear that we cannot answer the second question until we know exactly what type of company tax we are talking

about, and so we shall describe some of the main corporate tax systems which could be employed. It is useful to classify corporate tax systems in terms of how they tax distributed profits relative to their taxation of undistributed profits. When the corporate tax system in Britain was changed in 1965 and 1973, on both occasions the idea behind the change was to alter the relative tax burden on dividends and retentions. We shall follow this method of classifying company tax systems. An alternative approach is to look at systems in terms of their effects on the investment decisions of firms by asking the question 'How does the tax system affect the pre-tax rate of return on an investment project required to induce firms to go ahead with the project?'. This is a question to which we shall return after describing the different systems of corporation tax.

The system of corporation tax that is used in the United States, and which operated when the tax was first introduced in the UK, is known as the *classical system*. This is perhaps the simplest system to understand and is often represented as embodying the principle that the tax liability of the company should be completely independent of that of its shareholders. Under the classical system the company pays a flat rate of corporation tax on its taxable profits, and then the shareholders pay income tax on their dividends and capital gains tax on the gains that arise from corporate retentions. A company wishing to raise a given amount of finance may either retain profits, or distribute the profits as dividends and issue new shares, or borrow the money and pay interest charges on the loan. The classical system discriminates between the first two sources of funds unless capital gains are taxed at the same rate as investment income, and it favours debt finance if, as is almost always the case, interest payments may be deducted against profits in assessing liability to corporation tax.

It is precisely this discrimination between dividends and retentions which, so it is claimed, constitutes the major objection to the classical system because it involves the 'double taxation of dividends'. The double taxation arises because dividends are subject to both corporation tax and income tax, whereas retentions are liable only to corporation tax. This argument ignores the fact that capital gains tax is payable on gains arising from retentions, although of course it is perfectly true that the effective tax rate on capital gains is much less than the rate of income tax. Nevertheless, in 1973 the classical system was replaced in the UK

by the *imputation system* in order to alleviate part of the double taxation of dividends. The imputation system gives shareholders credit for tax paid by the company, and this credit may be used to offset their income tax liability on dividends. Part of the company's tax liability is 'imputed' to the shareholders and regarded as a prepayment of their income tax on dividends.

The company pays tax on its profits at the rate of corporation tax, and any profits that are subsequently distributed are regarded as having already paid income tax at a certain rate, which we may call the 'rate of imputation'. In Britain the rate of imputation is always set equal to the basic rate of income tax. Shareholders only have to pay additional income tax on their dividends if their marginal rates of income tax exceed the basic rate, while if their marginal rates are less than the basic rate they actually receive a refund from the Revenue. For example, a charity or pension fund will receive a refund of tax deemed to have been paid on their behalf by the company. Another method of alleviating the double taxation of dividends is to charge a lower rate of corporation tax on distributed profits than on undistributed profits. This is called the *two-rate* system.

An alternative system is simply to integrate the personal and corporate tax systems and, for tax purposes, to regard shareholders as partners in a business. Under the *integrated system*, as it is called, each shareholder is deemed to have earned a fraction of the company's profits equal to the fraction of its shares which he owns. The effect of this is that the company's profits, both distributed *and* undistributed, constitute part of the shareholder's personal taxable income. Once a year each shareholder would receive a piece of paper from the company showing his taxable profits for the last year together with a tax credit for the tax paid by the company on his behalf. The taxable profits would be added to his personal income. A reform along these lines was suggested by the Carter Commission in Canada and was seriously considered in West Germany. In neither country, however, was it adopted, partly on administrative grounds and partly on the irrelevant legal argument that a company is distinct from its shareholders.

Taxes and investment

We shall consider first a project financed entirely by borrowing. Imagine a firm contemplating investing in a project which involves

buying a piece of machinery and then using it together with labour and raw materials to produce output which is then sold. If the receipts from the sale of output more than cover *all* the costs involved then the project will earn profits for the firm, and the project will be given the go-ahead. What do the costs include? Obviously, they include the payments made for raw materials, fuel, and labour, but they also include the capital costs incurred. These will consist of two parts. The first is the interest payment on the loan taken out to finance the purchase of the machinery, and the second is the deterioration in the value of the machinery itself due to wear and tear caused by use, or to obsolescence caused by the invention of better machinery. This second element is the depreciation charge, and is called 'true economic depreciation'. It is important to note that it consists of the change in the value of the machinery during the firm's accounting period regardless of the way the value has changed. Since firms rarely sell machinery, it is extremely difficult to value second-hand plant, and so depreciation charges usually follow rather arbitrary rules, such as writing off the cost of an asset in equal instalments over some assumed average life for assets of that particular type, and only approximate true economic depreciation.

If the receipts from the project exceed all its costs, including capital costs as defined above, then the project will earn a surplus for the shareholders of the firm and will always be a desirable investment, provided the surplus is positive. What matters is not the size of the surplus, but the fact that it is a surplus. A proportional tax on this surplus will still leave a positive surplus for the shareholders, and therefore will not affect investment decisions. In the case we examined, investment was financed by borrowing and in that case capital costs consisted of interest payments on the borrowed money and depreciation of the capital equipment. As far as investment financed by borrowing is concerned, a corporation tax that allows as deductions both interest payments and true economic depreciation will be neutral.

The financing of investment

In practice, however, companies finance their activities in several different ways. One of the major decisions facing a company is its choice of capital structure. What fraction of its investment should it finance by equity and what fraction by debt?

We saw in the previous section that if there are no taxes, the cost of capital is simply the rate of return demanded by the supplier of finance—the rate of interest at which the firm can borrow, for example. In a competitive economy this cost of capital is independent of the particular method of finance that is chosen. While it may appear, for example, that borrowing secured on particular assets is 'cheaper' than other ways of raising new capital, such activities increase the risk, and hence the cost, attached to other financial instruments, such as unsecured loans or equity shares. Since there must be a lender for each borrower, the outcome will be one in which the 'price' of each kind of capital that the firm has will reflect the degree of risk attached to that particular asset, and the overall cost of capital cannot be reduced by resorting to so-called 'cheap capital'. It follows from this that there is little to choose between alternative methods of financing when there are no tax considerations, and that such decisions will be very sensitive to tax systems that favour one method rather than another. When tax considerations do apply, a firm will use the cheapest source of finance first, though there are practical limits to this, especially when this source is debt or retained earnings.

The tax system provides an incentive to use debt finance because the return on such finance, namely the interest payments paid to the holders of debt, are deductible for the purposes of corporation tax. In contrast, equity investment has to bear at least part of the burden of corporation tax. Under the classical system, no part of dividends can be offset against liability to corporation tax; hence the discrimination against financing projects this way is very heavy and to the extent that such finance is necessary, the required rate of return from a project, or the company's investment as a whole, is increased. With the imputation system, dividends are partially deductible for corporation tax purposes, and the degree of discrimination between the two methods of finance results from the difference between the corporation tax and income tax rates. Thus there is some increase in the required rate of return, but the effect is much smaller than under the classical system, especially when the rate of imputation is close to the corporate tax rate.

If investment is undertaken from retained profits, the position is more complex. The cost of internal finance depends on the personal tax rates of the owners of the company because they can avoid paying income tax on their returns by sheltering behind the combined burden of corporation tax and capital gains tax. It has

usually been the case that for rich individuals, even that combined burden has been considerably less than the potential charge to income tax. As income tax rates have fallen, and capital gains have been taxed less favourably, this relationship has been reversed. The consequence is that retained earnings are a relatively expensive source of finance unless the shareholder plans not to realize his holding (and hence trigger a capital gains charge) for a long period.

Fiscal neutrality

It can be seen from the discussion above that corporation tax can have a major effect on incentives to entrepreneurship, investment, and finance. These incentives are affected by the interaction of the personal and corporate tax systems, as well as by the structure of corporation tax itself. All these things have been subject to frequent and large changes, with results that have often been neither intended nor understood.

The main effect of the many changes in the corporate tax system has been to introduce fiscal considerations into decisions which there is every reason to believe are best left to companies themselves. The capital structure of a company and the method by which it finances its investment are matters which the tax system ought not to try to influence, and if it does it will create difficulties for itself. Divergences from a neutral tax system give rise to the need for complex legislation to prevent abuse and avoidance through the conversion of income into whatever legal form happens to be taxed most lightly. It is very difficult to distinguish clearly between capital and income, and yet that is what is required if the present system is to work smoothly. Complaints by companies about the losses they have made on foreign currency loans illustrate how income and changes in capital values are not easy to separate. By repurchasing their own debt at below its nominal value, companies can substitute tax-deductible interest payments for repayment of capital, with favourable tax consequences. Even the difference between debt and equity can be blurred, and in the 1960s there was extensive import of the American device of the convertible loan stock, which is debt to the taxman and equity to the holder.

Any deviation from a neutral tax system will provide someone

with an opportunity to invent methods of avoiding tax. The authorities then respond with legislation to prevent such abuse, and effort then goes into devising even more ingenious financial operations to save the company and its shareholders tax. A pound in tax saved is worth as much to the company as a pound earned by productive activity. Most of these side-effects of a non-neutral tax system were unintended and, if perhaps not enormously harmful to the economy, nevertheless constitute a diversion of resources of time and skilled manpower to pointless activities. The frequency of the changes in the tax system aggravates the situation.

In the next chapter we consider some of the specific distortions that the UK tax system has created and how fiscal neutrality might be better approached.

11

Company taxation in the UK

In the UK taxes on companies are a relatively modern development. Although the United States introduced a corporate income tax in 1909—even before the adoption of income tax—in Britain the separate taxation of companies started only in 1947. Until then the taxation of corporate profits was integrated with the personal income tax, and special taxes on profits were used only as wartime measures to raise extra revenue. When the War ended, the system was rationalized by increasing the rate of profits tax and exempting individuals and partnerships altogether from this additional tax. Thus companies were subject both to income tax and to a separate tax on corporate profits. The system of corporation tax has subsequently changed at regular intervals, with major changes occurring in 1958, 1965, 1973, and 1984.

The most recent reform was in 1984 when the Chancellor announced the reduction or withdrawal of many allowances against corporation tax in order to finance a reduction from 52% to 35% in the rate of tax. These changes took full effect from April 1986. They also influenced the US Treasury which, in November 1984, published a plan (US Treasury (1984)) for a major reform of the US tax system. A modified version of the plan was passed by Congress in 1986. The two sets of reforms had much in common. They aimed to broaden the tax base by moving away from an *ad hoc* mix of income and expenditure tax bases in the direction of a comprehensive income tax. In this way some of the striking disparities in effective tax rates on different kinds of saving and investment would be eliminated. Fiscal neutrality was the guiding principle behind the reforms. Such a move reverses the direction of policy over the last thirty years, during which period successive governments tried to improve economic performance by providing increasingly generous investment incentives in order to stimulate higher levels of capital formation.

An income tax must give allowances for capital consumption. Expenditure on capital equipment, such as plant and machinery or

buildings, should be deductible not when the expenditure is incurred, but as the capital concerned is used up in the course of production. Companies make such provision for depreciation in their accounts, but they have considerable latitude in the amounts that they charge, and for tax purposes some more objective standard is required.

British tax law was initially rather ungenerous in the capital allowances it provided for this purpose, and it still permits no depreciation of commercial buildings, for example. But as concern about the need to stimulate investment grew in the 1960s, so did provision for accelerated depreciation of industrial assets. Companies could write off their capital expenditures against tax much more rapidly than the equipment itself deteriorated. Ultimately, the whole of any expenditure on plant and machinery, and 75% of spending on industrial buildings, could be offset against tax immediately.

In 1974, following a corporate liquidity crisis in which the tax payments due in 1975 would have led to serious financial difficulties for a number of major firms, a temporary system of 'stock relief' was introduced. This gave relief for additional expenditure on stocks during the year, whether this resulted from the inflationary increase in the price of goods in stock (which had become massive in 1974) or from an increase in the volume of stocks themselves. This scheme eliminated most of the corporation tax liability of UK manufacturing industry. In the corporate sector as a whole the real value of tax payments fell throughout the 1970s (see Figure 11.1). Although the scheme was described as temporary, successive Chancellors procrastinated and nothing was done by way of permanent reform. Another liquidity crisis appeared imminent following a substantial run-down of stocks during 1980, and it was clear that action could no longer be delayed. Modifications to stock relief were introduced in the 1981 Finance Act, but again these were simply tacked on to the existing system rather than integrated into a coherent reform of corporate taxation. The prolonged debate over the future of stock relief had demonstrated that a reappraisal of the basis of corporation tax was necessary. After the 1983 general election, with a new and radical Chancellor, the way was open for a major reform to be implemented in the 1984 Budget. The implications of the 1984 changes are discussed below. As can be seen from Figure 11.1, the

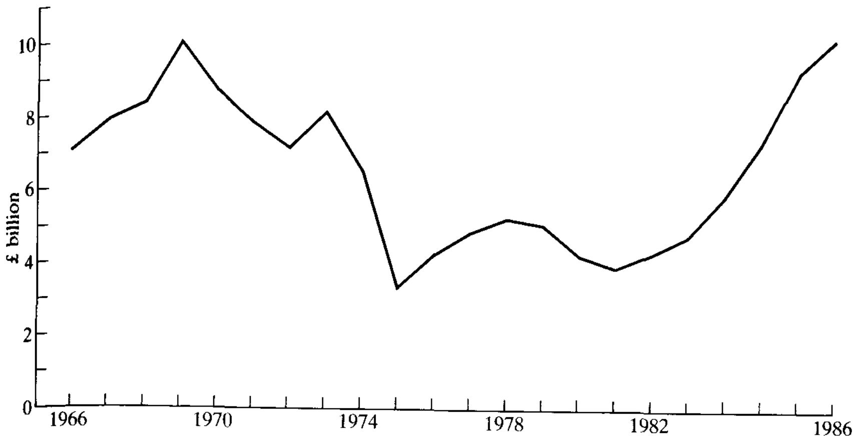
real value of corporate tax payments has returned to the level of the late 1960s.

The imputation system

Since 1973, corporation tax in Britain has been based on the imputation system. To illustrate how the system works, consider a shareholder who has received a cheque for £100 as his annual dividend. With a corporate tax rate of 35%, the pre-tax profits that are required to finance this dividend amount to £154, with the difference of £54 going to the Revenue in corporation tax. Part of this corporate tax bill is in fact prepayment of income tax at the basic rate on dividends which is deducted at source, and this component is paid directly to the Revenue when dividends are distributed. This is usually before the date when companies are normally required to pay corporation tax on profits for the year, and so this prepayment of tax is called advance corporation tax (ACT). In fact this description is somewhat misleading because the payment is more properly regarded as a deduction at source of basic rate income tax on dividends and not corporation tax at all. The remaining corporation tax payments to the Revenue are described as 'mainstream' corporation tax. They constitute the effective corporate tax burden since the amounts which are described as ACT would be paid, as income tax, even if corporation tax were completely abolished.

The essence of the imputation system is that when the shareholder receives his dividend cheque for £100 he is deemed to have already paid income tax at the basic rate on that dividend. If all shareholders paid income tax at the basic rate the matter would end there. But some shareholders pay the higher rate of income tax rather than the basic rate, and others pay at a zero rate. This complicates matters somewhat because we have to calculate the amount of extra tax that is due. To do this we must ask the question 'What dividend before tax would I need in order to finish up with £100 after payment of basic rate income tax?'. Suppose the basic rate of income tax is 25%. Then to end up with £100 after tax I would need £133 before tax. This is the notional pre-tax dividend that the shareholder received—the 'grossed-up' dividend—and £33 is the notional tax that he has paid.

Although this may seem rather abstract, the shareholder will in



Source: *Inland Revenue Statistics* 1987 and UK National Accounts ('Blue Book') 1987.

Fig. 11.1. Mainstream corporation tax, 1966–87 (1987 prices)

fact find that with his dividend cheque for £100 will come a piece of paper representing a tax credit of £33, exactly equal to the notional tax that we have just described. On his tax return the shareholder must enter the notional pre-tax dividend of £133 (equivalent to the value of his dividend of £100 plus the tax credit of £33) which will then be added to his other income in order to calculate his total taxable income, but since he is deemed to have already paid the notional tax he can use the credit as an offset against his income tax liability. If he pays tax at the basic rate, the credit eliminates the liability, and he can forget about the imputation system of corporation tax. If his marginal income tax rate is, however, 40% then his tax liability on the dividend is £53 minus the tax credit of £33. He will therefore have to send a cheque for the balance of £20 to the Revenue. But if the recipient of the dividend cheque were a pension fund, and hence not liable to tax, the boot would be on the other foot and the Revenue would have to refund the tax credit of £33 to the pension fund. Of the pre-tax profit of £154, a basic rate taxpayer would receive £100 (an effective tax rate of 35%), a pension fund would receive £133 (a tax rate of 14%), and an

individual with an income tax rate of 40% would receive £80 (an effective tax rate of 48%).

The example has been discussed at length so that the reader should understand the principles of the system and not be confused by the terminology used in the actual operation of the imputation system in Britain. The reason for its complexity is that imputation is granted at the basic rate of tax, and because of the progressive marginal rate structure of income tax, some shareholders are required to pay additional tax on dividends whereas others are refunded the tax credit. The system of tax credits is needed to ensure that the correct amounts are paid. None of this would be necessary if there were a single tax rate on investment income applicable to all investors, including pension funds. In the UK the rate of imputation has always been set equal to the basic rate of income tax. This is done on administrative grounds because the vast majority of shareholders pay tax at the basic rate, and hence for a large number of dividend recipients no net payments or refunds are required. Although this is convenient, it is in fact a rather restrictive feature of the tax system. There is no obvious reason for setting the rate of imputation equal to the basic rate of income tax, and there are in fact two objections to it. Firstly, it has the consequence that an increase (decrease) in the basic rate of income tax increases (decreases) the tax burden on earned income, but has no effect on the tax burden on the dividend income of shareholders paying the basic rate. This is because the tax credit rises (falls) in line with the increased (decreased) income tax liability, and if the credit has risen this will actually benefit exempt shareholders such as pension funds.

Secondly, the imputation system was introduced to reduce the fiscal discrimination between dividends and retentions, and hence between the different methods of raising finance. But the basic difficulty with the system is that it can lead to a neutral tax position only for those shareholders paying one particular rate of income tax. If we ignore capital gains tax this neutral position exists only for shareholders paying the basic rate. For other shareholders there will be discrimination in one direction or another. Where capital gains are taxed at income tax rates, as is the case following the 1988 Budget, any positive rate of imputation implies a bias in favour of distributed profits for all investors. If the effective rate on capital gains is less than the income tax rate—because gains are

taxed only on realization and the benefit of deferring the payment lowers the effective tax rate—then investors facing the higher rate of income tax would be in a neutral position when their holding periods were such as to generate an effective tax rate on capital gains of 20%. The income tax rate at which investors are in a neutral position does not coincide with a weighted average of the marginal income tax rates of shareholders, which is somewhat below the basic rate of tax and has been falling rapidly over the last two decades (see King (1977), Appendix A and King and Fullerton (1984), Chapter 3). The two factors responsible for this fall have been the rapid growth in the shareholdings of tax-exempt institutions—mainly pension funds—and the reduction in personal tax rates on high-income individuals in the 1979 and 1988 Budgets.

An additional complexity in the system is advance corporation tax. The Revenue does not wish to pay to shareholders any refunds of tax that it has not received from the company in the first place, and this is why each company is required to pay ACT before any refunds can be made. The value of ACT is equal to the total value of the tax credits received by the company's shareholders. The rate of credit (and hence also ACT) is defined as the ratio of the notional tax paid by the company on behalf of its shareholders to the dividends distributed, and so is always expressed in the rather strange form of 25/75, for example, if the basic rate of income tax is 25%.

ACT may be offset against the company's eventual liability to corporation tax. But in the 1970s and early 1980s there were many companies with small or zero tax liabilities, and for these companies the ACT was unrelieved. Surplus ACT may be offset against the corporation tax payments of the two previous years or carried forward. But in the early 1980s a great deal of concern was expressed about the problem of unrelieved ACT. The principle of the imputation system is that part of the company's tax bill is regarded as a credit against the shareholders' income tax liabilities on dividends, but if the company has paid no tax then there is no reason to give the shareholders credit. If the company turns out to have a zero tax liability, then ACT is simply unrelieved. There are two things to note about this outcome. The first is that an imputation system does not rest easily with a corporate tax base under which many companies have no tax liability. This was the

position before the 1984 tax reform but has largely disappeared since. Secondly, because the imputation system is effectively withdrawn when companies have no mainstream tax liability, the incentive to use different sources of finance varies not only from company to company, but even from year to year for the same company. This is an unsatisfactory outcome which gives firms yet more incentives to devote talented manpower to planning their financial structure rather than to the quality and range of their products.

The base of corporation tax

Similar considerations apply to the tax treatment of investment. Throughout the post-war period, governments of all persuasions tried to encourage investment by providing more and more generous incentives for such expenditure. To limit the revenue costs these incentives were not given uniformly but limited to those types of investment which were thought to be especially meritorious. As a result by 1984 there were enormous disparities in the treatment of different investment projects. Investment in plant and machinery could be depreciated in the first year (a 100% first-year allowance or 'free depreciation'). Industrial buildings qualified for a first-year allowance of 75% as well as 4% per annum allowances on the balance on the cost of the asset. In addition, there were, and remain, special cash grants to certain kinds of investment in the assisted regions and also discretionary grants under Sections 7 and 8 of the 1972 Industry Act, although non-discretionary regional investment grants were abolished in 1987. No depreciation allowances, however, were given for investment in land or commercial buildings (except for hotels which received an initial allowance of 20% plus further depreciation allowances) because such assets are expected to retain their value. There was a special form of relief for investment in stocks to mitigate the impact of inflation.

The net effect of these provisions was that the system as it stood in 1984 resulted in significant discrimination between investment in different types of asset and between investment in different sectors. Plant and machinery received favourable treatment whereas commercial buildings did not. Stocks of both raw materials and finished goods received unfavourable treatment

until 1974, generous treatment thereafter until the stock relief scheme was modified in 1981, and less highly favoured treatment after that date. The rationale for these differences is unclear, and the 1984 reforms attempted to reduce their importance.

The 1984 reform

There were two main components to the 1984 reform of corporation tax. The first was a significant reduction in the rate of corporation tax from 52% to 35% (staggered over a transitional period that was completed in 1986), and the second was the elimination of 100% first-year allowances and their replacement by depreciation allowances more closely related to true economic depreciation. The reduction in the rate of corporation tax reduced the attractiveness of debt finance. The rate at which interest payments are tax-deductible—the corporate tax rate of 35%—is close to the rate at which dividends are effectively deductible under the imputation system—the basic income tax rate of 25%. The adoption of depreciation allowances closer to some measure of true economic depreciation also reduced the variation in tax rates between different types of asset. Although these reforms did reduce the variability in tax rates on different types of investment, this was achieved at the cost of an increase in the overall tax rate on new investment. This is shown in Table 11.1. From a value close to zero, the average marginal tax rate on corporate investment in the UK has risen to a level of over 40%.

