IEA Yearbook of Government Performance 2002/2003

IEA Yearbook of Government Performance 2002/2003

iea
The Institute of Economic Affairs

First published in Great Britain in 2002 by
The Institute of Economic Affairs
2 Lord North Street
Westminster
London SW1P 3LB
in association with Profile Books Ltd

A CIP catalogue record for this book is available from the British Library.

ISBN 0 255 36532 2

Typeset in Stone by MacGuru
info@macguru.org.uk

Printed and bound in Great Britain by Hobbs the Printers

CONTENTS

Charts part 1: Government spending, taxation and other macro-economic indicators

Charts part 2: Income redistribution

Charts part 3: The effectiveness of public spending on health

Charts part 4: The effectiveness of public spending on education

Charts part 5: The effectiveness of public spending on law, order and public safety

Charts part 6: The diversity of public spending by region

Charts part 7: Miscellany

Note: Each chart's heading is designed to emphasise the main conclusion that can be drawn from that chart. The statistical sources at the foot of the facing page give an exact description of the statistical series used as well as its source.

THE AUTHORS

David Smith

David Smith studied at Trinity College, Cambridge, and the University of Essex in the 1960s, and has since been employed at the Bank of England, Royal Bank of Scotland, National Westminster Bank, Cambridge Econometrics and the London Business School. He joined London stockbrokers Williams de Broë plc in 1982, is a member of the IEA's Shadow Monetary Policy Committee, and delivers occasional lectures at the Cardiff and Derby university business schools.

Edward Bramley-Harker

Edward Bramley-Harker is a senior consultant in NERA's healthcare and pharmaceuticals practice. He joined NERA in 1998 after working as an economist with the Department of Health for several years. His work there included the allocation of resources to hospital and community health services, and developing benchmarking tools for use by health authorities and NHS trusts. Since joining NERA, his work has focused on healthcare financing reform, resource allocation, and pharmaceutical pricing and reimbursement. He was a lead author of NERA's recent study, *Towards Stakeholder Healthcare*, which set out funding reform

options for the NHS. He has degrees from Nottingham (BA) and McGill (MA) universities.

Hermione Parker

Hermione Parker is a freelance political economist and writer, specialising in income redistribution and its effects on living standards, incentives, unemployment and family life. She has been a specialist adviser to House of Commons committees, a member of the Microsimulation Unit Advisory Group in the Department of Applied Economics, University of Cambridge, and a member of the European Institute of Social Security. She helped form the Basic Income Research Group (now the Citizen's Income Trust) and the Family Budget Unit of which she is a director. She has published many papers in her field, including, for the IEA, *The Moral Hazard of Social Benefits* (1982) and *Taxes, Benefits and Family Life* (1995).

James Tooley

James Tooley is Professor of Education Policy at the University of Newcastle-upon-Tyne and director of the education programme at the IEA. He directed a global study of investment opportunities for private education in developing countries for the International Finance Corporation (IFC) which led to publication of *The Global Education Industry*, published by the IEA and IFC in 1999, with a second edition in 2001. He is the author of several other books and is a frequent speaker at international conferences on education. He recently established at the University of Newcastle-on-Tyne the E. G. West Centre for Market Solutions in Education.

Patricia Morgan

Patricia Morgan is a sociologist specialising in family policy and criminology. She is author and co-author of a number of books, as well as articles for periodicals and national newspapers. She is also a frequent contributor to television and radio debate.

Peter Wynarczyk

Dr Peter Wynarczyk is Head of Economics at the University of Northumbria. His research interests include macroeconomics, the economics of crime and law enforcement, Austrian economics, and political economy. He is the author of numerous academic contributions in these areas – journal articles, books, and chapters in books. He co-authored *A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought* (Edward Elgar Publishing Ltd, 1994), which was translated into French, Italian, Polish and Chinese, and is currently engaged in completing his book on *The Dynamics of Capitalism: A Comparative Analysis of Schumpeter and Hirschman* (Edward Elgar Publishing Ltd, 2002/3).

Peter Warburton

Dr Peter Warburton runs an independent economic consultancy, Economic Perspectives Ltd, and is a director of Rhombus Research Ltd. He spent fifteen years in the City as economic adviser and chief economist for the investment bank Robert Fleming (latterly J. P. Morgan Chase) and at Shearson Lehman. He is a member of the IEA's Shadow Monetary Policy Committee.

FOREWORD

Every twenty years or so, there is a fashion for big government and a fresh optimism that public spending will banish social and economic ills. In some countries, this fashion never passes. In the UK, the fashion has recently returned. Without adopting the position of the cynic, who believes that nothing good ever came of government, it is necessary to revisit the chronicles of British economic failure that have so often resulted from misguided public-sector intervention in the past. Our hope is that this volume will help to illuminate these past failures and rare successes sufficiently to penetrate the rosy glow with which thoughts of grander government are currently entertained.

At the beginning of the 21st century, we have a much better perspective on the effectiveness of government intervention than ever before. We have more and better data for the developed countries of the OECD, together with basic economic and social datasets for almost every other country of any size in the world. This wealth and diversity of information is a powerful weapon in discriminating between rival hypotheses and in exploding comfortable myths about the necessary size and activities of government in the Western world.

It is not our purpose to project a dreamy vision in which the free market is a panacea, nor to side with the anarchist, who denies the importance of externalities. The objective of this

Yearbook is to set out the substantial case for the restraint and diminution of public-sector activity and intervention, using updated information. The case is presented in the form of evidence and argument. The evidence spans macroeconomic performance, the tax and welfare systems, the delivery of healthcare, education services, criminal justice and public safety, and draws attention to the contrasting outcomes between the UK regions. In six introductory essays on selected topics, detailed arguments are advanced in support of the superiority of personal over collective choice.

The charts and commentary in the second section undertake an informal audit of the scale and success of UK public-sector activity. Each part contains measures of the scale or scope of government, over time and in comparison to other countries, followed by indicators of absolute or relative UK performance. If there is a simple message to be gleaned from all the evidence, it is that an increase in public-sector resources is no substitute for excellence in resource allocation. Where poor resource allocation is delivering inferior or disappointing outcomes, there can be little confidence that higher spending allocations will produce a different result.

This is not to suggest that the better outcomes that are being achieved elsewhere can be instantly or painlessly replicated in the UK. However, it is important to understand more clearly the reasons why some other countries' systems are more successful than our own and to identify the true obstacles and constraints to better performance in the UK, not least in the spheres of health and education. It is facile to imagine that a quantum leap in UK public-resource provision to match spending-to-GDP ratios in other EU countries will automatically deliver the desired results. Moreover,

prevailing levels of public apathy towards the political process do not constitute a mandate for raising the overall tax burden.

Among the many debts to be acknowledged in the preparation of this volume, the first is to Vito Tanzi and Ludger Schuknecht, the authors of *Public Spending in the 20th Century*. Their comprehensive survey of the growth of government spending in industrialised countries since the 1960s and its disappointing effects provides a powerful underpinning for the Yearbook. Their unfashionable thesis, that public spending in developed countries could be much lower than it is without sacrificing important policy objectives, chimes with the UK evidence presented here.

Thanks are due to Patrick Barbour, whose original idea stimulated the production of this Yearbook, as well as to Richard Baron, Edward Bramley-Harker, Forrest Capie, Frank Castles, Heather Gage, David Moller, David B. Smith and numerous e-mail correspondents who have helped me to track down information and data sources, some of which were a revelation. I am grateful to Colin Robinson, editorial director at the IEA, who has edited the text and contributed greatly to the coherence of the final product. The Yearbook has been assembled over a relatively short space of time and it doubtless contains some errors and many omissions, for which the authors accept full responsibility. Comments, criticisms and suggestions for the improvement or enlargement of the Yearbook will be most warmly received.

As in all IEA publications, the views expressed in this Yearbook are those of the authors, not of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council members or senior staff.

PETER WARBURTON

January 2002

IEA Yearbook of Government Performance 2002/2003

Essays

1 HOW HIGH IS TAX? HOW BIG IS SPEND?

David B. Smith

Introduction

Parliament's control of the purse has been one of the main ways in which the legislature has controlled the executive – and hence one of the main foundation stones of British democracy at least since Tudor times. Moreover, a central peacetime debate in British politics, ever since David Lloyd George was Chancellor of the Exchequer in the early 1900s, has been over how large a share of national resources should be controlled by the state and which sectors of society should provide the corresponding tax revenues. The government is by far the biggest single player in the British economy: general government expenditure in total currently accounts for 42.8 per cent of the 'basic price' measure of national output, which is more than twice the share of manufacturing industry, for example. Economists and many others also need to be able to measure accurately private activity free of public spending, which behaves quite differently and is often deliberately altered to offset the business cycles in private economic activity. These considerations suggest that there is both a strong need for well-documented and internally consistent figures for public-sector activity and also that providing such data should be one of the main concerns of official statistical offices, such as Britain's National Statistics (NS).

Unfortunately, it is surprisingly difficult for independent

economists to measure both the scale of government activity and how it has changed over the years in Britain, despite the central importance of this issue. These problems arise, in part, because governments have organised the delivery of 'public services' in different ways in recent years. However, the adoption of the 1995 version of the European Standard Accounts (ESA-95) for UK national accounting purposes in the autumn of 1998 also seems to have left many independent users of the figures confused, because the new accounting conventions are so different from their predecessors. This essay considers some of the conceptual and practical problems involved in measuring the UK tax and public spending burdens and how these have changed over time. There are two main conclusions.

First, that the differences between different potentially valid measures of the shares of taxes and spending in national output are so great that no one should regard the figures given in the Budget 'Red Book', for example, as more than the crudest of approximations. As Table 1 shows, the range of those shares is from just over 37.5 per cent to 43.5 per cent of GDP (including oil) for government spending, and from about 38 per cent to about 44 per cent for taxes and national insurance contributions. In other words, the range is about 6 per cent for both spending and taxes.

Second, that the House of Commons Treasury Select Committee, the Conservative opposition and financial journalists should all pay more attention to the measurement problems involved, in order to reassure the citizenry that the statistics are not being gerrymandered by unscrupulous politicians and bureaucrats in their own interests.

Measurement problems, old and new

This section discusses some of the conceptual problems that have bedevilled attempts to measure the tax and spending burdens ever since the pioneering studies of the 1950s, while the next section concentrates on the recent dramatic changes to the figures associated with the phased introduction of the new ESA-95 national accounts in two stages in the autumns of 1998 and 2001. In general, there are two main reasons why competing measures of the public spending and tax burdens may not be consistent with each other:

The first is that *definitions of the public sector can vary widely*, particularly once allowance is made for the existence of quasi-government bodies and public corporations. It used to be possible to limit these problems by using the concept of 'general government', which consists of central government plus local authorities. This approach helped minimise the breaks associated with the privatisation programmes of the Thatcher years, for example, which took industries that had previously charged for their services, such as gas, electricity and water supply, out of public corporations and into the private sector. Unfortunately, the distinction between general government and other sectors has become rather blurred in recent years because important publicly funded activities – such as NHS trusts – have been defined as public corporations since they first appeared in 1991, although the cost of buying in their services does appear as a procurement item in general government current expenditure.

The second problem concerns the *definition of national output with which government spending or tax revenues are compared*. For most of the early postwar period, it was accepted that the correct measure of gross domestic product (GDP) to use was the 'factor cost measure', which excludes indirect taxes and subsidies. This

was for three main reasons: first, that GDP at factor cost provided a more accurate measure of the national output available to support public consumption; second, that public expenditure paid almost no indirect tax and that a more accurate measure of the spending burden could be achieved if factor cost GDP was used as the divisor; and finally, that the alternative market price measure of GDP, which is gross of indirect taxes, would rise if there was a switch from direct to indirect taxation, even if nothing else had changed.

Political memoirs reveal that the market price measure of GDP was adopted by the mid-1970s Labour government, in place of the established factor cost measure, simply to massage down the public spending, tax and borrowing burdens, in the face of Cabinet concern that these were becoming unsupportable. Margaret Thatcher's switch from direct to indirect taxes in the 1979 Budget also made her record as an allegedly tight-fisted guardian of the public purse look noticeably better, when compared with the previous Labour administration, than it would have done if the more consistent factor cost measure of national output had been employed in its place.

The present Chancellor's policy of raising extra revenue through higher specific duties has also had the politically convenient effect of pushing up the market price measure of GDP, without adding one iota to national output, and correspondingly pushing down the reported tax and spending burdens. However, this is relatively small beer when compared to some of the other Maxwellian accounting practices – such as trying to treat tax credits as negative income tax – that the present Chancellor has employed, arguably to try to cook the books, and which have rightly been resisted by NS.

The measure of national output used as an indicator of the burden of public spending and taxes is not a trivial accounting point. In the 2000/01 fiscal year, the market price measure of national output, at £955 billion, was over £130 billion (15.8 per cent) higher than the £825 billion factor cost measure (see Table 1). This means that the share of total general government expenditure in money GDP was just over 37.5 per cent in 2000/01 if the market price measure is used, and 43.5 per cent if the arguably superior factor cost measure is employed instead – a massive difference of 6 percentage points. Similarly, the share of non-oil taxes in GDP was about 37.5 per cent using the market price measure, and 43.5 per cent using factor cost – again a difference of 6 percentage points, the equivalent of three weeks in the calculation of the much-publicised 'tax-free day', when the average citizen ceases to work for the state and starts working for him or herself. Furthermore, all these ratios would be between 0.9 and 1.2 percentage points higher if North Sea oil production, which reached £22 billion in the 2000/01 fiscal year, is deducted from GDP, as some would argue it should be.

The new ESA-95 national accounts

Accurate measurement of government spending and tax burdens was difficult enough a few years ago. However, the massive – and still little-understood – changes in the national accounts associated with the phased introduction of European Standard Accounts (ESA-95) in the autumns of 1998 and 2001 have acted rather like a gigantic mudslide sweeping down an alpine valley, and have erased what had previously appeared as many of the most established features of the UK economic landscape. It can be argued that the new ESA-95 accounts are more logical than their

predecessors – at least, for those who do not have to 'unlearn' their knowledge of the UK accounting conventions established between the late 1940s and 1998 – and have the added benefit that they are more comparable with the methods used by other countries. However, it is also clear from the debates between the Prime Minister and the then Leader of the Opposition in the last Parliament that even the most senior politicians are unaware that the post-ESA-95 data are so different from their predecessors that it is meaningless to compare the tax and spending burdens projected in the last Conservative Budget Report, for example, with today's figures.

Among the more immediately relevant of the ESA-95 changes introduced in late 1998 was that the European Union now appears as a separate – but somewhat under-reported – fourth arm of government, in addition to UK central government, local authorities and public corporations. This means that measures of the general government tax burden, for example, now exclude VAT and other government revenues raised on behalf of the EU, an amount equal to some 0.8 per cent of national output. Annual figures for UK transactions with the EU can be found in Table 11.1 of the National Statistics National Accounts 'Blue Book', and quarterly figures for the taxes paid to the EU are in the NS balance of payments press release. However, it is also clear that the Conservative opposition did not wake up to this significant change in the definition of the tax burden during the course of the last Parliament.

Another major change that followed the introduction of ESA-95, already mentioned, is that certain elements of general government consumption, such as universities and some colleges of higher education, now appear in different national account categories, such as non-profit-making institutions serving households. The corresponding funding costs now appear as one element in

the new ESA-95 financial accounts item 'Other Current Grants by General Government', which amounted to no less than £19.4 billion in fiscal 2000/01, or 2 per cent of national output. It is important to include this item when attempting to measure the public spending burden because almost all the other, more traditional spending items have been redefined down. The post-ESA-95 accounts also added tens of billions to money GDP, through definitional changes and technical improvements such as new sampling methods.

Thus, if the measure of GDP at current market prices in 1997, which was the last year before the changeover, is taken as an example, then it can be seen that the pre-ESA-95 estimate was £786.6 billion; the figure given on 22 August 2001, before the latest change, was £805.4 billion. And the latest figure for the same item is £811.1 billion or £24.4 billion more than the starting estimate. This upward revision to national output is enough on its own to reduce the apparent tax and public spending burdens by not quite 1.5 percentage points of GDP, other things being equal. Finally, the new ESA-95 accounts attempted for the first time to incorporate explicit measures of government productivity in measuring general government current expenditure in volume terms – the value figures were not affected by this change. Unfortunately, it has only been possible to implement this change from 1994 onwards, so making it hard to know how comparable the earlier data are with today's figures.

As indicated earlier, NS brought in a second set of major changes on 25 September 2001. The new accounts further reduced the reported size of the public sector through the exclusion of many municipal activities such as regional airports and municipally funded housing associations. The net effect of

all the changes to both the numerator and the denominator since the autumn of 1998 has been to reduce the widest measure of the share of government spending in national output by around 1.2 percentage points, and the share of taxes by 1.6 percentage points, if the calculations are performed for the overlap year of 1997/98, when compared with the pre-ESA-95 definitions used under the previous Conservative government, for example.

The post-25 September 2001 national accounts also took farther the attempt, pioneered when ESA-95 was first introduced in 1998, to measure general government output directly – for example, by measuring the number of fires attended by the fire brigade and the number of cats rescued from trees. The uncertainty attached to all attempts to measure government output, however, is shown by the fact that the national accounts published on 25 September 2001 cut the volume growth in general government consumption in the year to second quarter 2001 from 3.2 per cent to 1.8 per cent, when compared with the figures released on 22 August, but also indicated a far worse cost increase, of 4.9 per cent, than the 3.1 per cent previously reported for the same period. It is surprising that no political commentators have realised the implications of this for the effectiveness of the government's spending policies.

General government measured on a national accounts basis and by economic category

The problems involved in quantifying and tracking the size of the public sector mean that there is no unambiguously correct way to approach the problem, the demands of the EU for internationally comparable data for administrative purposes, for example, being

quite different from the needs of econometric modellers for long runs of consistent and seasonally adjusted quarterly data. However, for many economic purposes it is best to employ measures of general government expenditure compiled by economic categories on a national accounts basis. These national accounts measures of the main tax and spending categories make most economic sense and are easier to relate to other national accounts magnitudes, even if they do not correspond to any of the 'control totals' currently utilised by HM Treasury. A full set of such accounts is not published in paper form, although Table 6.4 in the NS publication 'Economic Trends' (October 2001 edition) provides a summary table using unadjusted data.[1] However, it is possible to put together a detailed set of general government accounts using seasonally adjusted quarterly series from the NS databank, provided one knows the code names of the series concerned. NS are most helpful in this respect and will provide the code names for both the calendar- and financial-year seasonally adjusted series to anyone who has access to their databank.

GDP includes public spending

A final important point is that GDP on any measure is defined to include public current and capital expenditure and also consumption financed out of welfare benefits. It can be argued that the state cannot fund itself, and that a more relevant measure of the tax and spending burdens is their ratio to the non-socialised element of national output. This was some 57.2 per cent of the basic price

1 Table C22 in the official 'Budget 2001' Red Book also corresponds to these figures, but shows only financial year totals, as do Tables 2.3C and 2.3D in NS 'Financial Statistics' and Table B21 in the November 2001 'Pre-Budget Report'.

measure of GDP, which has partly replaced, and is broadly equivalent to, the factor cost measure in the new ESA-95 national accounts in 2000/01. Put this way, the state and its beneficiaries were spending in total 74.8p for every pound spent in the private sector and extracting 73.6p in non-oil taxes.

This is a highly controversial and unconventional way to estimate the public spending and tax burdens. Essentially, the argument is that, if a taxpayer carries one bureaucrat on his or her back, the ratio is one to one, not one to one plus one, and that if the taxpayer carries two bureaucrats, the ratio is two to one, not two over three, and so on. That may explain why the tax burden sometimes feels much more onerous to individual taxpayers than the published figures suggest.

Conclusions

1. The existence of consistent good-quality figures for public spending and taxation is an essential precondition for an informed political debate, especially given the importance of Parliament's control of the purse in the evolution of British democracy. The easily accessible NS data fall somewhat short of what is desirable in this respect, though it is possible for the expert to put together rather better information from the NS databank.

2. The ESA-95 changes introduced in 1998 and 2001, and new ways of delivering public services, have complicated attempts to measure the size of the public sector, both at any point in time and over time. Shortly after ESA-95 was introduced in late 1998, one of the NS statisticians who compiled the government accounts was asked whether it was still possible to know whether the public spending and tax burdens were higher or lower than when Lady

Thatcher took office in 1979 or left it in 1990, for example. The reply was that the discontinuities in the data were such that it was now extremely difficult to make such comparisons with any great confidence.

3. It is not only the NS figures which have lost much of their usefulness in recent years but also the data provided in other official sources, most notably the Budget 'Red Book'. This has exploded in size since Gordon Brown became Chancellor but has lost much of the simple factual information – such as the overall impact of the Budget measures on the various income bands – that characterised earlier Financial Statements. Another serious loss is that the regular annual articles in the NS publication 'Economic Trends', showing how the tax and social security burdens in Britain compare with those in other leading countries, have not been published since March 1999. It is still possible for the expert to put some of this information together from OECD publications. However, that is not nearly so convenient and clearly does not have the media impact of a press-released article in NS's flagship publication, an impact that could prove embarrassing for a government that is already presiding over a record level of, and record increase in, the non-oil tax burden and whose spending plans imply further rises.

Nothing in this paper proves that the government's spin doctors are suppressing articles and figures that used to be published but are now regarded as being 'off message'. However, the issues involved are so important to democratic accountability that the House of Commons Treasury Select Committee should investigate them thoroughly. Measurement and accounting issues are inherently boring, which is why they attract so little

political and media attention. However, they are the first and best defence against misrepresentation by interested parties and what might be regarded, in a corporate setting, as financial fraud.

For further statistics on government taxation and spending, see the Charts section of this Yearbook, parts 1 and 7.

Table 1 **Alternative measures of the shares of government spending and taxes in UK national output in fiscal year 2000–01**

	Value (£bn)	*Share of GGE in GDP (%)*	*Share of total TNIC in GDP (%)*	*Share of non-oil TNIC in GDP (%)*
General government expenditure (GGE)	361.7			
Total taxes & National Insurance contributions (TNIC)	363.7			
Non-oil taxes & National Insurance contributions*	359.4			
GDP at current market prices	956.6	37.8	38.0	37.6
GDP at basic prices	844.4	42.8	43.1	42.6
GDP at factor cost	826.3	43.8	44.0	43.5
Non-oil GDP at current market prices	934.6	38.7	38.9	38.5
Non-oil GDP at basic prices	822.4	44.0	44.2	43.7
Non-oil GDP at factor cost	804.3	45.0	45.2	44.7

*Includes taxes paid directly to European Union. These totalled £6.3bn in 2000–01. Sources include National Statistics 'Financial Statistics', National Accounts press release 21 December 2001 and Williams de Broë calculations.

2 TRANSPARENCY AND CHOICE: A GREATER ROLE FOR PRIVATE FUNDING IN HEALTHCARE?

Edward Bramley-Harker

Introduction

For many years, the NHS has been credited with providing mostly equitable access to a comprehensive and high-quality health service. The system, based on strong principles of 'social solidarity', results in a significant redistribution of resources away from the better-off towards the poor and from the healthy towards the sick. This provides a health service where access to services should depend on 'need' for healthcare rather than on ability to pay. The NHS is also credited with providing a strong framework for cost control – tax funding (or rather the NHS's allocation from the Treasury) acts as a ceiling above which NHS spending should not go.

These features are often seen as positives. Few would argue with the objectives of equity in access to treatment and social solidarity (although some may argue about how well the NHS actually meets these objectives, given geographic differences in waiting lists and the stark contrast in access between those with private medical insurance and those without), and the government frequently emphasises the value for money provided by the NHS. But there are also weaknesses and problems. The media regularly highlight examples where things have gone wrong. Waiting lists are a constant high-profile issue for the NHS, as are staff workloads, recruitment, pay and morale. Less well publicised

are the low levels of satisfaction expressed by the UK population, particularly when compared with other countries. Set this against a background of patients becoming increasingly willing to challenge the judgement of medical staff (complaints about NHS staff account for a growing proportion of total complaints) and the NHS appears to be going through a critical period.

The question, then, becomes one of whether a tax-financed NHS will be able to meet the rising demands and expectations of the population, or whether alternative funding regimes should be considered. This essay explores some of the possibilities, including continuing with the NHS in its current guise, or introducing greater flexibility to make use of private funds. The trick with alternatives, of course, is to retain the things the NHS does well whilst addressing the weaknesses.

Some basic statistics

The data section of this Yearbook contains a variety of statistics about the UK health sector. It is well known that UK spending on healthcare is low by international standards. Spending measured as a proportion of GDP falls well below the EU average and the discrepancy is even starker when the southern European countries are excluded from the comparison. Whether this is detrimental to the overall health status of UK citizens is hard to say given the difficulties of measuring health outcomes and quality. Measures such as life expectancy and infant mortality are crude indicators and depend on much more than just the health system.

But a simple look at other statistics suggests that the system is under-resourced. The Charts section (part 3) contains figures illustrating that staff resources per capita are low. Other tables sug-

gests that the uptake of new technologies in the UK lags well behind that seen in many other EU countries, and intervention rates for 'sophisticated' procedures are relatively low. Table 1 at the end of this essay shows the availability of different high-tech medical equipment per capita of population across a number of countries, including the US and some western European countries. Similarly, Table 2 shows intervention rates for some relatively high-tech, but common, interventions. Naturally there are data problems with comparisons of this type, but it is the consistency of the UK's position which is compelling. We regularly lag behind other countries.

More noticeably from the patient's perspective, waiting lists are high and satisfaction levels are low by international standards. The UK does not compare favourably to satisfaction levels observed in other countries. According to a 1997 study, over 40 per cent of UK citizens were dissatisfied with health services in the UK, compared to 29 per cent in Spain, 17 per cent in the Netherlands and only about 11 per cent in Germany (see Figure 30b in the Charts section of this Yearbook).

Again, in comparison with other countries, flows of private funding into the health system are low. Figures show that the UK is much more reliant on public funding in healthcare than is seen elsewhere. Undoubtedly this is in part due to the poor incentives for individuals to purchase private medical insurance (PMI) and other forms of private care. For example, those with PMI effectively pay twice for their healthcare – once to the NHS and once for PMI. It benefits the NHS because PMI holders make less use of NHS services (they take their acute conditions to the private sector) but they receive no form of rebate. Of course, whether a rebate or tax incentive is appropriate is, to a degree, a political decision, and the lack of a rebate contributes overall to resource redistribution (it

tends to be the wealthy who have PMI and so forgo their NHS usage). But as those with PMI pay the full price for only a marginal benefit, it is hardly surprising that private funding is low.

Continuing with the status quo

Against this background, there are a number of ways the NHS could evolve. The government's own plans are centred on a continuation of the NHS in its current form but with more resources. In 2000, the government set out commitments to increase significantly levels of staffing and funding in the NHS Plan, including an aspiration to raise overall health expenditure to the European average. There are goals to improve and expand facilities, targets for additional staff, and national standards to promote geographic consistency. These are all to be welcomed, and it is not the intention of this essay to detract from the significance of these goals (although in some cases they were not particularly ambitious, often relying on current trends continuing until 2004). But then reality intrudes. Since the Plan, there has been a degree of scepticism about whether the targets can be met. For example, the staffing targets rely on significant recruitment from overseas which is probably not sustainable in the long term.