Table 11.1: *Effective marginal tax rates on corporate investment*

	1983/4	1988/9
Type of asset		
Plant and machinery	−35.6	25.5
Buildings	24.2	66.3
Stocks	41.7	53.8
Method of finance		
Debt	−61.1	31.6
New share issues	− 0.8	29.0
Retentions	15.2	48.9
Overall	− 0.1	44.7

Table 11.1 shows effective marginal tax rates on corporate investment in different assets and financed by different means for both the pre–1984 and current positions. The total wedge between the rate of return on investment and the rate of return received by savers depends upon both personal and corporate taxes. The figures in Table 11.1 include the effects of both sets of taxes. They are calculated under the assumption that investment projects earn a pre-tax rate of return of 10% per annum and that the inflation rate is 5%. It can be seen that before 1984 investment in plant and machinery and investment financed by borrowing were both subsidized by taxpayers at large. Tax rates on these projects were actually negative. In contrast, equity investment and investment in less highly favoured assets paid high marginal tax rates. The current position is that a much greater degree of uniformity has been introduced into the pattern of effective tax rates. The difference between equity and debt finance is now much smaller than before, and although machinery retains some tax advantage, the magnitude of this has been reduced. The gains in terms of greater fiscal neutrality have been achieved at the expense of an increase in the overall marginal tax rate on new investment in the corporate sector.

The new system purports to be a stable basis for the taxation of companies. But there are two reasons for casting doubt on this proposition. The first is that, as we have seen, the new system provides significantly less incentive to invest on average than the pre–1984 regime. A future government concerned with Britain's investment performance may wish to promote greater investment by a system of accelerated depreciation allowances, and an expectation of higher allowances would lead to a postponement of investment that might in turn justify the eventual change. The second reason concerns the failure of the new system to allow for inflation. With 100% first-year allowances, a company may write off its investment immediately and this reduces the effective cost of an investment by a proportion that is independent of the inflation rate; but when depreciation allowances can be used only gradually over time, the allowances are devalued by inflation. Only if the depreciation allowances are indexed to inflation will the incentive to invest be independent of the inflation rate. No such provision was contained in the 1984 reform. Moreover, current accounting methods include purely book profits on the

increase in the value of stocks in taxable income. This became so important in 1973 that the Government had to introduce a 'temporary' system of stock relief designed to prevent a serious cash-flow crisis in the corporate sector. By 1984 no permanent method of inflation accounting had been devised and the Chancellor simply abolished stock relief altogether. The current position is, therefore, one in which a new inflationary shock might lead to another cash crisis and significantly higher effective marginal tax rates in the corporate sector. Indeed, the system is more vulnerable to an inflationary shock than it was in 1974. Moreover, in the absence of indexation, tax rates can vary significantly with inflation whenever the inflation rate is of the same order of magnitude as the underlying real rate of profit. Since the latter is probably around 10% a year then even an inflation rate of 5% is still significant in this context.

For these two reasons—the disincentive to investment inherent in the present system and its vulnerability to an inflationary shock —it is worth asking whether there are alternative reforms that would achieve the objective of fiscal neutrality without the disadvantages of the 1984 reform.

Integration of personal and corporate taxes

The aim of the 1984 reform was to tax companies on their 'economic income'. In 1988 the personal tax system was reformed in a similar direction with capital gains taxed at income tax rates. This means that capital gains tax will play a more significant role in the future than it has in the past. But a consequence of the change is that the present system results in the 'double taxation of retentions', exactly analogous to the 'double taxation of dividends' between 1965 and 1973 which was used to justify the introduction of the imputation system (see Chapter 10). For example, in the case of a basic rate taxpayer retentions are subject to both the corporate and the basic income tax rates, whereas dividends are liable only to corporate tax. Given that the personal tax system, which now treats income and capital gains similarly, no longer discriminates between dividends and retentions, it is difficult to see why the corporate tax system should continue to do so. The logical change would, therefore, be to integrate personal and corporate taxes, and, in effect, extend the benefits of imputation relief to

retained earnings. One way of doing this would be to regard corporation tax as prepayment (or deduction at source) of capital gains tax at the basic rate on retained earnings, and to charge (grossed-up) gains only to the excess of the higher rate over the basic rate of tax. Another would be to deem a shareholder to have earned a fraction of the company's profits equal to the fraction of its shares that he owns. Integration along these lines would achieve fiscal neutrality in the financial decisions of companies, but would not mitigate the effects of inflation on the incentive to invest. Hence indexation of depreciation allowances and an adjustment for the increase in the value of stocks arising from general inflation would be necessary to attain full neutrality.

The cash-flow corporation tax

Given the difficulties that have been experienced in designing a satisfactory reform of the corporate tax system, it is tempting to consider abolishing the corporate tax altogether. If it did not exist then we would probably not wish to introduce it. Attractive though it might seem, there are problems with this idea. First, if the tax were abolished now there would be windfall gains and losses to individual shareholders. Following the 1984 reform these windfall gains would, on average, be significantly positive. In addition, the easiest way of extracting tax revenue from British subsidiaries of foreign-owned companies and from those shareholders of British companies who reside overseas is to have an independent corporate tax.

The most desirable reform of the corporate tax system, we believe, would be to convert the present tax into a tax based on cash flows. The existing treatment of depreciation makes no allowance for inflation and grants depreciation allowances on some estimate of the rate of decline of true economic value. This is 25% per annum for most types of plant and machinery. But in an uncertain world the rate at which assets depreciate can vary enormously not only from one asset to another but from one project to another. Economic depreciation is just as elusive a concept as economic income, and for the same reasons. The tax system cannot be based on subjective evaluation, and so in practice economic depreciation must be defined in terms of rather arbitrary rules. In contrast, a tax based on cash flows would present none of the problems of defining economic profit.

The principle of the cash-flow tax is that no distinction is made between expenditure on current items (labour, materials, etc.) and expenditure on capital goods. The tax base is simply the difference between receipts from the sales of goods and services (including the proceeds from selling assets) and the money spent on acquiring goods and services. For this reason we shall describe such a tax as a *cash-flow corporation tax*. The essence of the tax is that all receipts and payments, whether they correspond to current or to capital items, enter into the tax base and therefore there is no need to define 'true economic depreciation'.

What would the effect of such a tax be? Imagine a firm contemplating a specific investment project which would cost £1 million. With a cash-flow tax it would be able to deduct the £1 million spent on purchasing equipment against its profits on other projects, thus reducing its total tax payments. If the tax rate were 50% the reduction in taxes would be £½ million. The future profits of the project would also be reduced by 50% by such a tax, and so the net effect is that both the initial outlay and the subsequent returns are reduced by the same proportion, a proportion equal to the rate of tax. The tax scales down the size of the project financed by the company, but it does not alter the rate of return on the money invested in the project by the company. With a 50% tax rate, what the government is saying is 'in any project in which you invest we shall compulsorily acquire a 50% stake, and we shall of course provide half the finance in return for half the profits'. The reason this tax system can raise revenue is that it ensures that if firms are in a position to earn pure profits then the government too will get a good share of the excess profits. It is for this reason that the cash-flow tax is well suited to tackling problems such as how to tax the profits on North Sea oil and gas extraction. We believe that it also represents the best way of allowing for inflation in a simple manner without the need for complicated conventions on how to account for inflation. It taxes companies on those flows that are most important to the companies themselves, namely flows of cash.

In the above example it was crucial that the firm had available profits from other projects against which it could deduct investment expenditure on new projects. But a new or expanding firm might not have sufficient profits for this purpose, and such a possibility was an important element in the decision to replace accelerated depreciation allowances with cash investment grants in

1966. The problem can be partly met by allowing companies to carry forward tax losses, not, as at present, simply at their nominal value, but marked up by an interest factor to allow for the fact that they have to wait to get the benefit of the first-year tax allowances. Alternatively, companies could be allowed to trade unused tax losses so that a company with a tax loss could sell its unused tax credit to a company with positive taxable income.

Because the tax is based on cash flows as and when they occur, there is no need to index for inflation. The distinction between capital and income would be irrelevant, and the effects of inflation would be allowed for automatically without the need for any special adjustment. It is important to stress the simplicity of this system in contrast to the complexity of the alternative methods of calculating taxable profits that have been suggested.

To convert the current tax system into a cash-flow corporation tax would necessitate several changes (see King (1987) for a more detailed discussion). The first would be to bring back 100% first-year allowances and extend them to all types of capital expenditure in order to eliminate any distinction between current and capital items for tax purposes. The proceeds from all sales of assets would be taxed at the corporate tax rate. The other major set of changes that would be required concern the treatment of payments to the suppliers of finance. In principle, interest payments would no longer be tax-deductible. This means that the effective cost to companies of borrowing would be the gross interest rate and not, as at present, the net-of-tax interest rate. But there is a better way of achieving this than simply disallowing interest payments as a tax deduction. This is to allow interest payments to be tax-deductible as at present but to treat new borrowing as a taxable receipt. This would have the desired effect of making the effective cost of borrowing the gross interest rate, and would allow the cash-flow corporation tax to be applied to financial companies.

The taxation of financial companies, primarily banks, raises a number of difficulties. The need to retain the tax deductibility of interest payments exists because the abolition of tax deductibility has as its logical counterpart the abolition of the taxation of interest income. If this were done then any profit made by lending at interest rates higher than those at which money can be borrowed would go untaxed. Yet this is exactly what financial companies do. The reason why they pay lower interest rates than those at which they themselves can lend is that they do not charge

market prices for the financial services they provide. For example, banks have only recently started to pay interest on special current accounts, and on most accounts pay no interest and do not charge the full price for the banking services they offer. The logical treatment is to regard an interest-free current account as representing a combination of an interest-bearing deposit account and a charge for banking services. The present interest-free account is attractive to the customer because the income he is receiving in the form of free services is not taxed. Hence the tax treatment of banks is a problem for both income tax and value added tax, as well as corporation tax. The problems posed by the measurement of bank profits were recognized in 1981 when a special one-off tax on banks related to the size of their deposits was levied.

The final change required for a cash-flow corporation tax is the elimination of imputation credit paid on dividends. The principle of the cash-flow tax is to allow full deduction of all payments for real goods and services but no deduction of payments to the suppliers of finance. Consequently, the imputation system would be abolished and we would return to a classical system of corporation tax in which dividends distributed would be subject to personal income tax.

This proposal would create transitional difficulties if companies were allowed to engage in financial transactions in anticipation of the change in the tax system. They would have an incentive to increase borrowing before the tax was introduced and to repay this debt by the issue of new equity after the new tax came into force. It is not clear that these transitional incentives are any greater than those experienced in previous tax changes in the UK—notably those in 1965 and 1973—but anti-avoidance provisions would be needed. In the UK context, the simplest solution is for the Chancellor to announce that if the proposal were passed by Parliament then the new tax base would apply to transactions in debt or equity from the date of announcement of the tax change. There are precedents for this type of provision, and indeed until very recently the rate of corporation tax in the UK was determined at the end of the tax year rather than in advance.

With satisfactory transitional arrangements, the cash-flow corporation tax offers a means of attaining fiscal neutrality with uniform incentives to invest for all types of investment, and is robust to changes in the inflation rate that are as hard to predict as they are to control.

12
Taxing economic rent

One of the oldest ideas in public finance is that there are advantages in basing tax on economic rent. Most people are familiar with what is meant by the rent of land or buildings, but the concept of rent in economics has a specific technical meaning. It is the amount that a factor of production earns over and above that which it could earn in its next best use. If a singer earns £100,000 a year, and his next best employment would be as a barber at £5,000 per year, then he is obtaining economic rent of £95,000. Two points follow immediately from this example. One is that rent is the result of the scarcity of particular factors of production. If all barbers would make equally good singers, then the earnings of singers would be bid down to the earnings of barbers, and no rent would be derived. The second feature to note is that the rent could be taxed, or otherwise reduced, without any economic distortion resulting. So long as our singer nets more than £5,000 per year, he will continue his present occupation and stay out of the barber's shop.

There is obviously a close association between the concept of economic rent and the everyday notion of rent. Figure 12.1 shows the traditional analysis in a simple economy in which land was mainly used for agricultural purposes. The cost of production is taken to be the same for all land, but land varies greatly in fertility and so does the value of output from it. The economic rent derived from the land is the difference between value and costs, and is positive for all land inside the margin of cultivation—there is some land so poor that it is not worth cultivating. The total rent derived is measured by the shaded triangle.

If the price of the crop were to increase, the value of output would shift outwards and the margin of cultivation would be extended. The economic rent accruing to all the intra-marginal land—which would have been cultivated even at the lower price—will increase. In a competitive market, the rent which farmers will pay to landowners will be equal to the economic rent earned by the

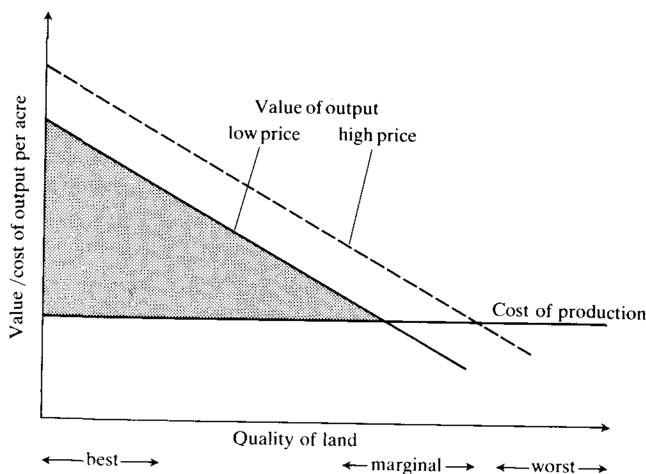


Fig. 12.1. Ecomonic rent in a simple economy

land. Because land has no profitable alternative use, the whole of the rent is economic rent. If the farmer is an owner-occupier, then part of the return to his farming activities will be the economic rent derived from his land—and also any economic rent derived from his superior capabilities as a farmer. Economic rents are often internalized in this way, rather than being the subject of explicit transactions.

At the end of the nineteenth century, a movement led by Henry George argued, vigorously, that for these reasons land should be the principal tax base. This tradition still survives, although it is apparent that the total of economic rents, of all kinds, is not now a sufficiently large proportion of national income for this to be a practicable means of obtaining the resources needed to finance a modern State.

But the underlying intellectual argument for seeking to tax economic rent retains its force. There are areas in which the argument seems especially strong. Economic rents arise from the existence of scarce factors. Often, the availability and distribution of scarce factors are determined by nature—talents for singing, or outstanding views. But there are other scarce factors where the scarcity is created, or allocated, by the community. Examples

might include oil and gas exploration licences, planning permissions, and television franchises.

In this chapter we examine the various ways in which the British tax system attempts to base itself on economic rents. We can generally identify these areas by the existence of special tax regimes on particular activities. We therefore look at property development, at North Sea oil and gas, at television contracting, at gambling, and at banking. In introducing special taxes for these activities, politicians have been motivated less by any sophisticated understanding of the theory of economic rent than by a sense that money was there for the taking. But it is the existence of economic rent which explains why these activities were so profitable and why it might be thought that discriminatorily high taxes could be imposed without inflicting economic damage. An appreciation of the underlying theory will enable us to see when this is possible, and when it is not.

Land and property development

Rent is naturally associated with land and property. But agricultural land is no longer the important source of wealth and income that it was when the economic analysis of rent was conceived. Today, even the best agricultural land is unlikely to be worth more than £5,000 per acre. Land in the south-east of England suitable for housing development may easily sell for £1 million per acre. Office sites in central London are much more valuable still.

These price differences arise mainly because land that is favourably located for offices or housing is scarce. But this scarcity is greatly increased by the existence of planning controls. By limiting further the availability of land for development, these controls enhance the value of sites that are already built on or for which planning permission can be secured. The consequence is that the decision of a planning authority may determine whether a piece of land commands only its low agricultural use value or its development value. Such a decision will rest, not on the amount of work done by the owner of the land or how socially deserving he is, but on consideration of the balance of amenities attached to development in a particular area.

These windfall gains have always appeared promising subjects

for taxation. Moreover, the theory of economic rent suggests that they could be taxed very heavily without inhibiting development. Suppose the award of planning permission increases the value of a plot of land from £5,000 to £1 million. Then even if the resulting gain were taxed at 90%, the developer would still be better off by almost £100,000 using the land for housing than retaining it for agricultural purposes. Substantial incentives to bring projects forward would remain.

There is, however, a weakness in this argument. It supposes that the tax is expected to be permanent. If the developer sees the only alternatives as agricultural use or immediate development, it is obvious that he will prefer immediate development. He may, however, believe that there is another alternative—that of retaining the land and delaying his application for planning permission or his sale of the land until the tax regime is more favourable. If this were to happen, the supply of land for development would be reduced and the price of that land which was available would increase. Contrary to the expectations suggested by the theory of economic rent, a tax on gains from development levied in these circumstances would raise land prices, increase the scarcity of housing and housing land, and inhibit property development generally.

Frequent attempts have been made to implement special taxes on development gains—on three separate occasions since the Second World War. In each case, landowners and developers have believed the tax would not be permanent, and in each case they have been right. The first cycle began with the introduction of planning controls in 1947. This was accompanied by a betterment levy, designed to secure that—eventually—all gains from the grant of planning permissions accrued to the public. The measure raised little revenue and was abolished by the incoming Conservative Government. Rather similar provisions were reintroduced by the next Labour Government in 1966, and again they were repealed.

The most recent tax on development gains was introduced in 1973—by a Conservative government. Before the tax was announced, property prices had been rising very sharply, and the size and scale of development programmes were growing rapidly. The tax was introduced in response to feelings right across the political spectrum that the magnitude and profitability of this activity were

quite out of proportion to its economic significance. The announcement of the new tax more or less coincided, however, with a variety of other political and economic events—war in the Middle East, the oil price rise, the miners' strike, and the defeat of the Government—which brought an abrupt end to the property boom. Property developers were more concerned to stay in business than with how notional gains would be taxed. The charge remained, was recast as development land tax in 1976, but finally abolished in 1985. Gains that arise from the granting of planning permission or from development are now treated in the same way as other capital gains, with a top rate of tax of 40% where the gains accrue to individuals and 35% where they are earned by companies.

Oil and gas

The production of minerals is an activity that generates economic rent. In Figure 12.1, we might read 'most easily worked reserves' in place of 'best land', and 'hardest to work deposits' in place of 'worst land', and our discussion would follow more or less unchanged. By far the most important source of economic rent of this type for Britain is North Sea oil production, although falling oil prices have greatly reduced the amount of revenue raised from it (see Table 12.1).

A special tax regime has been constructed for North Sea activities. A royalty is payable of 12½% of the value of the oil extracted. Petroleum revenue tax (PRT), at 75%, is due on the receipts from selling North Sea oil less the costs of finding it, extracting it, and bringing it ashore. The costs are those incurred in the field from which the oil comes—thus PRT is levied on a 'field basis'. Royalties can be treated as a cost in computing PRT. An 'uplift' provision allows 135% of initial capital expenditures to be offset against PRT. There is an oil allowance of 500,000 tonnes of oil a year which is free of PRT, subject to a cumulative total for each field of 5 million tonnes. There is also a 'safeguard provision' for rebating PRT if the historic cost profitability of a field becomes too low. In 1983 a number of concessions, including the abolition of royalties, were made for new discoveries. In 1988 royalties were abolished on Southern Basin and onshore fields developed after 1 April 1982, and the PRT allowance for such fields was cut to 100,000 tonnes.

Table 12.1: *North Sea oil revenues* (£ million)

	Royalties	SPD	PRT	Mainstream CT	Total
1977/8	228	—	—	10	238
1979/80	628	—	1,435	250	2,313
1981/2	1,396	2,025	2,390	681	6,492
1983/4	1,904	—	6,017	877	8,798
1985/6	2,057	—	6,375	2,911	11,343
1987/8[a]	1,310	—	2,330	1,360	5,000

[a] Forecast from the *Financial Statement and Budget Report 1988–89.*
Source: *Inland Revenue Statistics 1987*, Table 1.3.

Companies are also liable to corporation tax (CT) on their profits. A 'ring-fence' is drawn round the North Sea, so that only expenses or allowances relating to North Sea activities can be deducted in computing liabilities. Before North Sea production began, many oil companies had no liability to mainstream corporation tax. They typically had unused relief from capital allowances, stock relief, double tax relief, and advance corporation tax from their activities on the UK mainland and in the rest of the world. The ring-fence arrangement prevents tax losses and double tax relief derived elsewhere being used against North Sea profits and restricts the capacity of the companies to obtain relief for advance corporation tax.

A fourth tax—supplementary petroleum duty (SPD)—was introduced in 1980. It is a hybrid between royalties and PRT. It is based on 20% of gross revenues less the oil allowance. In 1982 it was renamed advance petroleum revenue tax (APRT), and payments of APRT can be offset against future payments of PRT. The law provides that any APRT that has not been relieved after five years will be refunded.

One additional complication concerns gas production. Until 1983, any company discovering gas in the North Sea was obliged to offer it to the British Gas Corporation. With the power that this restriction gave it, British Gas was able to drive hard bargains and in particular was able to make long-term contracts for gas supplies that were discovered before the 1973/4 oil crisis at prices which were, in the light of subsequent developments, extremely low. These contracts are now very profitable to British Gas, and can be seen, depending on your point of view, either as a public share of

the rents from North Sea gas production or as an economic rent attributable to the conferment and exercise of monopsony buying power. In either event, the rent is substantial and a special tax—the gas levy—is imposed to recoup the proceeds directly for the exchequer. From 1983 to 1987 the gas levy raised £500 million. This tax raises a number of wider issues which we discuss below under privatization.

One might conclude from the complexity of the system that it was a finely tuned instrument in which each element made a contribution to some carefully conceived overall design. This conclusion would be entirely mistaken. The planning period for investing in offshore oil exploration and development is a very long one, and one of the most important objectives of a tax regime for these activities is to provide a stable environment in which such plans can be made. The Government has been spectacularly unsuccessful in achieving this objective, and the tax structure and rates have been subject to substantial modifications every year since they were introduced and have often been changed several times in a year.

Worse than that, the interaction of the taxes is riddled with anomalies. On the one hand, there is a North Sea 'poverty trap', in which tax may take more than 100% of additional revenue from a marginal field; on the other, there is the possibility of 'gold-plating', where more than 100% of additional capital expenditure may be deductible against tax. The potential tax charge on the same discovery, or potential deduction for the same expenditure, varies widely across the North Sea according to the company that undertakes it and the field in which it occurs. The combination of the height of the tax rates imposed, uncertainty about their future, and the random relationship of tax to profitability has now reduced the rate of exploration and development to low levels.