The Plan also contained much talk of devolving responsibility and increasing accountability. Many would support this, but at the same time it contained a variety of measures for increasing central control. For example, the Plan reaffirms the role of the National Institute for Clinical Excellence (NICE) to disseminate high-quality information on cost effectiveness. There is a Modernisation Agency with a brief to spread best practice and National Service Frameworks that build on the work of NICE, setting out

national standards of care based on good evidence of the quality and effectiveness of interventions. The Commission for Health Improvement should ensure that national standards are being met and undertake regular inspections of local health bodies. These are all worthy aims (although one wonders how these bodies will work together in a co-ordinated way), but they hardly reinforce the objective of devolved responsibility or local accountability.

Where the NHS Plan disappoints is that it does nothing to address some of the fundamental weaknesses of the NHS. True, it restates a commitment to increases in spending, but it is unclear how long substantial increases in expenditure can be sustained through tax funding. Looking backward, significant resource increases are not without precedent, but these have not proved enough to stem the flow of crises and long waits. Also significant is that the Plan (and previous reform efforts) do little to address the lack of responsiveness in the system, which is still perceived largely as looking inward and upward to the NHS Executive rather than outward towards the needs of patients. In addition to the poor incentives for private funding, the system is largely unresponsive to the views of patients and citizens, and offers little choice or flexibility for those who want to spend more – even though surveys indicate that people want to see greater funding.

One conclusion is that prospects for the success of the Plan are not particularly high. In political terms, success may well be assessed on the basis of changes in waiting lists and whether the government is seen to have done enough to turn around the fortunes of the NHS. At a more fundamental level, the question should be whether spending more within the current structure will give us an NHS on a par with other western European countries. Or should we consider alternatives?

Where do we go from here?

There are a number of ways in which the system of health financing in the UK could be amended. They range from tinkering with the current system to more fundamental reform, perhaps drawing on lessons from other countries.

As described above, health spending in the UK is derived predominantly from public funds – much more so than in other countries. This creates an inherent inflexibility, and such a centralised system removes accountability from patients. In many other countries there is more flexibility and more local accountability. This is achieved within a redistributive framework (the better-off contribute more than the poor), preserving equity in access to treatment. In many social insurance-based health systems (common in Europe) there is flexibility for individuals to choose their social insurer, which then becomes responsible for commissioning care on behalf of its enrolees. There is often choice regarding the amount contributed (premiums can differ across social insurers). Some systems allow individuals to opt out of the public system (often mandating that they must arrange some form of insurance elsewhere, but exempting them from contributions to the social system). In the other tax-based systems, responsibility is devolved to a much lower level than in the UK. Funding responsibility in Sweden, for example, falls to the local councils, which also have the ability to vary local tax rates. This places accountability much closer to the end users of the service.

So how could the UK begin to introduce this sort of flexibility and accountability? In this respect, choice can be seen as an important mechanism. It is not immediately clear that patients and citizens are demanding choice per se, but choice acts as a mechanism for encouraging improvements in service structure and de-

livery. Put simply, if people can shop around, there is a strong incentive first to attract and then to retain customers. The logic is that this encourages downstream improvements in service delivery, be it better customer service, lower prices or a higher quality of service. In the health sector, the potential for benefits is large.

One way to introduce more choice is to address the poor incentives for private funding to flow into the system – to change the duplicate nature of private funding. Voucher schemes have been suggested, whereby patients receive a voucher to cover the value of NHS care. The voucher can be used either within the NHS or can be topped up with private medical insurance (or by patients themselves paying for the full cost of top-up services) to access other types of care.

A more radical option would be to move towards a 'stakeholder' healthcare system. Individuals would be mandated to enrol with a stakeholder insurer which becomes responsible for commissioning care on behalf of enrolees. Insurers would be required to accept all applicants and would have to offer a minimum guaranteed package of care that would be common to all insurers. This could be done within the current redistributive framework of the NHS (for example, by setting premiums as a proportion of income, ensuring that the better-off subsidise the poor, and by using risk adjustment mechanisms to prevent insurers from risk selecting). It would introduce elements of choice and competition. It would also increase flexibility, with the potential for individuals to contribute more towards their healthcare (in return for higher levels of service from their insurer or more comprehensive coverage).

An interim measure would be to tinker with the system, perhaps considering tax breaks for those with private medical insurance. In practice this would draw criticism because of the

deadweight loss (the cost of tax breaks for people who would have purchased insurance anyway) and the lack of evidence that breaks would actually stimulate demand for PMI. Nevertheless, it ought to be possible to structure tax breaks so that they target new PMI enrolees. For example, employers' national insurance and income tax on the benefit in kind are both levied on corporate PMI. Exemptions from these could be provided for those earning below a certain income threshold, thereby reducing the deadweight loss (most of those who currently have PMI would earn above the threshold) and targeting a new pool of demand.

There are various other possibilities. In Spain, for example, central government civil servants are allowed to take the equivalent of their NHS allocation and place it with a private insurer. The scheme is popular with those eligible – the majority take advantage of the opt-out. In Holland, individuals earning above an income threshold cannot join the social insurance system to cover their health risks. Instead, they have to obtain private insurance or self-pay, but they do not pay twice (through the tax system and through the private insurance system). Germany allows individuals to opt out of the social insurance system and take private insurance instead, but it is not a compulsory opt-out.

The theme common to all these ideas is choice. They strengthen the link between what individuals pay for their healthcare and the level of service they receive. Surveys in Britain regularly report that individuals want more money spent on health. But when it comes to tax rises they are more reluctant, probably because of the lack of transparency – people see their taxes go up, but do not necessarily see this feeding through into additional health expenditure and service improvements. Strengthen the link between what people spend and what they receive and the chances

of tapping into people's willingness to contribute more towards their healthcare look far higher. Hypothecation would be another route towards establishing a more explicit link, and evidence suggests that people would support tax rises if they knew the money would go towards healthcare. But hypothecation would not be popular with the Treasury, and it does not address the lack of flexibility inherent in the current system. It does not provide strong incentives for individuals to spend more if they want to.

This therefore brings us back to whether private funds could play a bigger role in the system. If pursued, this proposal would undoubtedly raise criticisms of inequity, with the wealthy better able to contribute more in private funds and hence receive more comprehensive levels of care, higher levels of service, or faster access. But this criticism ignores the fact that there are inequalities in the provision of services at the moment: those with PMI receive faster treatment in private facilities than those without. By improving the incentives for private money to flow into the system, it makes these higher levels of care more accessible to all. Flexibility and choice should encourage improvements in service delivery and quality of care across the board, benefiting rich and poor alike. Funding mechanisms can still be structured to ensure that the better-off pay more than the poor, and that access to good-quality care is not dependent on ability to pay. It need not challenge the fundamental equity of the NHS. Rather, it could improve equity in the delivery of care, making better levels of service available to more.

Concluding remarks

Most commentators agree that the NHS is going through a critical

time. Opinion is split about whether the resources and expenditure outlined in the NHS Plan will deliver real and sustainable improvements in the UK's health system. A comparison with other countries suggests that even if the targets in the Plan are met, the UK will still be significantly out of line with other countries in terms of overall expenditure and the mix of expenditure (public vs private).

There is no instant solution to the difficulties facing the NHS, but that is not a reason to prevent the consideration of alternatives. A tax-funded system is constrained, and it is not clear how long significant resource increases in the NHS's budget can be sustained (depending on the state of the economy, competing pressures on tax revenues and the willingness of the electorate to support tax rises). What is clearer is that the UK system does not best tap into people's willingness to spend more on their healthcare. Levels of private spending are low. A more flexible and transparent approach towards financing seems an obvious way to address this, encouraging individuals to contribute more towards their healthcare. Many options are on the table. All tend to support greater choice and a greater role for private expenditure.

Citizens are clearly concerned about the state of the NHS. Categorically proving that one way of funding care is 'better' than the other is not possible, and proponents of the status quo may see this as a reason for ignoring alternatives. Yet if satisfaction levels expressed by citizens are anything to go by, it is clear that we could learn a lot from other countries.

The Charts section of this Yearbook (part 3) contains statistics on health.

Table 1 **Per capita availability of different high-tech medical equipment in 1997 (units per million population, relative to the US)**

Countries	*CT scanners*	*MRI units*	*Mammographs*
Austria	182	111	NA
Canada	60	24	NA
Czech Rep.	53	14	79
Finland	91	114[a]	291
France	71	33	NA
Germany	125	82	NA
Hungary	34	18	53
Iceland	108	97	141
Italy	108	54	NA
Korea	153	67	NA
Mexico	9[a]	1[a]	8
New Zealand	66	36	132
Poland	3	5	NA
Portugal	90	37	27
Spain	68	43	NA
Switzerland	134	163	NA
Turkey	32	NA	19
UK	42[a]	61[b]	43
USA	100	100	100
USA (units per million population in 1997)	13.70	7.60	13.10

Source: *OECD Health Data 2000*
NA = Data not available
a 1998
b 1999

See also Table 35a in the Charts section of this Yearbook.

Table 2 **Per capita number of selected surgical procedures performed (units per 100,000 population relative to the US)**

Country	*Coronary Bypass, 1996*	*Operations on the Eye, 1990*	*Operations on the Musculoskeletal System, 1990*
Australia	39	603[a]	159[a]
Belgium	63	578[a]	194[a]
Canada	26	180	70
Finland	36	299	136
Greece	27[b]	NA	NA
Iceland	31	222	97
Norway	33	NA	NA
Poland	7	NA	NA
Portugal	14	99	31
UK	18	30	8
USA	100	100	100
USA (units per 100,000 pop.)	222	138	1199

Source: *OECD Health Data 2000*
NA = Data not available
a 1996
b 1995

See also Table 35b in the Charts section of this Yearbook.

3 HOW NOT TO ENCOURAGE ENTERPRISE THE POVERTY TRAP: 1971–2001

Hermione Parker

Background

This study updates from 1982 and 1994 to June 2001 the main findings of two IEA Research Monographs[1] which analysed the disincentive effects of Britain's tax and benefit systems on the living standards and work incentives of working families with children.

As before, the analysis starts from the premise that most people work to earn a living. It accuses nobody of being 'work shy' or 'scrounging'. It does not question the desirability of a social security safety net that is adequate, nor does it make judgements about lone parents. Its purpose is to demonstrate the extent to which Britain's regressive tax system (income tax, National Insurance contributions and council tax), compounded by increasing reliance on means-tested benefits, is pauperising working families with children.

Given that New Labour's plans for modernisation of Britain's tax and benefit systems are not yet fully in place, this is an interim assessment. From the information available, it seems likely that New Labour's changes will reduce the scale of the unemployment trap by increasing the rewards for lower-paid work, but will

1 Hermione Parker, *The Moral Hazard of Social Benefits,* Research Monograph 37, IEA, London, 1982, p. 109; Hermione Parker, *Taxes, Benefits and Family Life: The Seven Deadly Traps,* Research Monograph 50, IEA, London, 1995.

increase the scale of the poverty trap by raising the entitlement ceilings for Working Families Tax Credit (WFTC) to above average manual earnings. Assuming no other changes, WFTC is likely to set in motion a vicious circle of increasing public expenditures, financed in part by taxpayers who are themselves hard pressed. For a lasting solution, policy-makers need to switch from poverty relief to poverty prevention, for instance by raising income tax thresholds, by linking council tax liabilities to incomes instead of property values and by making National Insurance contribution less regressive. The case for convertible Tax Credits/Basic Incomes should also be reconsidered.

There is also the question: *How much does it cost households of different composition, across the life cycle, to avoid poverty?* In most developed countries (including the United States[2]) such information is provided by government, or under government auspices. This is not the case in the UK and never has been, yet without it successive British governments are targeting blindfold.[3]

Another facet of the debate, seldom aired in public, is the disparity between those who perceive children as the responsibility of their parents and those who also perceive them as tomorrow's wealth creators. New Labour's proposed reintroduction of child tax allowances is a move in the right direction, but reintroduction of the Married Couple's Allowance (or something similar) for cou-

2 National Research Council, *Measuring Poverty: A New Approach*, National Academy Press, Washington, DC, 1995.

3 John Veit-Wilson, *Setting Adequacy Standards: How governments define minimum incomes,* The Policy Press, 1998; Low Pay Commission, Third Report on the National Minimum Wage, Evidence from the Family Budget Unit, *Living Costs at the Poverty Line, Families with Two Children*, April 2000; House of Commons, Social Security Committee, Second Report, *Integrated Child Credit,* March 2001, Memorandum submitted by the Family Budget Unit (ICC16), p. 148.

ples dependent on a single income is also necessary. Without it, single-wage couples are taxed on the same basis as single people, although their taxable capacity is lower.

On the facts behind the spin

A succession of balancing acts

Many of the problems discussed here go back to the introduction of means-tested Family Income Supplement (FIS)[4] in 1971, and require balancing acts between three objectives: poverty avoidance, improved work incentives, and control of public expenditure. Though FIS and its successor benefits Family Credit and Working Families Tax Credit are ostensibly more cost-effective ways of boosting the incomes of lower-paid families with children than increasing income-tax allowances and Child Benefit,[4] that argument overlooks the long-term effects of means-tested benefits on work incentives and public expenditure. Without WFTC the poverty trap would not exist.

The scale of today's poverty trap would be smaller if Sir Edward Heath's government had succeeded in replacing income tax allowances and Family Allowances by Tax Credits/Basic Incomes,[5] convertible into cash for households with insufficient income to set against them. Instead, the closing decades of twentieth-century

4 For a contemporary critique by the former Deputy Secretary of the Ministry of Social Security, see Sir John Walley, *Social Security – Another British Failure?*, Charles Knight & Co. Ltd, London, 1972.

5 *Proposals for a Tax-Credit System,* Cmnd 5116, HMSO, October 1972. The proposed Tax Credits, like Basic Incomes, would have converted automatically into cash for households without the income to set against them. See Hermione Parker, *Instead of the Dole,* Routledge, 1989, Part 2.

Britain were marked by the falling away of non-means-tested family income support (Child Benefit, Child Tax Allowances, Married Man's Allowance) plus a bias in favour of means-tested benefits, the latter heavily influenced by the output of computer programs *which take no account of behavioural change*.

One result has been a surge in the gross earnings required by households with children to escape the poverty trap and become financially independent.

The poverty trap, April 2001

Since 1994, due mainly to the introduction of WFTC, the unemployment trap has been overtaken in importance by the poverty trap. For households with children, receiving all the means-tested benefits to which they are entitled, the gross earnings required to escape the poverty trap have risen to above average manual earnings. Table 1 shows the gross earnings required to escape the poverty trap. Table 2 shows the 'escape points' from the poverty trap as percentages of average male and average female manual earnings.

WFTC is a means-tested benefit payable to families with children where one or both parents work at least sixteen hours a week. The amounts payable depend on the number and ages of the children; the net incomes, savings and capital of their parents; whether the parents work full time (thirty hours or more a week) or part time (16–29 hours a week); and the costs of childcare. Parents with savings or capital in excess of £8,000 are ineligible. WFTC is payable for six months at a time, during all but the last six weeks of which there is no upper limit on a claimant's earnings. The cost to taxpayers of this perk, though generally unknown, is

likely to be large, as is the incentive to 'play' the system.

The main reasons for 'poverty' in working families with children include:

- Low earnings
- Taxation beyond ability to pay
- High travel-to-work and childcare costs
- High rents and council tax

Low earnings correlate with part-time working as well as low wages. Either way, the situation is aggravated by taxation regardless of ability to pay (TRAP). In June 2001, at the then minimum wage of £4 an hour, a typical two-parent family in the circumstances described below paid £1.68 income tax, £7.30 NI contribution and £15.50 council tax – nearly £25 a week in all – which it clearly could not afford. On earnings of £260 a week, they paid £23.68 income tax, £17.39 NI contribution and £15.50 council tax – nearly £57 a week in all – compared with WFTC entitlement of £53 in return. But for the tax they would not require WFTC.

Example 1: Two-parent household

In June 2001, a two-parent, single-wage family with two children under eleven, rent of £49.86, council tax of £15.50 and no childcare, needed gross earnings of £410 a week (£21,320 a year) to escape the poverty trap, compared with average male manual earnings in April 2001 of £360 a week (£18,715 a year).[6] Assuming a working week of forty hours, the family's implied marginal tax

6 New Earnings Survey 2001.

rate (income tax + NI contribution + WFTC withdrawal) was 69.4 pence out of each additional £ earned between earnings of £155 and £410 a week.[7]

Example 2: Lone mother

In June 2001, a lone mother with two children under eleven, local authority rent of £49.86, council tax of £11.40 and childcare of £150 needed gross earnings of £650 a week (£33,800) a year to escape the poverty trap[8] (Table 1) compared with average female manual earnings in April 2001 of £242 a week (£12,574) a year.[9] To earn £650 in forty hours he required an hourly wage of £16.25.

In October 2001, the minimum wage for workers aged twenty-two and over was increased to £4.10 an hour. Assuming a working week of forty hours, the increase adds £4 to gross weekly earnings, but a paltry £1.20 to the net weekly incomes of households with children receiving WFTC.

So what went wrong?

Key ingredients of the problem are:

- Ignorance of and indifference to the incomes required to avoid poverty.

7 *Tax Benefit Model Tables, June 2001,* Department for Work and Pensions, Information Centre, Analytical Services Division, 2001, Table 1.6b.
8 Ibid., Table 1.3d.
9 New Earnings Survey 2001.

- Taxation regardless of ability to pay (TRAP)
- Excessive dependence on means-tested benefits.

Given that nobody in government knows how much money households need to avoid poverty, it is par for the course that those with children are taxed beyond their ability to pay and expected to top up their net incomes by claiming WFTC, gaining at most 30.6 pence for each extra £ earned. Those who also claim Housing Benefit and Council Tax Benefit gain 6 pence for each extra £ earned.

Since the early 1980s, despite much talk about the need to improve work incentives, successive governments (first Conservative, now New Labour) have added to the poverty trap by condoning tax-induced poverty. Year after year of computer-simulated policy initiatives have put a wedge between government and the grass roots, which New Labour's spin doctors are busy knocking more firmly in place. To be a fully fledged citizen, so the doctrine goes, *you must pay tax.* Income tax – potentially the most progressive but also the most headline-catching tax – is cut back while VAT, council tax and NI contributions take the strain. Yet council tax and NI contributions are singularly regressive. For government, their attraction is that they do not hit the headlines.

Summary of findings

Five findings stand out:

1. Since 1994, the unemployment trap has improved but the poverty trap has worsened.
2. Most at risk of the poverty trap are working families with children, especially lone mothers.

3. To escape the poverty trap, two-parent, single-earner households with two children, living in local authority rented housing, need above average male manual earnings.
4. To escape the poverty trap, lone mothers in similar circumstances, but with childcare costs of £150 a week, need gross weekly earnings of £650, which is close to three times average female manual earnings.
5. The savings motive is being eroded by the exclusion from WFTC of working families with capital over £8,000; and exclusion from Income Support of retirement pensioners with capital over £12,000.[10]

Solutions

In IEA Research Monograph 50, I made three main policy recommendations:

- First, that decisions which impact on household living standards, self-reliance and family solidarity be taken together, not separately, in order to ensure consistency.
- Second, that all such decisions be based on careful examination of household living costs.
- Third, that income tax allowances, income tax reliefs and child benefit should be replaced by 'unisex' Basic Incomes/Tax Credits, which would convert into cash for people without the incomes to set against them. Most other income to be taxable.

10 See Hermione Parker (ed.), *Low Cost but Acceptable Incomes for Older People: A minimum income standard for households aged 65–74 years in the UK*, The Policy Press, 2000.

With the exception of council tax, New Labour government has made considerable progress with my first recommendation, but no progress concerning research into household living costs, to which it remains hostile, despite recommendations by the House of Commons Social Security Committee that such research be undertaken.[11] Nor are Basic Incomes/Convertible Tax Credits on New Labour's agenda. Yet Child Benefit, which replaced Child Tax Allowances and taxable Family Allowances, is a de facto Basic Income for children. Basic Incomes for adults would replace adult tax allowances and reliefs and most existing social security benefits. They would also reduce administrative costs. Given the billions of pounds being spent on changes to the tax and benefit systems, updated costings of Basic Income proposals appear overdue.

The Charts section of this Yearbook, part 2, contains statistics on income redistribution.

11 House of Commons, Social Security Committee, Second Report, *Integrated Child Credit*, HC 72, paras 24, 25, House of Commons, 14 March 2001.

Table 1 **Gross earnings to escape poverty trap, June 2001**

	Childcare costs	*Required earnings*	
	£ week	*£ week*	*£ year*
Single person	0	135	7,020
Lone parent + 1 child	0	310	16,120
Lone parent + 1 child	70	440	22,880
Lone parent + 1 child	100	490	25,480
Lone parent + 2 children	0	370	19,240
Lone parent + 2 children	100	560	29,120
Lone parent + 2 children	150	650	33,800
Married couple	0	185	9,620
Married couple + 1 child	0	340	17,680
Married couple + 2 children	0	410	21,320
Married couple + 3 children	0	480	24,960

Assumptions: (1) Children under 11, except eldest in three-child family, who is 11–15

(2) Single people aged 25 or over

(3) Rent and council tax, £ week:

	Rent	*Council tax*
Single:	41.52	9.40
Single + 1 or 2 children:	45.60	10.40
Couple:	41.52	12.80
Couple + 1 child:	45.60	13.70
Couple + 2 children:	49.86	15.50
Couple + 3 children:	49.86	15.50

Source: Department for Work and Pensions, Analytical Services Division, *Tax Benefit Model Tables, June 2001*.

Table 2 **Poverty trap escape points as %s of average manual earnings, local authority tenants April 1982, April 1994, June 2001**

	%s average manual earnings		
	1982	*1994*	*2001*
Single man – 25 or over	72	41	38
Married couple*	85	54	51*
Married couple + 1 child	93	66	94*
Married couple + 2 children	99	75	114*
Married couple + 3 children	102	89	133*
Single woman, 25 or over	120	63	56
Lone mother + 1 child (childcare £70)	152	102	182**
Lone mother + 2 chlldren (childcare £150)	161	115	269***

	—— Average manual earnings (£ week) ——		
	Apr 1982	*Apr 1994*	*Apr 2001*
Average male manual earnings	134	281	360
Average female manual earnings	80	182	242

* Single-wage, no childcare costs, wage-earner is husband

** Lone mother, has childcare costs, £70 per week

*** Lone mother, has childcare costs, £150 per week

Sources: *Tax Benefit Model Tables, April 1982*, DHSS, 1982; *Tax Benefit Model Tables, April 1994*, DSS, 1994; *Tax Benefit Model Tables, June 2001*, DWP, 2001.

4 THE GLOBAL EDUCATION INDUSTRY

James Tooley

A quiet revolution is taking place in education in developing countries. It has been sparked off neither by governments nor by international agencies. Nor is it lauded in the media. But it is impacting on the lives of millions worldwide. The revolution challenges the assumption that the public sector should be responsible for all aspects of education – for three main reasons. First, doubts are emerging about the effectiveness and efficiency of public education. Second, there are doubts about the equity, or fairness, of public education, and its accountability, especially to the poor. Third, there is an increasing awareness of initiatives by educational entrepreneurs, and evidence to suggest that competitive pressures can lead to significant educational improvements.

Standards and efficiency

As far as the first reason is concerned, while in many countries doubts have arisen about standards in state schools, it is not until comparisons are made with *private* schools in the same countries that the role of government is significantly questioned. Numerous studies have been carried out across a wide range of developing countries, all of which have found that private schools not only are more effective educationally, when controlled for socio-economic factors, but are also more efficient.

For instance, studies from the World Bank began by looking at achievement in verbal ability in Thailand,[1] following up with studies of achievement in language and mathematics in Colombia, the Dominican Republic, the Philippines, Tanzania and Thailand again.[2] The studies explored the proportional gain in achievement score if a randomly selected student, with the characteristics of an average public school student, were to attend a private rather than a public school, holding constant the student's socio-economic background. While there was a large range, the studies all showed the superiority of private education in terms of raising these cognitive abilities: for Colombia, the results showed that private schools were 1.13 times more effective than public schools, averaging for verbal and mathematical achievement. For the Dominican Republic, private schools were about one and a half times more effective in raising achievement in mathematics; and in Thailand, again for mathematics, private schools were 2.63 times more effective than the public schools.

One obvious objection was that private schools can succeed where public schools cannot because of increased resources. However, when the same researchers probed this issue, they found the opposite to be the case. Comparing the cost per student in a private and a public school gave results ranging from a low of 39 per cent in Thailand to a high of 83 per cent in the Philippines. Combining these two sources of information, the researchers were then able to gain an answer to the question: 'For the same per pupil

1 Emmanuel Jimenez, Marlaine E. Lockheed, Nongnuch Wattanawaha, 'The Relative Efficency of Private and Public Schools: the Case of Thailand', *The World Bank Economic Review*, vol. 2, no. 2, 1988, pp. 139–64.

2 Emmanuel Jimenez, Marlaine E. Lockheed, and Vicente Paqueo, 'The Relative Efficiency of Private and Public Schools in Developing Countries', *World Bank Research Observer*, vol. 6, no. 2, July 1991, pp. 205–18.

cost, how much more achievement would we get in private than in public schools?' The answer ranged from 1.2 times (Philippines) to a massive 6.74 times (Thailand) more achievement in the private than in the public schools.

Geeta Kingdon's evidence from India reveals similar findings.[3] Kingdon controlled for twenty-one potentially confounding variables, including parental and family income, number of years of mother's education, number of books in the home, and student aptitude, for her study of a stratified random sample of schools in urban Lucknow, Uttar Pradesh. She found that the (unaided) private schools were 27 per cent more effective at teaching maths and slightly more effective at teaching language than the public schools. But when per pupil costs are brought into the equation, the results become quite striking. In the (unaided) private schools the per pupil cost came out at less than half that in the public schools (38 Rupees compared to 80 Rupees).

Equity and accountability

Doubts about state education that inform the debate about the role of government in education also focus on the fairness of public provision. In many countries, however, it has been observed that, despite public expansion of funding and provision, the expansion has not reached all members of society equally. Particularly acute is the wide gap in terms of educational provision offered to urban and rural populations. In Indonesia, for instance, only 3 per cent of urban children of primary school age did not

3 Geeta Kingdon, 'The quality and efficiency of private and public education: a case study of urban India', *Oxford Bulletin of Economics and Statistics*, 58.1, 1996, pp. 57–81.

receive any schooling; in the rural areas it is over three times more, at 10 per cent. These comparison figures also obscure the fact that gender disparities in rural areas are even more severe. In Pakistan, for instance, while 73 per cent of urban females aged between seven and fourteen have attended school at some time, this figure plunges to 40 per cent for rural females in the same age group.[4]

In the poorest countries, it might be thought that spending on basic education would be a government priority, since these have yet to achieve universal primary school enrolment. However, this often does not happen. In Africa, for instance, per student spending on higher education is about forty-four times higher than on primary education.[5] Almost always it is found that the poorest 20 per cent of the population get significantly less than 20 per cent of public education subsidy, while the richest 20 per cent gain significantly greater than 20 per cent. Most dramatically in Nepal, the richest quintile gets almost half of total public spending on education.