The cash-flow principle is particularly well-suited to the taxation of this type of activity. The mechanics of applying a cash-flow tax on cumulative profitability were described by the Part Committee (1982) and the merits of the approach are very clear. Such a tax is relatively simple, robust to changing circumstances and because it is directly related to economic rent and the measures that oil companies use in appraising investment—expected cash flow—it secures a substantial share of the revenues of highly successful ventures while minimizing the disincentive to marginal ones.

It is often said that in attempting to reform the tax system we are constrained by history. If only we could start from scratch, things would be very different. The sorry history of the taxation of North Sea oil demonstrates that this is not true. We had a chance to invent a new tax system in the 1970s, with a clean slate; and we invented something which in its complexity, anomalies, inequities, and disincentives has all the characteristics of the British tax system as a whole. The fault lies, not with our ancestors, but with the ways in which we determine tax policy. Half-baked measures are hastily devised and then quickly and repeatedly modified to deal with some immediately pressing problem, all without any sense of long-term strategy or of how proposals fit into some overall picture. This book describes the consequences for the tax system as a whole.

Other sources of rent

Economic rents arise wherever individuals or companies have privileged access to scarce factors, and are particularly appropriate subjects for taxation where the government confers access to these scarce factors. It does this when it awards licences to explore and develop in the North Sea. Another example is when it allows the Independent Broadcasting Authority to award television franchises.

When commercial television was introduced in the UK, one contractor was appointed for each region, with a franchise which was subject to regular renewal. Advertising revenue grew rapidly and these franchises became very profitable. Lord Thomson, who controlled the company that obtained the right to broadcast in central Scotland, was reported to have described it as 'a licence to print money'. In a competitive market, this degree of profitability would have attracted new entrants, and returns would quickly have been bid down to normal levels. The regulatory restrictions on television production prevented this happening. Indeed by severely limiting the amount of advertising that companies could transmit—and hence raising its price—they may even have raised these profit levels still further. The Government responded by introducing a special levy on the profits of television contractors.

As with the case of North Sea oil extraction, one of the disadvantages of a high rate of tax on rents is that most of the costs

of production are borne, in effect, by the taxpayer rather than by the company. This may reduce the incentives to efficiency. One way of dealing with this is to sell the rights to the rents for a flat sum equal to their anticipated value, rather than impose a tax on the rents actually derived. The lump-sum nature of the effective tax levied in this way maintains incentives to cost reduction. The Government has experimented—with rather limited success—with auctions of licences for North Sea oil production, and it intends to deal with television franchises in a similar way when these next come up for renewal in 1992.

Gambling is another industry subject to tight restriction. Controls on casinos are particularly severe. It is necessary to establish a Board of bishops, retired police officers, or other persons of unimpeachable reputation to satisfy the Gaming Board that a company is of sufficient standing to hold a licence to run a casino, and even with these spiritual and temporal aids several major public companies have failed to win, or retain, their licences. In consequence the business is extremely profitable for those who are successful in obtaining licences and a special tax regime absorbs some of that profitability.

It is clearly undesirable that there should be a proliferation of industry-specific tax regimes. The results are likely to be inequitable and inefficient and, additionally, associated with an undesirable degree of arbitrary political power. The existence of economic rents provides a particular justification for these *ad hoc* taxes, especially where the rent is conferred by public action. Arguments for other special taxes on profitable industries or activities should be viewed with suspicion. The higher level of profitability is either the product of superior efficiency—in which case it should not be the subject of discriminatory taxation—or the product of the exercise of market power, which should be tackled directly rather than taxed. Only if this is impossible or undesirable does an argument for taxation remain.

Banking is often suggested as a possible victim for special taxation and, indeed, a one-off special levy on banks was imposed in 1981. Some of this simply reflects a primitive distrust of finance. Certainly it is difficult to see how any economic rents accrue in banking. It is true that established banks enjoy an advantage over newcomers to the industry, but this seems no more an appropriate subject for taxation than the good reputation of any other

supplier. Entry to banking is easy and the British clearing banks have seen their retail market share eroded by building societies and their wholesale activities challenged by the growth of American and other international competition. Perhaps the nearest approach to control of a scarce factor is their dominance of the clearing system—the method by which cheques are returned to be debited to the accounts of those who draw them. But, albeit reluctantly, the banks have given newcomers access to this system.

Banking does, however, raise one special problem. Banks operate largely by financing their costs through differences in their borrowing and lending rates. Because their charges are implicit rather than explicit, there are indirect consequences for revenues from income tax, corporation tax, and VAT. The issue was discussed in Chapter 11. Edwards and Mayer (1983) conclude that services provided by banks and other financial institutions should be unbundled, at least for tax purposes, and that some additional tax payment would be the likely outcome.

Privatization

The possibility of tax on economic rent arises where a firm or individual has exclusive access to scarce factors. It is open to governments to create such limited access, and to tax the resulting revenue; and we have noted how this has been attempted or accomplished in such diverse areas as development gains, television contracting, and gambling. In all these instances, the underlying rationale of the restriction is social rather than fiscal. The fiscal opportunity is simply a by-product.

Governments could, however, create monopolies with the primary motive of taxing the resulting profits. The tobacco monopolies of several European countries—such as France and Italy—originate from this approach, although they do not serve this function now. In general, the creation of a monopoly would seem to have no fiscal advantage over achieving the same result by direct taxation, and some potential disadvantages, particularly on incentives to efficiency in the industry concerned; and in both these countries, revenue is now mainly derived from conventional taxation (which applies both to domestic production and to imports) rather than from monopoly profit. A government particularly desperate for revenue could sell the monopoly; by this

means it would derive the capital value of a stream of future profits (or tax revenues) immediately.

In the Middle Ages, disreputable monarchs would raise revenue in this way by the granting of monopolies. Astute merchants would offer to finance the King's expenditure in return for some exclusive trading rights. No modern government would undertake any procedure so crude; but very similar issues arise, in slightly disguised form, in current proposals for privatization. The issue is that a wide range of public sector assets are, in fact, economic rents. Either, because they do represent particular scarce factors, they have not until recently been considered suitable for public ownership; or scarcity and rents have been created by statutory restrictions on competition.

The gas levy discussed above is one example. The rent arises from limitations on competition that may continue to exist even, and often especially, when a public sector firm is privatized. Certain other privatized industries enjoy similar benefit from economic rents. Much of the revenue of British Airways derives from rights to participate in international aviation cartels (Ashworth and Forsyth (1984)). The British Airports Authority derives most of its revenue from two sources, both rents (Starkie and Thompson (1985)). One is landing charges at Heathrow Airport (a scarce factor). The other is the sale of duty-free goods. Not even medieval kings thought of selling the right to sell goods free of taxes imposed on other traders, and it is more than extraordinary that a modern government should plan to do precisely that.

13

The tax system as a whole

Total tax revenue in the UK in 1988/9 will be around £171 billion, equal to 37.5% of GDP (Table 13.1). Income tax is the most important source of revenue, accounting for about a quarter of the total. Next in significance are National Insurance contributions and VAT. Together these three taxes contribute to 60% of the overall yield.

As we saw in Chapter 11, corporation tax, which had dwindled almost to insignificance at the beginning of the decade, has recently become an important revenue-raiser once more. This has more than offset the decline in revenues from North Sea oil production, which had contributed over 5% of total receipts during the 1980s. The other major taxes are local authority rates and the three principal excise duties on alcohol, petrol, and tobacco.

These figures are hard to interpret in isolation. How do tax levels in Britain compare with those in other countries? International comparisons of tax levels are not straightforward. Similar

Table 13.1: *UK tax revenue, 1988/9*

	£ billion	Percentage of total
Income tax	42.1	24.6
National Insurance contributions	31.6	18.5
Corporation taxes	21.0	12.3
Capital taxes	5.0	2.9
VAT	26.2	15.3
Excise duties	20.0	11.7
Other indirect	6.0	3.5
Local authority rates	19.0	11.1
Total	170.9	
Money GDP	456.0	

Source: *Financial Statement and Budget Report 1988–89.*

public objectives may be achieved by direct expenditures or by tax reliefs. One reduces the apparent burden of taxation, the other does not; Britain's switch from child tax allowances to child benefit appeared to make Britain a more heavily taxed country, while the shift from investment grants to depreciation allowances did the reverse. However, the economic significance of all these measures is very much the same. Britain has a free health care system, financed from general taxation, while other countries achieve the same outcome by imposing compulsory contributions to private insurance funds. On the other hand, British taxation and public expenditure are reduced when schemes contract out of the State Earnings-Related Pension Scheme. And countries differ in the way in which the government budget is divided between expenditures which use real resources—where the public sector buys goods and services, as in health, education, and defence—and transactions which represent transfers of income within the private sector—social security and debt interest. Theoretically, expenditure of this second kind (although not the first) could rise above 100% of national income.

With all these caveats, Table 13.2 presents what evidence there is on the level of taxation in Britain relative to other countries. It can be seen that Britain is firmly in the middle of the league. It is a league which appears to have three divisions. The highest tax rates are to be found in Scandinavia and some European countries; the lowest among a rather disparate group of countries which includes Australia, Japan, Switzerland, and the United States. Moreover, this characterization has been true for many years, and, despite much political rhetoric from all sides over the past decade, Britain's relative position has hardly changed. However, the middle division of western European countries has contracted, as France, Belgium, and Holland have pushed their tax burdens to levels which approach Scandinavian figures.

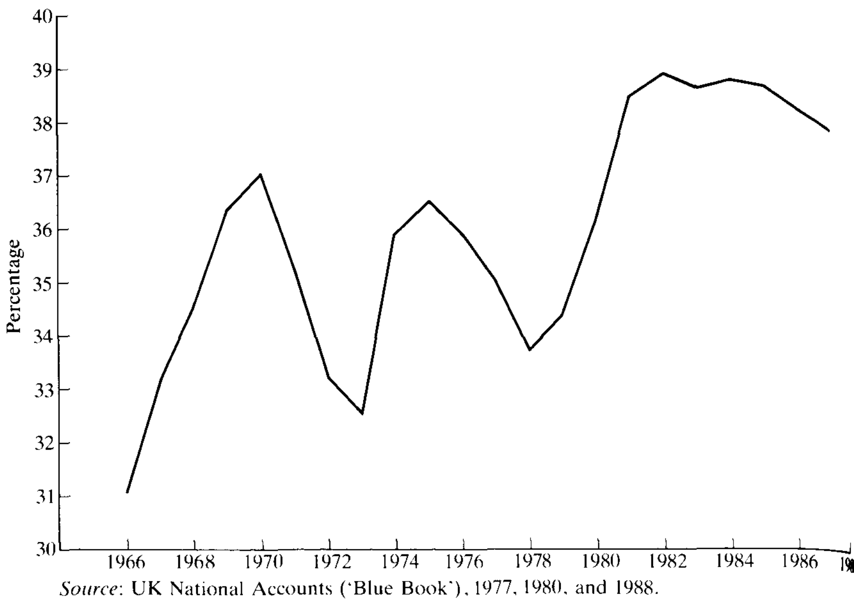
Thus the overall average tax rate is driven by social attitudes and deep-rooted political forces. The Scandinavian countries expect a more extensive range of government welfare provision than exists in the rest of the world, and appear to be able, and willing, to finance it. The low-tax countries have, in the main, limited welfare benefits, while much more of their health and educational expenditure is undertaken by the private sector. In the absence of a more fundamental reassessment of the nature of the relationship

Table 13.2: *Taxation levels, 1985* (taxation as percentage of GDP)

	All taxes	Goods and services	Personal income	Social services
Sweden	50.5	13.3	19.5	12.5
Denmark	49.2	16.8	24.7	1.9
Norway	47.8	17.9	10.8	9.9
Belgium	46.9	11.4	16.0	15.5
France	45.6	13.4	5.8	19.9
Netherlands	45.0	11.6	8.8	19.7
UK	*38.1*	*12.0*	*9.9*	*6.7*
Germany	37.8	9.7	10.8	13.8
New Zealand	34.3	8.0	20.6	nil
Switzerland	32.1	6.1	11.2	10.3
Australia	30.3	9.8	13.7	nil
US	29.2	5.2	10.4	8.6
Japan	28.0	3.9	6.9	8.5
OECD average	37.2	11.2	11.7	9.1

between the British government and the private sector than has been, or seems likely to be, contemplated, it is likely that Britain will remain in its present middling position. If Britain's overall tax rate is average, so too is the way in which the tax burden is made up. Britain collects slightly less than average in income taxes, while rates impose a much higher tax burden than property taxes elsewhere. But these differences are not substantial.

How has the tax burden changed? Since the 1960s the overall tax burden has risen considerably (see Figure 13.1). Until the mid-1970s, the brunt of the increase fell on income tax, and taxes on consumption diminished in significance. Since then, both these trends have been mildly reversed. National Insurance contributions have increased steadily throughout. Interestingly, these trends seem to be common throughout the world. As inflation accelerated, direct taxes tended to increase, because tax thresholds and rate bands were not raised in line with the growth of earnings. At the same time, commodity taxes—often levied as fixed monetary amounts—diminished in real terms. Eventually, these trends were noted, deprecated, and checked. The introduction of VAT in many countries has given them a broad-based, efficiently collected, buoyant commodity tax. And payroll tax increases have been stimulated by the rise in social security expenditures and the ease with which they can be used to derive revenue.



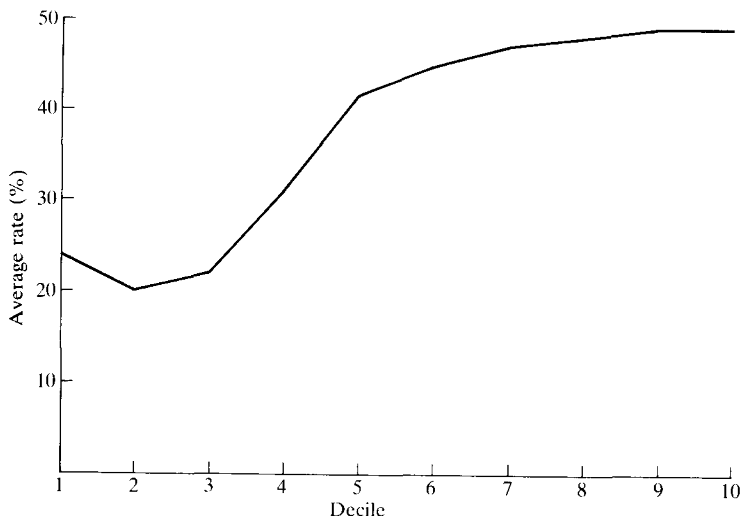
Source: UK National Accounts ('Blue Book'), 1977, 1980, and 1988.

Fig. 13.1. Tax revenue, UK, 1966–87 (share of GDP at market prices)

The distribution of the tax burden

Who pays the tax burden? We have stressed at various points in the book the importance of looking at the distributional impact of the tax system taken as a whole. And it is important to look at the effective, rather than the formal, incidence of each tax and to bear in mind that there is no such thing as a tax on firms: the effective incidence of all taxes is ultimately on individuals.

In Figure 13.2 we show how taxes on households were distributed in 1984. It can be seen that in the lower half of the income distribution the tax system is markedly progressive. The poorest 20% of households pay around 20% of their income (including benefits) in taxes of all kinds. This figure rises steadily until the median household is paying rather more than 40% of its income in taxes of all kinds—recall that the overall average tax rate is a little less than 40%. Thereafter, however, the degree of progressivity is slight, and even the richest 10% of households still

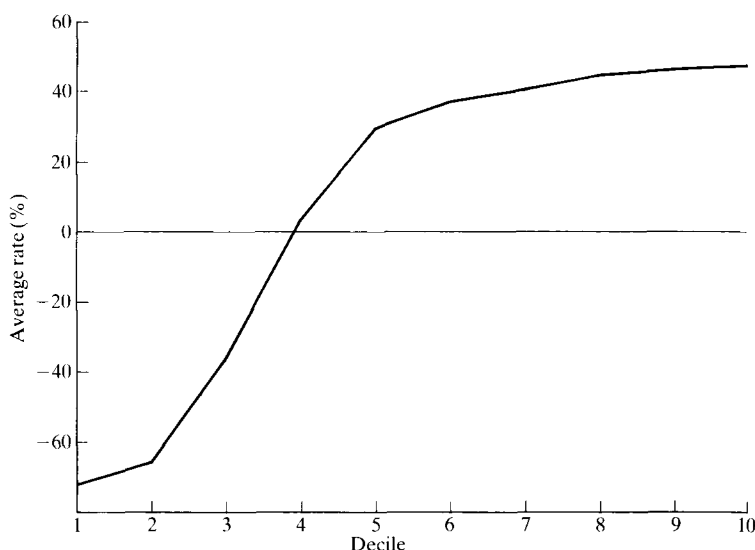


Source: Dilnot and Kay (1989).

Fig. 13.2. Average tax rate by decile (whole population, 1984)

pay less than half their income in tax. The dominant element in this pattern of progressivity is income tax. And this picture—with its initially steep but rapidly flattening slope—reflects the influence of the income tax schedule we described in Chapter 2.

It is, however, more appropriate to evaluate progressivity in the light of the tax and benefit systems taken together. Figure 13.3 shows an equivalent calculation on this basis. For the poorest households, the effective tax rate is approximately minus 70%. This is not an easy figure to interpret. It arises because the poorest households in Britain derive more or less all their income from state benefits. Thus the benefit system provides 100% of their income, or nearly so, while the taxman demands, say, 30% of it back, mostly in indirect taxation. Adding together these two tax rates—minus 100% from benefits and plus 30% from taxes—we obtain an overall 'tax' rate of minus 70%. If there were no overlap between taxes and benefits, this figure could approach minus 100%. The crossover point is reached at about the fourth decile. Around 40% of households receive more in benefits than they pay in taxes, while the remaining 60% pay not only for these transfers



Source: Dilnot and Kay (1989).

Fig. 13.3. Average tax and benefit rate by decile (whole population, 1984)

but also for other elements of the government budget. The shape of the schedule is still very similar to that in Figure 13.2—steeply sloping in the lower half of the income distribution, relatively flat thereafter.

A means of decomposing this overall tax schedule into its various components is shown in Table 13.3. This relies on the fact that the schedule shown in Figure 13.3 is similar in shape to the linear tax schedule illustrated in Figure 1.1. In fact, the British tax system can be well described by a linear tax schedule over a very wide range. What we do in Table 13.3 is to ask the question 'If an employer set out to pay someone at different income levels £1, how much would be taken—both on average and at the margin—in taxes of all kinds?'. Even before the employer calculates gross pay, National Insurance contributions have to be provided, then income tax and a second tranche of National Insurance are deducted. (The income tax rate is lower than the nominal 25%

because the base is gross labour cost, not pay.) When the net pay that remains is taken to the shops, VAT is levied on the goods which are bought. Some of the expenditure will—on average—be on tobacco, alcohol, and petrol, while other taxes formally incident on business—such as commercial and industrial rates—will be raising the prices of goods which are sold in the shops. Adding all these taxes together, we see that the effective marginal tax rate is 57%.

This figure may seem remarkably high, but it is what is needed to obtain an average tax rate of nearly 40% through a progressive tax system. We have also calculated, in Table 13.3, the associated tax credit—the equivalent of the intercept in Figure 1.1. A positive figure denotes a progressive tax while a negative one indicates that the element of taxation concerned is regressive. Income tax is progressive. National Insurance contributions—basically proportional to income—are neither progressive nor regressive, while indirect taxes taken as a whole are regressive in their incidence. Overall, the progressivity of the income tax dominates the whole—reflecting, again, the translation of the general shape of Figure 1.1 into Figure 13.3.

Table 13.3: *Linearization of UK tax system, 1988/9* (couple, both working, basic rate taxpayers)

	Tax credit (£)	Marginal rate (%)
Income tax	1,795	23.0
Employee's NI	—	8.2
Employer's NI	—	9.5
Total direct	1,795	40.7
VAT	−137	7.2
Petrol	26	1.8
Alcoholic drink	−75	2.1
Tobacco	−249	0.9
Housing	−103	0.4
Licences	−103	0.3
Intermediate	−75	3.5
Total indirect	−716	16.2
Total	1,079	56.9

Source: Institute for Fiscal Studies.

Table 13.4: *The tax system as a whole, 1948/9–1988/9 for a two-earner couple*

	Tax credit (£)	Marginal rate (%)
1948	−240	54.4
1958	−107	48.2
1968	−789	54.0
1978	1,518	58.3
1983	1,273	61.1
1988	1,079	56.9

Note: Reflated by changes in average earnings for 1988/9 levels.
Source: Dilnot, Kay and Morris (1984), Table 14.3 and Institute for Fiscal Studies.

In Table 13.4 we consider how this progressivity evolved over time. Remarkably it appears that until the mid–1960s, the British tax system was not progressive at all. Although income tax was a progressive tax, this progressivity was more than offset by the regressive effect of National Insurance contributions and of indirect taxes. The change in progressivity occurred during the period 1968–78. The largest single element in it was the transformation of National Insurance from a flat-rate to an earnings-related tax. But it seems that during that period most components of the tax system moved in the same direction—there was a steady rise in progressivity.

Income tax—always the most progressive element of the tax structure—increased its share of overall tax revenues, while at the same time the schedule itself became more progressive through increases in the marginal rate of tax. The regressivity of indirect taxation was reduced, although the decline in smoking among higher-income households provided a countervailing influence. Since 1978, that increase in progressivity has been slightly reversed. However, the tax system remains far more progressive than at any time before 1970.

These conclusions will surprise many people. This is because political assessment of tax progressivity enormously overrates the significance of the higher rates of tax. The reality is that very few people have ever paid higher rates—the proportion of taxpayers facing them has rarely exceeded 5% of the total and has often been

much lower—and the amount of tax paid at higher rates has always been small. In 1948/9 there were no less than thirteen different rates of income tax, rising to 95%. Yet the basic rate of income tax, then 36%, applied to incomes up to £30,000 (at 1988 earnings levels). The absurd 95% rate applied only above £250,000 (at 1988 earnings levels), and it is likely that some of the thirteen rates were the marginal rate of tax for only a few thousand, or even hundred taxpayers. The reality of the tax system was that the combination of flat-rate National Insurance contributions and high and regressive indirect taxes meant that most richer taxpayers contributed a smaller proportion of their income than their less well-off compatriots.

14

The international context of taxation

The world economy has become increasingly integrated. Trade flows have risen as a proportion of national income and there is now a global capital market. The EEC has embarked on an ambitious plan to establish a single internal market within the Community as soon as possible after 1992. This gives a new importance to the international context within which the British tax system is set.

Differences between the rates or systems in place in various countries may lead to distortions in the pattern of production or trade. The coexistence of different tax regimes may influence the countries in which goods are manufactured, and the countries from which savings are derived and in which investment takes place. Tax administration must consider the issue of jurisdiction: which country is entitled to collect tax on any particular transaction. These issues of distortion and jurisdiction are quite distinct. The problem of jurisdiction arises because tax revenues accrue to many different exchequers, and would remain even if everyone had exactly the same tax system. Distortions arise because there are many different tax systems, and would remain even if all revenues accrued to the same government. In practice, however, the consequences of distortion and jurisdiction interact.

The internationalization of the economic life also creates problems of tax enforcement. Countries differ in the vigour and success with which they collect tax, and governments lack the incentive or the ability to enforce the revenue laws of other states. This has led to the imposition of controls on flows of trade and capital across borders in order to protect domestic revenue. The battle against smuggling is one of the oldest traditions of revenue enforcement, and modern governments have been equally concerned about the opportunities to evade tax which arise from the opportunity to export capital. These controls, however, inhibit the development of innocent trade as well as trade whose objective is to avoid tax. A primary concern for the European Community has

been to find measures which enable these controls to be relaxed without undermining the integrity of revenue collection. This chapter considers in turn the issues of distortion, jurisdiction, enforcement, and the co-ordination of tax within the European Community (EC).

Taxation and trade distortion

Trade distortion is principally the result of direct rather than indirect taxation. Since we expressed scepticism in Chapter 8 about the economic significance of this conventional distinction, it is necessary to explain rather carefully why this is so. Most of what are generally called direct taxes are levied on factors of production, while indirect taxes are imposed on goods consumed. In Chapter 8, we described how VAT might be levied by reference to accounts (an origin basis) or on output (the destination basis which is used in the UK and other EC states). It is generally easier to change the location of production in response to taxation than to change the location of consumption. Hence distortions are more often the result of differences in taxes on production than differences in taxes on consumption. This is the important underlying distinction—that between taxes on production and consumption—and it is broadly equivalent to the more common direct–indirect distinction.

The exceptions to this generalization—that it is direct rather than indirect taxes that have important trade effects—are so conspicuous as to attract disproportionate attention. Cross-border shopping is a problem in certain areas where there are densely populated frontier areas. Shoppers from the south of Ireland benefit from the lower rates of VAT and excise duty which apply in the north. Luxemburg's modest tax rates cause some embarrassment to its European neighbours. And there are many anecdotes about borders between states or countries which are lined with petrol stations or liquor stores. These differences in tax rates have created the absurd institution of the duty-free shop, which has become an inefficient mechanism of public subsidy to airports and ferries. But although this artificial trade does impose some limitation on the freedom of countries to impose very high indirect tax rates, there are few cases where it seriously endangers

revenue, and the effort involved, both in evasion and enforcement, is better characterized as harmless fun than as seriously damaging to welfare.

Indirect taxes do impose distortions and welfare losses where they are not destination-based—where taxes are levied on intermediate stages of production, or are not rebated on exports and levied on imports. Examples include business rates and taxes on diesel fuel, both of which raise production costs. Exemptions in the VAT system have a similar effect. Thus the zero-rating of non-residential construction gave British financial institutions (producing output which is largely exempt) an advantage over their continental European competitors, who were obliged to pay the standard rate of VAT on their construction expenditures. It cannot be said that the advantage was very great, and it has now been eliminated, since the European Court ruled that the provision violated the rules of the Community.

The most important tax on factors of production is the income tax on individuals. If labour income is taxed too heavily in country A, you can often reduce the burden by working in country B instead. Again, this is an issue which generates more anecdote than evidence of serious effect. The study by Fiegehen and Reddaway (1981) showed that even the high tax rates of the 1970s appeared to have had little effect on the mobility of senior managers in practice. For most people, the ties of family, home, culture, and language outweigh fiscal incentives to work in other countries, and the opportunities for advancement within multinational companies dominate the fiscal benefits of a lower tax rate on a lower salary. There are obvious exceptions—entertainers and professional sportsmen and women. But when the Inland Revenue published a consultation document on changes to the concept of residence for tax purposes, most of the practitioner response was to the effect that mobile managers were being penalized too heavily rather than moving to minimize tax. The competition between countries in the 1980s to lower their top rates of income tax—which we discuss more fully at pp. 222–3 below—is essentially a political rather than an economic competition.

The most significant distortions are those introduced by corporation tax. Some of these distortions are, of course, intentional. When the Republic of Ireland set a corporation tax rate of 10% for much of manufacturing industry, its principal objective was to

induce companies to establish plants in that country when it might otherwise have been uneconomic to do so. Most of the gains from this policy will be earned at the expense of other countries. Indeed, since the output which such a policy creates is necessarily high-cost production, it is likely that the high-cost output which results has the consequences that the gains to Ireland, or any other country acting in this way, will be less than the costs imposed on the rest of the world. Other countries may then react by making similar changes in their own tax systems, and the outcome may have negative results for everyone.

There is therefore a common interest in refraining from this destructive competition. The provisions of the Treaty of Rome which restrict the use of state aids are designed for this purpose but, although they have enjoyed some success in limiting the use of industrial subsidies and ensuring that regional policies across the European Community are co-ordinated rather than competitive, the opportunity to apply similar principles to corporate tax systems has proved limited.

Similar issues arise in the taxation of savings and investment more generally. Capital is highly mobile. When this is the case, is it desirable to harmonize tax rates on income from capital? This question is very relevant to the completion of the internal market after 1992, and the removal of all barriers to capital mobility that is part of this process.

In an economy which is either closed or where there is no international capital mobility, saving and investment must be equal. Tax incentives to affect one will also affect the other. But in an open economy with capital mobility, domestic saving and domestic investment can differ. This has important consequences. Consider a group of countries (the EEC, for example) among which capital may flow freely. A natural objective of an economic community is to ensure an efficient allocation of investment resources within that community. This would be achieved by equalizing the marginal rates of return on investment in each member country. But these are influenced, as we saw in Chapter 10, by the tax treatment of corporate investment. Suppose that the tax treatment of income from capital is on a residence basis, i.e. the tax liability of a resident in any of the countries on an ECU (European Currency Unit) of investment income is independent of the country in which the income originates. Then equilibrium in

the EEC capital market requires that the market (pre-tax) interest rate is the same in all countries. The relationship between the required rate of return on an investment project and the interest rate depends upon the corporate tax system. For debt-financed projects the required rate of return equals the interest rate (adjusted for risk) when the corporate tax system allows true economic depreciation. If all member countries adopted a corporate tax system with this property then the rates of return on investment would be equalized throughout the Community even though rates of tax were not harmonized. Equally, a cash-flow corporation tax—discussed in Chapter 11—would result in marginal rates of return equal to the (common) interest rate without the need to harmonize the rate of corporation tax. The lesson is that the first priority is to harmonize the base of corporation tax.

As far as savings are concerned, if income is taxed on a residence basis then savings will flow to wherever the pre-tax yield is highest. The case for harmonizing the taxation of income from capital at the personal level is much weaker. Personal taxes determine the post-tax return on savings, and hence the relative tax rates on consumption today versus consumption tomorrow by domestic residents. Since, as we argue below, the case for harmonizing tax rates on different types of consumption is not strong, it is not apparent that the EEC need intervene in the savings incentives given by member governments provided that these do not discriminate against overseas assets.

Harmonization of tax rates is more important when we turn to issues of jurisdiction and enforcement.

Despite some worthy analyses by the OECD, progress in international co-ordination of corporate tax systems in a context wider than the European Community has been negligible. Such progress as has been made relates more to issues of jurisdiction and enforcement than to the more fundamental objective of ensuring a corporate tax regime consistent with a free international trading order.

Jurisdiction

Jurisdiction is the question of who is entitled to collect any particular tax. In a sense, this is one of the oldest problems in taxation. Invading kings and emperors, and private individuals

ranging from brigands through toll-keepers to Robin Hood, attempted to assert the right to collect taxes by a combination of fair and foul means, and citizens attempted to minimize the number of jurisdictions to which they were subject. In a more stable and ordered world, these matters are pursued in international conventions and the negotiation of double tax treaties.

Jurisdiction is not simply a problem between nation states—it arises equally where there are multiple governments within a country. So long as there are several pots into which tax revenues may go, rules are required to determine which is the appropriate pot in any particular case. The key element in these rules is one which associates a tax liability with a geographical place. Property taxes are a popular means of financing local government across the world precisely because the issue of jurisdiction is so easily resolved. A building has a well-defined location, it is easy to determine what that location is, and it can only ever be in one place at a time. On the other hand, suppose a Swiss pharmaceutical company discovers a new drug in its laboratories in the United States, the product is manufactured in Belgium, and sold in the UK at a very substantial mark-up on the cost of the raw materials used. Where does the profit on that transaction arise? It is likely that all four countries involved will wish to demand a share of the income generated and there are no obvious criteria for resolving their conflicting claims.

Jurisdiction is usually easily resolved for commodity taxes. Taxes on goods are levied by reference to the place of supply and it is generally obvious enough where the place of supply is. The same is true of most services: tax is charged on a haircut or a restaurant meal by the authority in whose area the hairdressing salon or the restaurant is located. There is, however, an important difference between the way in which goods and services are treated. If an American visiting London buys a cashmere sweater in Harrods, VAT on the transaction will be refunded when he exports the sweater—the basis of jurisdiction is determined by where the commodity is consumed, not where it is purchased. If our US visitor has his hair cut at the same time, VAT will be charged on the transaction, even though the product is undoubtedly exported—there is no equivalent treatment of exports of services. If the purpose of his visit to London is to take legal advice, it is likely that the transaction will be zero-rated, not because it is exported—it is not easy to watch a service being exported, though there are

some exceptions, such as haircuts—but because it is an international service and international services are zero-rated.

As technology advances, services become more international and these issues—which have always arisen but have generally been of minor significance—start to become central. For centuries, stamp duties have been an important basis for taxation, and governments required that documents be embossed with a revenue stamp when a transaction was completed. But if the transaction is an entry in an electronic ledger, it is far from clear where—if anywhere—it takes place and it cannot be controlled by stamping a document. Stamp duty on purchases of securities in London has been reduced in the last ten years from 2% to ½% as it became clear that maintenance of the old high rates would lead to the development of new ways of doing business which would yield no revenue at all.

The major jurisdictional issues, however, are those which affect personal and corporate income taxes. Most people work, live, and spend most of their income in a single country, and it is clear enough which country should collect the tax on that income. For those with more complex affairs, however, British tax law defines three concepts: *residence* (the country where you mainly live in a particular tax year), *ordinary residence* (the country where you usually live), and *domicile* (the country with which you have the strongest associations). Your tax liability on any item of income depends on the particular combination of residence, ordinary residence, and domicile that characterizes your circumstances, and any number of permutations of these concepts are possible. These are complications which will grow in significance as more people come to adopt international life-styles.

The principal source of difficulty, however, is that there is no consistency between countries on the principles which form the basis of jurisdiction. In Britain, the Inland Revenue is not very interested in the colour of your passport—its primary concerns are with residence, ordinary residence, and domicile[1]—but the American Government seeks to tax US citizens on their world-wide income wherever it is derived or wherever the individuals themselves decide to live. The effect of these incompatible bases

[1] A consultative document (Inland Revenue (1988)) proposes some changes to this.

of jurisdiction is that the same income may be subject to tax in many countries, or in none.

This arises most frequently with corporation tax, because of the growth of multinational corporations. Not only do they account for a growing proportion of economic activity, but they have greater opportunities than most individuals to arrange their affairs so as to minimize their tax liabilities. The basic principles of UK tax law are that UK-resident corporations are subject to tax on the whole of their income wherever derived, which means that branches of UK companies operating overseas are taxed as if the operations concerned took place in the UK. If UK companies operate abroad through subsidiaries which are themselves non-resident, the parent is liable to tax only on their profits which they remit to it, while non-resident companies operating in the UK are subject to tax on the income arising in the UK.

It should come as no surprise that none of this works very well. There are two fundamental weaknesses in the approach. One is the concept of corporate residence. It arises because, as we saw in Chapter 11, the taxation of British companies grew out of the taxation of individuals. Now it makes sense to ask where an individual is resident, but a company is not resident anywhere. A company may operate, or sell goods, in many countries but that does not tell you where it is resident. The Courts, and the Inland Revenue, have struggled for a century with this misconceived question, but the absence of a clear basis of jurisdiction continues to pose problems. One of the most widespread corporate tax avoidance devices of the decade—the so-called Delaware link—involved the creation of companies incorporated in the US (and hence subject to US jurisdiction) but also resident in the UK, enabling tax deductions to be obtained for the same interest payment in both countries.

The second weakness is that the relationship between a company and its wholly-owned subsidiary is completely under the control of the company itself and the attempt to distinguish the two entities for tax purposes is doomed to frustration. The tax authorities of the world seek to make that distinction by imposing 'arm's-length' transfer prices on transactions between associated companies in order to prevent profits being transferred to the jurisdiction with the lower tax rate, and also by setting arbitrary restrictions on the way in which subsidiary companies may be

capitalized. But the essential nature of much multinational activity is that there is no free market in the services which parts of the organization provide to each other. We noted above the problem of the drug company whose ownership, production, research, and sales are located in different countries. It should be stressed that there is, even in principle, no correct answer to the question of where the income arising in this process accrues. One arbitrary division is as good as any other, and even if the different tax authorities involved had full information and boundless goodwill —which is very far from the case—there is no right answer to the question of who should collect which tax.

Double tax treaties are the means by which countries attempt to iron out some of the disruption to international trade and capital movements which would otherwise arise from multiple claims to jurisdiction. It should be stressed, however, that these are palliatives for an unresolved problem, not a solution. A more common difficulty, however, is not that there are too many jurisdictions, but too few: not too much tax, but too little. Many major companies have financing subsidiaries based, for example, in the Netherlands Antilles. It goes without saying that nothing of substance happens in the Netherlands Antilles and that few of those who purport to do business there could locate the islands on the map.

There are two means of escaping these difficulties. One is to concentrate more on taxes which are robust to problems of jurisdiction. We have seen, for example, that value added tax is largely free of these complications. The basis of a jurisdictional claim is reasonably well defined and countries administer the tax in ways which are readily compatible at the international level. There is consequently no need for protracted negotiation of international treaties and few opportunities for using the crevices in the system for the purpose of tax avoidance.

The second mechanism is formula apportionment—countries agree among themselves on how the tax base should be defined and how it should be divided between competing jurisdictions. This is broadly how corporate income taxes are levied in the United States, and it allows different states the capacity to levy tax at different rates without major conflicts or anomalies. Thus an American firm will pay Massachusetts tax on a share of its US income which reflects the proportion of its sales, employment, and

assets which occur in Massachusetts. This system is often known as unitary taxation.

In the last decade, some American states, led by California, have attempted to apply this system to the world-wide income of multinational corporations. The controversy which resulted has been one of the principal diplomatic issues in Anglo-American relations in recent years and, under intense pressure from the British Government, the attempt to apply unitary taxation internationally as well as domestically has now been abandoned, at least for the time being. There are good and bad reasons for this. Unitary taxation, generally applied, makes companies pay tax, somewhere, on all their income—the Netherlands Antilles location or the Delaware link fails unless the company actually operates in the Netherlands Antilles or in Delaware. This greater effectiveness of international corporate taxation is unwelcome to the companies concerned, which are almost the only groups that understand these issues, but good news for other taxpayers. However, most formulas have been biased in favour of the governments choosing the formulas. Without international agreement on the basis of apportionment—which will not be easily secured—unitary taxation might create more anomalies and distortions than it removes. Nevertheless we believe that it is inevitable that the European Community must move in this direction, and we discuss that issue further below.

Enforcement

It is difficult for any country to rely on another to enforce its tax system. Governments may be willing to give their tax authorities strong powers to investigate the affairs of those who are evading national taxes and to impose penalties on those who are caught. They will be reluctant to give anyone similar powers to collect taxes which are due in other countries. Moreover, some jurisdictions have very high standards of tax administration, and others not. In Scandinavia, social attitudes seem to secure general compliance with systems that involve some of the highest rates of taxation in the world; but in Italy, evasion of VAT appears to be endemic (Pedone (1981)). Some countries make a profitable business out of the exercise of discretion in financial matters,

especially those involving foreigners. The trail that runs to Switzerland or Liechtenstein generally runs cold.

Governments have generally responded by throwing fiscal frontiers round their borders. Customs officials monitor imports and exports to ensure that excise duties and VAT are duly paid. Controls over capital movements, usually the product of broader macro-economic objectives, often have the subsidiary purpose of impeding evasion of taxes on wealth and investment income. Sometimes this has become a primary objective. In spite of this, few developing countries succeed in collecting much tax on the capital income of their wealthy residents. And these measures to collect taxation by restricting inward and outward flows of goods, services, and capital impede the progress of economic integration.

It is therefore desirable to find other ways of limiting opportunities for tax evasion. Withholding taxes will help and in January 1989, the European Commission proposed a 15% withholding tax on investment income payable to EEC residents. If all countries deduct tax on investment income, that reduces the incentive for a foreign investor to conceal the income from his own national revenue authorities or to put the money overseas in the first place. And the slowly developing co-operation between national revenue authorities will improve the situation. The exchange of information does not, in fact, have to be very extensive: it may be enough for people to believe that it occurs. Yet there are both dangers and limitations in the development of this international co-operation in tax administration. We are not much concerned by the libertarian objections which are currently a block on progress. The freedom to evade tax is not one to which we attach value, although it is an unfortunate consequence of the persistent inequities of the tax system as a whole that many honest taxpayers no longer have sufficient confidence in the fairness of tax administration to entrust it with adequate powers to detect and deter evasion.

The internationalization of tax systems and tax collection does carry the danger that the standards of all are bid down to the standards of the lowest. More than that, international co-operation has to include many countries to be effective. If some countries do not impose withholding taxes, or do not participate in the exchange of information, that seriously undermines the position of those that do. Moreover, as the number that co-operate increases, the potential benefits of being the country that does not increase also. Our assessment is that the long-term

problems of enforcing a tax on capital income by reference to the residence of the taxpayer rather than the source of the income are probably intractable. This is already substantially true for personal income tax in the third world and for corporation tax everywhere and, before long, it is likely to be true for the personal income tax in developed countries also. This gives additional force to the arguments for expenditure and cash-flow taxation which we have developed elsewhere.

Harmonization within the European Community

The proposals for fiscal harmonization within the European Community which the Commission has currently put forward as part of its campaign to complete the internal market in 1992 are, although radical in their implications, limited in their scope. The Commission has not sought to look for a tax system which could reduce distortion, or reconcile the problems of jurisdiction. Instead it has been primarily concerned to find mechanisms which will allow states to remove fiscal frontiers while retaining separate jurisdiction and without creating new or additional distortion.

The fiscal package for 1992 has been described as 'convergence by reference to points of departure rather than points of arrival'. This means that the Commission has *not* asked the question 'What would be the best tax structure for the Community as a whole?'. Instead, it has sought to put forward a regime which, particularly in rate structure, represents an average of existing positions. Thus 'it must be clearly understood that the present package is not an attempt to design an ideal fiscal system for the Community but a blueprint for the abolition of fiscal frontiers . . . [The Commission has] confined itself to setting out the minimum changes which must be made to . . . achieve a sufficient degree of fiscal approximation' (Commission of the European Communities (1987)).

The range of VAT rates currently charged in EC member states is shown in Table 14.1. The standard rate varies from 12% (Luxemburg, Spain) to 22% (Denmark) and 25% for many commodities in Ireland. The number of rates ranges from one in Denmark—which applies a flat 22% rate to almost all commodities—to seven in France. Three countries—the UK, Ireland, and Portugal—apply a zero rate to a significant range of goods and services, including foods. Before the present 1992 campaign, the Commission had not been seriously concerned to promote greater

uniformity in rate structures, except in attempting to restrict the use of zero-rating. The Sixth Directive on VAT, published in 1977, has encouraged some convergence on the tax base. Most countries exempt health and education and a number of other services, such as posts. Financial services are, in the main, exempt and in the Community generally (although not the UK) new residential construction is taxed and rents are exempt from VAT.

The scheme put forward by the Commission would require each country to adopt a common rate structure with a standard and a reduced rate. The plan does not insist on complete harmonization: each state would be free to choose a higher rate in the range 14–20% and a lower rate in the range 4–9%. There would, however, be convergence on the base. Current exemptions would mostly remain. The lower rate would apply to foodstuffs, fuel, water supplies, medicines, books, newspapers and periodicals, and public transport. All other goods and services would then be subject to the standard rate.

The normal mechanism by which VAT is collected is that tax is chargeable on the whole of a firm's output. If the purchaser is another registered trader in the same country, he can reclaim the VAT paid against his own potential liability. Exports—whether to another EEC country or elsewhere—are zero-rated, so that they may be excluded from taxable output. Traders classify output themselves, but they may be required to provide evidence—including documentation produced for purposes of border controls

Table 14.1: *VAT rates in the European Community, April 1987*

	Reduced	Standard	Higher
Belgium	6, 17	19	25, 33
Denmark	—	22	—
France	2.1–13	18.6	33.3
Germany	7	14	—
Greece	6	18	36
Ireland	0, 10	25	—
Italy	2, 9	18	38
Luxemburg	3	12	—
Netherlands	6	20	30
Portugal	8	16	30
Spain	6	12	33
UK	0	15	—

Source: Lee, Pearson, and Smith (1988).

—in support of their claim that tax is not payable on a portion of their output because it was exported. When the goods are imported into another country which levies VAT (including all EEC states), tax is payable by the importer when the goods cross the frontier. In practice, the goods can normally be brought into the country against a guarantee of payment.

Under the Commission's proposals, exports to other member states would no longer be zero-rated, and registered traders in other EEC countries would be treated as traders within the same country are now. Thus if a German firm buys materials from an Italian producer, it now reclaims the VAT paid (at German rates) by the German importer, or pays such VAT itself and offsets it against tax payable on its own output. This is illustrated in Figure 14.1. In future, it would reclaim the VAT paid (at Italian rates) by the Italian exporter, illustrated in Figure 14.2.

A side-effect of this change—but a critical one—is that the VAT which was formerly paid in Germany, and repaid in Germany, would now be paid in Italy and repaid in Germany. Until Europe is a great deal more united than it is now, this outcome is not likely to be congenial to the German Government. The EEC therefore intends to establish a clearing-house in which all payments would be redistributed to their country of origin. Since no tax would be refunded, or levied, when goods crossed the frontier in transit from one community state to another, border formalities would be unnecessary to administer VAT in this system.

Most EC member states impose substantial excise duties on alcoholic drinks, tobacco, and petrol. There are, however, massive differences in the tax structures adopted and in rates of tax (Table 14.2). There are three principal categories of alcoholic drink—spirits, wines, and beer. Northern European countries tend to tax all drinks more heavily and wine-producing states tax wine lightly, if at all. Taxation of spirits and beer is normally related to the alcoholic strength of the product, while that of wine is based on its volume regardless of strength. The Commission's proposals represent an arithmetic average of the existing levels of these taxes across the Community.