Some of the most dramatic evidence of the inequity of public provision, which also raises the issue of accountability, comes from India. The *Public Report on Basic Education in India*[6] looked at primary education in four states, where it surveyed a random sample of villages, in which there were a total of 195 government and 41 private schools. The report outlines some of the 'malfunctioning' taking place in government schools for the poor in these four states. The schools suffered from poor physical facilities and high

4 World Bank, *Priorities and Strategies for Education. A World Bank Review*, Development in Practice series, World Bank, Washington, DC, 1995.

5 Ibid.

6 The Probe Team, *Public Report on Basic Education in India*, Oxford University Press, Oxford, 1999.

pupil–teacher ratios, but what was most disturbing was the low level of teaching activity taking place in them. When researchers called unannounced on their random sample, only in 53 per cent of the schools was there any teaching activity going on. In fully 33 per cent, the headteacher was absent. The Probe survey reported many instances of 'plain negligence', including 'irresponsible teachers keeping a school closed or non-functional for months at a time' and a school where 'only one-sixth of the children enrolled were present'.[7] Significantly, the low level of teaching activity occurred even in those schools with relatively good infrastructure, teaching aids and pupil–teacher ratio. Even in such schools, 'teaching activity has been reduced to a minimum, in terms of both time and effort. And this pattern is not confined to a minority of irresponsible teachers – it has become a way of life in the profession.'[8]

These problems highlight the 'deep lack of accountability' in the public schools. For these problems were *not* found in the private schools. The Probe team found a considerably higher level of teaching activity taking place in the private schools, even though the work environment was not better in these. For the researchers, this 'brings out the key role of accountability in the schooling system. In a private school, the teachers are accountable to the manager (who can fire them), and, through him or her, to the parents (who can withdraw their children). In a government school, the chain of accountability is much weaker, as teachers have a permanent job with salaries and promotions unrelated to performance. This contrast is perceived with crystal clarity by the vast majority of parents.'[9]

7 Ibid., p. 63.
8 Ibid.
9 Ibid., p. 64.

All of this evidence is leading some governments and international agencies to wonder whether or not public education can reach the poorest in society, or whether some form of public-private partnership – perhaps with publicly funded vouchers being available for use at any school, public or private – would be a better role for government to play if reaching the poor is its aim.

Private-sector alternatives

But can private schools really reach the poor? In fact, the presence of private schools serving low-income families is a growing phenomenon throughout the developing world, and relates to the third major reason for the growing questioning of the role of government in education – the emergence of viable private-sector alternatives. In India, for instance, recent research has revealed a whole range of schools charging about $10 to $20 per year per student, run on commercial principles and not dependent on any government subsidy or philanthropy. These fees are affordable by families headed by rickshaw-pullers and market-stall traders. Even so, many of these schools also offer a significant number of free places – up to 20 per cent – for even poorer students, allocated on the basis of claims of need checked informally in the community. Similar schools have been reported in many African countries too.[10]

The emergence of private education alternatives is not only about the poor, of course. Recent research has uncovered a whole range of interesting examples of educational entrepreneurs who

10 Igor Kitaev, *Private education in sub-Saharan Africa: a re-examination of theories and concepts related to its development and finance*, International Institute for Educational Planning/UNESCO, Paris, 1999.

are creating innovative and effective private alternatives. The International Finance Corporation found education for-profit companies in developing countries that had created 'chains' of schools and colleges, often operated on a franchise basis, with strict quality control procedures in place (including using the international standards of the ISO 9000 series) and investing in research and development to explore new ideas in pedagogy and curriculum. Examples include Objetivo/UNIP in Brazil, which has over half a million students from kindergarten to university level across its five hundred campuses around Brazil; and NIIT based in New Delhi, which offers computer education and training in its forty owned centres in the metropolitan areas, and about a thousand franchised centres across India. It also has a global reach, with centres in the USA, Asia-Pacific, Europe, Japan, Central Asia and Africa.[11]

Companies like NIIT are also developing student loan programmes to help the less advantaged access their courses. NIIT has links with Citibank, giving all its advanced students the opportunity to take out a seven-year study loan towards repayment of the programme fees. The loan covers up to 90 per cent of the course fee and is repayable over the next sixty months. Significantly, the loan does not require any collateral – so it is open to students from any socio-economic background, provided they can pass the entrance test. The theory behind this is that any student who gains the advanced qualification will be more than able to repay the loan, given the demand for young people with Internet-related skills, in India and beyond.

11 James Tooley, *The Global Education Industry*, Hobart Paper 141, IEA, London, 2nd ed., 2001.

Notably, private entrepreneurs have harnessed information technology to the learning process. There has been a rapid growth of for-profit private-sector providers in education at all levels – including primary and secondary schooling as well as higher education – creating e-learning opportunities, in developed as well as developing countries. Many of these are in direct competition with traditional public-sector providers, such as the University of Phoenix, with 90,000 students across 32 campuses and 71 learning centres. However, many traditional universities have also responded to the challenge by either creating for-profit subsidiaries themselves – with New York University, for instance, setting up its NYOnline arm, and Columbia University creating a for-profit arm, Fathom Knowledge Network Inc., in partnership with Cambridge University Press, the New York Public Library and the University of Chicago.[12] Other for-profit companies are emerging to provide e-learning for the primary and secondary school market, including the appropriately named k12.com, led by William J. Bennett, Secretary of State for Education under the Reagan administration, aimed especially at home-schooling families and disaffected children, providing opportunities to study in 'virtual charter schools'.

The emergence and strength of these private-sector alternatives have impressed many governments, looking to improve the quality and efficiency of public schooling. The British government is currently engaged in a process of contracting out failing schools and local education authorities to the private sector, to find best-value service wherever it can be found. But this process is not confined to developed countries: one notable example comes from

12 Commonwealth of Learning, *The Development of Virtual Education: A global perspective*, London, 1999.

India, where the state governments of Tamil Nadu, Karnataka and Andhra Pradesh want to bring computer education into all high schools. Significantly, although allocating extra funds to this endeavour – about US $22 million over five years in Tamil Nadu – the states have not looked to the public sector to provide this, but instead have developed a model to contract out the delivery to private companies, which provide the software and hardware while the government provides an electricity supply and the classroom. Companies that have won these contracts can also use the classroom as a franchised centre, open to the schoolchildren and teachers during the day, and to the general public in the evenings and at weekends. The contracting out of curriculum areas such as this represents an important step forward in relationships between the public and private sectors, and provides an interesting model worth watching and emulating.

The Charts section of this Yearbook, part 4, contains statistics on education.

5 THE SCANDAL OF STATE 'PARENTAGE': CAN 'SOCIAL WORK' BE ABOLISHED?

Patricia Morgan

The outcomes for children in public care are a national scandal. The state is a terrible parent. Massively over-represented among the disadvantaged, 75 per cent of care children leave school without qualifications – a rate twelve times higher than for children in general. They are sixty times more likely to be homeless and fifty times more likely to be imprisoned.[1] Any time spent in care runs risks of social and mental problems nearly threefold the rate in the general population of comparable age, and over fourfold in those reared by both natural parents.[2] This record is a damning indictment of the notion, constantly reasserted in the collectivist twentieth century, that the state would be a far better parent compared to the bungling amateurs customarily left with the task. Yet the worth of the committed parent is illustrated by the outcomes for adopted peoples from the very worst possible backgrounds which are significantly better than those of institutionally reared or fostered people. They

1 A. Heath, M. Colton and J. Aldgate, 'Failure to Escape: a longitudinal study of foster children's educational attainment', *British Journal of Social Work*, vol. 24, 1989, pp. 241–60; L. Garnett, *Leaving Care and After*, National Children's Bureau, London, 1992; Prison Reform Trust, *The Identikit Prisoner*, 1991; also *The National Prison Survey*, Home Office, 1991.

2 A. Buchanan and J. Ten Brinke, *What Happened When They Were Grown Up?*, Joseph Rowntree Foundation, York, 1997; A. C. Rutter, D. Quinton and J. Hill, 'Adult outcome of institution reared children: males and females compared', in L. N. Robins and M. Rutter, *Straight and Devious Pathways from Childhood to Adolescence*, Cambridge University Press, Cambridge, 1990.

also fare better in every way, at all times of life, compared to those restored to natural parents or relatives, or to those reared in similar socio-economic conditions to the ones into which the adopted were born.[3]

While adoption is a childcare option much in the child's best interests, it has been on a downward trajectory since the 1970s: adoption orders reached a peak of 25,000 in 1968, falling to 11,000 in 1980 and 4,100 in 1999. Around a half are step-parent adoptions. With the collapse of baby adoptions, stigma has passed from the unwed mother to the woman who relinquishes her child. No matter how dire her conditions or capacity for parenthood, she will be pressurised to keep the baby. However, while the percentage of adoptions involving children from local authority care has continued to grow, from 7 per cent of all adoptions in 1975 to 40 per cent in 1996, the overall decline in adoption also hides a recent fall in children adopted from care (reaching the low level of 1,900 in 1997).

With the history of child welfare one of a choice between growing up in public care or returning to the family that abandoned, ill-treated or could not cope with the child, so statutory social services developed along with the premise that children would seldom, if ever, need alternative homes. Even at the high tide of baby adoption in the 1960s, adoption was more or less unthinkable for 'welfare' children. Older or handicapped children were considered unadoptable anyway. In the 1970s, several developments came together to suggest the possibility of families for children growing up in care. There were the deaths of children left with or sent back to their original families and research (often with

3 Rutter et al., op. cit.

war orphans) showing that late adoptions were successful. This coincided with evidence of thousands of children stockpiled in care, waiting for the elusive family reunion that never came. Legislation made it possible to obtain a court ruling 'freeing' a child for adoption. The trickle of care children out into adoption was engineered by children's advocates and organisations. But as local authorities were unavoidably becoming involved with adoption, the Adoption Act 1976 gave this movement a concerted push. This was hardly separable from the Seebohm reorganisation and its associated ideology. Creating large 'generic' social work departments out of little groups of welfare specialists, it greatly extended the powers and scope of social services. The Act required each local authority to have in place, by itself or in co-operation with other agencies, a comprehensive adoption service by 1988.

While it rose slowly until the early 1990s, the percentage of children who left care through adoption then began to fall – and was under 4 per cent by 1997. Hopes that 'special needs' adoption would reduce the public care population, or become a mainline childcare option, were disappointed. Attitudes became increasingly hostile as the numbers involved fell. The 'partnership with parents' principle, attributed to the Children Act 1989, became deeply embedded in the culture of social work.

In a reaction against the intrusion of the 'permanence' principle into children's services, goals were reaffirmed as family preservation, rehabilitation and restoration. Yet, when the court determines any questions regarding the upbringing of a child, the Children Act insists that 'the child's welfare shall be the court's paramount consideration' – pointing as much in the direction of adoption as away. The same applies to the general duty of local authorities to 'safeguard and promote the welfare of children within

their area who are in need' and 'so far as is consistent with that duty, to promote the upbringing of such children by their families'. But, given the emphasis on 'partnership', the promotion of the welfare of children and their upbringing by their original families were equated, whether or not this was consistent with children's best interests. The result was the revitalisation and reassertion of naive claims that, even in cases of extreme abuse and neglect, it had been made possible for all children to remain with their birth parent(s) or, if they were looked after by the local authority, to return home or stay in care with the hope of eventual contact. At best, adoption was a last resort.

It might seem that local authorities had plenty of time between 1976 and 1988 to set up their 'comprehensive' adoption services, but many had not complied twenty years on.[4] A half of social services did not produce any publicly available information about adoption in the mid-1990s. There were 'clear and unacceptable delays',[5] and most did not have sustained partnerships or agreements with other adoption agencies, whether voluntary bodies or other local authorities. There is a regulatory requirement to review adoption policies, procedures and work not less than every three years. An inspection found that this was a developed process in only one authority, while '[i]n some, it was hard to find any evidence of such reviews being done'.[6] Given deeply held reservations about the validity of adoption, it is not surprising that authorities have been so poorly equipped to provide something to which they have given such low priority. Nothing addresses 'from the outset

4 *For Children's Sake: An SSI Inspection of Local Authorities Adoption Services*, Social Services Inspectorate, Department of Health, 1996.

5 Ibid., p. 19.

6 Ibid.

all the options for achieving a permanent home for the child and what that plan will be if rehabilitation with the birth family cannot be achieved'.[7] While the Department of Health has recently encouraged the use of contingency planning, 'there is confusion in the field as to what precisely is required'. With everybody unclear as to what is expected of them, everything drifts.[8]

Local authorities have little grip on the passage of children through the care system, whether 'adoptable' or not. Once a child is in care or a Care Order has been obtained, the case is 'safe' and the issue settled. All the other pressures mean that it is high-priority or crisis work which gets done. Despite the shortfall in suitable adopters, those that are approved face a significant wait. One study found 2,400 children for whom no adopters had been identified, while there were 1,300 adopters who had no child placed with them.[9]

Functionaries dislike making waves. The temptation is always to play safe, procrastinate, and do nothing. No steps may be taken to place a child for adoption until 'freed' by the courts, while the courts will not approve freeing or care plans with adoption as the aim where there are no prospective adopters on the horizon. In courts as in social work, children's cases must compete with the great mass of other business. Courts have (not unjustifiably) a low opinion of social work. They may insist that further assessments and attempts at rehabilitation be made – not just to give the birth parents every chance, but to observe these efforts themselves.[10]

7 *Adoption: The Prime Minister's Review*, Performance and Innovation Unit Report, Cabinet Office, 2000, p. 25.

8 Ibid., p. 26.

9 Findings from the 'Survey into the Implementation of Department of Health Adoption Circular LAC(98)20'. Quoted in *Adoption: The Prime Minister's Review*, op. cit.

10 *Adoption: The Prime Minister's Review*, op. cit., p. 27.

The Adoption Agencies Regulations 1983 require agencies to ensure that staff have adequate experience and qualifications to undertake adoption work. But managements are poorly informed, little time is spent on adoption by social workers 'active' in this area, and expertise has diminished. Social work education 'has become ever more generic, meaning that social workers entering children and families work have limited specialist skills and are likely to have received little training on fostering and adoption issues'.[11] This has meant increased preoccupation with politically correct jargon and issues like sexism and racism. There is no body of knowledge or good practice, and social work is not research guided.

However, the late 1990s saw a repeat of developments in the early 1970s. Advocacy for comparatively successful adoption outcomes accompanied adverse publicity for a care system beset by scandals, in which *Adoption and the Care of Children*,[12] from the Institute of Economic Affairs, made a significant contribution to the debate. The negative approach of the social services to prospective adopters was repeatedly in the public eye, along with adherence to bizarre and discriminatory policies, like precise racial matching. The proportion of care children involved in adoption began to rise again. By the end of March 2001, 3,067 were adopted out of care, or 5.5 per cent (this was over 40 per cent more than in 1998/89).[13] By 2002 there may be 4,050 adoptions. The length of time before

11 Ibid., p. 16.

12 Patricia Morgan, *Adoption and the Care of Children: The British and American Experience*, Choice in Welfare 42, IEA, London, 1998.

13 After the downturn of the 1980s and 1990s there were 58,900 in care as at March 2001 with an annual increase of 4.4 per cent in the previous three years. 'Children adopted from care in England: 2000/2001', *Statistical Bulletin*, Department of Health Bulletin 2001/25, October 2001.

approval for adoption was on average two years and ten months in 1999, while it was three years and five months in 1995. The length of time before placement for adoption dropped from one year and eleven months to one year and eight months – although a half waited more than two years and around 20 per cent more than four. Possibly under the impact of criticism that too great a tolerance was shown for unacceptable parental behaviour, with placement reduction put before child safety, the numbers in care itself also began to rise, with a concomitant fall in leavers.[14] The trend towards 'voluntary' placements gave way to an expansion in Care Orders (rising by a quarter after 1997).

Although governments had hitherto shown little or no interest in adoption, the Quality Protects Programme (involving an investment of £375 million over three years), together with Local Authority Circular LAC (1998) 20, 'Achieving the Right Balance', positively endorsed adoption as part of mainstream children's services, and encouraged endeavours to achieve greater stability and better outcomes for looked-after children. The report requested by the Prime Minister was enthusiastic about transforming expectations and creating a positive culture for adoption. It underlined how adoption was not considered early enough, and not delivered quickly enough, for not enough children. In *Adoption and the Care of Children*, I emphasised how, after safety, permanence should be the overriding objective of children's services and how proper permanency planning needed systemic change. Even with the best of intentions, permanence is not achieved within open-ended 'family preservation' guidelines, despite any amount of reviews, individual 'care plans' and monitoring (where

14 Ibid.

paperwork takes precedence over outcomes for children). The Prime Minister's Review emphasised how the 'problems and barriers . . . are deep seated, in some cases structural, and extend beyond social services'. Thus, there should be:

> . . . a clearly articulated policy on promoting permanence for looked-after children – providing a safe, stable and secure family which will give them lifelong support. Securing permanence should be the basis for Care Planning. Adoption should be seen as a key means of providing permanence within a full spectrum of options that starts with return to the birth family, as the clear first choice, but moves swiftly to delivering genuinely permanent alternatives when this is clearly not in prospect . . . the whole process of planning, decision making and implementation should be driven and shaped by the needs of the child and progress made according to timescales that reflect these needs.[15]

A new Children and Adoption Bill has had its second reading and is now being examined by a Special Standing Committee (heavily packed with social workers). It will make the child's welfare the paramount consideration in any decision relating to adoption, although an amendment states that there must also be or have been 'significant harm' to the child before one of the new adoption Placement Orders can be made against the wishes of the birth parent(s). It remains to be seen how this will be interpreted (does it cover neglect or abandonment, or does the child have to be dead?). Again, a duty is imposed upon local authorities to 'prepare and publish a plan for the provision of adoption services in their area'. As the present law (of 1976) has been widely ignored, this

15 *Adoption: The Prime Minister's Review*, op. cit., p. 53.

raises the question of the point of new legislation. There is no provision for tracking children through the care system; no limits that might 'drive and monitor social workers in planning for permanence', or none of those 'clear benchmark timescales for the key stages of the process of planning for and delivering permanence and adoption'.[16] These could have meant, for example, a much firmer grasp by the courts on what work is to be done, by whom and when.

There is scope, however, for the voluminous reports that social workers spend interminable time constructing, given that they must undertake 'assessments' of the need for post-adoption support services. Adopters want a 'normal' family life, not one that is to be supervised by 'the welfare'. As for help with the upbringing of what are often handicapped or disturbed children, they would be better off getting it direct from medical and educational sources.[17]

If the Prime Minister's Review concluded that the government should promote a substantial increase in successful adoptions for looked-after children,[18] the question arises of by how much, or how many? With 3,067 looked-after children adopted in England to the year ending March 2001, it looks as if the target already set for the increase in adoptions by 2004/05 is easily being met. Much of the actual and proposed increase may be due to 'tail gunning' the children already destined for adoption, by placing more of them more rapidly, or hurrying on the foster parents interested in adopting their charges. This is likely to produce an increased level

16 Ibid., pp. 54, 63.
17 N. Lowe et al., *Supporting Adoption*, BAAF, 1999, p. 40.
18 *Adoption: The Prime Minister's Review*, op. cit.

over a number of years, but may do very little to increase the proportion of children for whom adoption is the plan.[19] Taking the US target and doubling adoptions could bring the level to 4,400, or around 8 per cent of looked-after children. As the level of adoption from care ranges from 1 to 14 per cent for local authorities, bringing them all up to the level of the most successful would bring the total up to 5,100, or 9.25 per cent of looked-after children.[20]

But then we are still told how adoption can only be considered for a tiny proportion of children in the care system. Claims are that '90% of children who are taken into care are returned home within the first six months', or that around 70 per cent of children are unlikely to require adoption, not least because they are in care on a voluntary basis.[21] This suggests that the care system is an efficient, fast-moving conveyor belt, where children come in, get sorted and are quickly sent home to open arms. It involves a duplicitous use of statistics. Over a half of children who cease to be looked after in a year have been in care for less than six months, as the most common reason for admission is because the parent(s) need relief. But there is a distinction between the throughput and the stockpile.

The numbers in care at any point reflect the accumulation of children over time whereby, if they do not leave fairly fast, they stay for a very long time. After six months the flow of discharges slows to a trickle and a substantial minority stays indefinitely, with around a quarter having entered care five or more years before. Many children who come into care under 'voluntary' agreements

19 The *planned increase* in looked-after children with adoption as their goal is 'very modest' and more likely about 1 per cent overall for England. *Adoption: The Prime Minister's Review*, op. cit., p. 88.

20 Ibid.

21 Families and Adoption Family Briefing Paper 14, Family Policy Study Centre, 2000, p. 2.

end up in compulsory care with court orders. In 1999, 28,700 children had been looked after for over two years (9,490 were under ten and 2,790 were under five). Is this a 'tiny proportion'? Nearly 30 per cent have three or four moves in their first year. A child who has been in care for six months or more has a 60 per cent chance of remaining in care for four years or more – most likely until the age of sixteen. By fifteen to eighteen months this is 80 per cent.

Moreover, as at 31 March 2001, an estimated 36,600 (or 62 per cent of the stockpile) had a need category of 'abuse or neglect'. The second-most prominent category was 'family dysfunction' (cases where parents may be drug users or rearranging their 'partnerships') at 5,900, or 10 per cent. If adoption is likely to be a solution for abused, neglected or effectively homeless children, then this is between a half and three-quarters of those in care.

Here we are still warned that adoption may prove difficult – so it is perhaps best not to try, since those 'who stay in care and need new families are usually those who have experienced the most serious neglect, emotional, physical or sexual abuse . . . 39% of these children require on-going therapeutic support even after joining their new family'.[22] In turn, many looked-after children 'have experienced early disruption and a number of placements, even after coming into care'.[23] All this argues for intervening earlier and decisively before too much time is lost and damage is done, given that age at placement has a crucial influence on disruption rates.[24] Around a third of children are in care for more than three years before being placed. They often start as infants, not 'difficult to place'

22 Ibid.

23 Ibid.

24 J. Fratter et al., *Permanent Family Placement: a decade of experience*, BAAF, London, 1991.

teenagers, since the average age of entry into care for a child who was subsequently adopted was eighteen months or less in 2000/01.[25] Those adopted in 1998/89 were on average one year and two months on coming into care, but were two and a half years old before the decision was even made that adoption was in their best interests. While 38 per cent had one placement before their adoptive placement, 18 per cent had two, 15 per cent had three, and 14 per cent had six or more.[26]

The history of adoption is one of constant invention of reasons why it is not possible, or will not work, or of ways to deny, divert, frustrate and sabotage the process. Some reasons are well worn and constantly recycled. Should we not spend the resources preserving the original family? says an old perennial,[27] as if this had not been repeatedly tried, and had not repeatedly failed.[28] The British Agencies for Adoption and Fostering claim that around 26 per cent of its referrals involve black and mixed-race children, and that there are not enough adoptive families for them – it being 'particularly hard to find families for sibling groups of these children'.[29] But BAAF hardly approves of transracial adoption.

Considering the discouragement they received, it is little short of a miracle that there are any prospective adopters at all. Misunderstandings, at least, might be reduced if the promised 'New Na-

25 'Children adopted from care in England: 2000/2001', op. cit.

26 G. Ivaldi, *Children adopted from care: an examination of agency adoptions*, BAAF, 1998.

27 See C. Roberts, A. Warman, 'Adoption and looked-after children; international comparisons', Family Policy Briefing 1, Department of Social Policy and Social Work, University of Oxford, 2001.

28 See review of evidence in P. Morgan, *Adoption and the Care of Children*, IEA Health and Welfare Unit Choice in Welfare Series No. 42, 1998.

29 Families and Adoption Family Briefing Paper 14, op. cit., p. 2.

tional Standards' emerge with 'appropriate evidence-based criteria for assessment of adopters'.[30] It can hardly encourage adopters to come forward if they must take on the birth parent(s) and all their problems as well, given the emphasis on maintaining the child's 'identity' with contact – even where a natural father has murdered the mother.[31] Prospective adopters can always be avoided by looking in the wrong places. Great hopes are vested in 'gay men and women' as an 'under-used resource who could meet the needs of particular children'.[32] Just how many might be found may be gauged from the facts that all of 0.1 per cent (or is it 0.2 per cent?) of households are headed by a same-sex couple, and that a large majority of homosexuals do not want children at all, with 'gay culture' being decidedly singles oriented.[33]

The inclusion of Special Guardianship in the new Adoption Bill promises to make child placement more gay friendly and, more widely, provides another way of avoiding adoption. This has been urged by those who want to firm up 'permanent fostering' in order to give children more stability, without causing conflict or a more decisive break with the original family.[34] It lets children out of care, and foster carers make decisions without 'back-seat'

30 Ibid., p. 56.

31 Lowe et al., op. cit.

32 Families and Adoption Family Briefing Paper 14, op. cit., p. 8.

33 K. Wellings et al., *Sexual behaviour in Britain – the National Survey of Sexual Attitudes and Lifestyles*, Penguin, 1994; Hansard, House of Commons, 11 November 1997, col. 507 wa; Hansard, House of Commons, 11 May 2000, col. 471 wa; P. Cameron and K. Cameron, 'Homosexual Parents', *Adolescence*, 31, 124, winter 1996; J. J. Bigner and F. W. Bozett, 'Parenting by Gay Fathers', in F. W. Bozett and M. B. Sussman (eds), *Homosexuality and Family Relations*, Haworth Press, New York, 1990.

34 For a prominent exponent of this view, see J. Thoburn, *Review of Research Relating to Adoption*, Interdepartmental Review of Adoption Law: Background Paper No. 2, Department of Health, 1990.

driving by social workers. But no formal ties are established with other members of the family. It ceases at majority and the court that grants guardianship can take it away. The essence of guardianship is that it is not lifelong or permanent, so that children here, and in other modes of long-term fostering, remain, in important ways, outsiders. There may be some children – older, with handicapped or sick parents, for example – for whom it is appropriate. But this does not make it as generally desirable as adoption or justify using it to replace adoption.

Antipathy to adoption, and its rarity, in Europe have now become an element in the debate. The suggestion is that we must cut back in order not to be out of step. It is difficult to extrapolate from one culture to another, and the social differences between us and our neighbours extend much farther than adoption. Moreover, other countries may still place emphasis on other measures for unwanted children, such as institutions, which we should not emulate. In turn, citation of the Human Rights Act may become as great an obstacle to adoption as the Children Act 1989. It is already given as the reason why there cannot be circumstances, such as gross physical or sexual abuse, identified in statute as situations in which children's restoration to the birth parent(s) need not be attempted.