As we saw in Chapter 8, tobacco is subject to two types of tax (in addition to VAT)—a specific duty, chargeable per cigarette, and an *ad valorem* tax, based on the price of the cigarettes. There are considerable variations in the level and structure of these taxes

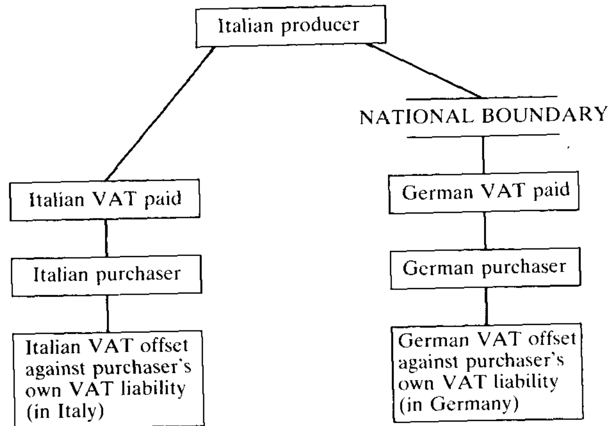


Fig. 14.1. How VAT is currently administered

Table 14.2: *Rates of excise duty in the EEC, April 1986* (ECU)

	Alcohol		Tobacco[a]		Fuel[b]	
	Spirits[c]	Wine[d]	Specific	*Ad*[e] *valorem*[c] (%)	Petrol	Derv
Denmark	10.5	1.57	1.52	39	0.46	0.19
UK	7.45	1.54	0.96	34	0.31	0.26
Germany	3.52	—	0.52	44	0.24	0.20
France	3.45	0.03	71	0.39	0.19	0.19
Italy	0.69	—	0.03	69	0.53	0.12
Spain	0.93	—	0.01	35	0.20	0.03
EC proposal	3.81	0.17	0.39	52–54	0.34	0.18

[a] For cigarettes in the most popular price category.
[b] Per litre.
[c] Per 0.75 litre bottle, standard strength.
[d] Per litre.
[e] Including VAT.
Note: At 1 January 1989, 1 ECU was worth approximately 63p.
Source: Lee, Pearson, and Smith (1988).

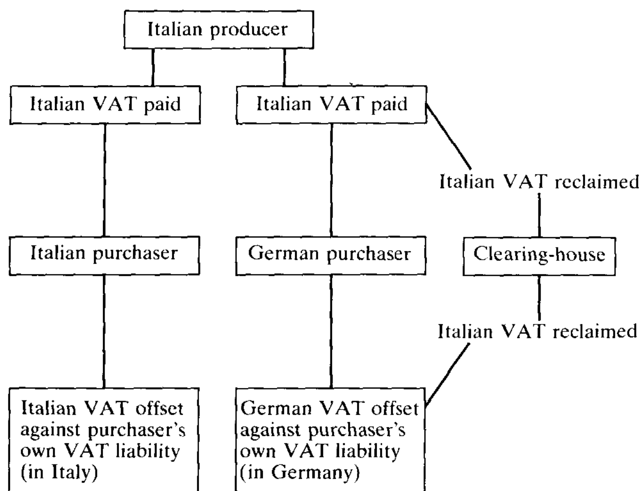


Fig. 14.2. VAT administration after 1992

across countries. Again, what is proposed is that all states should levy tax at the (unweighted) average rate of individual countries and, because small countries (Denmark and Ireland) apply the highest rates, this amounts to a substantial increase in tobacco taxation for the community as a whole. Diesel fuel (derv)—used mostly, but not exclusively, by commercial hauliers—is everywhere taxed more lightly than petrol—used mostly, but not exclusively, by private motorists. Averaging of the tax rates would lead to a tax on petrol roughly twice the level imposed on derv.

The scale of the tax rate changes required of member states under the Commission's proposals are a formidable obstacle to their implementation. The changes include the termination of zero-rating under VAT in Ireland and the UK, and the introduction of wine taxation in Germany, France, Italy, Portugal, and Spain. The effect in Denmark would be tax cuts of around 60% for spirits, 90% for wine, and 75% for beer. Tobacco taxation would

be halved in Ireland, while cigarette prices in Greece would be doubled.

Changes of this scale would involve profound social and economic adjustments in many member states. Opposition to the proposed changes in alcohol and tobacco taxation is likely to be particularly strong. This is true both in those member states where, for reasons of health policy and revenue, duties are currently high, and in those member states such as Greece which would be required to impose substantial levels of duty on cigarettes and spirits for the first time.

The overall fiscal impact on the budget of several member states would be considerable. In particular, Denmark—which has recently reduced its budget deficit at considerable political cost—would be required to sacrifice about 10% of its total tax revenue, and the figure for Ireland, which continues to run a major budget deficit, would be close to 5%. Member states would give up national control over rates of excise duty, although they would remain free to vary VAT in the light of domestic budgetary or other requirements, provided they remained within the bands prescribed by the proposed directive. Taken together, these observations must raise serious doubts about the political realism of the proposals.

Implementation of the Commission's proposals would require, for at least half the member states of the Community, the most radical fiscal reform in their history. Such a reform would not be promoted by, or the result of, internal political pressures. Indeed in almost all cases it would involve a range of specific measures which would be unattractive both to the principal interest groups and to public opinion generally within the countries concerned. Like them or not, the current differences in fiscal systems across the member states of the Community are not the result of mere vexatiousness—they are the product of divergences in fiscal history, public views, and political balance.

The problems of collective administration of indirect taxation raise a number of difficult issues. At present, VAT is operated by self-reporting subject to sample checks: an inspector will check to ensure that output has been properly accounted for (either as a taxable supply or as an export) and that claims for refund or tax offset are properly supported by invoices from other registered traders. The quality of administration varies widely across the

Community: as a broad generalization, it is considerably higher in the northern European states than in the south, and in some countries VAT evasion is endemic. In the post-1992 world, documentation issued anywhere in the Community would be acceptable evidence in any other state and verification would be accomplished by international co-operation. Similar requirements would apply to excise duties.

Now it is not inconceivable that such a system could be made to work. It would certainly be an undertaking of formidable proportions. But if it were to be accomplished by 1992 or indeed in any realistic time-scale, it would be essential to develop the systems and relationships needed to make it operate well before the date at which collection of indirect tax revenue throughout the Community became dependent on it. Detailed proposals for the administration of the clearing-house are still awaited.

Indeed there is little evidence that member states are taking any substantial steps towards implementing the fiscal changes which the 1992 programme would require. Few, if any, of the major tax reforms which have taken place in several community states appear to have been influenced by the requirements of 1992. The governments of Denmark, Ireland, and the UK have made clear, with varying emphasis, the difficulties which implementation would pose for them. While the Single European Act, which became effective in 1987, allows proposals in many areas of community affairs to be approved by qualified majority voting, fiscal changes require unanimity. There seems little prospect, at present, that such unanimity will be achieved.

However, the virtual certainty that the Commission's hopes will not be realized should not be interpreted as meaning that nothing will occur. Changes will certainly happen, and there are three principal realistic options: the postponement of 1992, the development of a two-tier community, and a compromise involving significantly more limited reform than the Commission has in mind.

The European Community has, on many previous occasions, 'stopped the clock' when negotiating an issue. It is possible that on this occasion they would stop the calendar. 1992 would have many more than 365 days and the removal of border controls which everyone currently associates with 1992 will not happen until 1993 or 1994 or 1995.

The weakness of this particular scenario is that there is no particular reason to think that the problems which prevent realization of the Community ideals in 1992 will be any easier to resolve by 1993 or 1995. Perhaps Ireland's budget deficit will by then have diminished—the problems that country faces if it has not will by then be enormous—but broader political difficulties will remain, particularly those that relate to the taxation of alcohol and tobacco. The problems of approximating VAT may be equally intractable. Although the deferral of 1992 is certainly a likely event, the probability that the deferral would then prove indefinite must be rated high.

The second option would be the development of a 'two-tier' community. The fiscal adjustments required by the Commission proposals are considerably more severe for the outer group of community states, in a geographical sense, than for the inner historic core. The changes demanded of the Benelux countries, France, Germany, and Italy, are considerably easier to implement than those needed in Denmark, Greece, Ireland, Portugal, Spain, and the UK. This happy coincidence of geography and politics could be exploited to allow the creation of an area within the Community within which trade could take place freely and an area against which barriers would remain. Matters are not quite as simple as this suggests—in particular, the problems of integrating VAT administration in Germany and Italy remain—but an outcome along these lines seems considerably more realistic than full implementation.

Those countries in the second tier, of course, would derive the worst of all worlds from this outcome. It is a scenario in which 1992 is a reality, but a reality from which they are excluded. This is precisely the position in which business in Austria, Sweden, and Switzerland, in particular, already fears it might find itself. The possibility is that half the states of the Community will find themselves similarly placed.

The third outcome is to pursue solutions which could, by administrative reform, allow the persistence of tax rate and base differences between member states while still achieving the elimination or substantial reduction of border controls. Measures of this kind have been suggested, for example, by Cnossen and Shoup (1987). Indeed, this effect could largely be achieved if the

existing draft Fourteenth Directive—which provides for adjustments related to exports and imports to be administered domestically rather than at the frontier—were widely implemented.

Harmonization of direct taxation

The proposals contained in the Commission's plans for 1992 relate entirely to indirect taxation. This reflects the limited objective from which the proposals begin—that of permitting the removal of border controls between member states. The Commission has not been concerned primarily to devise measures which would remove distortions in the patterns of trade and production within the Community. It may be seen from our analysis that it is principally direct taxes—income and corporation tax—which are relevant to these.

Convergence in the income tax systems of member states is a very distant goal. Even federal countries such as Switzerland and the United States continue to have differences in rates and tax base between local jurisdictions. Discussion of income tax structures at the Community level has so far been concerned with specific issues which arise when individuals move between countries, such as conflicts of jurisdiction which require double taxation relief and the taxation of frontier and migrant workers. These problems may grow in significance as integration progresses.

It has recently been recognized, however, that there is one direct tax issue which needs to be faced immediately if border formalities are to be eliminated. If exchange controls between member states are abolished, the problem of enforcing taxation on capital income becomes much greater if rich individuals believe they can escape tax by shifting their assets elsewhere. This not only erodes the tax base, but may have damaging economic consequences for the countries concerned. This is a serious problem for France and Italy and some of the countries which have recently acceded to the Community in which there is a long tradition of strict capital controls, illegal capital export, and low standards of tax morality. A European system of withholding tax is seen as a possible solution to this problem. But aside from the practical problems of implementation, such a measure is inadequate if capital export outside the Community is possible as well as within

it. Our judgement is that the problem is probably insoluble, and threatens seriously to erode the taxation of capital income everywhere.

The personal income tax system is also an element in the taxation of corporations, and differences in rate and structure of company tax are a principal potential source of distortion. The Community has made little progress in tackling these issues. The Commission's earliest recommendations for the harmonization of corporation tax required the adoption of a classical system by all member states. By the 1970s, however, both Britain and France had preferred an imputation system, and the two-rate structure in force in Germany was very similar in its practical effect. The Commission therefore shifted its favours to imputation and put forward a draft directive which would have required countries to adopt rates of imputation and of mainstream tax within broad prescribed ranges. The European Parliament reacted adversely to this proposal, correctly stressing that it was futile to harmonize the rate structure if there remained enormous differences in the tax base. The Commission has subsequently established working groups to consider these issues but attention seems to have concentrated on peripheral matters, such as the period for which losses may be carried forward, rather than substantive problems.

All federal states have found that some form of unitary tax system is the only means of enforcing distinct corporation tax jurisdictions in an integrated economy. This involves a common basis for the measurement of corporate tax liability, and a system of apportionment between states. Convergence on the base is essential, and once this is achieved, reasonable differences in rates can then be tolerated indefinitely. Some degree of harmonization of company law and accounting practice appears to be a necessary preliminary to these developments. This is an agenda which the Community has as yet barely begun to consider.

15
World tax reform

In the course of the last five years, tax reform has become a central item on the political agenda of governments around the world. In the United States, an initiative taken by the Reagan Adminstration led in 1986 to the passage of the Tax Reform Act which reduced the top rate of income tax in that country to 28%. The Labor Government of New Zealand has introduced what is possibly the most radical tax reform programme ever implemented by a western government—broadening the tax base, reducing rates of income tax and simplifying the rate structure, and imposing a comprehensive VAT and a new corporate tax system. We have noted at appropriate points the major changes which have been made in the UK, particularly in the Budgets of 1984 and 1988. Governments in other countries are either introducing or contemplating similar measures. It is as though a log-jam has suddenly begun to shift.

The growth of the tax revolt

Public expenditure and the resulting tax burden grew rapidly in the 1960s throughout the western world. In the subsequent decade, one manifestation of the resulting discontent was the so-called 'tax revolt'. In a famous referendum in 1978, the voters of California approved a 'Proposition 13' which imposed an upper limit on levels of property taxation. Governments everywhere took steps to restrict the growth of public spending. The effect of tax on work incentives became a political issue, and the intention to reduce taxation, especially at its upper levels, was a significant element in the programme of Conservative governments in the UK in 1979 and in the US in 1980.

The Thatcher Government's intention of cutting tax rates was frustrated by the conjunction of a recession which lowered revenues and increased expenditure. The overriding objective was to reduce inflation by limiting public sector borrowing. The

Reagan Administration, however, had fewer inhibitions. Encouraged by optimism about the shape of the 'Laffer curve'—which suggested that the effect of taxation on incentives was so large that lower tax rates would produce higher rather than lower revenues —it implemented major reductions in US income tax rates. This theory was not supported by evidence, or subsequent experience, and the US budget moved rapidly into substantial deficit, which has continued ever since.

At the same time, the trend to increasing government intervention in the economy was, almost for the first time, called into question. Governments in Britain, the US, and Australasia adopted policies of privatization and deregulation, and came increasingly to assert the virtues of market forces over central control. Fiscal neutrality, once an abstruse concept of public finance theorists, became a political goal. From these different elements—opposition to high rates of taxation, reaffirmed faith in markets, and increasing public dissatisfaction with the whole process of raising revenue—emerged the tax reform movement of the 1980s.

The favourable Press response to the 1984 Budget in the UK gave further evidence of the extent of this dissatisfaction. The proposals were not, in fact, particularly radical and the important changes affected corporations rather than individuals directly, but it was apparent that the rhetoric of tax reform was popular even if that rhetoric ran somewhat ahead of the reality. The days when Chancellors were told that there was no political mileage in reforming the fiscal system, because there would be brickbats from the losers and no bouquets from the gainers, were at an end.

Tax reform in practice

In the United States, the Treasury had prepared a comprehensive analysis of the possibilities for major structural reorganization of the tax system. This study was published in late 1984, and has become known as 'Treasury 1'. It remains required reading for would-be tax reformers in all countries. The re-elected President Reagan mounted a major campaign to win popular support for these proposals and prepared a revised version in 1985 ('Treasury 2') which met some of the political objections to Treasury 1 at the cost of significant departures from fiscal neutrality. But the plans

ran into heavy opposition from the interest groups which had blocked all previous attempts at comprehensive tax reform and which had led one leading advocate of change to title his work *Federal Tax Reform: The Impossible Dream* (Break and Pechman (1975)). But suddenly, and unexpectedly, Congress approved a package broadly based on Treasury 2 in 1986 and the proposals became fully effective in 1988.

The main elements of that reform involved broadening of the tax base combined with lowering of tax rates. Many deductions under the personal income tax disappeared. Most were exemptions of a kind which had never existed in Britain, or which had been eliminated here many years before. There is, for example, a certain logic in being able to deduct losses through theft from taxable income, but it is a logic which had never been found compelling in the UK and which now no longer applies in the US. Some of the most important restrictions were on reliefs related to the deductibility of other taxes for interest payments and losses in unrelated businesses; these latter provisions removed opportunities which had been widely used by high-income taxpayers to minimize their effective liabilities. Capital gains, when realized, are now taxed as income. Even after these reforms, deductions under the United States personal income tax remain as extensive as or more so than in the UK—mortgage interest relief is fully deductible, for example, and so are health care contributions.

In the corporate sector also the theme was, as in the 1984 Budget in Britain, that of lower taxes on a broader base. Investment incentives were reduced or removed and a much less generous scheme of depreciation allowances instituted. The corporate tax rate was cut to 34%.

The revenue raised, together with that derived from the reduction in personal allowances, was used to finance substantial reductions in rates of personal income tax. In place of an elaborately graduated structure with fourteen rates rising to 70%, the new US tax schedule has only two bands—of 15% and 28%. This 28% rate is not as low as it seems, partly because the withdrawal of an exemption over a wide range of income raises the effective rate to 33% for many taxpayers, and partly because state income taxes may be chargeable in addition, but the reductions are nevertheless dramatic.

The tax reform process in New Zealand was closely identified

with a single individual—the Finance Minister, Roger Douglas—for whom tax changes were an element in a radical package of economic deregulation. New Zealand was unusual among western countries in having neither a payroll tax nor a broad-based sales tax. The outcome had been an income tax that was high and—because the threshold at which tax liability began was low—was not very progressive, together with an accretion of *ad hoc* excises on commodities.

New Zealand's new tax structure has as its central element a goods and services tax—VAT at a single rate of 10%—which has an extremely broad base including food, fuel, and most of the items zero-rated in the UK. The personal income tax base has also been broadened, particularly to include fringe benefits which are now the subject of a tax levied directly on the employers who provide them. Corporation tax—now 28%—can be imputed in full against personal income tax. New Zealand now also has two rates of income tax—24% and 33%—and (in contrast to either Britain or the United States) this top rate is indeed the top rate of income tax, since there is no supplementary tax from local taxes, social security contributions, or additional tax on income derived from corporate sources.

One feature common to both these reform packages—and which we have also seen in the UK Budget of 1988—is the reduction in the number of bands in the tax schedule and, in particular, in the maximum rate of tax applied. Although Britain, New Zealand, and the US have implemented the most radical reforms in this area, the trend in this direction has been common to many countries. Table 15.1 shows some of the changes which have been made.

These changes reflect, in part, a better understanding of the properties of tax schedules and of the practical limits to the tax rates which can sensibly be imposed. There are also clear signs of imitation, particularly of the US reforms. To the extent that capital and income are mobile, low tax rates in one country put downward pressure on schedules elsewhere. But this effect should not be exaggerated. Although there are a few well-publicized cases of prominent authors and pop singers in tax exile, emigration to enjoy the benefit of lower tax rates is not a major threat to tax revenues in practice. And although American tax *rates* were reduced, the tax *paid* by many high-income individuals and

Table 15.1: *Changes in income tax schedules, 1975–89*

	Number of brackets		Maximum rate	
	1975	1989	1975	1989
Australia	7	4	65	49
Belgium[a]	11	7	60	55
Canada[a]	13	3	47	29
France	13	13	60	57
Germany	Very large[b]		56	56
Ireland	6	3	72	58
Italy	32	7	72	60
Japan[a]	19	5	75	50
Netherlands	10	8 (1990)	71	60 (proposed)[c]
New Zealand	22	2	57	33
Sweden[a]	11	3	56	42
UK	10	2	83	40
US[a]	25	2	70	33

[a] Local income taxes payable in addition.
[b] Has polynomial formula tax schedule.
[c] Not comparable, because integrated with social security.
Source: Cnossen and Messere (1989).

corporations increased after the reforms, as a result of the disappearance of many tax shelters.

Political imitation was more important than economic imitation. The British Chancellor of the Exchequer, Nigel Lawson, made speeches disparaging the radicalism of the US reforms relative to his own, but, presumably finding this argument less than persuasive even to himself, instigated the further package implemented in 1988. In other countries, the American example provided the impetus for internal reassessment.

The basis of reform

The superficialities of everyday political debate rarely contain explicit reference to the intellectual basis of the proposals put forward. None the less, it is clear that the tax reform movement of the 1980s is heavily influenced by the concept of the comprehensive income tax. This is discussed at length in Treasury 1 which sees the effective choice as one between a comprehensive income tax and an expenditure tax and chooses, mainly on practical

grounds, to pursue the income tax route. Treasury 1 was willing to accept many of the implications of this choice—including, for example, the complex requirements for indexation of the personal income tax—although these proved impossible to implement in practice. The equalization of the rates of tax on income and on capital gains—perhaps the single key symbol of the comprehensive income tax—was, however, a central component of the reforms which were approved in the US in 1986 and, as we have seen, was followed by the UK in 1988.

If the 1980s is the decade of the comprehensive income tax, there is an apparent paradox which requires explanation. Until the mid-1970s, there was an overwhelming consensus among public finance economists that the comprehensive income tax was the appropriate route for reform. In the United States, a dominant intellectual tradition had grown up, initiated by Haig and Simons and taken forward by Joseph Pechman of the Brookings Institution and many others. The concept of 'tax expenditures' was devised to describe, essentially, deviations from the income tax base.

Yet in the mid-1970s, that intellectual consensus fell apart. As we described in Chapter 6, the expenditure tax is not a new concept, but until the 1970s it remained an esoteric one. The Meade Report, published in Britain in 1978, provided a description of an expenditure tax for the United Kingdom, as did the first edition of our own book. *Blueprints for Basic Tax Reform*, which appeared in the United States in 1977, did the same for the United States. There are no opinion polls among economists, but in the 1980s an increasing body of economic writing favoured the merits of an expenditure tax.

Why then did policy seem to favour the comprehensive income tax? Academic thinking did play an important role in persuading policy-makers that the solution to the growing practical problems of the tax system lay in moving toward fiscal neutrality. The objective of fiscal neutrality was recognized as desirable both to reduce distortions and to limit tax avoidance. But, as we showed in Chapter 6, there are two routes to fiscal neutrality—the comprehensive income tax and the expenditure tax. The fact that the present system is called an income tax led policy-makers to think that the measures required to move to a comprehensive income tax involved less upheaval than those necessary for the transition to an expenditure tax. In this book we have argued that the

oppposite is the case. The reality is that at present we have an unwieldy hybrid income tax, and for fiscal neutrality the choices are between a comprehensive income tax and, to use Andrews's (1974) nomenclature for the expenditure tax, a cash-flow income tax.

Although the comprehensive income tax has some attractions, it suffers equally from some central difficulties. The basic one is the complexity of the annual accretion concept. There are no satisfactory ways of attributing to individuals many kinds of income which are not remitted directly to them. The complications of indexation for inflation are considerable. And the sources of capital gain are sufficiently diverse that to treat them all as income both creates economic distortion and arouses popular hostility. We also doubt the political realism of a programme which seeks to attack distortions in the savings market by levelling down existing concessions rather than by levelling up. These problems mainly relate to the taxation of income from capital, and it is notable that governments around the world have derived less and less revenue from taxing capital income relative to labour income, both within the income tax system itself and through greater reliance on social security contributions.

There is nothing in the experience of the 1980s which would lead us to change our judgement that these difficulties are virtually intractable, and a good deal to reinforce it. The problems of income attribution are not diminished in any way, and we described in Chapter 14 how the internationalization of the world economy is making them steadily worse. The United States did consider an extensive scheme of income indexation, but did not pursue it. Britain has indexed its capital gains tax, at the price of some complexity, but has shyed away from extending similar provision to interest income and actually abolished indexation in the taxation of stocks (inventories). Both Britain and the United States have equalized rates of tax on incomes and capital gains.