Since the question of whether we have gone too far is already being raised, the slightly increased impetus towards adoption may not be maintained. As there seemed no good reason for social services to continue to handle adoption, when they are so uninterested or even antagonistic, as well as ill equipped for the task, I have suggested that responsibility be transferred to specialist agencies. An argument against this is that adoption is just part of the provision for the placement of children away from home,

which includes fostering and residential care. In turn, this is related to the child protection function. I realise that I was not radical enough. The record of adoption, and children's services generally, as one of massive incompetence and shortcomings raises the question of whether we need social work at all. Much work is already being duplicated, and there is more that could be done by policing, health and education agencies, as well as specialist bodies dealing with child placement. At most, this justified little more than local children's departments in the pre-Seebohm mode.

Note: The statistics in the text relate to England only.

6 IS IMPRISONMENT THE ANSWER?

Peter Wynarczyk

Introduction

Economists have been interested in crime and punishment issues for more than two hundred years. Nevertheless, only in the last three decades or so, following the seminal work of Becker,[1] has the literature blossomed. Attention has been focused on rationalising and modelling criminal participation rates, measuring the social costs of crime, exploring the appropriate and optimal choice of punishment, examining the effectiveness of different law enforcement agencies, and evaluating the feasibility of alternative crime fighting strategies. On the punishment front, economists' concerns have largely been directed towards identifying deterrence and incapacitation effects and calculating the costs, benefits and welfare implications of different sanctions.

The dominant economic perspective on crime and law enforcement emanates from Chicago,[2] which advances a deterrence model where criminals weigh up the benefits and costs of criminal

1 G. S. Becker, 'Crime and Punishment: An Economic Approach', *Journal of Political Economy*, 76, 1968, pp. 169–217.

2 See P. Wynarczyk, 'The Economics of Criminal Participation: Radical Subjectivist and Intersubjectivist Critiques', in E. Fulbrook (ed.), *Intersubjectivity in Economics: Agents and Structures*, Routledge, London, 2002.

participation. This economic approach explains much of the rise in crime experienced in the US, England and Wales, and other advanced industrial economies since World War II. While the eleven-fold increase in recorded crime in England and Wales between 1955 and 1992 (from less than half a million per year to 5.6 million) is understandable in terms of *both* a decline in deterrence and a weakening of morality and social norms, related noteworthy explanatory factors were the decline in the chances of detection, a reduction in expected punishments, and the increasing opportunities and gains to be had from crime. Evidence on police clear-up rates, for example, suggests that they fell steadily during the period in question, from well over 50 per cent in the 1950s, to around 40 per cent in the 1970s, to 25 per cent by 1992.[3] As Murray[4] has reminded us, it became *both* much safer *and* more acceptable to participate in crime in Britain post-1955.

If one of the key duties of the state is to protect its citizenry from internal harm, as Adam Smith long ago realised, then the record of the UK government on this front for most of the second half of the twentieth century was one of failure. The degree of failure is illustrated by the rise in the early 1990s of both the fear of crime within the community and the placing of crime at the top of the political agenda. This led Dennis and Erdos[5] to conclude that 'in the lifetime of a 77-year-old the average citizen has become 47

3 D. J. Pyle, *Cutting the Costs of Crime*, Hobart Paper 129, Institute of Economic Affairs, London, pp. 18–19.

4 C. Murray, *Does Prison Work?*, Choice in Welfare 38, IEA, London, 1997.

5 N. Dennis and G. Erdos, *Families without Fatherhood*, IEA Health and Welfare Unit, Choice in Welfare no. 12, London, 1993, p. 79.

times more likely to be the victim of a crime against his or her person or property'.

Post-1992 there has been a sea change in the willingness to tolerate increasing crime and incivility. This transformation stems partly from US experience and theory from the 1980s onwards, including the growth in economic literature related to penal policy, which often found itself at odds with the established conventional wisdom within criminology. There has been a movement towards a more punitive approach to criminal justice following what Fukuyama[6] called 'The Great Disruption' of the 1960s to the early 1990s – a period characterised by rising crime and social disorder, the decline of the family, and the erosion of trust.

Between 1980 and 2000 the US experienced a large growth in the number of persons under correctional supervision (probation, parole, jail and prison) from just over 1.8 million to almost 6.5 million. By 1993 one man was incarcerated for every 50 in the workforce, while another 2.6 men were on probation or parole (with around 7 per cent of the male workforce under the supervision of the US criminal justice system). The incarceration rate (for inmates under state and federal jurisdiction) has more than tripled since 1980, up from 139 to 478 per 100,000. This represents an increase in the US prison/jail population from just over 500,000 in 1980 to almost 2 million in 2000. For those who believe in deterrence and incapacitation effects, the results have been salutory. For example, according to the BJS National Crime Victimisation Survey (NCVS), property crime rates in the US have fallen steadily and significantly during the period under discussion (from an

6 F. Fukuyama, *The Great Disruption*, Profile Books, London, 1999.

adjusted victimisation rate of above 500 per 1,000 households to below 200). At the same time, violent crime rates remained flat for most of the period (an adjusted victimisation rate of between 40 and 50 per 1,000 persons aged twelve and over) until followed by a sustained fall post-1994 to below 30 per 1,000. American economists have been keen to highlight not only the deterrence and incapacitation effects from the increased likelihood and length of imprisonment but also to calculate the social net benefits accruing from imprisonment.

In England and Wales, as in the United States, there has also been a noticeable increase in the prison population. In addition, the dominant mood here echoes North American sentiment in favour of the deterrent, incapacity, net social benefit and retribution aspects of prisons: there is less concern than there used to be with the rehabilitation and reform of criminals. As Avio[7] correctly argues, while 'in-prison investments in human capital and their impact on recidivism remain unanalysed', research over several decades on the returns from inmate rehabilitation has produced only inconclusive results, insufficient to overcome the Martinson doctrine that scant evidence exists to support the supposed benefits of rehabilitation programmes.

On the political front, an increasing emphasis was placed by both Conservative and Labour governments on the need to lock persistent criminals away in order to 'give communities a break'. In comparison with the United States, the prison population of England and Wales grew more slowly, but nevertheless substantially – from almost 44,000 in 1980 to just over 64,500 in 2000. In

7 K. L. Avio, 'The Economics of Prisons', *European Journal of Law and Economics*, 6, 1998, pp. 143–75.

Great Britain as a whole, there was a sustained rise in the prison population between 1993 and 1998, when it peaked at 71,000.

As in the US, supporters of the increased use of the prison option were able to point to an impact on crime. Between 1977 and 1992 the rate of recorded offences in England and Wales more than doubled to reach 109 per 1,000 population. This was followed by a steady decline to 86 in 1998/99. Under the same counting rules, the total number of recorded offences fell from a peak of 5.6 million in 1992 to 4.5 million. After 1998/99 the counting rules were changed to broaden the coverage of offences – resulting in crime rates of 98 for 1998/99 and 101 in 1999/2000, with 5.1 million offences now recorded for 1998/99 and 5.3 million for 1999/2000. By 2000 the incarceration rate for England and Wales was 124 per 100,000 population, making it the second largest in the European Community, closely following Portugal (127). Pyle[8] suggested that a cost-effective crime reduction strategy might involve increasing the likelihood and length of imprisonment rather than increasing police numbers or improving labour market conditions. Between 1993 and 2000 the average sentence length for adults for indictable offences in England and Wales at the crown court increased from 21.6 months to 24 months; in addition, in 2000 41 per cent of male sentenced prisoners were serving over four years compared with 36 per cent a decade earlier.

Benefits and costs of imprisonment: does prison pay?

James Q. Wilson, in his classic *Thinking about Crime*,[9] argued that

8 D. J. Pyle, 'The economics of crime in Britain', *Economic Affairs*, 9, 1989, pp. 6–9.
9 J. Q. Wilson, *Thinking about Crime*, Vintage Books, New York, 1985.

incapacitation works to reduce crime if three conditions are met; namely: a significant number of offenders are repeat or persistent offenders (which they are); a vacuum is left when offenders are taken off the streets (usually true, except in such cases as drug turf wars and prostitution); and offenders' experience of prison does not significantly enhance their future criminal productivity or post-release activity (so prisons are not 'universities of crime').

Regarding the first condition, recidivist rates in England and Wales remain stubbornly high (as they do in the US), with a re-conviction rate of around 58 per cent within two years of discharge, rising to 70 per cent plus within five to seven years. Regarding the second, Wilson suggests, with good cause, that imprisoning one criminal does not usually lead to other free criminals committing *more* crimes. Finally, empirical evidence from the US[10] points to a significant 'criminogenic effect from imprisonment' where negative training and negative labour-signalling harm the future legitimate lifetime earnings and employment prospects of offenders. This suggests that the consequences of any substantial growth in the prison population will extend far into the future. In addition, the long-run social capital of certain communities may be severely damaged where imprisonment is 'normalised' and the stigma associated with prison disappears.

Given that these conditions are met, Wilson[11] is led to conclude that 'what remains is to find out how much crime is reduced by sending offenders to prison and then to ask whether these gains in crime reduction are worth the cost in prison space and (possibly) in justice'. This question and its solution are principally matters of economic analysis.

10 Avio, op. cit.
11 Wilson, op. cit., p. 147.

There are several key elements in examining the benefits and costs from imprisonment. The first of these – estimating the number of offences an average criminal commits per year free on the streets (the so-called 'individual offence rate', usually termed λ) – remains contestable in the criminology literature, although there is an emerging consensus within the economics literature on criminal participation rates. Individual offence rates vary significantly for different kinds of offenders, with the distribution of offences being highly skewed – so that a large number of offenders commit a small number of offences and a small number of offenders commit a large number of offences ('super-baddies'). As Tarling[12] showed for the UK, around 6 per cent of criminals account for about half of crime (convictions). Early evidence from the US[13] suggested that the top 10 per cent of offenders had individual offence rates up to eighteen times larger than those at or below the median figure. Among economists the present consensus is that the average offence rate is between fifteen and twenty-one crimes per year.[14]

12 R. Tarling, *Analysing Offending: Data, Models and Interpretations*, HMSO, London, 1993.

13 P. Greenwood, *Selective Incarceration*, Rand Corporation, Santa Monica, 1982.

14 J. J. DiIulio, 'Help Wanted: Economists, Crime and Public Policy', *Journal of Economic Perspectives*, 10, 1996, pp. 3–24; S. D. Levitt, 'The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Litigation', *Quarterly Journal of Economics*, 107, 1996, pp. 319–51; S. D. Levitt, 'Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime', *American Economic Review*, 87, 1997, pp. 270–90; T. B. Marvell and C. E. Moody, 'Prison Population Growth and Crime Reduction', *Journal of Quantitative Criminology*, 10, 1994, pp. 109–40; R. B. Freeman, 'Why Do So Many Young American Men Commit Crimes and What Might We Do about It?', *Journal of Economic Perspectives*, 10, 1996, pp. 25–42.

The second factor to explore is the average cost per crime committed. Evidence drawn from the US, from the work of DiIulio and Piehl, Levitt and Freeman,[15] suggests a figure between $2,300 and $3,000. Taking the upper bound of $3,000 and a mid-point offence rate of 18 as a rough guide to the average cost of crime to society per criminal per year gives a figure of $54,000. When we compare this figure to the average annual cost of maintaining a prisoner of around $24,000 in the US[16] we find that there are at present significant net social gains to be made from incarceration of the order of $30,000 per prisoner per annum.

Such average measures should be taken with care, since economists are more rightly concerned with the *marginal* benefits and costs of incarceration. However, they do provide some support for the expansion of the US prison population that has taken place. This has led Levitt[17] to conclude that 'In the absence of strong alternatives to imprisonment at the present time, however, increased reliance on incarceration appears to have been, and continues to be, an effective approach to reducing crime.' Without such rises, it is suggested, both property crime and violent crime would have been significantly higher in the US than is currently being experienced. There are, of course, greater gains to be made from imprisoning 'super-baddies' since the costs they impose on society are far higher, with λ in many cases above 200, leading to net social gains in excess of $500,000. There is an opportunity here to lower crime dramatically without the need to increase prison demands significantly.

15 J. J. DiIulio and A. M. Piehl, 'Does Prison Pay?', *Brookings Review*, 4, 1991, pp. 28–35; Levitt, 1996, op. cit.; Freeman, op. cit.

16 In 1996 the average state inmate cost per year was $20,100 and the federal inmate cost was $23,500.

17 Levitt, 1996, op. cit., p. 348.

The evidence for England and Wales appears less strong and less reliable (compared with the amount of research carried out in this area by economists in the US). Tarling[18] suggests a λ of around 11.4 for 1990, which raises the question of why criminals in the US should be more engaged in criminal activity than their UK counterparts. Given that US estimates of λ have tended to rise during the last decade, there seems no adequate reason to assume that UK criminals should be *so much more* 'unproductive' than their American counterparts. Assuming a λ at the bottom end of the US range of 15, and accepting an average cost per crime of around £1,900 (the mid-point of the original US estimates), gives an average cost to society per criminal per year of around £28,500. This is close to the average annual cost per offender in prison of around £27,500 in 2000/01, suggesting that the prison population is tending towards its most appropriate size (with regard to average net social benefits). Of course, captured in these quite different average net social benefits for the US and UK is the wide disparity in average cost of incapacitation per prisoner per year, reflecting, in part, the vintage and type of prisons used.

On deterrence and incapacitation

Recent work by Levitt[19] and Kessler and Levitt[20] lends further

18 op. cit.

19 S. D. Levitt, 'Why Do Increased Arrest Rates Appear to Reduce Crime: Deterrence, Incapacitation, or Measurement Error?', *Economic Inquiry*, 36, 1998, pp. 353–72.

20 D. Kessler and S. D. Levitt, 'Using Sentence Enhancements to Distinguish between Deterrence and Incapacitation', *Journal of Law and Economics*, 42, 1999, pp. 343–63.

support to economists' empirical evidence on the significant impact of deterrence and incapacitation on criminal activity; it endeavours to distinguish between deterrence and incapacitation effects in order to ascertain their respective contributions to crime reduction. In the earlier piece, Levitt[21] examines the impact of increased arrest rates on crime and accepts that 'deterrence appears to be empirically more important than incapacitation in reducing crime, particularly in the case of property crimes'. With regard to property crime, he suggests that deterrence effects account for more than 75 per cent of the observed effect of arrest rates on crime. This has an important public policy spin-off: an over-reliance on incapacitation effects would lead to a rising prison population composed of increasingly ageing, low-risk inmates, posing little threat; whereas strong deterrence effects can lead to a reduction in total time served by reducing the number of criminal acts by far more than the increased periods served in prison.

Incapacitation is at its most effective when it occurs during an offender's active criminal career. According to UK data, the average length of a male criminal career is around 4.3 years and for females 1.3 years. The peak age for offending is the same for males and females, at eighteen years. About 60 per cent of male offenders and 80 per cent of female offenders have criminal careers of less than one year. Criminal activity declines steeply with age. But 20 per cent of male offenders have a criminal career of at least ten years' duration, and it is they who should be targeted most.

21 Levitt, 1998, op. cit., p. 370.

Kessler and Levitt[22] also examined the impact of sentence enhancements, such as the three-strike laws, in the US. They found evidence of both significant deterrence and incapacitation effects resulting from the recent use of sentence enhancements (these impose 'mandatory, statutory increases in prison sentences on individuals who were already going to be incarcerated'), and they go on to suggest that an increasing reliance on sentence enhancements may represent 'an effective means of reducing crime' and an attractive public policy option. This is because such measures target the 'most frequent and dangerous offenders', who are likely to impose the greatest crime-related costs if free and provide the greatest net social gains if imprisoned. Not only is there an identifiable deterrence effect but also a pronounced incapacitation effect in relation to persistent and serious offenders.

Conclusions

A large body of empirical evidence exists to support economists' arguments that crimes are deterred by both the likelihood and severity of punishment. Increased incidence and length of imprisonment serve to increase the costs that potential criminals face and affect criminal activity by reducing crime.

The answer to the question 'Does prison work?' depends largely upon what one wants prison to achieve. Economists tend to be more positive about it because they concern themselves less with issues of rehabilitation and retribution than with deterrence and incapacitation effects: they are concerned also to evaluate the

22 op. cit.

costs, benefits and welfare implications of imprisonment compared with alternative crime reduction strategies. Evidence advanced here, and the pronounced lack of viable policy alternatives, suggest that the increased use of prison sentences, at present and in the recent past, makes a great deal of sense.

Useful Internet sites

National Statistics www.statistics.gov.uk
Home Office (Criminal Justice System) www.criminal-justice-system.gov.uk
Prison Service www.hmprisonservice.gov.uk
Bureau of Justice Statistics www.ojp.usdoj.gov/bjs

The Charts section of this Yearbook, part 5, contains statistics on law, order and public safety.

CHARTS PART 1

GOVERNMENT SPENDING, TAXATION AND OTHER MACRO-ECONOMIC INDICATORS

UK public expenditure as a share of gross domestic product (GDP)

The UK is torn between the challenge of further economic liberalisation and the deceptive lure of a tax-financed boost to public services. The striking reforms and ownership changes of the 1980s and early 1990s have set the UK apart from the majority of its EU partners, briefly tempting a comparison with the leanness of public provision in the US (Figure 1a). Yet the opportunities for further extension of consumer choice, afforded by robust economic growth over the past four years, have been spurned. While traditional fiscal reprobates such as Sweden, Italy and Belgium have taken impressive strides to slim down their public sectors (Figure 1b), the UK's agenda has been shifting in the opposite direction. The government's Comprehensive Spending Review of July 2000 and subsequent Budget statements have set a course for real public spending to grow more rapidly than the typical growth of GDP for the next three years, based on the apparent belief that health and education are public goods.

Figure 1a: **General government expenditure as a percentage of nominal GDP**

Sources: OECD Economic Outlook, various issues (US and EU-15). National Statistics Statbase, www.statistics.gov.uk/statbase/, and HM Treasury Budget 2001, HC 279 (UK). UK data codes: QYXI and YBHA.

Figure 1b: **Change in government spending as a percentage of nominal GDP between 1997 and 2001, percentage points**

Source: OECD Economic Outlook 69, June 2001, Annex table 28.

Figure 1a **UK turns its back on small government**

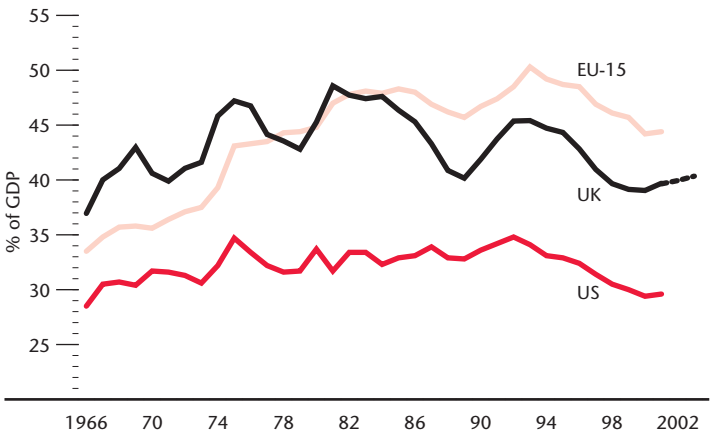
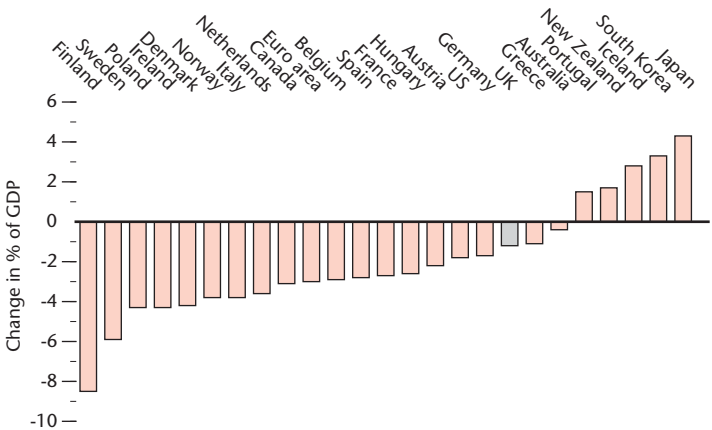


Figure 1b **UK is no longer at the cutting edge**



International comparisons of the public-sector share of GDP

Each nation's public expenditure commitments have been accumulated at different times and as a result of particular crises and political events. Italy, for example, still suffers the burden of heavy debt service costs which are a legacy of excessive public spending and poor fiscal management in the 1970s and 1980s. The UK's main obstacle to a slimmer state is its large and immensely complex social security system (Figure 2a). Perceived shortcomings in public commitments to health and education in an EU context are trivial by comparison. A broader and more significant issue concerns the optimum size of government in a mature developed economy during peacetime. The extent of the divergence shown in Figure 2b should allay concerns that the UK public sector has even approached the lower limits of viability. Among newly industrialised nations with respectable standards of education and healthcare (and lower crime rates) there are examples of even smaller public sectors.

Figure 2a: **Composition of OECD general government total outlays in 1997**
Source: OECD Economic Outlook 69, June 2001, Annex tables 28 and 33 (total outlays and net debt interest). OECD Social Expenditure (SOCX) Database, 2000 ed. (health and social security). OECD Education at a Glance, 2001 ed., table B2.1a (education).

Figure 2b: **General government expenditures as a percentage of nominal GDP: OECD projections for 2001**
Source: OECD Economic Outlook 69, June 2001, Annex table 28.

Figure 2a **How UK public spending stacks up internationally**

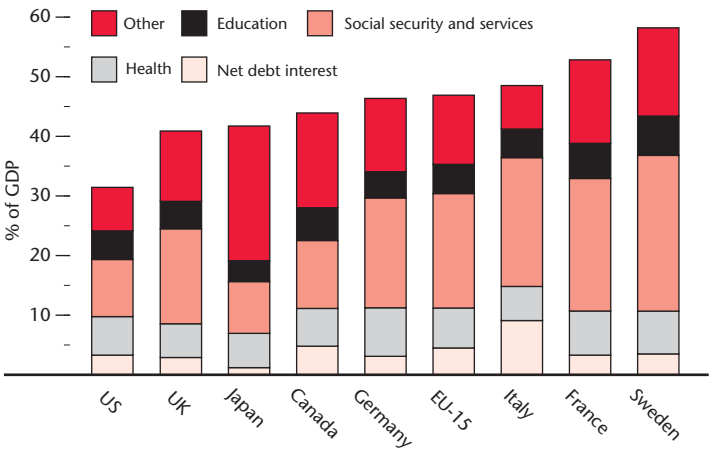
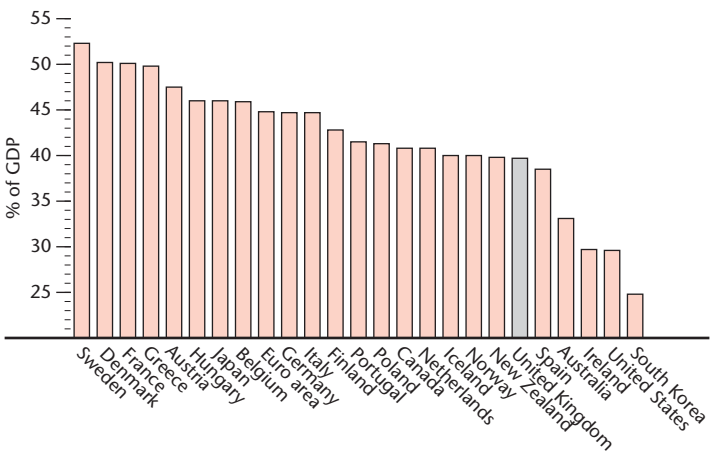


Figure 2b **Governments: small, medium and large**



Evolution of UK public spending as a share of GDP

A lasting reduction in the size of government is achieved when the ownership of assets and proprietary control of an economic activity are transferred into the private sector. By contrast, Figure 3a demonstrates how little of the steep ascent in the share of UK public sector expenditure on consumption has been reversed over the past 20 years. The trough of 35.9 per cent of GDP in 2000 was marginally higher than that of 1989, and government plans are expected to raise the proportion to 37.5 per cent by 2003. There is a great temptation to relax public expenditure constraints when the economy is buoyant and entitlement to benefits is correspondingly low. However, public spending on social security and social services is surprisingly responsive to private-sector economic activity. The experiences of 1952, 1973–4, 1980–1 and 1990–1 (Figure 3b) give ample evidence of the way in which the current spending share can ratchet upwards by 4 percentage points or more during a recession. Should the global economic downturn prove to be severe, the UK could soon be faced with a much higher public spending ratio than 37.5 per cent.

Figure 3a: **Share of UK general government total outlays and current expenditures in nominal GDP, percentages**
Sources: National Statistics Statbase, www.statistics.gov.uk/statbase/, UK data codes EBFT, ANLT and YBHA, and United Kingdom National Accounts 2001, table 11.3.

Figure 3b: **Share of UK general government current expenditure in GDP versus real annual percentage growth of private sector expenditure**
Sources: National Statistics Statbase, www.statistics.gov.uk/statbase/, UK data codes ANLT, YBHA, YBIK and NMRU.

Figure 3a **How high would UK current spending be in a recession?**

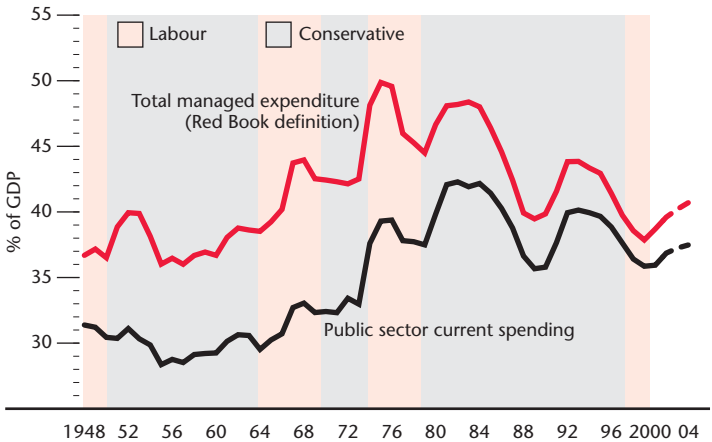
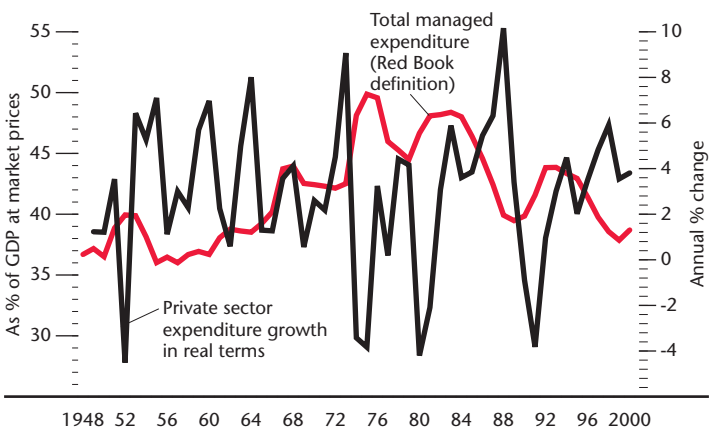


Figure 3b **UK public current spending ratio soars when private sector slumps**



How the composition of UK public spending has changed

Beneath the surface of UK public spending, there have been a number of large compositional shifts since the late 1980s. The greatest of all has been the extension of social security and social services expenditure, denoted in Figure 4a as social protection. No government has set out to boost the share of social protection, yet none has restrained it successfully. By contrast, health has been a consistently high priority for all governments. Another beneficiary of the shuffling process has been the growth in the administration of government, including the costs of establishing regional assemblies, gathered under the heading 'general public services'. Surprisingly, education has captured a very small addition to its share since 1987, smaller even than the reallocation to public order and safety.

The largest reduction in public spending has arisen as the UK has claimed a share of the global peace dividend by effectively freezing the defence budget in real terms. This is reflected in Figure 4b. Successive governments have also achieved significant savings in property management costs and as a result of the transfer of local authority housing into private hands. The abandonment of overt regional policy and the shrivelling of the trade and industry ministry is a fourth area of significant saving.

Figure 4a: **Change in the composition of UK public expenditure by classification of function between 1987 and 2000**
Sources: National Statistics Statbase, www.statistics.gov.uk/statbase/, and United Kingdom National Accounts 2001, table 11.2. UK data codes: QYWW, QYWX, QYWY, GVEU, QYXE, QYXD, QYXA, QYXC, QYXZ, QYXB, NMYX and QYXI.

Figure 4b: **Percentages shares of defence and health in general government expenditure excluding debt interest**
Source: National Statistics United Kingdom National Accounts, various years.

Figure 4a **Winners and losers in the UK public spending stakes in 2000 versus 1987**

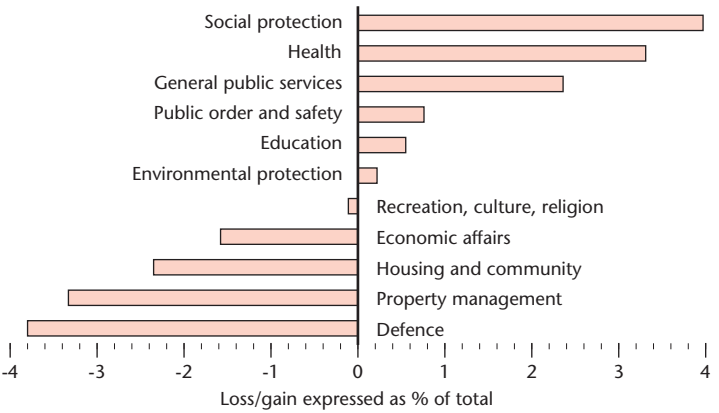
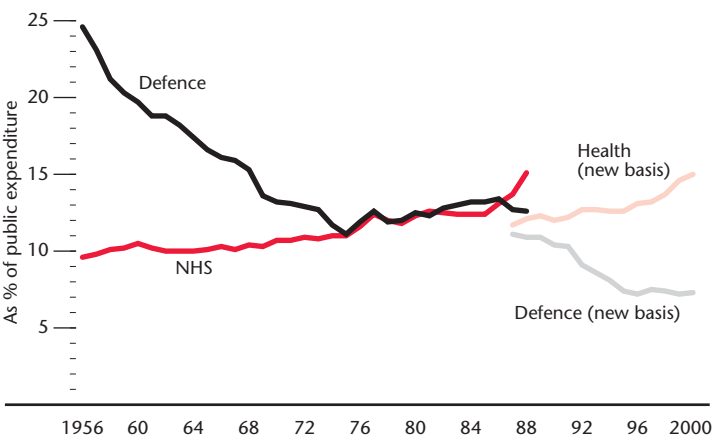


Figure 4b **Beating swords into scalpels**



How UK taxes are raised and where the money goes

The financing of public expenditure is predominantly through taxation. After netting off the £6.3bn of UK taxes paid direct to the EU, domestic tax revenues formed 93.7% of government receipts in 2000. Most types of tax revenue are blended together in the government's accounts. Non-domestic (i.e. business) rates and council tax are exceptional in that they are collected and spent by local authorities rather than central government. While the UK does not earmark particular tax revenues for particular spending purposes, it is useful to consider the relative magnitudes of taxes and expenditures, shown in Figures 5a and 5b.

The social protection budget, at £143.9bn in 2000, was notionally financed by household income tax and National Insurance contributions (£131.6bn) plus council tax (£13.8bn). VAT revenues would pay for the health, housing and environmental protection budgets, while receipts of Customs and Excise duties would almost exactly cover the education budget.

Figure 5a: **Composition of taxes paid by UK residents in 2000**
Source: National Statistics United Kingdom National Accounts 2001, table 11.1.

Figure 5b: **Composition of UK public expenditure by classification of function in 2000**
Source: As for Figure 4a.

Figure 5a **Taxes in 2000: every which way but loose**

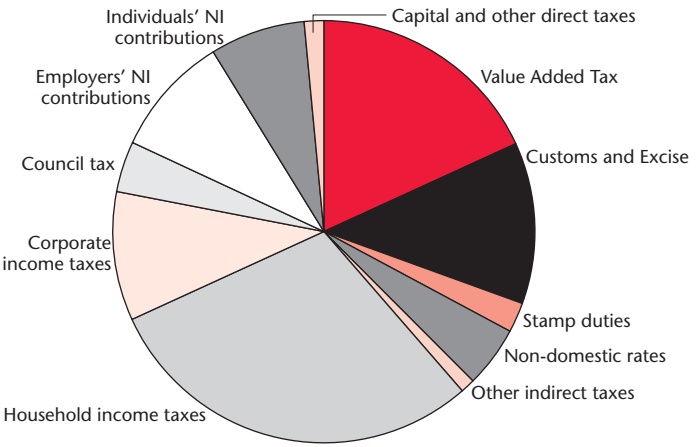
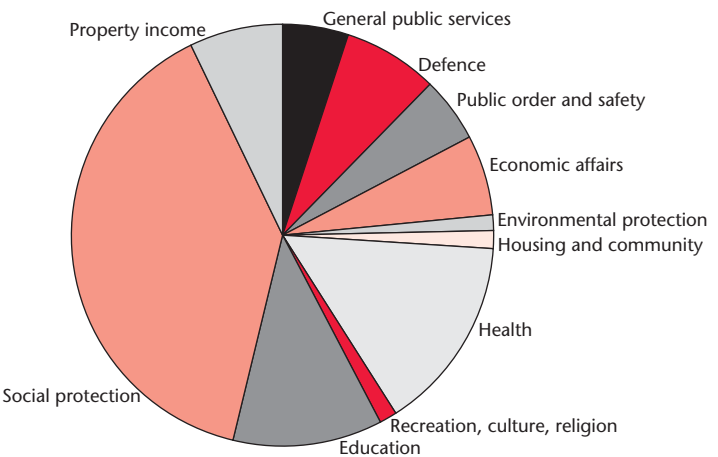


Figure 5b **Social protection takes the lion's share in 2000**



International comparisons of the overall tax burden

Whereas the UK government expenditure ratio in 2001 was around 9 per cent of GDP lower than in 1981, this is not true of the aggregate measure of the tax burden. Using data provided by National Statistics, rather than that reported in the Treasury's Red Book, the ratio of total taxes and compulsory social security (National Insurance) contributions to GDP reached about 38 per cent in 2001, less than 1 per cent shy of the record 38.8 per cent in 1982. Government projections of the tax burden (Figure 6a) use a definition that nets off the new-style income tax credits (such as Working Families Tax Credit), treating these in-work benefits as negative taxation. The 2001 Red Book projects a fall in the net tax ratio of 0.5 per cent to 37 per cent by 2005/06. In conjunction with the rising spending trend, this implies a steadily worsening fiscal balance and a return to deficit finance. The magnitude of the challenge is evident from the fact that tax burdens have risen in most other OECD countries since 1996 (Figure 6b), including the US, Germany, France and Canada.

Figure 6a: **Total tax revenues and compulsory social contributions as a percentage of GDP**
Source: OECD Revenue Statistics, 1965-2000 (US, Sweden and EU-15), National Statistics Statbase, www.statistics.gov.uk/statbase/, and HM Treasury Budget 2001, HC 279 (UK). UK data codes: GDWM (annual) or GCSU, YBHA (quarterly).

Figure 6b: **Change in total tax burdens between 1996 and 2000, expressed in percentage points**
Sources: As Figure 6a.

Figure 6a **Tax burdens are rising almost everywhere**

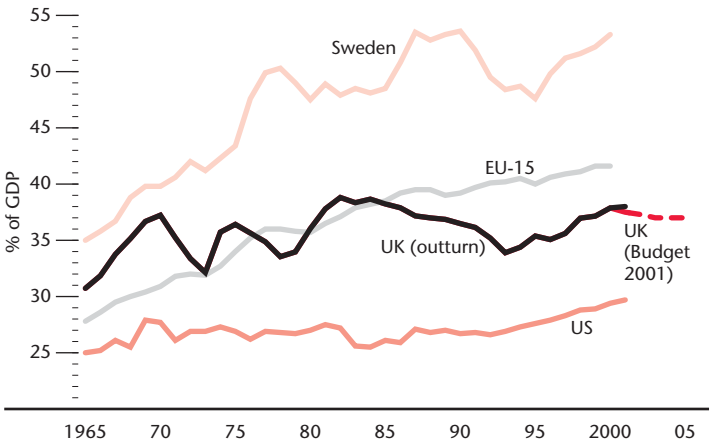
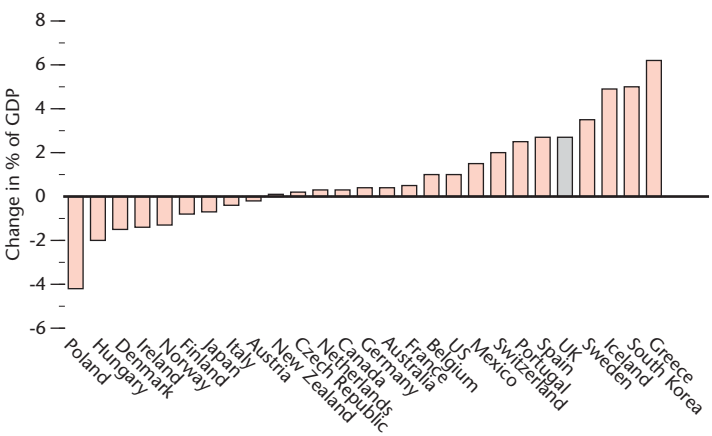


Figure 6b **The tax tide has turned since 1996 and few countries are resisting**



International composition of the tax burden

Figure 7a **UK poised to enter the tax-gatherers' Top 10**

Tax revenue, excluding social security, as % of GDP in 1999		*Compulsory social security payments as % of GDP in 1999*	
Denmark	48.3	Czech Republic	17.6
Sweden	39.0	Netherlands	16.8
New Zealand	35.6	France	16.6
Finland	34.4	Austria	15.1
Canada	33.0	Germany	14.8
Norway	31.4	Belgium	14.5
Belgium	31.2	Hungary	13.2
Italy	30.9	Sweden	13.2
Australia	30.6	Italy	12.3
United Kingdom	**30.1**	Spain	12.2
France	29.3	Switzerland	12.2
Austria	28.9	Finland	11.8
Ireland	28.1	Greece	11.5
Hungary	26.0	Norway	10.2
Greece	25.6	Poland	9.9
Portugal	25.6	Japan	9.7
Netherlands	25.3	Portugal	8.7
Poland	25.3	United States	6.9
Germany	22.9	**United Kingdom**	**6.2**
Spain	22.9	Canada	5.2
Czech Republic	22.7	Ireland	4.2
Switzerland	22.2	South Korea	4.1
United States	22.0	Mexico	3.0
South Korea	19.5	Denmark	2.1
Japan	16.4	Australia	0.0
Mexico	13.8	New Zealand	0.0

The UK already gathers an amount of tax comparable to that levied in France, Italy and Belgium, but sets a much lower rate of compulsory social security payments. Despite the deliberate switch towards indirect taxation in the early 1980s, the UK exchequer remains heavily dependent on income, profits and property taxation, as is the case in the US, Canada and Sweden (Figure 7b).

Figure 7b **UK combines American direct tax take with European indirect tax burden**

Taxes on income, profits and property as % of GDP in 1999		*Taxes on goods and services as % of GDP in 1999*	
Denmark	31.4	Denmark	16.3
Sweden	23.6	Hungary	15.8
Canada	22.6	Norway	15.5
New Zealand	22.5	Finland	14.3
Australia	21.0	Portugal	14.2
Finland	20.1	Greece	13.6
Belgium	19.1	Poland	13.2
United Kingdom	**18.1**	Czech Republic	13.1
United States	17.3	New Zealand	12.9
Italy	16.7	Ireland	12.4
Norway	15.9	Austria	12.4
Ireland	15.4	France	12.3
Switzerland	15.4	Italy	11.9
France	14.2	Netherlands	11.8
Austria	13.2	**United Kingdom**	**11.7**
Netherlands	12.8	Belgium	11.6
Germany	12.1	Sweden	11.2
Spain	12.1	Germany	10.6
Poland	11.8	Spain	10.5
Greece	11.7	South Korea	9.5
Japan	11.1	Canada	9.4
Portugal	11.0	Mexico	8.6
Hungary	9.7	Australia	7.6
Czech Republic	9.6	Switzerland	6.8
South Korea	9.0	Japan	5.3
Mexico	5.1	United States	4.7

Figure 7a: **Total tax revenue and compulsory social security payments as a percentage of GDP for OECD countries in 1999**
Source: OECD Revenue Statistics, 1965–2000, tables 4 and 14.

Figure 7b: **Direct and indirect tax revenues as a percentage of GDP for OECD countries in 1999**
Source: OECD Revenue Statistics, 1965–2000, tables 8, 22 and 25.

Alternative measures of the UK tax burden over time

While international comparisons of the aggregate tax burden are most commonly made using total revenues to GDP at market prices, there are plenty of other plausible definitions. David Smith's essay in the first section discusses some of the other contenders in the UK context. Figure 8a illustrates the effect of exchanging GDP at market prices for Gross Value Added (GVA) at basic prices. The argument for using basic rather than market prices is that market prices include the net influence of indirect taxes and subsidies. Hence, a supposedly neutral switch from direct to indirect taxation would inflate GDP at market prices and deflate the tax burden on this measure. In the interests of neutrality between income- and expenditure-based taxes, many commentators prefer to use GVA at basic prices as the denominator. This leads not only to a higher estimate of the tax burden but, for the UK, to a record tax burden in 2000.

Figure 8b repeats the exercise using measures of taxation, GDP and GVA that exclude the UK's offshore oil production sector, sometimes referred to as the North Sea oil sector or the UK Continental Shelf. During the late 1970s and early 1980s, the contribution of the offshore oil industry increased sharply and distorted macroeconomic aggregates.

Figure 8a: **Measures of the total UK tax burden in terms of GDP at market prices and GVA at basic prices**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: GCSU, YBHA and ABML.

Figure 8b: **Measures of the non-UKCS tax burden in terms of GDP at market prices and GVA at basic prices**
Sources: National Statistics Statbase, www.statistics.gov.uk/statbase/, Williams de Broë calculations of historical UKCS tax revenues. UK data codes: GCSU, YBHA, ABML and AHWL.

Figure 8a **UK tax burden heading for higher highs**

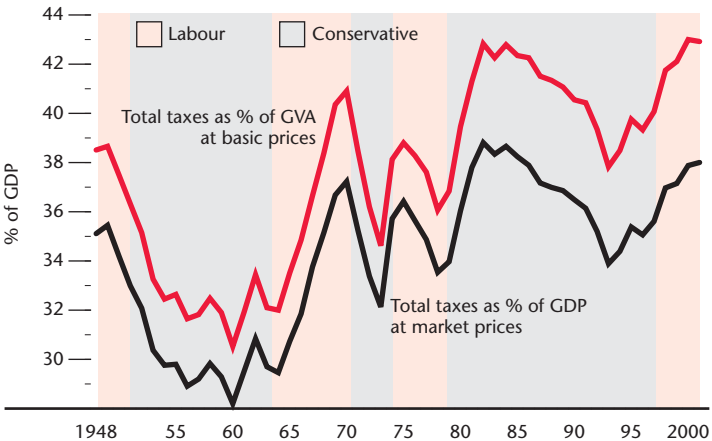
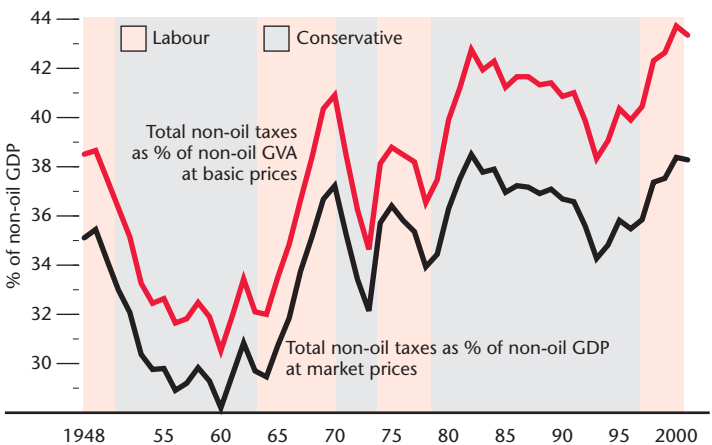


Figure 8b **Offshore oil activities do not change the picture**



The evolving composition of the UK tax burden

The composition of UK taxation tilted strongly towards direct taxes between the late 1940s and the early 1970s, owing mainly to the sharp rise in the share of National Insurance contributions. The cyclicality of income tax explains some of the irregularity shown in Figure 9a. At strong cyclical peaks in GDP, income tax receipts tend to rise more rapidly than nominal GDP and overall tax revenues. Subsequently, the addition of household income taxes, council tax, corporate taxes (including Petroleum Revenue Tax and the windfall tax on privatised utilities) accounted for a declining share of total taxation until the early 1990s. However, a reversal is under way which has restored the overall direct tax take – income and wealth taxes plus social security contributions – to more than 60 per cent of the total.

Value Added Tax and Customs and Excise duties form the backbone of taxes on production and imports, and their share has stabilised at around 37 per cent since the VAT rate was lifted to 17.5 per cent. Capital taxes, mostly inheritance tax (Figure 9b), have dwindled to insignificance while taxes paid direct to the EU account for the final 2 per cent of the total. The UK has resisted attempts to forgo the partial rebate of its contributions, which was negotiated by Margaret Thatcher in the 1980s, but the gathering pressures on the EU's budget may demand a larger UK proportionate contribution in the coming decade.

Figure 9a: **Principal sources of UK tax revenue as a percentage of the total**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: NMBY, NMYH and NMZL.

Figure 9b: **Subsidiary sources of UK tax revenue as a percentage of the total**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: AIIH, FJWB and NMGI.

Figure 9a **UK income and property taxes have made a comeback**

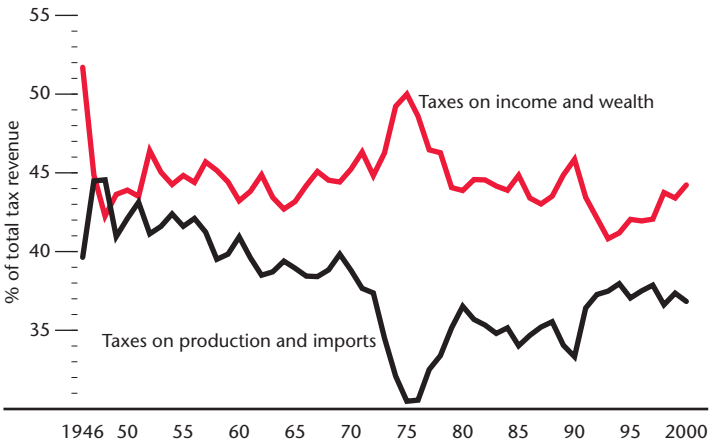
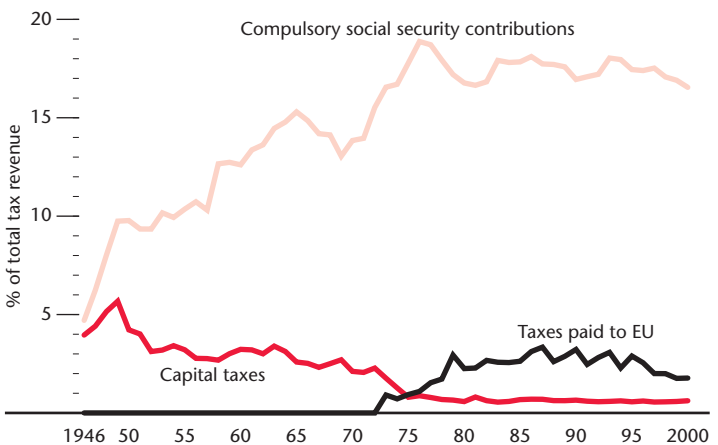


Figure 9b **Burden of UK taxes paid to EU is stable, but for how long?**



How the UK's public debt burden compares

Figure 10a shows that the UK is an extremely rare example of a large developed country with a lower public debt burden in 2001 than in the mid-1980s. Nevertheless, the US has shown a much more impressive record since the early 1990s recession, as rapid economic growth and buoyant tax revenues have carried the overall public-sector budget into surplus and created the opportunity for significant debt repayment. The impact of stronger GDP growth in the second half of the 1990s enabled EU governments to reduce their proportionate debt burdens almost everywhere, in stark contrast to Japan, where liabilities have escalated sharply to 130 per cent of GDP in 2001. The recent reduction in the UK public-sector debt burden is unexceptional.

Four years on from the deadline for the evaluation of the Maastricht criteria for government deficits and debt, Italy and Belgium have converged little towards the 60 per cent 'qualifiying' upper limit. Greece, joining in 2001, is the third member of the centenary club. With so many countries still very close to 60 per cent debt ratios after four years of consistent, if unspectacular, economic growth, there is scope for concern that an economic downturn would inflict widespread breaches of fiscal discipline. The UK is in a much more secure fiscal position, but has little capacity to raise revenue from future asset sales, in contrast to other EU countries.

Figure 10a: **Government gross financial liabilities as a percentage of nominal GDP**
Source: OECD Economic Outlook 69, June 2001, Annex table 31.

Figure 10b: **General government gross public debt as a percentage of nominal GDP using the Maastricht definition**
Source: OECD Economic Outlook 69, June 2001, Annex table 61.

Figure 10a **UK public debt burden has eased little in buoyant 1990s**

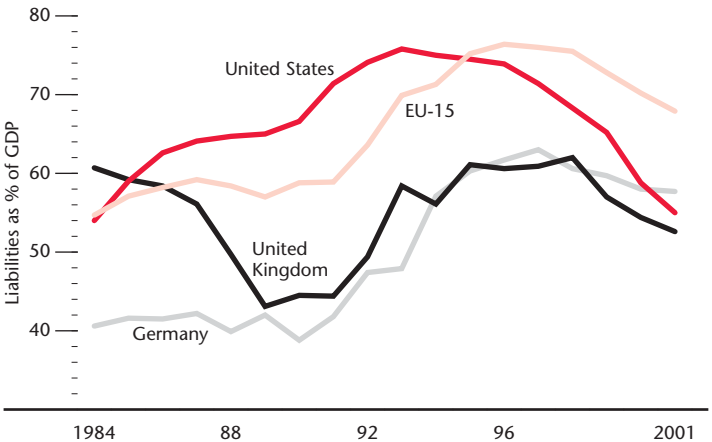
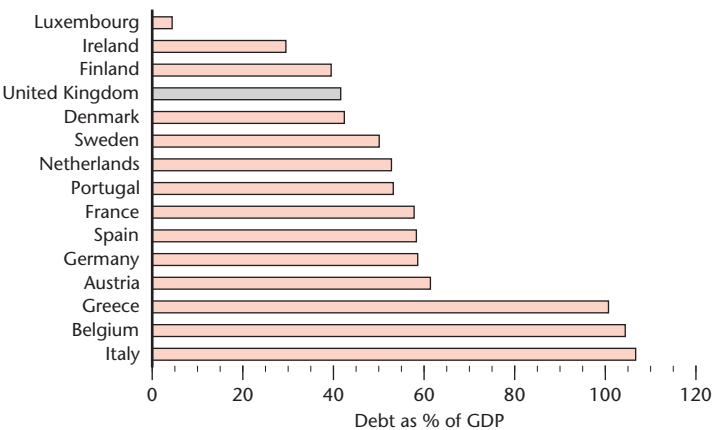


Figure 10b **Centenary club still years away from Maastricht criteria**



UK public-sector and national balance sheets

In 1976, the UK public sector owned 30 per cent of the tangible assets on the national balance sheet and accounted for about one-sixth of national net worth. The difference between the two measures is represented mainly by the outstanding stock of gilt-edged securities and National Savings instruments. The extensive privatisation programme and discounted residential property sales eroded the tangible share significantly during the 1980s, but the decline in the public-sector share of national net worth ratio is a more recent development. After the recession of 1990–2, the public finances fell into disrepair and heavy government borrowing drove an increasing wedge between the two measures.

In 1997, the Labour government adopted a new fiscal framework that included a commitment to a golden rule whereby public borrowing is used only for investment and not to fund current spending. Since 1997, there has been a gradual increase in the public-sector share of national net worth. Additional taxation, notably on the privatised utilities and the pension funds, contributed to the strengthening of the public-sector balance sheet (Figure 11a). However, this improvement in the public sector's net financial assets (Figure 11b) has been largely at the expense of the UK private sector, leaving net international assets at 12 per cent of GDP by end 2000.

Figure 11a: **Public-sector shares of national tangible wealth and national net worth expressed as percentages**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: CGXE, CGTY, CGRE and CGDA.

Figure 11b: **Sectoral composition of UK net financial assets, expressed as a percentage of nominal GDP**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: CGSA and NQFT.