We wait to see how long these provisions last. Despite the shift towards a comprehensive income tax implied by the equalization of income tax and capital gains tax rates, the majority of the changes made to the taxation of savings in the course of the decade have represented the extension of fiscal privilege to new forms of savings rather than the removal of it from assets which are already favoured.

In Chapter 5 we described the tax treatment of the six principal

Table 15.2: *Principal changes in the tax treatment of savings since 1979*

	Gains	Losses	Present status
Owner-occupied housing	No major changes		Better than expenditure tax
Life insurance	—	End of premium relief Possible changes to tax treatment of funds	Slightly better than income tax
Pension funds	Extension of pension fund opportunities for self-employed Personal pensions for employees	Limitations on lump sum Rules on scheme over-funding	Better than expenditure tax
Bank and building society deposits	Extension of composite rate to bank deposits		Worse than income tax
Company shares	Employee share option schemes Business Expansion Scheme Personal equity plans	—	Variable
Government securities and corporate bonds	Exemption from capital gains	Accrued income scheme	Worse than income tax

vehicles for personal savings in the UK—owner-occupied housing, life insurance, pension funds, bank and building society deposits, company shares, and government securities and corporate bonds. In Table 15.2 we show how the tax treatment of all these assets has changed since 1979, and include an assessment (based primarily on Hills's (1984) approach) of whether the resulting regime is more or less favourable than either the expenditure tax or the comprehensive income tax treatment.

More generally, although these reforms have been promoted as routes to tax simplification, the joke about the accountant who strained his back picking up the simplified tax code enjoys increasing, and deserved, currency. If tax planning is a less extensive and elaborate activity than a decade ago, it is because of the reductions in the rates of tax, not the product of simplifications within the tax structure.

Charles McClure, an architect of the US tax reform and the principal author of Treasury 1, has posed the question of whether the US moves should be seen as tax reform's finest hour, or the death throes of the income tax (McClure (1988)). On balance, we share his judgement that it is the latter. We have seen, in the 1980s, the best endeavours of politicians and tax administrators to eliminate distortion and achieve simplification within the income tax framework, and the results are deeply disappointing. The next generation of tax reform and tax reformers will have to look in different directions.

The process of tax reform is at its beginning, not its end. There is now a political willingness—indeed necessity—to contemplate a magnitude of change which seemed impossible only a decade ago.

Further reading

We have not given individual references for the rates of tax and benefit which we have reported frequently in the text. There are a wide variety of commercial guides to the tax system, which range from those designed to give useful advice on how to complete your tax return to handbooks for tax lawyers and accountants. The publisher Tolley produces manuals covering not only the principal taxes but also National Insurance and social security, and the information they provide is comprehensive.

Chapter 1

Musgrave (1959) remains the classic text in public finance. Atkinson and Stiglitz (1980) is an outstanding modern survey, but advanced in approach; Stiglitz (1988) is much more elementary. The theory underlying many of the issues discussed in this book can be found in the surveys contained in Auerbach and Feldstein (1985 and 1987).

Chapter 2

Statistics about the tax system can be found in the annual publication *Inland Revenue Statistics* and in the Reports of the Commissioners of Inland Revenue. Johnston (1965) provides a now somewhat outdated account of the functioning of the Inland Revenue. Good international comparative material is surprisingly hard to come by; some help can be obtained from OECD reports (particularly OECD (1986)), from the publications of some of the leading accountancy firms, and from the evidence provided for the Treasury and Civil Service Committee's inquiry into the structure of personal income taxation and support. A helpful introduction to the issues involved in the disincentive effects of taxation is the article by Break in the Brookings Institution volume (1974). Good surveys are Brown (1983) and Hausman (1985).

Chapter 3

Barr, James, and Prest (1977) continues to be a helpful introduction to the issues involved in the administration of the income tax system. Smith (1986) is a survey of what is known about tax evasion and the black economy.

Chapter 4

An introduction to the British social security system and its possible reform is Dilnot, Kay, and Morris (1984). Studies of the causes and characteristics of poverty are those of Beckerman and Clark (1982) and Townsend (1979). See also the contributions in Atkinson and Sutherland (1988).

Chapter 5

The Meade Report (1978) is a good general introduction to issues in the tax treatment of savings, and Hills (1984) provides numerical estimates of the fiscal privilege of different asset types. International comparisons can be found in King and Fullerton (1984), while Kay (1986 and 1989) explains more recent developments in the system.

Chapter 6

The best-known and most detailed proposals for a comprehensive income tax are those put forward in Canada by the Carter Commission (1966). A more recent analysis is US Treasury (1984). The concept of income is discussed by Hicks (1939) and Simons (1938), but the best survey is that by Kaldor (1955, Appendix). A collection of some of the more important contributions on the subject has been edited by Parker and Harcourt (1969).

Chapter 7

The two most cogent cases for an expenditure tax are the classic exposition of Kaldor (1955), arguing from the theoretical viewpoint, and the case put by Andrews (1974) on practical grounds. Official reports explaining how an expenditure tax would work

have been produced abroad, in the USA (US Treasury (1977)), in Sweden (Lodin (1978)), and in Ireland (Irish Commission on Taxation (1982a)). A survey of the issues is Pechman (1980).

Chapter 8

Statistics on the collection of indirect taxes are contained in Customs and Excise Reports. The distinction between direct and indirect taxes is at best an arbitrary one, and for further reading on the theoretical issues contained in this chapter the reader is referred to the notes on Chapters 3 and 14. An introduction to the theory of optimal indirect taxation is Sandmo (1976).

Chapter 9

Rubinfield (1987) provides a good survey of the issues of principle involved in relations between central and local government. The Layfield Report (1976) remains a penetrating survey of the problems of the UK; a variety of National Audit Office reports comment on specific users, and a survey of recent developments can be found in Bailey and Paddison (1988).

Chapters 10 and 11

A detailed analysis of the range of possible corporate tax systems and their effects on the financing and investment decisions of firms is to be found in King (1977), and the Green Paper on corporation tax (1982), even if superseded by subsequent events, remains a good survey of the issues involved in choosing between alternative systems. Devereux (1987) looks at more recent developments.

Chapter 12

The taxation of rent is a topic that attracts no more than brief attention in most public finance texts; but the influence of George (1879) continues. Oil taxation is the subject of much more extensive discussion—see, for example, Devereux and Morris (1983).

Chapter 13

The theoretical literature on the distribution of the tax burden is extremely technical. The pioneering contribution was that by Mirrlees (1971). A less technical but still demanding paper is Atkinson (1973b); for the theory of the measurement of inequality see Atkinson (1973a) which contains a very useful non-mathematical discussion of the main concepts. Annual discussions of the distributional impact of the tax system are to be found in *Economic Trends* and *Fiscal Studies*.

Chapter 14

Given the importance of the subject, surprisingly little is written on the economics of international taxation. There are several OECD reports (OECD (1985 and 1987)), and a range of issues are covered in Cnossen (1987). A good technical treatment of the effect of differing tax systems on international flows of capital is contained in Sinn (1987, Chapter 7).

Chapter 15

A volume which brings together descriptions and analysis of tax reform in eleven major countries is Pechman (1988). The impact of the reforms in the UK and US on the taxation of investment is analysed in King (1985). Discussions of how tax systems have and should be changed are not difficult to find. The most comprehensive survey of the British tax system and possibilities for reform is the Meade Report (1978). The Reports of the Irish Commission on Taxation (1982a, 1982b, and 1984) have considerable relevance for the UK. US Treasury (1984) is an important contribution to the literature on tax reform; so too are a variety of documents associated with recent major tax changes in New Zealand. The Japanese reforms are discussed in King (1987).

References

Aaron, H. J. and Galper, G. (1985), *Assessing Tax Reform*, Brookings Institution, Washington, DC.

Andrews, W. D. (1974). 'A consumption-type or cash flow personal income tax', *Harvard Law Review*, **87**.

Ashworth, M. H. and Dilnot, A. W. (1987). 'Company cars taxation', *Fiscal Studies*, **8**, 4, 24–38.

—— and Forsyth, P. J. (1984). *British Airways: Civil Aviation Policy and the Privatisation of British Airways*, IFS Report Series 12, Institute for Fiscal Studies, London.

Atkinson, A. B. (1973a). 'On the measurement of inequality', reprinted with non-mathematical summary in A. B. Atkinson (ed.), *Wealth, Income and Inequality*, Penguin, London. (Originally published in *Journal of Economic Theory*, **2**, 1970.)

—— (1973b). 'How progressive should income tax be?', in M. Parkin (ed.), *Essays on Modern Economics*, Longman, London.

—— (1973c). *The Tax Credit Scheme and Redistribution of Income*, Institute for Fiscal Studies, London.

—— (1983). *The Economics of Inequality*, Oxford University Press, London.

—— and Harrison, A. J. (1978). *The Distribution of Personal Wealth in Britain*, Cambridge University Press, London.

—— and Micklewright, J. (1988). 'Turning the screw: benefits for the unemployed 1979–88', TIDI Discussion Paper 121, London School of Economics mimeo.

—— and Stiglitz, J. E. (1980). *Lectures on Public Economics*, McGraw-Hill, London.

—— and Sutherland, H. (eds.) (1988). *Tax–Benefit Models*, STICERD Occasional Paper 10, Chapter 3, London School of Economics.

—— and Townsend, J. L. (1977). 'Economic aspects of reduced smoking', *Lancet 3*, September, 8036, **2** for 1977.

Audit Commission (1984). *The Impact on Local Authorities' Economy, Efficiency and Effectiveness of the Block Grant Distribution System*, HMSO, London.

Auerbach, A. J. and Feldstein, M. S. (1985). *Handbook of Public Economics*, **1**, North-Holland, Amsterdam.

—— and —— (1987). *Handbook of Public Economics*, **2**, North-Holland, Amsterdam.

Bailey, S. A. and Paddison, R. (eds.) (1988). *The Reform of Local Government in Britain*, Routledge, London.

Barr, N. A., James, S. R., and Prest, A. R. (1977). *Self Assessment for Income Tax*, Heinemann, London.

Baumol, W. J. and Bradford, D. F. (1970). 'Optimal departures from marginal cost pricing', *American Economic Review*, **60**.

Beckerman, W. and Clark, S. (1982). *Poverty and Social Security in Britain since 1961*, Oxford University Press, Oxford.

Beveridge Report (1942). *Social Insurance and Allied Services*, Cmd. 6404, HMSO, London.

Boskin, M. J. (1977). 'Taxation, saving and the rate of interest', *Journal of Political Economy*, **86**, 2, S3–28.

Bradford, D. F. (1986). *Untangling the Income Tax*, Harvard University Press, Cambridge, Mass.

Break, G. F. (1957). 'Income taxes and incentives to work: an empirical study', *American Economic Review*, **47**.

—— and Pechman, J. A. (1975). *Federal Tax Reform: The Impossible Dream*, Brookings Institution, Washington, DC.

Brookings Institution (1974). *The Economics of Public Finance*, Brookings Institution, Washington, DC.

Brown, C. V. (1968). 'Misconceptions about income tax and incentives', *Scottish Journal of Political Economy*, **15**.

—— (ed.) (1981). *Taxation and Labour Supply*, Allen & Unwin, London.

—— (1983). *Taxation and the Incentive to Work*, 2nd edn., Oxford University Press, Oxford.

——, Levin, E., and Ulph, D. T. (1976). 'Estimates of labour hours supplied by married male workers in Great Britain', *Scottish Journal of Political Economy*, **23**.

Cain, C. and Watts, H. (1973). *Income Maintenance and Labour Supply*, Markham, New York.

Carter Commission (1966). *Report of the Royal Commission on Taxation*, Ottawa.

Chawla, O. P. (1972). *Personal Taxation in India*, Somaiya Publications, Bombay.

Cnossen, S. (1987). *Tax Coordination in the European Community*, Kluwer, Antwerp.

—— and Messere, K. (1989). 'Survey and evaluation of personal income tax systems in OECD member countries', ISPE, mimeo.

—— and Shoup, C. S. (1987). 'Coordination of value added tax', in S. Cnossen (ed.), *Tax Coordination in the European Community*, Kluwer, Antwerp.

Commission of the European Communities (1987). *Completion of the Internal Market: Approximation of Indirect Tax Rates and Harmonization of Indirect Tax Structure*, COM(87) 320, Brussels.

Devereux, M. P. (1987). 'On the growth of corporate tax revenues', *Fiscal Studies*, **8**, 2.

—— and Morris, C. N. (1983). *North Sea Oil Taxation: The Development of the North Sea Tax System*, IFS Report Series 6, Institute for Fiscal Studies, London.

Diamond, P. A. and Mirrlees, J. A. (1971). 'Optimal taxation and public production', *American Economic Review*, **41**.

Dilnot, A. W. and Kay, J. A. (1989). 'Great Britain', in M. Boskin (ed.), *World Tax Reform and the World Economy*, Institute of Contemporary Studies, San Francisco.

—— and Morris, C. N. (1984). 'The UK tax system, structure and progressivity, 1948–82', *Scandinavian Journal of Economics*, **86**, 2.

—— and Morris, C. N. (1981). 'What do we know about the black economy?', *Fiscal Studies*, **2**, 1, 58–73.

Edgeworth, F. Y. (1897). 'The pure theory of taxation (III)', *Economic Journal*, **3**.

Edwards, J. S. S. and Mayer, C. P. (1983). *Issues in Bank Taxation*, IFS Report Series 5, Institute for Fiscal Studies, London.

Feige, E. (1979). 'How big is the irregular economy?', *Challenge*, 22.

Fiegehen, G. C. and Reddaway, W. B. (1981). *Companies, Incentives and Senior Managers*, Oxford University Press, Oxford.

Fields, D. B. and Stanbury, W. T. (1971). 'Income taxes and incentives to work: some additional empirical evidence', *American Economic Review*, **41**.

Flemming, J. S. and Little, I. M. D. (1974). *Why We Need a Wealth Tax*, Methuen, London.

Foster, C. D., Jackman, R. A., and Perlman, M. (1980). *Local Government Finance in a Unitary State*, Allen & Unwin, London.

George, H. (1879). *Poverty and Progress*.

Godfrey, L. (1975). *Theoretical and Empirical Aspects of the Effects of Taxation on the Supply of Labour*, OECD, Paris.

Goldthorpe, J., Lockwood, D., Beckhofer, F., and Platt, J. (1970). *The Affluent Worker. Industrial Attitudes and Behaviour*, Cambridge University Press, London.

Government Actuary (1983). *National Insurance Fund: Long-Term Financial Estimates*, HC 451, HMSO, London.

Hausman, J. A. (1981). 'Labour supply', in H. J. Aaron and J. A. Pechman (eds.), *How Taxes Affect Economic Behaviour*, Brookings Institution, Washington, DC.

—— (1985). 'Labour supply', in A. J. Auerbach and M. S. Feldstein, *Handbook of Public Economics*, **1**, North-Holland, Amsterdam.

Hemming, R. and Kay, J. A. (1982). 'The costs of the State Earnings Related Pension Scheme', *Economic Journal*, **92**.

Hicks, J. R. (1939). *Value and Capital. An Inquiry into some Fundamental Principles of Economic Theory*, Clarendon Press, Oxford.

Hills, J. (1984). *Savings and Fiscal Privilege*, IFS Report Series 9, Institute for Fiscal Studies, London.

HMSO (1942). *The Taxation of Weekly Wage Earners*, Cmd. 6348, London.

—— (1972a). *Taxation of Capital on Death* (Green Paper), Cmnd. 4930, London.

—— (1972b). *Proposals for a Tax-Credit System* (Green Paper), Cmnd. 5116, London.

—— (1974). *Wealth Tax* (Green Paper), Cmnd. 5704, London.

—— (1975). *Report of the Select Committee of the House of Commons on Wealth Tax*, HC 696, London.

—— (1980). *The Taxation of Husband and Wife* (Green Paper), Cmnd. 8093, London.

—— (1981). *Alternatives to Domestic Rates* (Green Paper), Cmnd. 8449, London.

—— (1982). *Corporation Tax* (Green Paper), Cmnd. 8456, London.

—— (1985). *Reform of Social Security*, Cmnd. 9691, London.

HM Treasury (1988). *The Government's Expenditure Plans, 1988–89 to 1990–91*, Cm 288, HMSO, London.

Hobbes, T. (1651). *Leviathan or, the Matter, Forme and Power of a Commonwealth Ecclesiasticall and Civil*, Andrew Crooke, London.

Howrey, E. P. and Hymans, S. (1978). 'The measurement and determination of loanable funds saving', *Brookings Papers on Economic Activity*, 3, 655–85.

Hughes, G. A. (1988). 'Rates reform and the housing market', in S. A. Bailey and R. Paddison (eds.), *The Reform of Local Government in Britain*, Routledge, London.

Inland Revenue (1988). *Residence: The Scope of UK Taxation for Individuals*, consultative document, Inland Revenue, London.

Irish Commission on Taxation (1982a). *First Report: Direct Taxation*, The Stationery Office, Dublin.

—— (1982b). *Second Report*, The Stationery Office, Dublin.

—— (1984). *Third Report: Indirect Taxation*, The Stationery Office, Dublin.

IRS (1979). *Estimates of Income Unreported on Individual Income Tax Returns*, US Internal Revenue Service, Washington, DC.

Johnston, A. (1965). *The Inland Revenue*, Allen & Unwin, London.

Kaldor, N. (1955). *An Expenditure Tax*, Allen & Unwin, London.

—— (1956). *Indian Tax Reform*, Ministry of Finance, India.

—— (1980). *Reports on Taxation, I*, Duckworth, London.

Kay, J. A. (1984). 'The effect of increasing tax thresholds on the poverty and unemployment traps', *Fiscal Studies*, **5**, 1, 32–4.

—— (1986). 'Approaching an expenditure tax?', *Fiscal Studies*, **7**, 2, 33–7.

—— (1989). 'Privatizing savings', *Economic Outlook*, **13**, 5.

Kay, J. A. and Keen, M. J. (1982). *The Structure of Tobacco Taxes in the European Community,* IFS Report Series 1, Institute for Fiscal Studies, London.

King, D. (1988). In S. A. Bailey and R. Paddison (eds.), *The Reform of Local Government in Britain*, Routledge, London.

King, M. A. (1977). *Public Policy and the Corporation*, Chapman & Hall, London.

—— (1985). 'Capital tax reform', *Economic Policy*, **1**, 220–38.

—— (1987). 'The Japanese tax reform proposals', London School of Economics Financial Markets Group Discussion Paper 16, mimeo.

—— (1988). 'Prospects for tax reform in 1988', London School of Economics Financial Markets Group Discussion Paper 10.

—— and Fullerton, D. (eds.) (1984). *The Taxation of Income from Capital*, Chicago University Press, Chicago.

Layfield Report (1976). *Local Government Finance*, Report of the Committee of Inquiry, Cmnd. 6453, HMSO, London.

Lee, C., Pearson, M., and Smith, S. R. (1988). *Fiscal Harmonisation: An Analysis of the European Commission's Proposals*, IFS Report Series 28, Institute for Fiscal Studies, London.

Lewis, A. (1978). 'Perceptions of tax rates', *British Tax Review,* **6**.

Liesner, T. and King, M. A. (1975). *Indexing for Inflation*, Heinemann Educational Books, London.

Lodin, S. O. (1978). *Progressive Expenditure Tax—An Alternative*, Liber Forlag, Stockholm.

MacAfee, K. (1980). 'A glimpse of the hidden economy in the national accounts', *Economic Trends*, 316 (February).

McClure, C. E. (1988). 'The 1980 Act: tax reform's finest hour or death throes of the income tax', *National Tax Journal*, **41**, 303–15.

Meade Report (1978). *The Strucıure and Reform of Direct Taxation*, Allen & Unwin, London.

Minford, A. P. L. (1982). *Unemployment: Cause and Cure*, Martin Robertson, Oxford.

Mirrlees, J. A. (1971). 'An exploration in the theory of optimum income taxation', *Review of Economic Studies*, **38**.

Mukherjee, S. and Orlans, C. (1975). *Indexation in an Inflationary Economy*, PEP, London.

Musgrave, R. A. (1959). *The Theory of Public Finance*, McGraw-Hill, New York.

—— and Musgrave, P. B. (1976). *Public Finance in Theory and Practice*, 2nd edn., McGraw-Hill, New York.

Nordhaus, W. D. (1975). 'The political business cycle', *Review of Economic Studies*, **42**.

OECD (1985). *Issues in International Taxation*, Paris.

—— (1986). *Personal Income Tax Systems under Changing Economic Conditions*, Paris.

OECD (1987). *Issues in International Taxation 2*, Paris.

Opinion Research Centre (1977). 'A survey of the motivation of British management', London.

Parker, R. H. and Harcourt, G. C. (eds.) (1969). *Readings in the Concept and Measurement of Income*, Cambridge University Press, London.

Part, A. (1982). *The Taxation of North Sea Oil: Report of a Committee*, Institute for Fiscal Studies, London.

Pechman, J. A. (ed.) (1980). *What Should be Taxed: Income or Expenditure?*, Brookings Institution, Washington, DC.

—— (ed.) (1988). *World Tax Reform: A Progress Report*, Brookings Institution, Washington, DC.

—— and Timpane, P. M. (eds.) (1975). *Work Incentives and Income Guarantees: The New Jersey Negative Income Tax Experiment*, Brookings Institution, Washington, DC.

Pedone, A. (1981). 'Italy', in H. J. Aaron (ed.), *The Value Added Tax: Lessons from Europe*, Brookings Institution, Washington, DC.

Public Accounts Committee (1977–8). *Sixth Report of the Public Accounts Committee*, HC 574, HMSO, London.

Radcliffe Report (1954). *Report of the Royal Commission on Taxation of Profits and Income*, 2, Cmd. 9105, HMSO, London.

Ramsey, F. A. (1928). 'A mathematical theory of savings', *Economic Journal*, **38**.

Rawls, J. (1971). *A Theory of Justice*, Clarendon Press, Oxford.

Revell, J. (1965). 'Changes in the social distribution of property in Britain during the twentieth century', paper given to Third International Conference of Economic History, Munich, 1965.

Rubinfield, D. (1987). 'The economics of the local public sector', in A. J. Auerbach and M. S. Feldstein, *Handbook of Public Economics*, **2**, North-Holland, Amsterdam.

Sandford, C. T. (1973). *Hidden Costs of Taxation*, Institute for Fiscal Studies, London.

——, Godwin, M., Hardwick, P., and Butterworth, I. (1982). *Costs and Benefits of VAT*, Heinemann, London.

Sandmo, A. (1976). 'Optimal taxation—an introduction to the literature', *Journal of Public Economics*, **6**.

Shoup, C. S. (1969). *Public Finance*, Weidenfeld & Nicolson, London.

Simons, H. C. (1938). *Personal Income Taxation*, University of Chicago Press, Chicago.

Sinn, H.-W. (1987). *Capital Income Taxation and Resource Allocation*, North-Holland, Amsterdam.

Smith, S. R. (1986). *Britain's Shadow Economy*, Oxford University Press, London.

Starkie, D. N. M. and Thompson, D. J. (1985). *Privatising London's Airports: Options for Competition*, IFS Report Series 16, Institute for Fiscal Studies, London.

Stern, N. H. (1976). 'Taxation and labour supply—a partial survey', in *Proceedings of a Conference on Taxation and Incentives*, Institute for Fiscal Studies, London.

Stiglitz, J. E. (1988). *Economics of the Public Sector*, Norton, New York.

Townsend, P. (1979). *Poverty in the United Kingdom*, Penguin, London.

Travers, A. (1982). 'Block grant: origins, objects and use', *Fiscal Studies*, **3**, 1, 11–22.

US Treasury (1977). *Blueprints for Basic Tax Reform*, US Government Printing Office, Washington, DC.

—— (1984). *Tax Reform for Fairness, Simplicity and Economic Growth*, US Government Printer, Washington, DC.

Whittington, G. (1983). *The Theory of Inflation Accounting*, Cambridge University Press, Cambridge.

Worswick, G. N. D. (1971). 'Fiscal policy and stabilization in Britain', in A. Cairncross (ed.), *Britain's Economic Prospects Reconsidered*, Allen & Unwin, London.

Zabalza, A., Pissarides, C., Piachaud, D., and Barton, M. (1979). 'Social security and the choice between full-time work, part-time work and retirement', paper presented to NBER/SSRC Conference on Econometric Studies in Public Finance, Cambridge, mimeo.

Index

'ability to earn' 90, 125
'ability to pay' concept 89–90
accessions tax 106
accounting and inflation 173, 175
accrued interest 113
actuarial estimates 65, 92
Addington, H. 56
administration:
  capital gains tax and 86
  community charge and 138
  corporation tax and 97, 168
  costs of 14–15, 30, 54–5, 59, 71–2, 128
  enforcement 133, 198, 202, 207–9, 217
  expenditure tax and 100–2, 108–16, 227
  income tax and 49–59, 229
  indirect taxes and 100, 126–9; in EC 214–16
  and international co-operation 208–9
  and jurisdiction 198, 202–7
  local income tax and 149–50
  social security benefits and 54, 61–5, 71–2
  of taxation policy 119
  VAT and 55, 128–9
advance corporation tax (ACT) 166, 169, 183
advance petroleum revenue tax (APRT) 183
agricultural land 107, 178–81
alcohol, expenditure on 132
alcohol tax 129, 130, 132, 212
allowances 23, 44–5, 46–7, 50–1, 75
American Taxpayer Compliance Measurement Program 58
Andrews, W. D. 225, 229
anti-avoidance schemes 104, 177
'arms-length' transfer prices 205
Ashworth M. H. 47, 188
assets:
  depreciation of 85, 99, 160, 165, 170
  exemption from present system 104, 229
  'registered' 111, 118
  reliefs for 104
  sales of 176
  and tax treatment 11, 85–6
  transfers of 104
assisted regions 170
Atkinson, A. B. 70, 77, 131, 228, 229, 231
Audit Commission 137
Auerbach, A. J. 228
Australasia 220
Australia 190
Austria 216
average tax rate:
  by decile 193, 194
  definition 12
  and disincentive effects 18
  higher average rate 111
  and income effect 16
  and income level 28, 30, 37, 38, 39–40
  and inheritance tax 107
  international comparison 190–1
  and marginal tax rates 12–13, 16–17, 28, 122
  and progressivity 12–13, 192–3, 195
  and substitution effect 28
  and tax revenue 37
  tax schedule and 23–5
  see also composite rate

'back to Beveridge' schemes 72, 73, 76
Bailey, S. A. 230
bank deposits 84–5, 87, 111, 118, 226
banks, taxation of 176–7, 180, 186–7
Barr, N. A. 53, 229
basic rate of tax 23, 39, 40, 83, 85
Baumol, W. J. 124
Beckerman, W. 229
Belgium 190
benefit credit scheme 77
benefits, social security 61–78, 193–4, 229
  administration 54, 61–5, 71–2
  child 45, 63–4, 72, 78, 190
  and community charge 138
  contingent 72, 73, 76
  costs of 62, 71, 191

benefits (cont.)
  efficiency of 70–2
  entitlements 69, 116
  family credit 63–4, 72, 78
  'Fowler-Moore reforms' 61–2
  fundamental reforms, proposals for 72–6
  housing benefit 64, 77–8, 136
  income-related 73
  income support (IS) (supplementary benefit) 63, 64, 71, 72, 73, 76,
  integration/interaction with tax system 61–2, 65–70, 76–8, 193–4, 225
  levels of 62, 70
  means-tested benefits 13, 29, 31, 66, 67, 71, 72
  'poverty trap' 38, 66–8
  and progressivity 193–4
  sickness benefit 63, 71
  state pensions 64–5, 71, 81, 91–3, 105, 116, 131, 190
  supplementary pension 71
  'take-up' of 71–2
  'targeting' of 78
  unemployment benefit 63, 68–71
  see also National Insurance contributions; tax credits scheme; social dividend scheme
'benefit theory' of taxation 89–90
Beveridge Plan/Report 61, 72
'black economy' 57–9, 229
Blueprints for Basic Tax Reform 224
Board of Inland Revenue 58
borrowing, costs of 176
Boskin, M. J. 96
Bradford, D. F. 124
Break, G. F. 33, 35, 221, 228
British Airports Authority 188
British Airways 188
British Civil Service 55, 81, 98
British clearing banks 187
British Gas Corporation 183–4
Brookings Institution 224, 228
Brown, C. V. 52, 228
Budgets:
  1894, 106
  1979, 103, 169
  1984, 103, 164, 165, 170, 171–3, 174, 219, 220
  1988, 103, 168, 169, 219, 222, 223, 224
building societies 84–5, 87, 111, 118, 187
burden of taxation 15, 16, 86, 90, 123, 153, 154–5, 168, 191–7, 231
Business Expansion Scheme (BES) 84
business (industrial and commercial) rates 134–5, 136, 137

Canada 54, 129, 148, 159, 229
capital, cost of 159–62
capital equipment, expenditure on 164–5
capital gains:
  conversion of income into 86
  and home ownership 80
  long term/short term 104
  sources of 225
  taxation of (capital gains tax) 49, 83, 86–7, 97, 103 ff., 106, 117, 118, 158, 168, 169, 174, 182, 221
capital income 96, 217, 225
capital mobility 201–2, 208
capital structure of companies 160–2
capital transfer tax 107; *see also* inheritance taxation
capitalized taxes 10–12, 41, 106 ff., 141
cars, company 47
Carter Commission 159, 229
cash-flow corporation tax 173, 174–7, 184, 202, 209
cash-flow tax base 113, 174–7, 225
cash investment grants 175–6
central/local government relations 135–51
centralization or local autonomy? 150–1
Central Statistical Office 57
charities 159
Chawla, O. F. 109
cheques and credit cards 57
child benefits 45, 63–4, 72, 190
Clark, S. 229
classical system of corporation tax 158, 161, 177, 218
Cnossen, S. 216, 231
'coding', notice of 49
collection of taxes 100, 207
Commissioners of Inland Revenue, Reports of 228
commodity taxation 7, 121 ff., 191, 203
  arguments against uniformity of 123–5, 126
  incidence of 130

intermediate goods and 123, 127, 135
as method of redistributing income 125
see also indirect taxes; VAT
community charge (poll tax) 138–42, 145–7, 150
administrative problems of 138
alternatives to 147–50
argument for 141
benefit system and 138
deterrent effect of increases 146
housing market, effect on 12, 141
inequalities of local areas, effects of 145
primary merit 141
radical but irrelevant 150
redistributive effects of 139
regressive nature of 139
relationship to household income 140
simplifies grant system 146
company taxation *see* corporation taxation
'composite rate' tax 85
compliance costs 15, 71, 128
comprehensive income tax 98–9, 103, 104, 105, 119, 164, 224–5, 227, 229
Comptroller and Auditor General 52
computerization of tax operations 54–5
consumption:
taxes on 199
valuation problems 110
see also expenditure; indirect taxes
contingent benefits 72, 76
convertible loan stock 162
corporate bonds 84, 104
corporate profits tax 164
corporation taxation:
administration of 97, 168
alternatives to 157, 159
base of 170–1
cash-flow 173, 174–7, 184, 202, 209
changes in system of 164
effects on consumers 156
deductions against 49
distortions introduced by 200
effective burden of 166
and financial companies 176
harmonization of 201–2, 217–18
effect on incentives 162
incidence of 153–7
international 207
effects on investment 158–60, 170–3
justification of 152
liability to 151, 201–2, 218
mainstream 166, 167
on profits 183
real value of payments 166
reforms (1984) 171–3
residence problems and 204 ff., 209
tax on capital employed 153–6
tax on pure profits 153–6
types of 157–9
corrective taxes 126
Crossman, Richard 64
Customs and Excise Reports 230

death duties 106, 107
debt financing 158, 161, 171, 202
'Delaware link' 205, 207
Denmark 214, 215
Department of Social Security 66
depreciation:
allowances 160, 170 ff., 175, 190
of industrial assets 165, 170
'true economic' 160, 171, 174, 175
deregulation 220, 222
developing countries 208, 209
development land tax 182
Devereux, M. P. 230
Diamond, P. A. 123
diesel fuel (DERV) tax 213
differential incidence 7
Dilnot, A. W. 47, 58, 70, 71, 77, 229
direct taxation:
direct-indirect balance 120
direct-indirect distinction 199
distortions resulting from 104, 199
recasting as indirect taxation 121
reform of 103–19
see also corporation tax; expenditure tax; income tax; indirect taxation
disincentive effects *see* incentives
distortions 104, 198, 199–202, 209, 217, 225, 227
distributional effects of taxes 124
district valuer 134
dividends 83, 158–9, 166–8, 173, 177
domestic rates 134–44, 148–9, 151
double tax treaties 206
'double taxation':
of dividends 158, 159, 173

'double taxation' (cont.)
of retentions 173
of savings 95, 102
Douglas, Roger 222
duty-free sales/shops 188, 199

earnings-related contributions 23
'earnings rule' 35
econometric assessment 30–2, 33
'economic income' 173, 174
economic inefficiency 19
economic rent:
argument for taxing 179–80, 186, 230
and banking 186–7
definition of 178
and gambling 186
and land and property development 180–2
and North Sea oil and gas 182–5, 186, 188
and privatization 187, 188
in simple economy 178–9
and state monopolies 187–8
and television franchises 185–6
Economic Trends and Fiscal Studies 231
Edgeworth, F. Y. 36
education:
expenditure by local authorities 135, 150–1
national expenditure as alternative to domestic rates 151
Edwards, J. S. S. 187
Edwardes, Sir M. 48
efficiency in design of tax schedules 36
efficiency costs (dead-weight loss) of taxation 30
efficiency/incentives trade-off 26
egalitarianism 37
Eire *see* Ireland
endowment insurance 82
enforcement, problems of tax 198, 207–9, 217
entrepreneurship and corporation tax 154–5
equal/equiproportional sacrifices, principles of 36
equity:
horizontal 41–2
house-owner's 79–80
and income levels 40
investment 161–2, 172
vertical 41
equity finance for companies 166–70
estate duty 41, 106, 107, 108
European Commission/Community (EC) 121, 128
Britain and 198, 218
capital mobility in 201, 217
corporation tax and 200–1, 202, 207, 218
fiscal reform in 214
Fourteenth Directive of 216
harmonization of direct taxation 217–18
harmonization of indirect taxation 131, 202, 209–16
income tax systems, convergence of 217
single internal market plans 198, 201, 209, 214, 217
two-tier development 216
VAT and 200, 209–16
European Currency Unit (ECU) 201
European Parliament 218
excise duties 189, 212–14
expenditure:
commodity composition of 124–5
personal sources of 112
as tax base 99–101
expenditure tax (ET):
administration of 108–15
arguments for 94–6, 99–102, 103, 106, 109–11, 224, 229
history of 108–9
vs. indirect taxes 99–101, 102
suggested ET return form 113–15
transitional problems 116–19
and 'Treasury 1' 223–4
treatment of savings under 95–6, 226–7
see also lifetime expenditure tax
'external effects' of goods 126

family credit 63–4, 76, 77, 78
Family Expenditure Survey (FES) 132
Feige, E. 57
Felstein, M. S. 228
Fiegehen, G. C. 34, 200
Fields, D. E. 33
Finance Act (1981) 165; (1985) 52
see also Budgets
financial companies, taxation of 176, 177
First World War 21

fiscal imbalance of local authorities 136, 146–7, 151
fiscal neutrality:
arguments for 19–20
and cash-flow tax 105, 177
and corporation tax 162–3
history of policy 220, 224–5
and tax reforms 164, 168, 172, 173
fiscal reform in EC 214
Fisher, I. 94
Flemming, J. S. 93
formula apportionment 206–7
Forsyth, P. J. 188
'Fowler-Moore reforms' 62
France 187, 190, 217, 218
'free depreciation' 170
fringe benefits 47–9
Fullerton, D. 169, 229
Furniss v. *Dawson* 60

gambling 180, 186
Gaming Board 186
gas levy, the 184, 188
gas, taxation of North Sea 183–4
George, H. 179, 230
Germany, West 147, 159, 216, 218
gifts, taxes on 106–7, 113, 118
gilt-edged securities 84, 104
Goldthorpe, J. 35
Government Actuary 65
government borrowing requirements 7
government grants to local authorities:
and community charge 146
as control of local government spending 146–7
history of 136, 143–4
to redistribute revenue 144–6
to remedy fiscal imbalance 146–7
for 'spill overs' 143
Government Social Survey 52
Greece 214
Green Papers:
Taxation of Capital on Death (1972) 106
Proposals for a Tax-Credit System (1972) 77
Wealth Tax (1974) 91
The Taxation of Husband and Wife (1980) 43
Alternatives to Domestic Rates (1981) 147, 149–50
Corporation Tax (1982) 230
Reform of Social Security (1985) 43

Harcourt, G. C. 97, 229
Harcourt, Sir W. 106
harmonization within EC:
of direct taxation 217–18
of excise duties 212–13
of indirect taxation 131, 202, 209–16
of VAT 209–12, 213–14
Hausman, J. A. 31, 228
health care contributions, US 221
Heathrow Airport 188
Hemming, R. 65
Hicks, J. R. 97, 98, 229
higher-rate taxpayers 23, 40, 85, 103, 111, 166, 169, 196–7, 200, 221
see also income tax
Hills, J. 227
Hobbes, T. 94
horizontal equity 41–2
house ownership:
and capital gains tax 80
'income' from 80, 104
investment in 11–12, 79–81
local taxes (rates) on 134, 141
tax concessions 11, 80
household taxation 43–5
housing benefit system 64, 136
Howrey, E. P. 96
Hughes, G. A. 141
'human capital' 91, 93
'hybrid' income tax 103, 225
Hymans, S. 96
hypothecated grants 143

ideal fiscal system for EC 209
ideal income tax system 98–9, 125
implicit marginal tax rates 29, 61, 66–7, 172–3
imputation system of corporation tax:
ACT complication 169
and cash-flow tax 177
consequences of 161–2, 170
and EC 218
principles of system 158–9, 166–8
rate of imputation 159
tax position of shareholders 168–9
incentives:
company finances and 162, 169–70
direct vs. indirect taxation and 120–3
fiscal neutrality and 19
income tax and 16–18, 47–9, 59
indirect tax and 15–16, 123–5
investment and 161–3, 164, 172 ff., 208

incentives (cont.)
managers and 32–5
married women and 32
progressivity and 30–4
work incentives 27–36, 40, 120–1, 219–20
incidence of taxation 6–10, 130, 133, 191–7
company taxation 153–7
differential 7
direct taxation 191
factors governing 8
formal vs. effective 8–10, 133, 191
income tax 67–8, 191–3
indirect (commodity taxes) 6, 7, 129–30, 191
NICs 9, 22–3, 67, 191
'poverty trap' 67
VAT 6, 8, 9, 191
income, definition of 96–7
income distribution, effect of taxes on 37
income effect of taxes 16, 18, 28, 30, 31, 34
income support (IS) (supplementary benefit) 63, 64, 71, 72, 73, 75, 76
income tax:
administration of: collection costs 14–16, 54–5, 59, 86; PAYE 49, 53, 54, 78, 119; reforms 55, 104, 119, 220, 222, 224–7; schedular system 23–5, 36–9, 51, 53, 80, 98, 193–4, 222–3; withholding 56, 208, 217
comprehensive: aim 103; description of 98–9; movement towards a 104, 164, 224–5, 227; problems of 119, 225
effects of: on choice of occupation 35; incentive effects 16–18, 47–9, 59; incidence 67–8, 191–3; on labour supply 30–2, 68–70, 200; on residence 35, 200, 201, 204, 209; on wealth distribution 91
history of 21–2, 52, 55, 56
and inflation 84–7, 102, 120, 121, 135, 172, 173, 174
international comparisons 26, 27, 53–6, 200–1, 207–9, 217–18, 221
local income tax *see below*
optimal income taxation 37–8
problems of: black economy 57–9, 229; complexity 53–4; enforcement 133, 209, 217; tax avoidance 41, 44, 59–60, 103, 105, 163
relationship to other taxes and benefits: capital gains tax 49–59, 229; corporation tax 158; NICs 13, 21, 23–5, 31; social security benefits 61–2, 65–70, 76–8, 193–4, 225
revenue from 189, 192
structure of 25, 29–32, 39–41, 53, 120; failings of 43–4; schedules 23–7, 36–9, 51–2, 53, 80, 98, 194, 222–3; tax allowances 23, 42, 44–9, 50–1, 61, 74, 75, 76, 80; tax base 40–60, 79–88, 94–6, 113; tax returns 49, 53–4, 112–15; tax thresholds 38, 40, 66, 74, 86, 104, 107, 122; tax unit 32, 42–5
theoretical analysis 36–9, 89–90
treatment of: capital gains 49, 86–7, 97, 104; earnings 46–51; housing 11–12, 80, 105, 226; investment income 83–6, 87, 164, 168, 170, 172, 201, 225, 231; life insurance 82, 105, 226; married women 32, 42–4, 62, 66; partnerships 52, 53; pension funds 105, 226; savings 86–8, 95–6, 105, 112, 164, 201, 226, 227; self-employed 46, 51–2; shareholders 83–4, 169, 226; social security benefits 61–2, 65–70, 72, 73, 76–7, 193–4, 225
income as tax base 1, 90, 94–6
incorporation, advantages of 152, 157
Independent Broadcasting Authority 154, 185
indexation:
and capital gains 80, 81, 83
and corporation taxation 172–3, 176
and indirect taxes 120
and taxation 99, 112, 224, 225
see also inflation
India 93, 108–9
indirect taxes 120–33
administration of 100, 126–9
advantages of 133
aims and principles of 123–7
in Britain 120, 127–33, 189
compared with expenditure tax 99–101, 102
definition of 120
distributional effects 123–5
harmonization within EC 131, 202, 209–16

household spending and 132
incentives and 15–16, 120–3, 123–5
incidence of 6, 7, 129–30, 133, 191
indirect–direct balance 120–1, 133, 230
indirect–direct distinction 199
inflation and 121
international comparisons 127, 131
regressivity of 99, 195 ff.
revenue from 189
acting as tarriffs 127
see also commodity taxation; direct taxation; VAT
individual basis for tax unit 43–5
Industry Act (1972) 170
industry-specific taxes 186
inequality in distribution of wealth 91, 231
inflation:
cash-flow corporation tax and 174–5, 177
company taxation and 172–3
and direct taxes 191
and expenditure tax 99
and government intervention in economy 219–20
indexing for 175–6, 225
and investment income 84–7, 102
and rateable values 135
taxation and 86–7, 120, 121
see also indexation
inflation accounting 173, 175
inheritance taxation 41, 106–8
Inland Revenue 22, 25, 53 ff., 60, 66, 149
Inland Revenue Statistics 41, 228
institutionalization of personal savings 88, 98
integration of personal and corporate taxes 173–4
interest:
and corporation tax 158, 161, 171, 202
expenditure tax and 113
and inflation 85
investments and 84–5, 225
tax-deductibility of payments 171
see also debt financing
intermediate goods, taxes on 123, 127, 135
Internal Revenue Service (IRS) 53 ff.
international comparisons of tax systems 26, 27, 53–6, 200–1, 207–9, 217–18, 221
see also harmonization within EC
international context of taxation 198–218, 225, 231
'inter vivos' gifts 106–7, 113
invention, corporation tax and 154, 155
investment:
corporate 171
and corporation taxation 158–60, 171–3
financing of 160–2
and inflation 84–6, 172
stimulation of 164, 170, 172
tax treatment of 170–3
investment funds 87, 172
investment grants 190
investment income 79–88
taxation of 44, 85–6, 98, 103–4, 112, 158, 164, 168, 170, 201, 225, 231
Ireland (Eire) 56, 109, 199, 200–1, 214, 216, 229
Irish Commission on Taxation 109, 229, 231
Italy 127, 187, 207, 216, 217

James, S. R. 53, 229
Japan 190, 231
jurisdiction and tax administration 198, 202–7, 209, 217

Kaldor, N. 60, 93, 94, 108, 229
Kay, J. A. 65, 66, 70, 71, 77, 131, 229
Keen, M. J. 131
Keynesian revolution 4, 5
King, M. A. 169, 176, 229, 230, 231

labour supply 32
land 117, 134, 178–82
Laffer curve 220
Lawson, N. 223
Layfield Committee 2, 136, 137, 149, 150, 230
legacy duty 106
Lewis, A. 52
Liechtenstein 208
life-cycle savings 116
life assurance:
under comprehensive income tax 98
under expenditure tax 113
as fringe benefits 48
and inheritance taxation 107
importance in total assets 79
tax treatment of 82 87, 105

lifetime expenditure tax (LET) 100–2, 108–19
- arguments for 100–2, 110, 112–13
- definition of 102
- structure of 111–12
- transitional problems 116–17
- *see also* expenditure tax

linear tax systems 12–14, 23, 39–41, 194–6
- definition of 13
- properties of 12–14
- and UK tax systems 194–6

Little, I. M. D. 93
Lloyd George, D. 21
local authority finance 134–51
- and central government/grant system 136, 141, 142, 143–7
- and community charge 12, 138–42, 145–7, 150
- Layfield Committee of Enquiry 136, 137
- the rating system 12, 134–8, 148–9
- sources of income (1984/5) 137
- alternative sources available 147–51
- spending patterns of 145, 150–1
- uniform business rate 142–3

local income tax 119, 149–51
Lodin, S. O. 109, 230
low-income families 29, 38, 39, 40
lump-sum taxes 18