Figure 11a **UK public-sector asset ownership turns the corner**

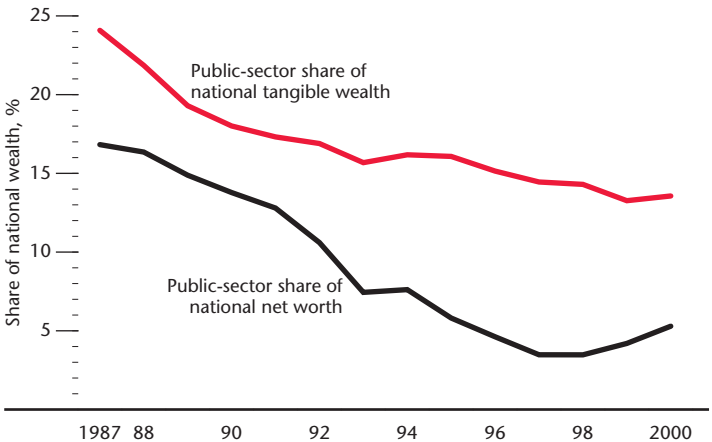
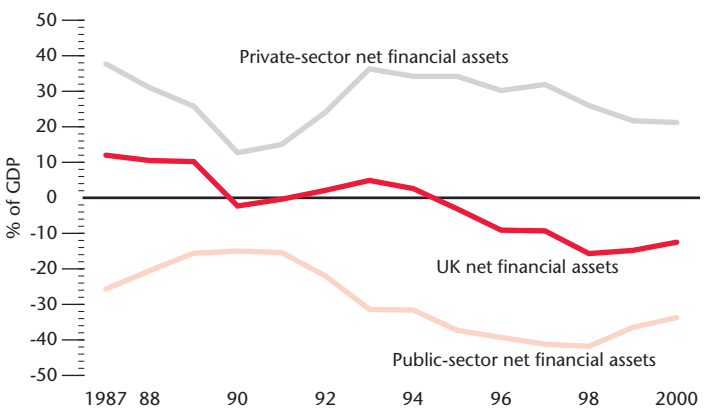


Figure 11b **UK public-sector balance sheet improves at expense of the private sector**



UK economic freedom on an international comparison

The Heritage Foundation in Washington, DC, and the Fraser Institute in Vancouver, BC, publish annual compendium volumes containing composite measures of economic freedom. Both the ingredients and the methods used are slightly different, but Hong Kong, Singapore and New Zealand occupy the top three rankings in the latest edition of both publications. Figures 12a and 12b use the Fraser Institute's publication *Economic Freedom of the World* because of its historical dimension and the addition of a more comprehensive index for 58 countries. The main index, reported in Figure 12a, combines objective indicators of the consistency of institutional arrangements and policies with economic freedom in seven key areas. These include: size of government, economic structure and use of markets, monetary policy and price stability, legal structure and security of private ownership.

Figure 12a demonstrates the UK's significant progress between 1980 and 1990 and the further gradual improvement in the following decade. The Fraser Institute ranks the UK fourth in the world, while the Heritage Foundation's 2002 index places the UK ninth equal, alongside Chile and Australia. The Fraser Institute's more comprehensive index, incorporating survey data to fill some of the information gaps, lifts the US above the UK (Figure 12b) and assigns the UK fifth place in the world ranking. Declines in scores among large developed nations are rare, but Japan is one example.

Figure 12a: **Fraser Institute Index of Economic Freedom, scores out of 10**
Source: J. Gwartney, C. Skipton and R. Lawson, *Economic Freedom of the World*, 2001 Annual Report, Fraser Institute, Canada, 2001.

Figure 12b: **Fraser Institute's More Comprehensive Index of Economic Freedom, scores out of ten**
Source: As Figure 12a.

Figure 12a **UK has an excellent score … for now**

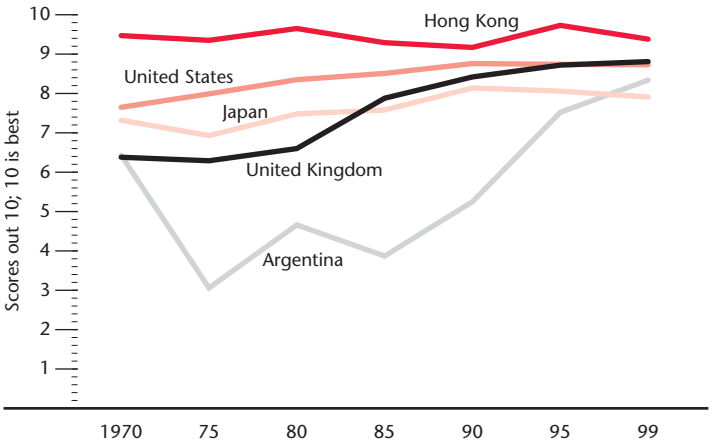
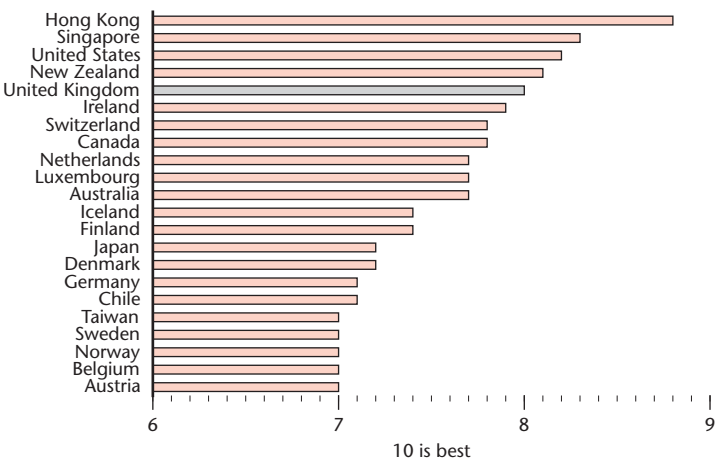


Figure 12b **Leaders of the free world**



The UK's international creditworthiness ranking

Institutional Investor magazine has conducted a biannual survey of the creditworthiness of sovereign nations since 1983. Those surveyed are senior economists and sovereign risk analysts at leading global banks, money management and securities firms. Respondents grade each country on a scale of zero to 100, with top marks awarded to countries that have the lowest probability of default. Participants are not allowed to rate their home countries. The responses are weighted to give prominence to the opinions of institutions with greater worldwide exposure and sophisticated country analysis systems.

Figure 13a describes the progress of the credit rating index since 1995, in order to highlight the impact of recent financial market turbulence. Since September 2000, global creditworthiness has drifted lower, but the UK has resisted this trend. The UK recorded its best score in the September 2001 survey, and occupies a commendable seventh place (Figure 13b) in the world rankings. The most notable change in recent years is the demotion of Japan from among the élite rankings to a dismal thirteenth. Switzerland and Germany are still regarded as the standard bearers of creditworthiness.

Figure 13a: **Recent development of the *Institutional Investor* global creditworthiness rating index, based on the lowest probability of default = 100**
Source: Institutional Investor, various issues.

Figure 13b: **Ranking of the *Institutional Investor* global creditworthiness rating index at September 2001, based on the lowest probability of default = 100**
Source: Institutional Investor, September 2001, pp. 131–6.

Figure 13a **UK creditworthiness still among the best in the world …**

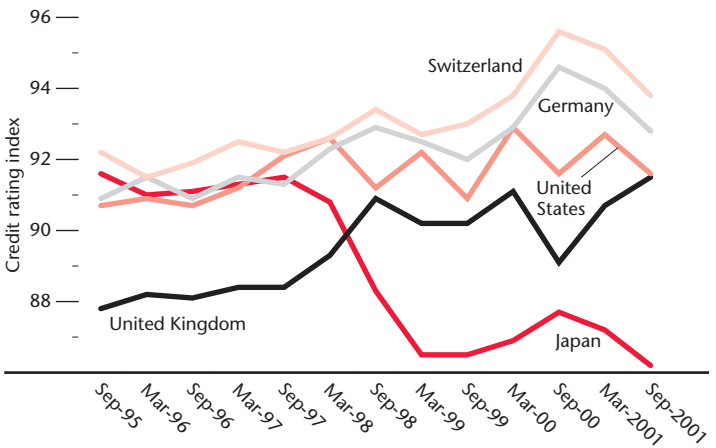
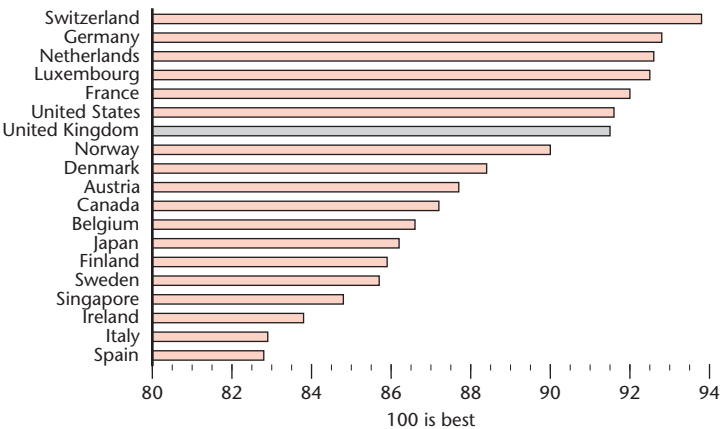


Figure 13b **… but the continentals lead the way**



UK competitiveness on an international comparison

The International Institute for Management Development (IMD) produces an annual ranking of international competitiveness under the title World Competitiveness Scoreboard. As with the Index of Economic Freedom, IMD has a rival in the World Economic Forum, which has published a Global Competitiveness Report each year since 1979. IMD's Yearbook measures and compares the extent to which a country provides an environment that fosters the domestic and global competitiveness of the companies operating within its borders. The IMD scores are constructed as a synthesis of objective and survey indicators, drawn from a panel of more than 3,500 executives. Figure 14a sets out the recent evolution of the overall competitiveness rankings, with the US gaining top spot in each of the past five years. Finland and Sweden have made impressive progress, but the UK's placing has deteriorated to ninteteenth in 2001 from ninth in 1997. The leading placings on the IMD's 2001 scoreboard are shown in Figure 14b.

The World Economic Forum looks more kindly on the UK, awarding a world rank of seventh for current competitiveness in 2001 and twelfth for growth competitiveness, as against eighth in 2000. The UK's loss of status in the competitiveness rankings clearly has something to do with currency valuation, but the regulatory environment and the costs of doing business have also contributed to a weaker showing.

Figure 14a: **IMD World Competitiveness rankings, 1997–2001**
Source: www.imd.ch/wcy/ranking/pastresults.html.

Figure 14b: **IMD World Competitiveness Scoreboard, 2001**
Source: www.imd.ch/wcy/ranking/ranking.html.

Figure 14a **UK begins to lose its competitive advantage**

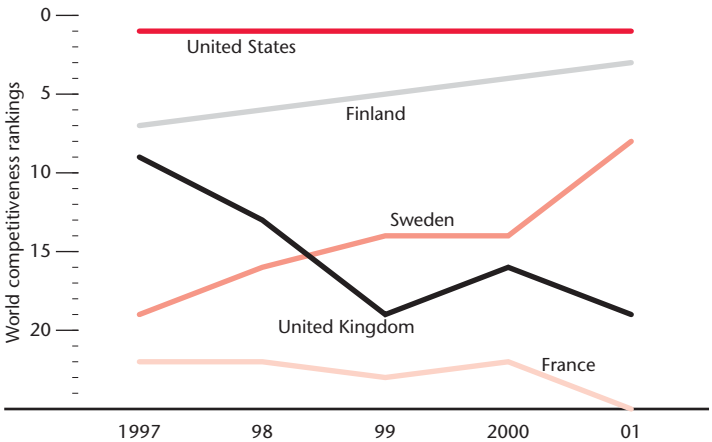
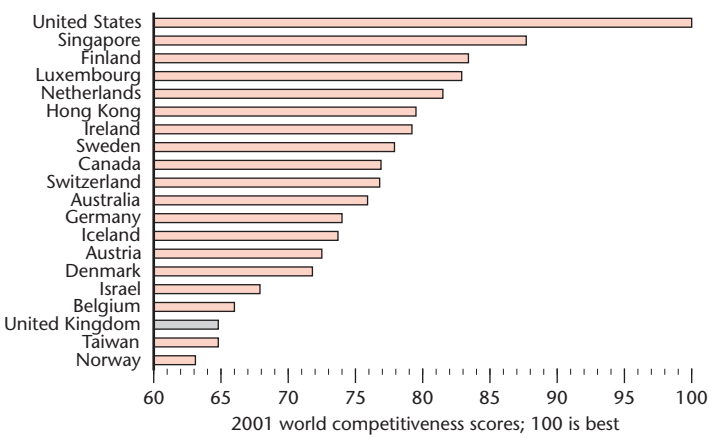


Figure 14b **Strong pound is but one factor**



The long view of UK GDP per capita

Figure 15 **UK income per head fails to keep pace with the world's best**

1870			*1913*			*1950*		
1	Australia	100	**1**	Australia	100	**1**	USA	100
2	**UK**	**88**	**2**	USA	93	**2**	Switzerland	95
3	Netherlands	76	**3**	New Zealand	90	**3**	New Zealand	88
4	New Zealand	74	**4**	**UK**	**86**	**4**	Australia	78
5	Belgium	74	**5**	Canada	78	**5**	Canada	78
6	USA	67	**6**	Switzerland	75	**6**	Denmark	73
7	Switzerland	60	**7**	Belgium	74	**7**	**UK**	**72**
8	Denmark	55	**8**	Netherlands	71	**8**	Sweden	70
9	Germany	52	**9**	Denmark	68	**9**	Netherlands	63
10	France	51	**10**	Germany	67	**10**	Norway	57
11	Austria	51	**11**	France	61	**11**	Belgium	57
12	Ireland	49	**12**	Austria	61	**12**	France	55
13	Canada	47	**13**	Sweden	54	**13**	Germany	45
14	Sweden	46	**14**	Ireland	48	**14**	Finland	44
15	Italy	41	**15**	Italy	45	**15**	Austria	39
16	Norway	39	**16**	Norway	44	**16**	Italy	37
17	Spain	38	**17**	Spain	39	**17**	Ireland	36
18	Finland	31	**18**	Finland	37	**18**	Spain	25
19	Portugal	27	**19**	Greece	28	**19**	Singapore	23
20	Greece	25	**20**	Japan	24	**20**	Hong Kong	23
21	Japan	20	**21**	Singapore	22	**21**	Portugal	22
22			**22**	Portugal	22	**22**	Japan	20
23			**23**	South Korea	16	**23**	Greece	20
24			**24**	Taiwan	13	**24**	Taiwan	10
25			**25**			**25**	South Korea	8

The UK's relative economic decline has been under way for a very long time, as Figure 15 confirms. The basis of comparison is real GDP per person, scaled each year to the best performance. UK real income per capita in 1999 was almost six times the 1870 level, and yet its ranking slipped from second to seventeenth over this period. Prior to 1950, the UK retained an advantage over the other large European countries, but in the 1970s seven western European nations overtook the UK. Ireland, Austria, Norway, Hong

1973			*1999*		
1	Switzerland	100	**1**	USA	100
2	USA	92	**2**	Norway	85
3	Canada	76	**3**	Singapore	84
4	Denmark	77	**4**	Denmark	80
5	Sweden	74	**5**	Switzerland	77
6	Germany	72	**6**	Canada	76
7	France	72	**7**	Australia	75
8	Netherlands	72	**8**	Netherlands	74
9	Australia	70	**9**	Japan	73
10	New Zealand	69	**10**	Germany	73
11	Belgium	67	**11**	Hong Kong	73
12	**UK**	**66**	**12**	France	72
13	Japan	63	**13**	Belgium	71
14	Norway	62	**14**	Ireland	71
15	Austria	62	**15**	Sweden	69
16	Finland	61	**16**	Austria	69
17	Italy	58	**17**	**UK**	**68**
18	Spain	48	**18**	Finland	68
19	Greece	42	**19**	Italy	64
20	Portugal	40	**20**	Taiwan	56
21	Hong Kong	39	**21**	New Zealand	55
22	Ireland	38	**22**	Spain	53
23	Singapore	33	**23**	South Korea	48
24	Taiwan	23	**24**	Portugal	48
25	South Korea	16	**25**	Greece	42

Kong, Japan and Singapore had all leapfrogged the UK by 1999. In every sub-period, the UK has had a below-average GDP growth rate, but the growth deficit was the smallest for the most recent period, 1973–99.

Figure 15: **Rankings of real GDP per capita at various dates. The highest value at each date forms the basis of the index, highest = 100**
Source: N. Crafts, *Britain's Relative Economic Decline, 1870–1999*, London School of Economics mimeo, September 2001.

UK productivity growth on an international comparison

Figure 16 **UK productivity gap has been closing**

1870			*1913*			*1950*		
1	Australia	100	**1**	Australia	100	**1**	USA	100
2	**UK**	**80**	**2**	USA	93	**2**	Canada	77
3	Netherlands	76	**3**	Canada	81	**3**	Australia	67
4	USA	70	**4**	**UK**	**78**	**4**	Switzerland	66
5	Belgium	68	**5**	Netherlands	75	**5**	Netherlands	53
6	Switzerland	56	**6**	Belgium	67	**6**	Sweden	53
7	Canada	53	**7**	Denmark	64	**7**	**UK**	**51**
8	Germany	50	**8**	Germany	64	**8**	Belgium	46
9	Denmark	49	**9**	Switzerland	60	**9**	Denmark	45
10	Austria	43	**10**	Austria	53	**10**	Norway	41
11	France	43	**11**	France	53	**11**	France	41
12	Sweden	38	**12**	Sweden	47	**12**	Germany	37
13	Norway	35	**13**	Norway	40	**13**	Finland	31
14	Italy	33	**14**	Italy	39	**14**	Italy	30
15	Finland	27	**15**	Finland	34	**15**	Austria	30
16	Japan	14	**16**	Japan	20	**16**	Ireland	24
						17	Japan	21
						18	Singapore	20
						19	Greece	19
						20	Portugal	19
						21	Spain	18
						22	Hong Kong	12
						23	South Korea	10
						24	Taiwan	8

Professor Crafts notes that, in considering relative levels of economic welfare, it is important to examine how much work effort is needed to produce GDP. Crafts estimates that annual hours worked per person employed in the UK fell from 2,984 in 1870 to 2,224 in 1950 and 1,732 in 1996. By contrast, in South Korea, the average work year increased from 2,200 hours in 1950 to 2,453 in 1996. Using hours worked rather than population head count as the denominator, the overall growth rate of UK productivity per hour is greater than for GDP per person. While Britain's relative

1973			*1996*		
1	USA	100	**1**	Norway	100
2	Netherlands	81	**2**	Netherlands	98
3	Canada	79	**3**	Belgium	93
4	Switzerland	79	**4**	France	91
5	Sweden	77	**5**	Germany	89
6	Australia	74	**6**	USA	84
7	Belgium	72	**7**	Italy	82
8	Germany	71	**8**	Denmark	79
9	Denmark	71	**9**	Sweden	77
10	France	69	**10**	Ireland	76
11	Austria	65	**11**	Australia	76
12	Norway	61	**12**	Austria	75
13	**UK**	**60**	**13**	Canada	74
14	Italy	58	**14**	Spain	72
15	Finland	53	**15**	Switzerland	72
16	Spain	46	**16**	**UK**	**69**
17	Greece	45	**17**	Finland	68
18	Japan	44	**18**	Japan	62
19	Portugal	41	**19**	Hong Kong	57
20	Ireland	38	**20**	Singapore	53
21	Singapore	29	**21**	Greece	51
22	Hong Kong	29	**22**	Taiwan	49
23	Taiwan	19	**23**	Portugal	42
24	South Korea	15	**24**	South Korea	36

economic decline is no less marked, the multiple of productivity between the two dates is 8.9 rather than 6. The UK improves from achieving only 51 per cent of the world's best performance in 1950 to 60 per cent in 1973 and 69 per cent in 1996, and remains ahead of Japan, Hong Kong and Singapore.

Figure 16: **Rankings of real GDP per hour worked at selected dates. The highest value at each date forms the basis of the index, highest = 100**
Source: N. Crafts, *Britain's Relative Economic Decline, 1870–1999*, London School of Economics mimeo, September 2001.

CHARTS PART 2

INCOME REDISTRIBUTION

International comparison of working-age benefits

Professor Frank Castles of Edinburgh University has used the SOCX database to distinguish three distinct models of state welfare provision. First, a western European social security model that devotes around 60 per cent of combined public health and social security spending to income replacement (i.e. state pensions and out-of-work benefits), 35 per cent to poverty alleviation and healthcare, and a residual amount to the newer special needs categories. Second, an English-speaking poverty alleviation model, in which income replacement takes about 45 per cent, poverty alleviation between 50 per cent and 55 per cent. Third, a Scandinavian state services model, in which contingency-based spending exceeds income-replacing expenditure, but where personal care for the aged and disabled etc. commands a 20 per cent share. Surprisingly, the UK's spending patterns come closest to the latter.

It is obvious from Figure 17a that there is also great disparity in the scale of commitment to social security expenditure. Once old age benefits are excluded, neither the US nor Japan finds a worthwhile role for income replacement programmes. Germany is far from convinced of the merits of income replacement, but the UK has been drifting towards a sizable commitment. Figure 17b shows the complete spectrum as at 1997.

Figure 17a: **Public expenditure on income-replacing social security benefits (including unemployment benefit but excluding old age and survivors' benefits) as a percentage of GDP**
Source: OECD SOCX Social Expenditure database (1999).

Figure 17b: **Ranking of countries on the basis of public expenditure on income-replacing social security benefits (including unemployment benefit but excluding old age and survivors' benefits) as a percentage of GDP in 1997**
Source: As Figure 17a.

Figure 17a **Income replacement is big business in the EU**

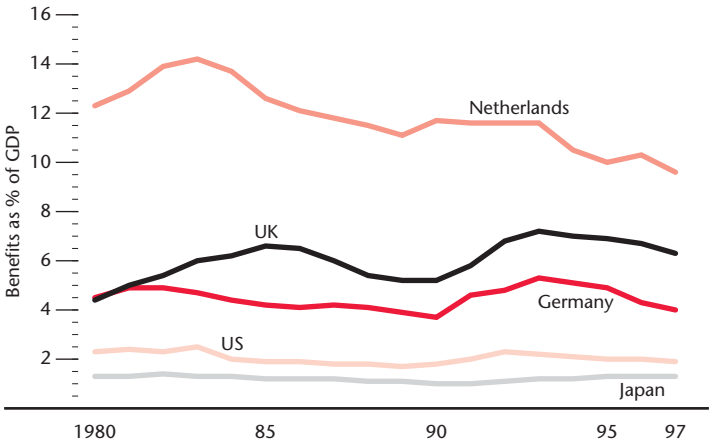
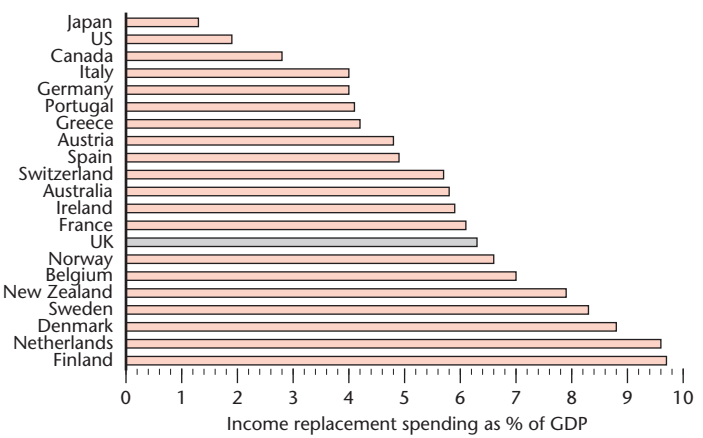


Figure 17b **Income redistribution: rich nations beg to differ**



International comparison of underfunded public-sector pensions

A second significant area of disagreement between OECD countries lies in the generosity of state provision of income-related old age pensions. Most countries make a distinction between a universal flat-rate payment, contingent on reaching a certain age, which is intended to alleviate poverty among the aged, and a pension related to the previous level of earned income. The ageing of the population, and the corresponding maturity of state pension promises, presuppose that additional funds will be available to meet these escalating commitments. In general, this is untrue.

Figure 18a gives some broad indications of the magnitude of the implied public expenditures for five members of the G-7. Italy faces the sternest challenge, but the problem does not really materialise until after 2010. By 2040, it is acute for almost all EU countries with the exception of the UK and Ireland. Like the UK, the US has made comparatively modest state pension promises and the implied spending profile appears manageable. Taking into account all sources of retirement income (public and private), Figure 18b provides estimates of the degree of old age income replacement in each OECD country.

Figure 18a: **Projections of public-sector pension expenditures as a percentage of nominal GDP**
Source: D. Roseveare, W. Liebfritz, D. Fore and E. Wurzel, *Ageing populations, pension systems and government budgets: simulation for 20 OECD countries*, Economics Working Paper No. 168, OECD, Paris, 1996.

Figure 18b: **Expected old age replacement rates in OECD countries in 1995, expressed as percentages**
Source: Blöndal and Scarpetta, *The retirement decision in OECD countries*, OECD Economics Department Working Paper No. 202, OECD, Paris, 1998.

Figure 18a **UK's modest promises avoid the unfunded liabilities trap**

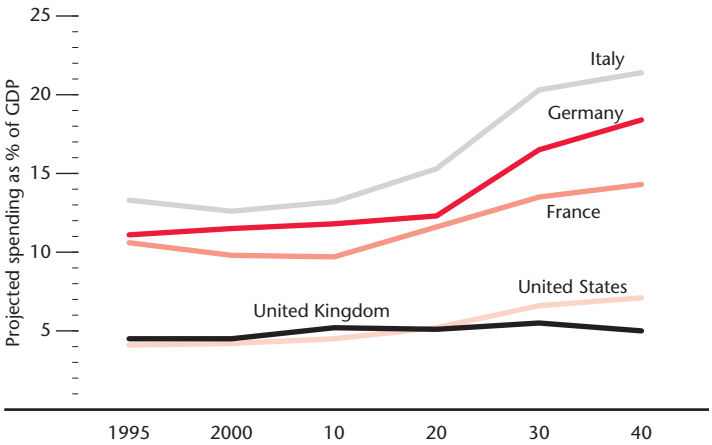
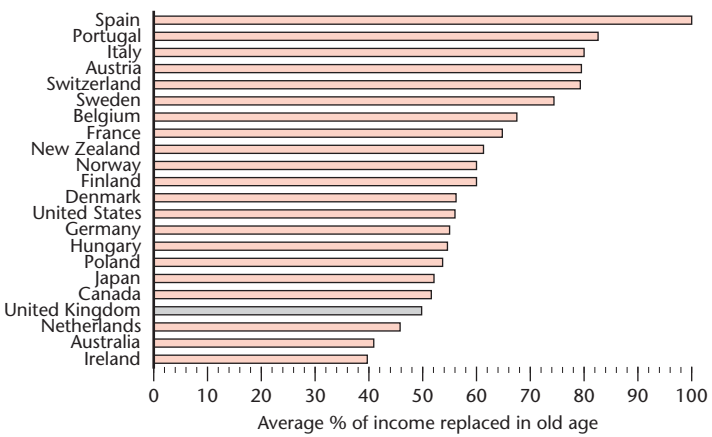


Figure 18b **The bigger the promise, the bigger the bill**



UK public expenditure on social security as a share of GDP

UK public spending on social security is mostly financed out of general taxation, but there is a significant earmarked element in the form of National Insurance contributions made by employees and by employers on their behalf. The 50-year profile traced in Figure 19a reveals a clear upward trend in the spending-to-GDP ratio. As a generalisation, there are three main factors supporting this upward trend. First, a political desire to mitigate the adverse social consequences of economic and other structural changes; second, governments' desire to gain popularity by raising the level of benefit entitlements; and third, the automatic effects of an economic downturn on contingency-based social security spending. Both Labour and Conservative governments have been responsible for reinforcing this upward trend by their actions.