MacAfee, K. 57
McClure, C. E. 227
mainstream corporation tax 166, 167
managers 32–5, 47–9
marginal tax rate:
- and average tax rate 12–13, 16–17, 28, 122
- and corporation taxation 171–3

definition of 12
- and disincentives 35, 36, 37, 39, 40
- distribution of 67–8
- and excess burden of taxation 16
- graduated pattern of 40
- high marginal tax rages 27, 36, 67
- international comparisons 26–7
- and means-tested benefits, and NICs 31, 61, 67
- and progressivity of tax systems 12–13, 36, 40, 195–6
- reduction in 17, 18
- and tax schedules 23–7
- total rate on earnings (1988/9) 29

marital status 32, 42–3
- and tax allowances 44–5, 76

Marks and Spencer 153, 154
married man's allowance 42, 44–5
married women, income and taxation 32, 42–3, 44, 62
Mayer, C. F. 187
Meade Committee/Report 76, 109, 224, 229, 231
means-tested benefits 31, 61, 67, 71–2, 73
Micklewright, J. 70
migration, effect of tax on 35, 200, 222
Mill, J. S. 94
Minford, A. P. L. 69
minimum aggregate sacrifice principle 212
MIRAS 80
Mirrlees, J. A. 123, 231
Money Which 53
monopolies, tax on 187–8
monopsony buying power 184
Morris, C. N. 58, 70, 71, 77, 229, 230
mortgages 79
- tax relief on 11–12, 80, 221

multinational corporations 200, 205–7
Musgrave, P. B. 4, 228
Musgrave, R. A. 4, 122, 228

National Audit Office reports 230
National Insurance benefits (proposals) 76
National Insurance contributions:
- administrative problems 53
- and benefits 31, 63, 64
- and contracted-out workers 65
- history of 22–3
- incidence of 9, 22, 46, 50
- and income taxation 23, 51
- and investment income 85, 86
- liability to 46, 50
- and 'poverty trap' 67
- schedule of 23, 25, 26
- as source of revenue 189, 191
- and UK tax system 13, 194 ff.

national register scheme 138
negative income tax proposals 73, 74–5
Netherlands 190
Netherlands Antilles 206–7
neutral tax system 19–20
- *see also* fiscal neutrality

New Zealand 26–7, 219, 221–2, 231

non-cumulative tax system 50–1
Nordhaus, W. D. 5
North Sea oil and gas:
  'gold-plating' possibility 184
  history of taxation 185
  investment, planning period for 184
  'poverty trap' 184
  revenues from 183, 189
  'ring-fence' arrangement 183
  special tax regime 180, 182–3
  taxation of profits 175, 180, 182–5

occupation, choice of 35
OECD 133, 202, 228, 231
oil, taxation of North Sea 175, 180, 182–5, 189
one-parent families 63
OPEC 133
Opinion Research Centre 33
optimal income taxation, theory of 37–8
output maximization position 38
owner-occupied housing 11–12, 79, 80–1, 104, 105

Paddison, R. 230
Parker, R. H. 97, 229
Part Committee 184
partnership taxation 52, 53
paternalism of corrective taxes 126
PAYE 22, 46, 49, 53, 54–5, 78, 119
payroll tax 121–2, 191
Pechman, J. A. 221, 224, 229, 231
Pedone, A. 207
Peel, Sir Robert 21
pension contributions, tax relief on 81, 105
pension funds 81, 98, 105, 116, 117, 118, 167, 168
pension rights 93
pension shemes:
  occupational 48, 64, 65, 81, 93, 105, 116
  personal (private) 65, 81
  state (retirement) 22, 35, 61, 62, 71, 81, 91–3, 116, 131
  State Earnings-Related (SERPS) 64–5, 190
  supplementary pensions 71
pensioners, proportion of in population 64
personal income tax allowance 23, 46, 75
personal wealth in UK 79, 92
petrol tax 129, 132, 213
petroleum revenue tax (PRT) 182
planning controls, effects of 180–1
poll tax *see* community charge
'poverty trap' 38, 66–8; North Sea 184
poverty 229
pre-payment of tax 111, 159, 166
Prest, A. R. 53, 229
'primary' workers 32
primary sources of information 55
privitization 187–8, 220
probate duty 106
production, taxes on 199–200
profits:
  corporation taxation 153–4, 164
  and North Sea gas and oil 175, 180, 182–5
  pure profits 153–6
progressivity:
  definition 90
  disincentive effects of 30, 36
  of income tax 21, 23, 26, 30, 168
  and indirect taxes 99 f., 122
  and rating system 139
  and social security benefits 61
  of tax system generally 12–13, 40, 99–100, 139, 141, 192 ff., 196
property development 180–2
property market 148
property owning and taxes 87–8, 90, 149, 203
  see also house ownership
property values 12, 134, 141
'Proposition 13' 219
Public Accounts Committee 52
public expenditure:
  benefits of 17
  government control of 136–8
  financing of 7, 228
purchase tax 129

Radcliffe Committee/Report (1954) 52, 108, 122
Ramsey, F. A. 124
'Ramsey rules' 124
random element in taxation 42
Rank Xerox 154
rate of return (cost of capital) 158, 159–62
rates/rating system 12, 134–51
  alternatives to 147–51
  basis of 134–5

rates/rating system (cont.)
  central government and 136–8, 141, 142, 143–7
  criticisms of 135, 137, 139, 148–9
  domestic 137, 148–9
  and government grants 137, 146–7
  and household income 140
  incidence of 134–5, 136, 139
  industrial and commercial 135, 137
  and inflation 135
  Layfield Committee of Enquiry 136, 137, 149
  and local authority income and spending 137, 151
  progressivity and 139, 141
  property values and 12, 134, 141
  rateable values, revaluations 134, 135, 136–8, 144
  rate-capping 137
  and rented housing 135, 148
  weaknesses of 135–6, 148
  see also community charge; local authority finance
Rawls, J. 36–7, 38
Reagan, President R. 219, 220–1
real interest rates 96
receipts, taxation of 113
Reddaway, W. B. 200
redistribution of income and wealth 125, 139–40, 145
reforms of tax system:
  in UK 4, 54–6, 104, 119, 164, 165, 168, 170, 171–3, 229, 231
  see also Budgets
  in USA 164
registered accounts 113, 118
remuneration packages 48
replacement rates 68–70
residence for taxation 200, 201, 204, 209
retained earnings 161–2, 168, 171, 173–4
revenue collection 198–9
revenue sharing 144, 147
Rhys Williams, Lady 73
'ring-fence' in North Sea 183
Rossminster Group 59–60
royalties, oil 182
Rubinfield, D. 230

sacrifice theories of taxation 89–90
sales tax *see* VAT
Sandford, C. T. 128
Sandmo, A. 230
savings 79–85, 87–8
  disincentives to (double taxation) 95–6, 102
  distortions in 87, 96, 103, 104, 225
  taxation of 86–8, 95–6, 105, 112, 164, 201, 225–7
Save as you Earn (SAYE) 83
Scandinavia 190, 207
schedular system of income tax 23–45, 51–2, 53, 80, 194, 222–3
schedules: A 80, 98; D 51; E 51
'secondary' workers 32, 66
second homes 80–1
Second World War 61, 164
Select Committee report 91
'self-assessment' 54
self-employed, taxation of 51–2
separate taxation of husband and wife 43
services, taxation on 203–4
SERPS *see* pension schemes
sex discrimination in taxation 43
share ownership 82–4
shareholders, tax rates of 169
shares/stock options 48–9, 83
Shoup, C. S. 216
sickness benefit 63, 71
Simons, H. C. 98, 224
single internal market (after 1992) 198, 201, 209, 214, 217
single parents 63
Sinn, H.-W. 231
small businesses 51, 107, 117–18
Smith, S. R. 58, 229
smoking, economic effects of reduction of 131, 196
smuggling 198
'social dividend' scheme 73–6
Social Security Reviews (1985) 65
social security system:
  administration costs 71
  benefit levels (1989) 62
  efficiency of 70–2
  expenditure on 190
  integration with tax system 76–8
  interaction with tax system 61, 65–70
  reforms of 61–2, 72–6
  and taxation 61–78, 193–4, 225
  see also benefits, social security
'special concessions' 96
'spill overs' and grants to local authorities 143, 146

'spite effect' 122
Sri Lanka 108
stabilization policy 4–5
stamp duties 204
Stanbury, W. T. 33
Starkie, D. N. M. 188
state pension rights 81, 93
statistics about tax system 5, 228
Statutory Sick Pay scheme 63
Stiglitz, J. E. 228
Stock Exchange 84
stock relief scheme 165, 170–1, 175
subsidiary companies 205
substitution effect of tax 16–17, 18, 28, 31
succession duty 106
supertax 21
supplementary benefit *see* benefits, social security
supplementary pension 71
supplementary petroleum duty (SPD) 183
surtax 21
Sutherland, H. 229
Sweden 54, 109, 216, 230
Switzerland 190, 208, 216, 217

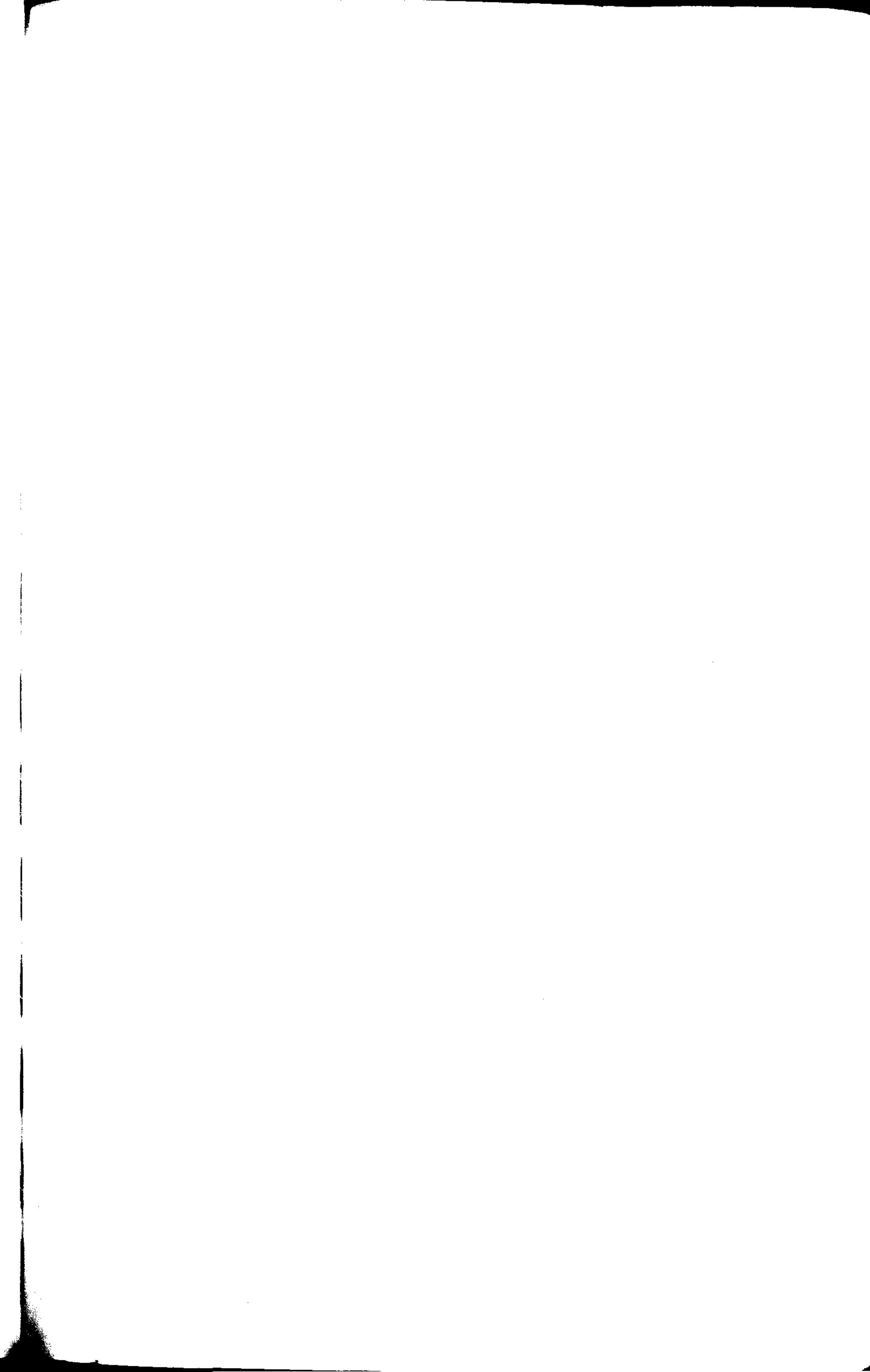
'take up' of benefits 71–2
'targeting' benefits 78
tariffs 127
taxable capacity *see* tax base
tax allowances 50–1
  personal 23, 44, 46, 75
  married couple's 44–5
  married man's 42, 44–5
  wife's earnings 44
tax avoidance 59–60
  anti-avoidance provisions 104, 177
  on capital gains 105
  on capital transfers 41, 107, 108, 109
  'Delaware link' 205, 207
  and income tax 44, 103
  and neutral tax system 163
  residence and 200, 205–6
tax bases 46–60, 79–102
  'ability to earn' theory 90, 125
  'ability to pay' theory 89–90
  benefit theory 89–90
  and cash-flow corporation tax 113, 174–7, 225
  choice of 89–102
  and corporation tax 170–1
  and comprehensive income tax 98–9
  expenditure as tax base 94–6
  income as tax base 1, 40–60, 79–88, 90, 94–6, 113
  wealth as tax base 90–3
tax capitalization 10–12, 41, 106 ff., 141
tax collection:
  costs of 14–15, 30, 49, 54–5, 59, 71–2, 78, 86, 119, 128
  methods of 49–52, 53, 144, 149–50
tax concessions 105
tax credits scheme 74–5, 77, 83, 167, 168
tax, effective incidence of 6–10, 130, 133, 191–7, 231
tax enforcement, problems of 133, 198, 202, 207–9, 217
tax havens/shelters 152, 205, 206, 207, 223
tax laws 205
tax liabilities 69, 70, 203, 204
tax rates *see* average; implicit marginal; marginal tax rates
Tax Reform Act (US) 219
tax returns 49, 53–4, 112–15
tax revenue:
  international comparisons 189–91
  local authority 137
  North Sea oil and gas 183, 189
  UK (1966–87) 192
  UK (1988/9) 198
tax revolt, growth of 219
tax schedule *see* income tax; schedular system; schedules
tax system as a whole 12–20, 44, 52–6, 99–100, 120, 139, 189–97, 227
  complexity of 53–4
  distributional effects 37, 91, 123–5, 139, 140, 144–6
  efficiency of 26, 30, 36
  government policies and 141, 146–7, 219–20
  and incentives 14–18, 27–36, 40, 47–9, 59, 120–5, 161–4, 172 ff., 208, 219–20
  and NICs 13, 194 ff.
  progressivity of 12–14, 40, 99–100, 139, 141, 192 ff., 196
  and welfare 14–16, 17, 18, 61–78, 123, 193–4, 225
tax systems, internationalization of 208
tax theory 36–9, 89–90, 123–7, 157–63, 174–7

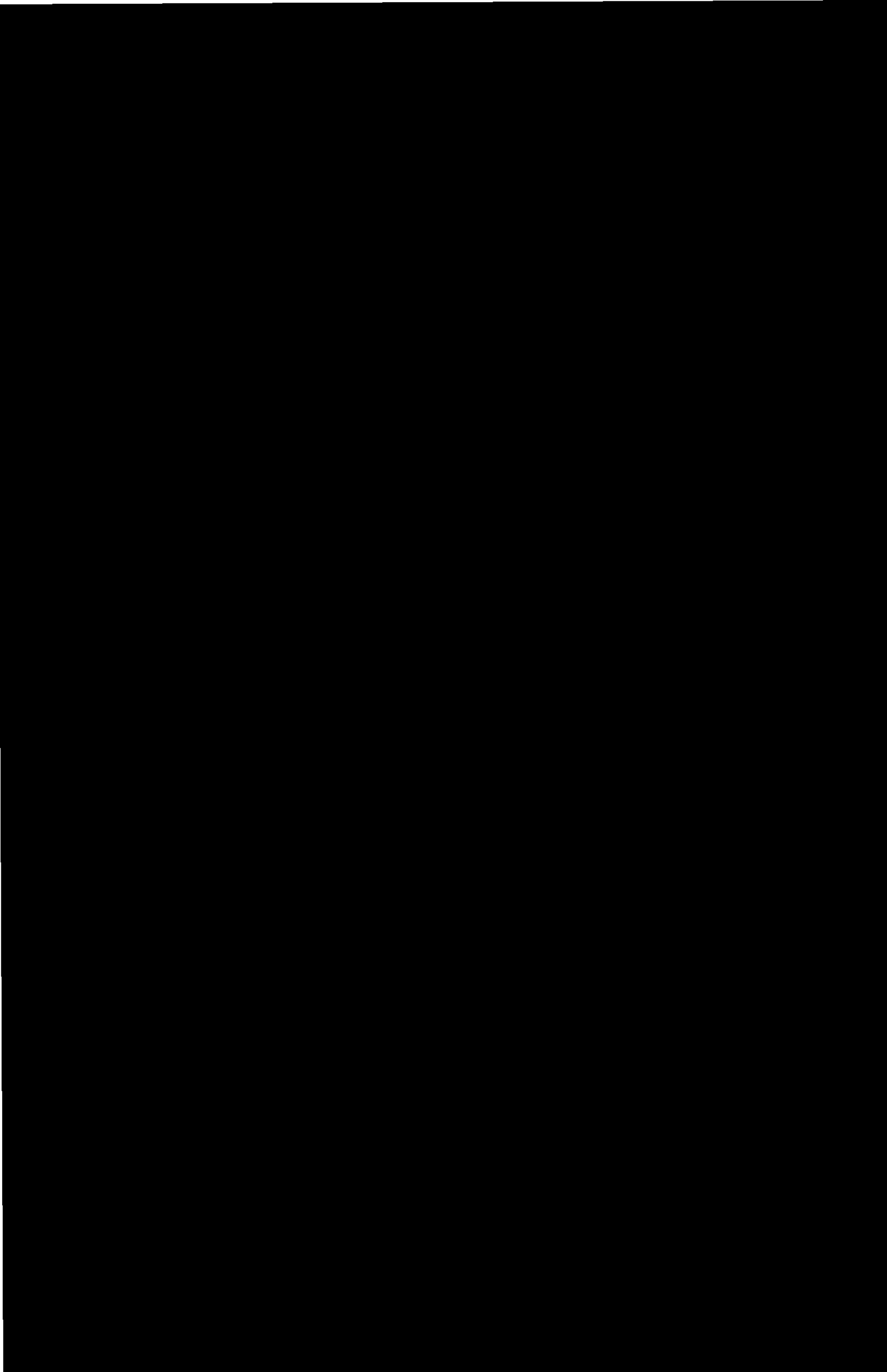
tax thresholds 38, 40, 66, 74, 86, 104, 107, 122
tax units 42–5
television franchises 180, 185–6
television licences 22, 138
Thompson, D. J. 188
Thomson, Lord 185
tobacco consumption 132
tobacco tax 6, 129, 130–2, 212–13
Townsend, J. L. 131, 229
trading, taxation of 112
transitional problems:
  of cash-flow corporation tax 177
  of expenditure tax 116–19
Treasury and Civil Service Committee 228
Treasury stock 84
Treaty of Rome 201
trusts, and comprehensive income tax 98
Tucker, Roy 59–60

unemployment:
  benefit 22, 63, 68–71
  trap, and replacement rates 68–70
unhypothecated grants 146
uniform business rae 142–3, 144, 146
uniform taxation of commodities 123–5, 126
unincorporated businesses 117
unit basis of taxation 43–5
unitary taxation 207, 218
universal poll tax 124
utiliterian objectives 36
USA 26, 27, 96, 98, 145, 147–8, 152, 158, 162, 190, 204–5, 217, 219 ff.
  budget 220
  comparison of US income tax system with UK 53–6
  corporate income tax 164, 205, 206–7
  health care 221
  tax system and reform 220–1, 227, 231
  Treasury 108, 109, 164, 220
  'Treasury 1, and 2' 220, 223–4, 227, 229, 230, 231

valuation of consumption 110
value added tax (VAT) 6–7, 8, 9, 55, 99, 100, 127–30, 189, 191, 195, 200, 203, 206
  accounts or invoice basis 128, 199
  administration after 1992 212
  costs and complexity of system 128
  distributional impact of 129
  EC and 200, 209–16
  and housing 134
  incidence 6, 8, 9, 191
  rates of 129, 130
vehicle and driver registration 55
vehicle excise duty 22, 138, 147, 148
vertical equity 41
Vestey, Lord 59

wages and labour supply 31, 32
wealth:
  changes in composition and structure 105
  distribution of 91, 92, 93
  forms of 91–2, 93
  in pension funds 79, 105
  personal wealth 105–6
  as tax base 90–3
  valuation problems 99
wealth tax 106
welfare effects of taxes 14–16, 17, 18, 61–78, 123, 193–4, 225
West Germany 27
Westminster, Dukes of 107–8
White Paper (1942): *The Taxation of Weekly Wage Earners* 22
widow's pension 62
wife's earnings allowance 44
wine, taxation of 127
withholding of taxes 56, 208, 217
women, tax treatment of 32, 42–3, 44, 62
work effort and taxation 27–35
Worswick, G. N. D. 5





This fifth edition of a very successful book is the most extensively revised so far. The revisions reflect the substantial changes both in the tax system itself and in the ways people think about tax issues that have occurred since the book's publication in 1978. There have been major shifts in rates of tax, in the taxation of savings and companies, and in the social security system, while reforms to the structure of local authority finance and the ways in which married couples are taxed are in progress. The growing integration of the European and world economies is taken into account and the international environment within which the British tax system is set.

The authors also identify areas in which the progress of tax reform in Britain is unsatisfactory and a principal concern of the book remains the description of a reform strategy, based on a personal expenditure tax and a cash–flow corporation tax.

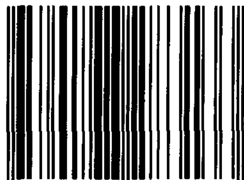
John Kay is Professor of Industrial Policy at the London Business School and Fellow of St John's College, Oxford.
Mervyn King is Professor of Economics at the London School of Economics.

'. . . brilliant example of a rare species: a highly serious yet lively and amusing work on taxation.' *British Tax Review*

'. . . its readability, lucidity and general usefulness will undoubtedly ensure many editions to come.'
The Times Higher Education Supplement

RELATED OXFORD BOOKS
The Japanese Tax System by H. Ishi
Applied Economics in Banking and Finance Fourth Edition by I. Partington
Britain's Shadow Economy by Stephen Smith
Principles of Business Taxation by J. Pointon and D. Sprately

ISBN 0-19-828313-X



OXFORD UNIVERSITY PRESS