Modest declines in the social security spending ratio since 1995, consistent with falling jobless numbers, could easily be transformed into another steep increase in the event of a stagnant or recessionary UK economy. The supposed slack in the public finances for 1999 and 2000 has already been used to finance additional health and education spending commitments. Meanwhile, the enhanced generosity of in-work benefits could become unexpectedly costly in a downturn. Figure 19b gives a detailed breakdown of UK social security spending.

Figure 19a: **UK general government spending on social security payments as a percentage of GDP**
Source: Department of Social Security, *The Abstract of Statistics for Social Security Benefits and Contributions, and Indices of Prices and Earnings*, various eds. National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: NMRY and YBIM.

Figure 19b: **Composition of UK general government spending on social security payments in 1999/2000**
Source: National Statistics, *Annual Abstract of Statistics 2001*, Table 10.21.

Figure 19a **Is a rising trend in benefit spending inevitable?**

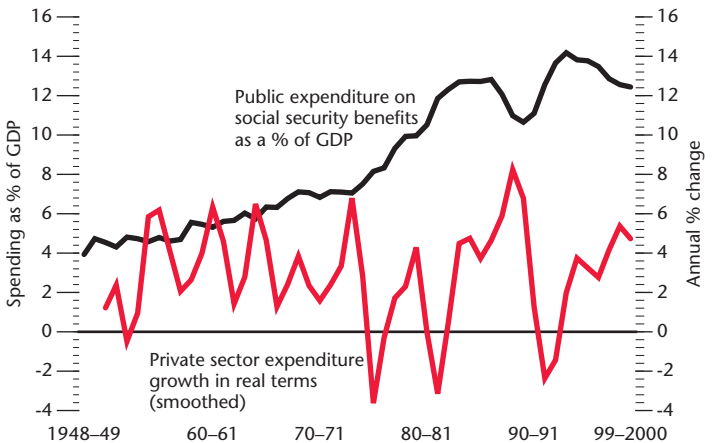
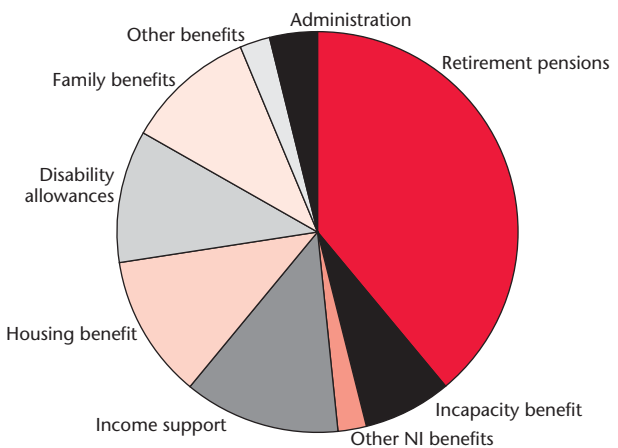


Figure 19b **The UK benefits merry-go-round, 1999–2000**



How UK social security benefits are distributed

The conflict between the welfare objectives of contingency-based poverty alleviation and income replacement in the UK is clearly illustrated by Figure 20a. A system that was focused on redistributing resources to the very poorest, regardless of their age, gender or state of health, would use original income as the basis of its assessment. In fact, the UK social security system fails to award the largest transfer to the poorest decile of households, even for income-related benefits. The distribution of other types of benefit is even less discriminatory. The use of 'need' categories, such as single-parent families, incapacitated, unemployed and so on, creates artificial boundaries between similarly needy households and rewards them differently. The surprising result is that the lower half of the income distribution receives only 70 per cent of total benefit expenditure, rather than the 80 or 90 per cent that one might expect.

Another consequence of a highly complex benefit system that interacts with income, taxation, capital resources, housing tenure and many aspects of household composition is that benefit entitlements are not always claimed. Figure 20b gives estimated percentage ranges of take-up for five income-related benefits in 1998/99, based on benefit expenditures rather than case-loads. Low take-up is a symptom of excessive complexity and general confusion regarding the benefit system.

Figure 20a: **Percentage of UK social security benefit expenditure received by individuals according to deciles of gross income (before housing costs) in 1998/99**
Source: (Derived from) Department for Social Security, *Social Security Statistics, 2000*, p. 186.

Figure 20b: **Expenditure-based percentage take-up rates of income-related benefits, 1998/99**
Source: Department for Social Security, *Social Security Statistics, 2000*, pp. 189–91.

Figure 20a **Only 70% of social security benefits reach UK's poorer households**

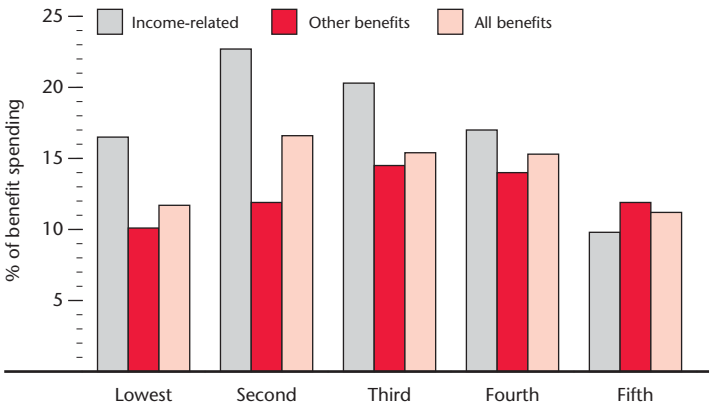
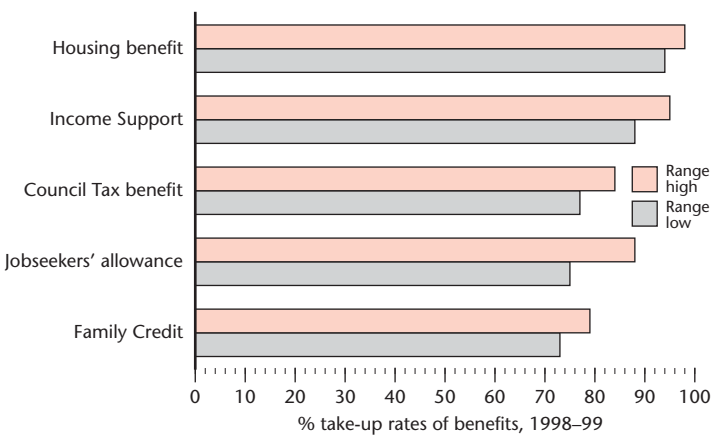


Figure 20b **Not all UK means-tested benefits are claimed**



How UK income tax liabilities are distributed

During the 1980s and 1990s, the industrial structure of the UK economy skewed towards the private services sectors, partly under the influence of the capital markets revolution. Freed from the restrictive practices of the commercial banks, businesses were able to expand much more rapidly. The sectors most affected by the funding transformation were commercial property services, computer and related services, telecommunication services, recruitment services, advertising and media services, and financial services. These businesses introduced more flexible, meritocratic remuneration structures, which were necessary to attract dynamic 20–35-year-olds. The decentralisation of pay determination fostered much greater dispersion of pay inflation among the workforce, as a significant minority received regular double-digit annual percentage increases.

This gradual widening of income differentials, in combination with a progressive income tax system and incomplete indexation of the income tax thresholds, has brought about significant changes in the dispersion of income tax liabilities. Figure 21a reveals that the top decile of income taxpayers now accounts for more than 50 per cent of the total tax liability, up from 36 per cent in 1978/79. At the bottom end of the pay distribution scale, the introduction of the National Minimum Wage has drawn many more individuals (see Figure 21b) into the system, such that 60 per cent of adults aged over eighteen are income taxpayers.

Figure 21a: **Percentage shares of total UK income tax liability represented by the top tiers of taxpayers**
Source: National Statistics, *UK Inland Revenue Statistics 2000*, table 2.4, updated from www.inlandrevenue.org.uk.

Figure 21b: **Estimated number of individual UK income taxpayers in millions**
Source: National Statistics, *UK Inland Revenue Statistics 2000*, table 1.4.

Figure 21a **The growth of the taxpaying meritocracy**

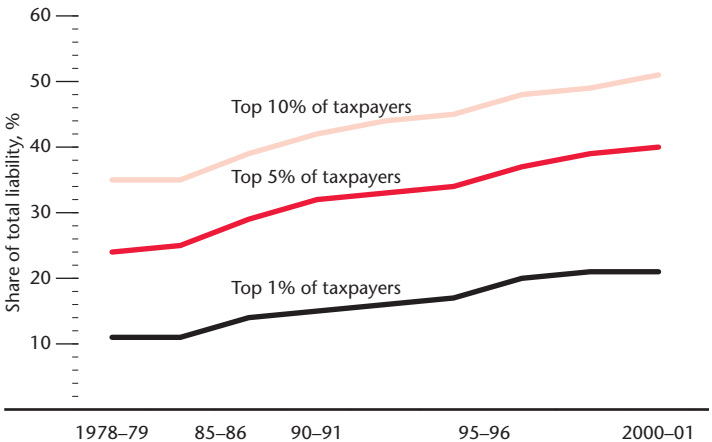
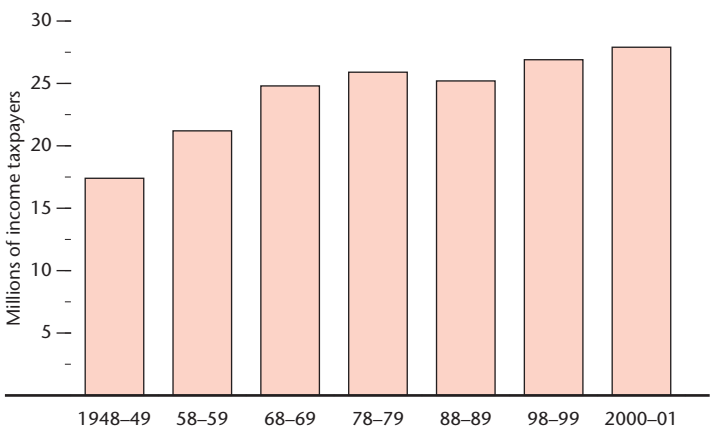


Figure 21b **More and more are becoming enmeshed in the UK's income tax net**



The interaction of overall taxes and benefits in UK households

The complex interaction of UK taxes and benefits is summarised in Figure 22a for working-age households. In this presentation, households are ranked according to the distribution of their original incomes (excluding state-administered benefits and pensions), adjusted for the number of household members, their ages and other relevant characteristics to recognise differing demands on resources. The actual monetary values are shown for each decile of the equivalised income distribution. The results show that, while the income tax system is progressive, the indirect system is sufficiently regressive as to leave most deciles with a virtually identical total tax burden. Indeed, the lowest decile bears an overall tax burden of 50 per cent of gross income (original income plus cash benefits). See also Figure 25b on page 151.

Figure 22b displays the same information for retired households, where all but the top 10 per cent of the income distribution scale receive more in state-administered pensions and benefits than is paid as income tax. The indirect tax burden remains a regressive influence, leading to a total tax burden of 50 per cent for the poorest decile of retirees, identical to that for the population of working age. Other deciles have an average tax rate of just under 30 per cent. While the overall tax and benefit system is redistributive, the tax system in isolation is not.

Figure 22a: **Aggregate taxes and benefits in £bn for working-age households by decile of equivalised original income, 1999/2000**
Source: National Statistics, *Economic Trends*, no. 569, April 2001.

Figure 22b: **Aggregate taxes and benefits in £bn for retired households by decile of equivalised original income, 1999/2000**
Source: As Figure 22a.

Figure 22a **Give and take for UK working-age households**

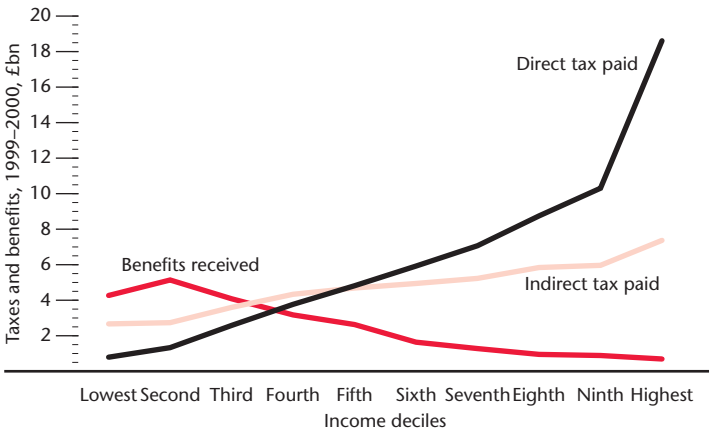
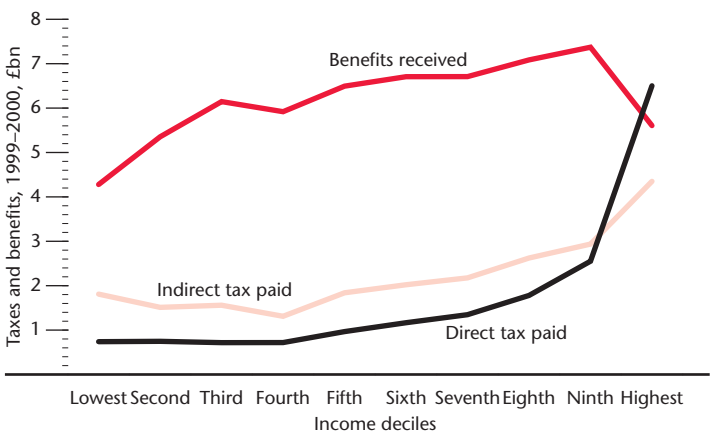


Figure 22b **Take and give for UK retired households**



Costs of UK tax collection and benefit administration

In a second-best world (in a ideal world there would be no taxes) all taxes would be levied at a flat percentage rate with no exemptions. Evasion would be impossible and avoidance futile. These taxes would be easy and almost costless to collect. In practice, there are dozens of UK taxes with multiple rates and bands, exemptions, allowances and reliefs. Evasion is widespread and avoidance is extremely worthwhile for the privileged. Very few taxes are cheap to collect and the Inland Revenue writes off hundreds of millions of pounds of old liabilities each year. Hundreds of thousands of self-assessed income taxpayers fail to deliver their annual returns on time and suffer fines and penalties as a result. These are the frictional costs of the tax system.

Figure 23a details the collection costs of Inland Revenue taxes and the administration costs of, if anything, an even more complex benefit system. More than £6 billion per annum is spent on processing direct taxes and benefits. Figure 23b reveals that the costs of benefit administration have been edging lower, but remain expensive. In addition, the Department for Work and Pensions estimates that 7.4 per cent of Income Support and Job Seekers Allowance payments for 2000/01 were either fraudulent or erroneous.

Figure 23a: **Costs of Inland Revenue tax collection and tax write-offs and of social security benefit administration in £bn**
Sources: Board of Inland Revenue Annual Reports, various years. These can be found at www.inlandrevenue.org.uk; National Statistics, Annual Abstract of Statistics, table 10.21.

Figure 23b: **Inland Revenue tax collection and tax write-offs and social security benefit administration expressed as percentages of the total tax yield or benefit cost**
Sources: As Figure 23a.

Figure 23a **Frictional costs of UK's over-complex transfer system**

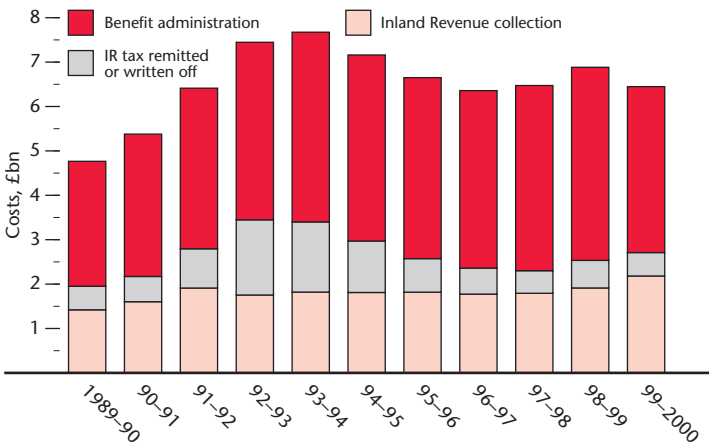
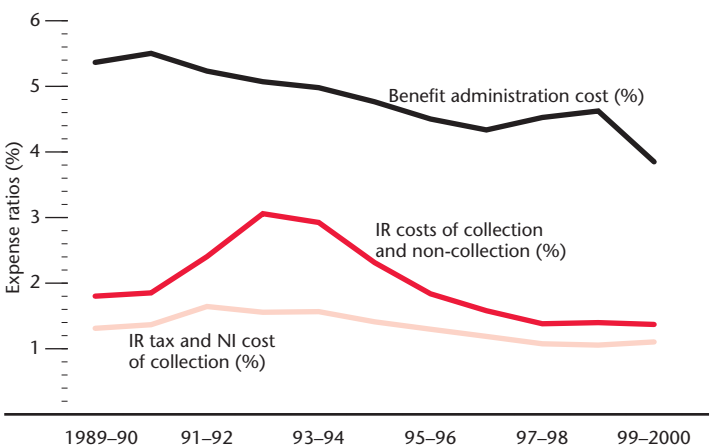


Figure 23b **Cost ratios are falling, but remain unacceptably high**



International comparison of Gini coefficients of income inequality

The supreme purpose of the UK's elaborate transfer system of taxes and benefits is surely to soften the rough edges of the raw income distribution. On this criterion, it is failing miserably. Despite the transfer system's increasing sophistication and bewildering complexity, Figure 24a shows that inequalities in disposable income have continued to widen. Ranking households according to their equivalised original incomes (as in Figure 21a), the ratios of the ninetieth to the tenth percentiles of actual disposable incomes have risen from a multiple of 3.4 in 1981 to 4.6 in 1999/2000.

The standard measure of income inequality is the Gini coefficient. This calibrates the extent to which an actual income distribution differs from a perfectly equal income distribution using the cumulative density function. A Gini coefficient of zero represents perfect equality and of 100 per cent indicates complete inequality. Figure 24b places the UK income distribution among the least equitable of the 26 industrialised and emerging nations covered, alongside Ireland and the US, although these estimates have not been gathered on a common definition of income or for an identical year. Arguably, a significant degree of income inequality is necessary to induce individuals to take entrepreneurial risks. However, too much inequality stirs up civil unrest and the risk of revolution.

Figure 24a: **Interdecile and interquartile ratios for UK households' disposable income, ranked according to equivalised original incomes**
Source: National Statistics, *Economic Trends*, no. 569, April 2001.

Figure 24b: **Gini coefficients for OECD countries**
Sources: The World Bank, *World Development Report 2002*, Oxford University Press, New York; National Statistics, *Economic Trends*, no. 569, April 2001.

Figure 24a **Opening a wider divide**

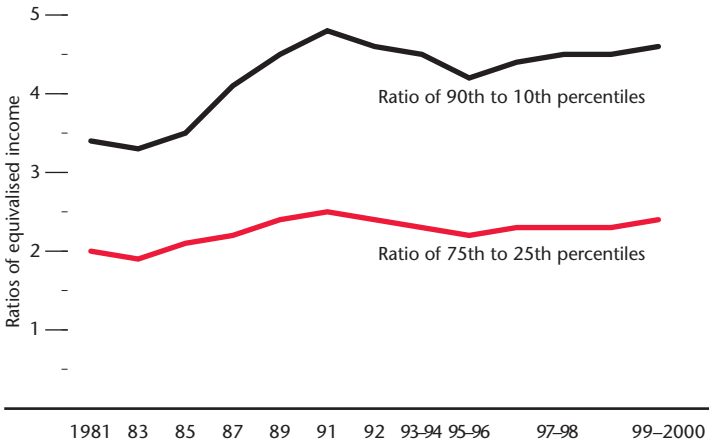
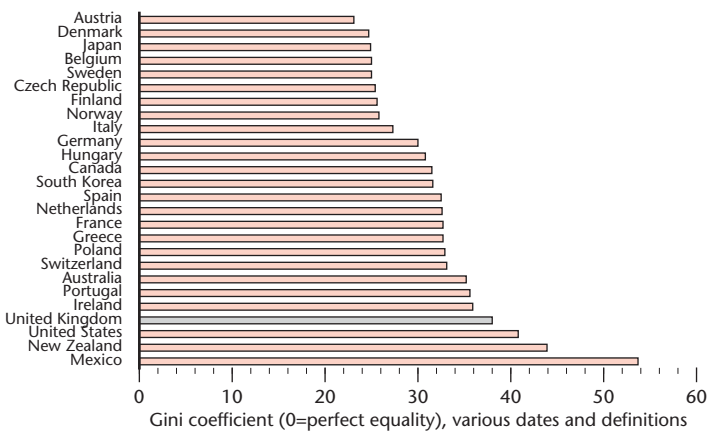


Figure 24b **UK income distribution is among the least equitable**



Net effects of income redistribution on UK households

Gini coefficients are properly applied only to actual incomes, preferably after the inclusion of all benefits and the deduction of all taxes and compulsory social security contributions. However, there is an extra layer of redistribution which is the notional allocation of benefits in kind, such as education and health services, housing and travel subsidies, free school meals, etc. Figure 25a shows how these benefits augment the lower quintiles to a greater extent than the upper quintiles, particularly those who purchase private education and healthcare.

However, the redistributive tendencies of the benefit system, in cash and kind, have been eroded since 1996/97 by the over-indexation of duties on road fuel and tobacco and the greater use of regressive indirect taxes such as the air passenger tax and the insurance premium tax. Figure 25b shows the heavy impact of these taxes, particularly on the lowest decile of household income.

Figure 25a: **Effects of all taxes and benefits in £bn on UK household incomes by quintile groups in 1999/2000, ranked by equivalised income**
Source: National Statistics, *Economic Trends*, no. 569, April 2001.

Figure 25b: **Total tax burdens of working-age households, ranked by decile of equivalised income, expressed as a percentage of gross income, for 1996/97 and 1999/2000**
Source: As Figure 25a.

Figure 25a **How the UK cookie crumbles**

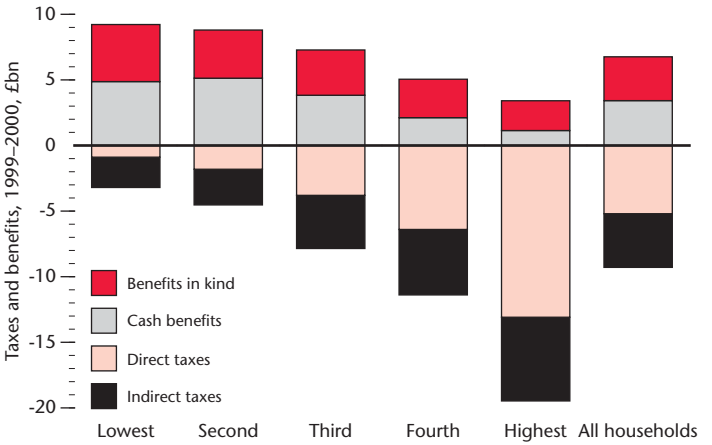
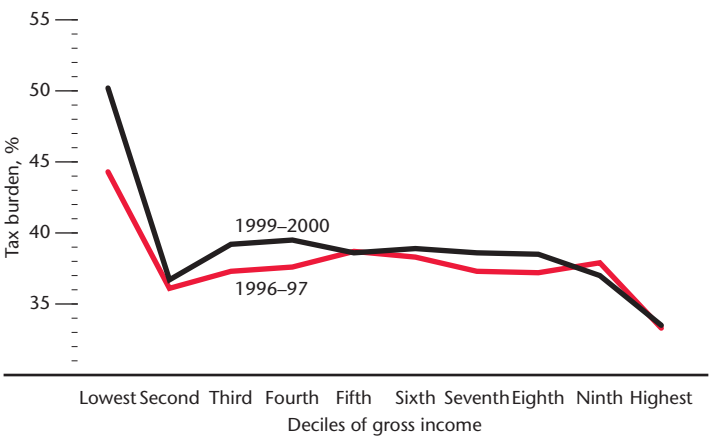


Figure 25b **UK tax system is regressive, not progressive**



CHARTS PART 3

THE EFFECTIVENESS OF PUBLIC SPENDING ON HEALTH

International comparison of public-health spending as a share of GDP

The performance of the UK public-health sector, more commonly known as the National Health Service (NHS), was one of the most contentious issues at the 2001 general election. Prime Minister Tony Blair's avowed intent to raise total UK health spending to the EU average within the lifetime of the new parliament can be considered the foremost pledge of the Labour government in its second term. Figures 26a and 26b confirm that NHS spending has tracked the OECD average very closely since the 1970s. The UK ratio was very close to the OECD average of 6.1 per cent in 1998 and not far behind the EU (excluding the UK) average of 6.5 per cent. However, in terms of overall health spending to GDP there was a sizable gulf between the UK's 6.8 per cent and the 8.9 per cent average of the other fourteen EU member countries.

While NHS spending is set to rise by more than a third in real terms between 2000 and 2004, this would be sufficient only to reach a total health share of around 8 per cent. Ironically, Germany, with significantly higher public and total spending ratios, often ranks below the UK in measures of health system performance. The absence of a simple linkage between health spending levels and outcomes calls into question the wisdom of setting a target for the spending ratio, however it is achieved.

Figure 26a: **Public expenditure on healthcare as a percentage of nominal GDP**
Sources: OECD Health Data 2001; Office of Health Economics Compendium of Health Statistics, 13th ed., 2001.

Figure 26b: **Public expenditure on healthcare as a percentage of nominal GDP, latest observation (1998–2000)**
Source: OECD Health Data 2001.

Figure 26a **UK health share set to resume its secular increase**

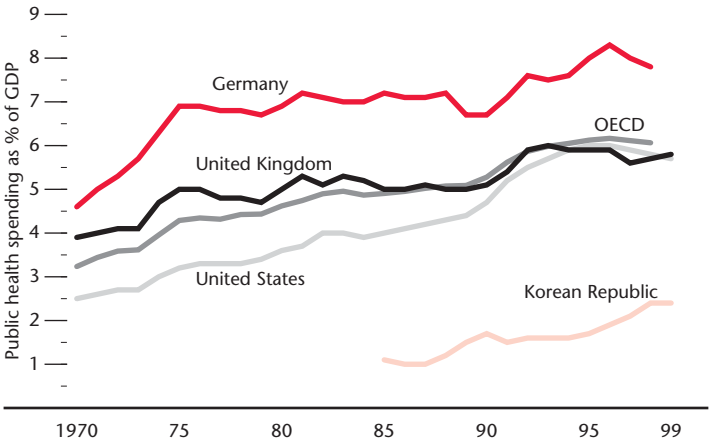
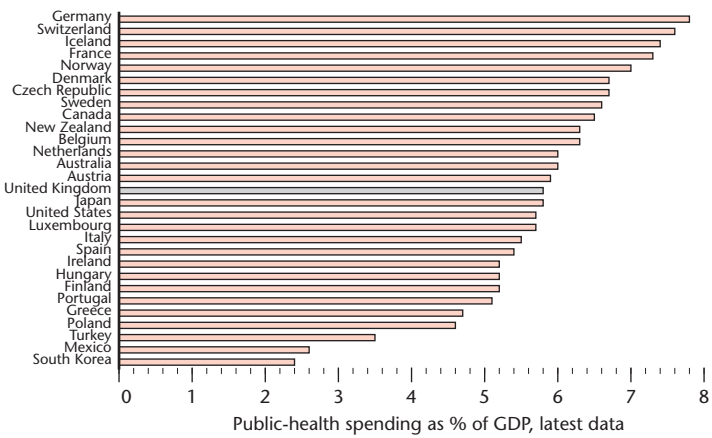


Figure 26b **Continent of Europe leads the way**



International comparison of public-sector share in total health spending

At around 84 per cent of total UK health spending, the NHS is already one of the most dominant public healthcare sectors in the developed world (see Figures 27a and 27b). The implications of existing public spending plans would raise this still further. Given that the EU average public-sector health share is about 74 per cent and the US share is only 45 per cent, there are plenty of working examples of more diverse systems of healthcare delivery and funding. The special status of the NHS as a universal system, virtually free at the point of use, is perceived increasingly as an obstacle to progress, forcing additional resources to be applied through traditional, but ineffective, channels. Edward Bramley-Harker's essay in the first section advocates greater choice as a mechanism for encouraging improvements in service structure and delivery.

In most other countries, there is more flexibility and more local accountability, and this is achieved without sacrificing the principle of access to services according to need. Even the UK's private health insurance industry is lacking in market responsiveness owing to the fact that many of the existing beneficiaries receive this as a taxable employment benefit and are therefore insensitive to its cost. Those who purchase the insurance directly baulk at the sizable annual premiums and the knowledge that they receive no compensation for helping to relieve the pressures on the NHS.

Figure 27a: **Public expenditure on healthcare as a percentage of total healthcare expenditure**
Source: OECD Health Data 2001.

Figure 27b: **Public expenditure on healthcare as a percentage of total healthcare expenditure, latest observation (1998–2000)**
Source: As Figure 27a.

Figure 27a **UK has one of the smallest private health sectors**

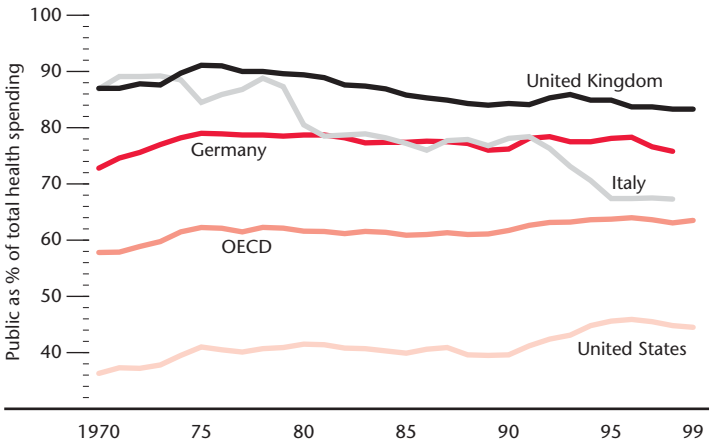
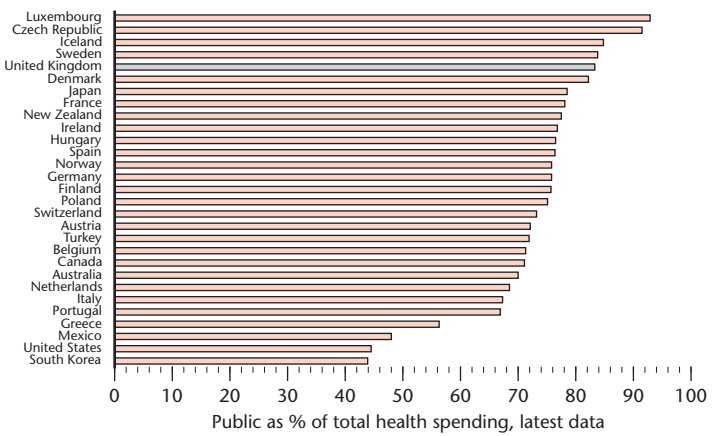


Figure 27b **Greater diversity of health provision works elsewhere**



Growth of UK public-sector health spending over time

Most government departments have unit costs that rise at a similar, if not identical, rate to the local consumer price index. For example, the index value of UK central and local government pay and procurement unit costs in October 2001 was 126.9 (January 1992 = 100) as against 126.2 for the index of consumer prices. But the price index for NHS pay and procurement has been rising much more rapidly in recent years, and will probably have passed 140 by October 2001. The index for local government is 132.1, reflecting the substantial exposure to health spending.

Figure 28a presents the annual growth rate of NHS spending in real terms using the GDP deflator, but also using the Hospital and Community Health Services (HCHS) Pay and Price series compiled by the Public Expenditure Team at the Department of Health. The conventional method gives a picture of volatile year-to-year real growth, ranging from 1 per cent to almost 10 per cent per annum. When the HCHS deflator is used, much of this volatility disappears and the range of real growth shrinks to between 0.5 and 3.8 per cent. Figure 28b shows the evolution of the pay and service cost inflation elements of the HCHS series since 1984. Rising labour cost inflation in the later years reflects the acute manpower shortages.

Figure 28a: **Annual percentage growth rates of nominal real expenditures on the NHS**
Sources: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001; Department of Health Public Expenditure Team.

Figure 28b: **NHS Hospital and Community Health Services (HCHS) pay and price inflation, % per annum**
Source: Department of Health Public Expenditure Team.

Figure 28a **Real growth of UK health spending has been overstated**

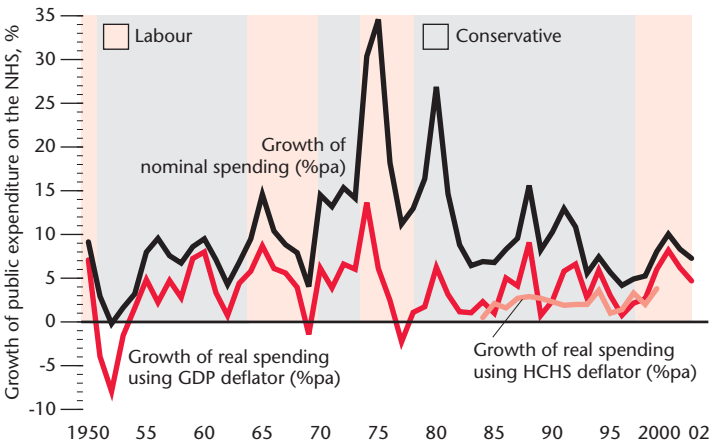
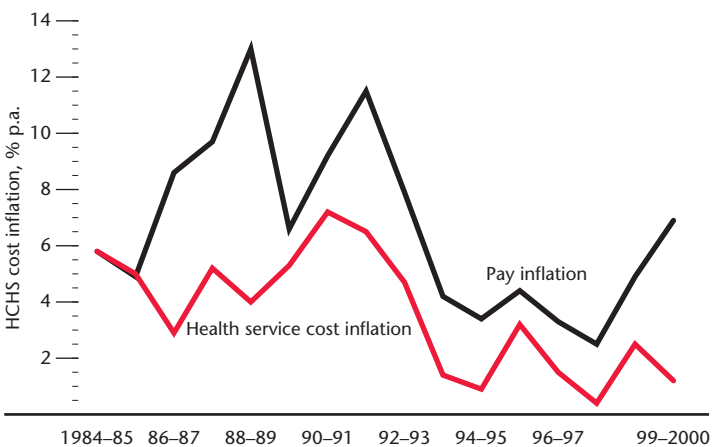


Figure 28b **Real wages are responding to UK labour shortage**



Composition of UK public-health spending by category

In 1973, hospital services accounted for two-thirds of NHS gross spending, but this proportion has since fallen to less than half. Part of the explanation lies in the reorganisation of the NHS in 1974, but the dramatic reduction in the average length of patient stay has also played a part. The average stay in a UK hospital was 45 days in 1951, 23 days in 1973, and just 5 days in 1999/2000. Medical advances have speeded up recovery times and medical attitudes have become much more supportive of the early discharge of patients. A corresponding increase in community health services has occurred as general practitioners and local surgeries have borne a greater responsible for patient aftercare.

However, Figure 29a also reveals a substantial increase in the importance of other services in NHS expenditures. These comprise central and headquarters administration, ambulance services, mass radiography services, and centrally financed items such as laboratory, vaccine and some research and development costs. From 1991/92, the figures also include capital charges, depreciation and some other, formerly excluded, expenditures. Figure 29b analyses the cost composition of NHS expenditures and shows how contracted-out services have been utilised much more intensively since 1995.

Figure 29a: **Composition of NHS gross spending by service, expressed as percentages**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 2.16.

Figure 29b: **Distribution of current expenditure of health authorities and NHS trusts in England, expressed as percentages**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 2.13.

Figure 29a **UK community health care takes large strides**

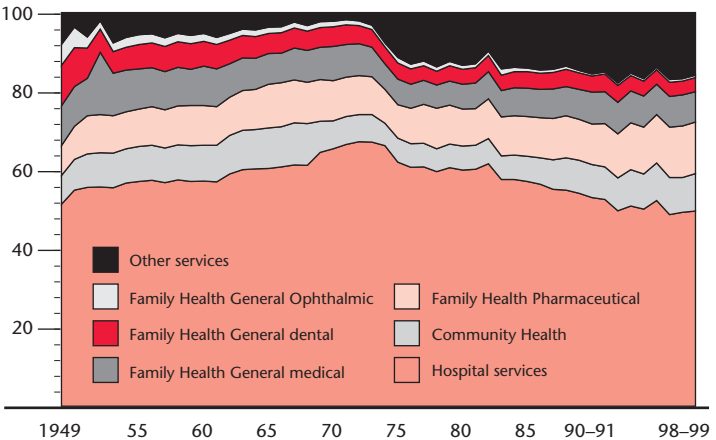
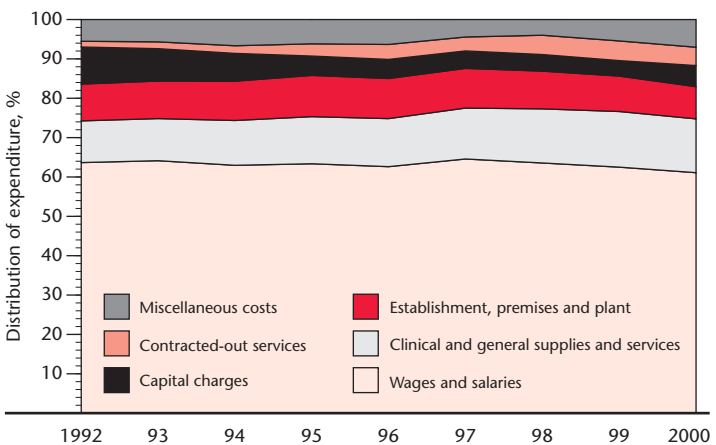


Figure 29b **System under strain: outside contractors to the rescue**



Distribution of employment in the UK public healthcare sector

Despite the reduction in the numbers of hospitals and hospital beds, the NHS has more than doubled the number of employees working in its hospitals since 1951. (See Figure 30a.) The apparent reductions in nursing and midwifery staff after 1990 are partly due to the exclusion of nurses on Project 2000 training courses. More recently, another definition change has led to the exclusion of student nurses from the nursing totals. The contracting-out of domestic and ancillary services explains the much larger falls in the numbers of directly employed domestic and ancillary staff since 1982.

The 1991 NHS reform was instrumental in boosting the head count for administrative and clerical staff, which includes general and senior managers. On a full-time equivalent basis, the complement of hospital managers in England grew from just over 4,000 in 1989 to almost 19,000 in 1993 and over 24,000 in 2000. Non-medical, non-nursing professional and technical staff have enjoyed the fastest expansion in staff numbers as medical equipment and technology have become more sophisticated. However, the advent of hi-tech healthcare clearly leaves something to be desired: Figure 30b reveals that over 40 per cent of UK citizens were dissatisfied with the NHS in 1997.

Figure 30a: **Numbers of staff employed in NHS hospitals by category, in thousands**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 3.3.

Figure 30b: **Comparison of citizens' satisfaction with health services in four European countries**
Source: E. Mossialos, 'Citizens' views on health care systems in the 15 member states of the EU', *Health Economics*, 6, 1997, pp. 109–16.

Figure 30a **UK NHS has a growing army of clerical staff**

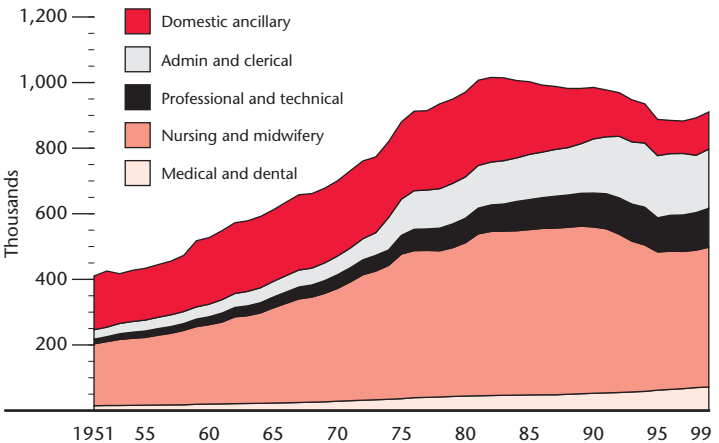
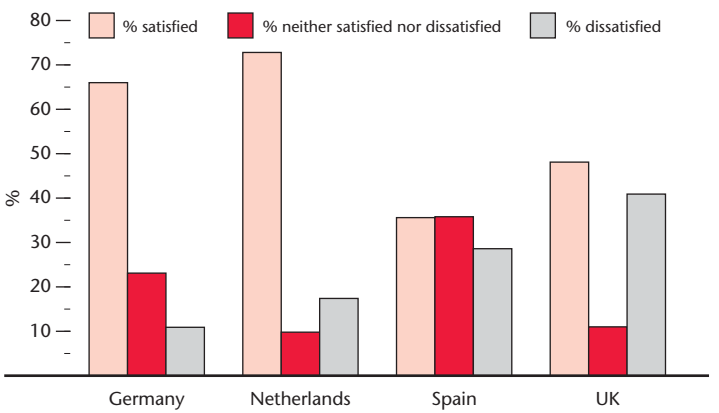


Figure 30b **Efficiency gains have not impressed UK patients (1997 citizen survey)**



Public- and private-sector contributions to health spending

Despite the acute cost pressures in the NHS, few patients pay for prescribed drugs and, for those who do, the prescription charge (currently £6.10) remains well below the average prescription cost (£10.55 in 2000). NHS patients who are not too young, too old, too infirm or unemployed are required to pay for dental treatment, medical prescriptions and some hospital charges, although these latter payments are collected locally by NHS trusts and are excluded from the data. Figure 31a shows that patient charges, so defined, currently represent only 2 per cent of total NHS spending.

The 16 per cent of UK healthcare spending that is outside the NHS is divided almost equally (Figure 31b) between private healthcare subscriptions and treatment charges and other consumer spending on health. Roughly 11.5 per cent of the UK population is covered by private medical insurance, virtually unchanged from 1990. Other consumer spending on health consists of drugs and medication, other than those purchased on NHS prescription, and spending on prescription spectacles and contact lenses at retail prices.

Figure 31a: **NHS patient charges as a percentage of total NHS funding**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 2.18.

Figure 31b: **Composition of UK healthcare spending, 2000**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, tables 2.1 and 2.22.

Figure 31a **UK patients are blissfully unaware of the true costs of healthcare**

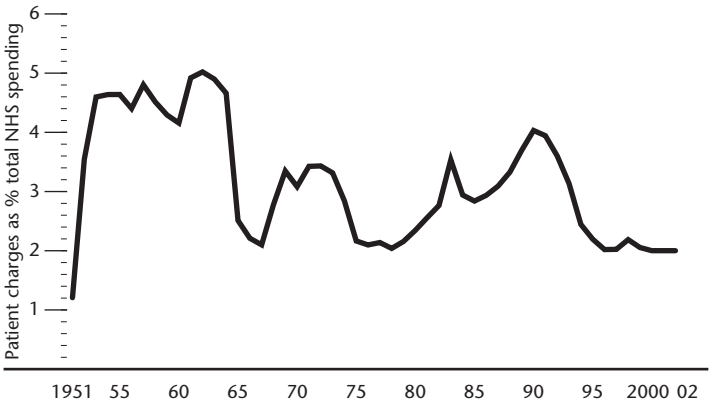
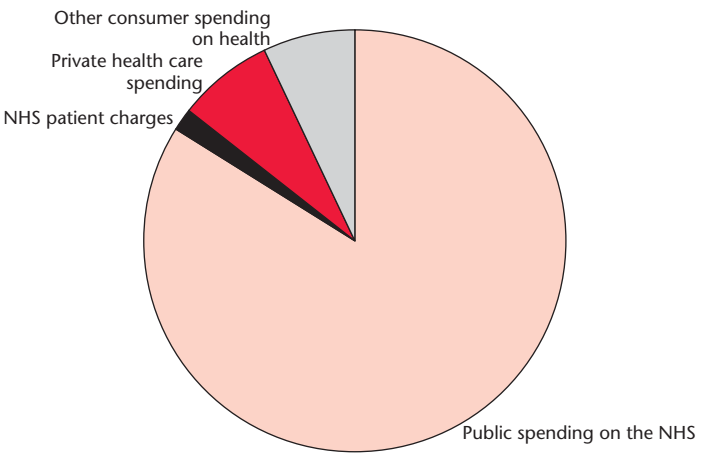


Figure 31b **UK offers great scope for other health charging structures**



International rankings of health systems and health attainment

The World Health Organisation (WHO) publishes an annual *World Health Report*, containing composite measures of overall health system attainment (Figure 32a) and health system performance (Figure 32b), respectively. The attainment measure, based on 100 for the highest attainment in each dimension, weights together indicators of achievement in the level and distribution of health, the level and distribution of responsiveness, and fairness of financial contribution. The UK ranked a respectable ninth overall, ahead of Germany, the Netherlands, Italy and the US.

Overall health system performance depends on the efficiency of health systems in translating expenditures into positive health outcomes, as measured by, say, disability-adjusted life expectancy (DALE). Performance on the level of health is defined as the ratio between achieved levels of health and those that could be achieved by the most efficient health system. On this efficiency measure, France displaces Japan at the head of the table and the UK falls to a distant 18th in the world rankings, with Germany 25th and the US 37th. By this assessment, in 1997, the UK had ample capacity to raise its attainment levels without raising its health expenditure in relation to GDP. It is highly probable that the same remains true in 2002.

Figure 32a: **WHO index of overall health system attainment in 1997**
Source: WHO, *World Health Report 2000*, Annex table 9, found at: www.who.int/whr/2000/en/statistics.htm.

Figure 32b: **WHO index of overall health system performance in 1997**
Source: WHO, *World Health Report 2000*, Annex table 10, found at: www.who.int/whr/2000/en/statistics.htm.
NB: Countries with populations of under 500,000 have been omitted from the rankings shown in Figures 32a and 32b.

Figure 32a **UK attainment is high, despite having a lower spending ratio …**

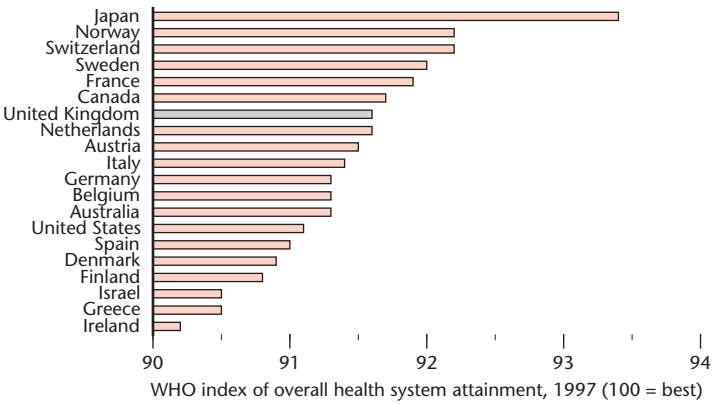
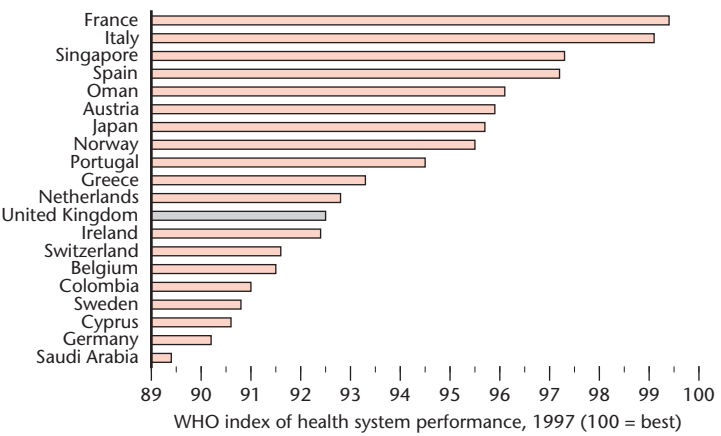


Figure 32b **… but the NHS does not rank among the best**



International comparisons of life expectancy

Life expectancy at birth is one of the mostly commonly quoted comparative indicators of health system attainment. However, while an excellent healthcare system can minimise infant mortality and sometimes add a few extra years to the end of a life, it is probably the healthy habits of a lifetime which most impinge on life expectancy. For men, the incidence of coronary heart disease is one of the key indicators of life expectancy. In Japan, the death rate from this cause, per 100,000 population under 75, is 36; in England and Wales it is 159 and in Scotland 207. For other prominent causes of male death, cerebrovascular disease and lung cancer, England and Wales have typical readings for the OECD countries, but Scotland's death rates are consistently higher. Overall, the UK ranks sixteenth for male life expectancy, ahead of the US and Germany and yet behind Greece.

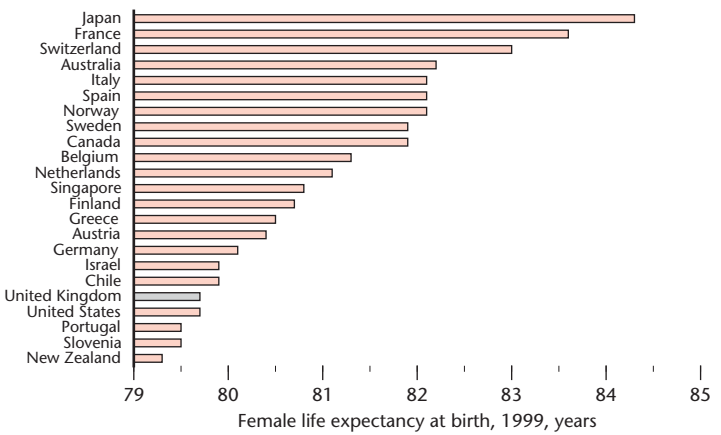
For women, life expectancy is greater, and the United Nations World Population Prospects looks to an expected lifespan of almost 85 years of life, in several countries, for a woman born in 2020. Japan is very close to this expectation already. Japan's significant advantage derives in part from a very low death rate from breast cancer, just 13 per 100,000 against the OECD average of 26 and a UK reading of 34. The incidence of death from lung cancer among women in Japan is also about one-third of that in the UK. The UK's world ranking for female life expectancy is nineteenth, virtually identical to that of the US. The potential for extending UK life expectancy by copying good practice from elsewhere appears to be significant for both males and females.

Figure 33a: **Male life expectancy at birth for 1999 in years**
Source: OECD Health Data 2001.

Figure 33b: **Female life expectancy at birth for 1999 in years**
Source: As Figure 33a.

Figure 33a **Tobacco, poor diet and obesity still take their toll on UK men**

Figure 33b **British women are 5 years adrift**



International comparisons of infant mortality

The UK has traditionally had one of the lowest infant mortality rates in the world, but this reputation has been lost. Other countries have achieved much greater reductions in infant mortality during the past 40 years (Figure 34a) and the UK's death rate of just under 6 per 1,000 live births during the first year of life is only slightly lower than the OECD average. The speed of convergence of Hungary, Greece and Portugal on European norms for infant mortality is extremely impressive.

Iceland's extraordinary success in lowering the death rate for 1998 and 1999 may contain an erratic element, based on a small population, but it is clear that an infant mortality rate of around 4 per 1,000 is an attainable national objective. The UK's regional divergences (from 4.6 in the East and South-West to 6.9 in the West Midlands) are also a source of great concern in a country where ease of transport for medical emergencies surely does not pose as great a problem as in Sweden.

Figure 34a: **Infant mortality in the first year: deaths per thousand live births**
Source: OECD Health Data 2001.

Figure 34b: **Infant mortality in the first year: deaths per thousand live births in 1999**
Sources: OECD Health Data 2001; National Statistics Regional Trends no. 36, 2001 ed.

Figure 34a **The tremendous performance of the past 40 years**

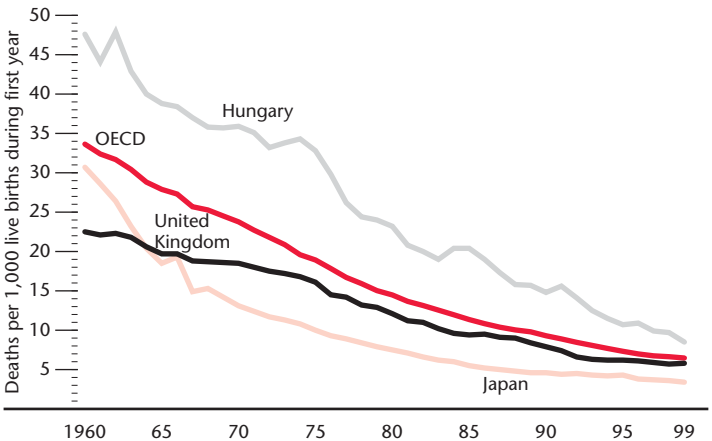
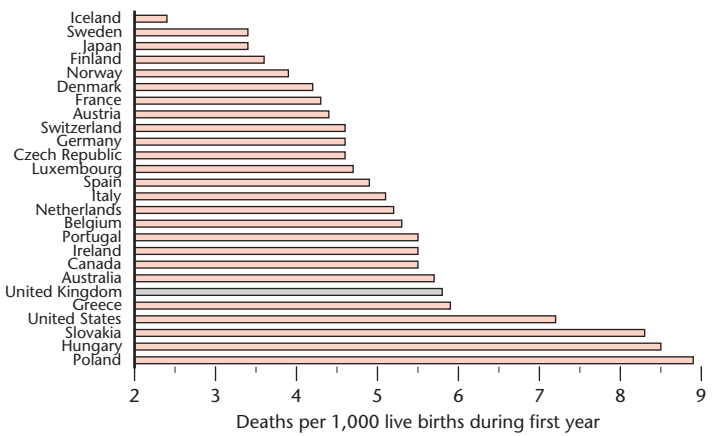


Figure 34b **Six per thousand is still six too many**



International comparisons of access to health equipment and operations

In an age of sky-high public expectations in the realm of health, one of the biggest indictments of the UK health service is its failure to invest in high-tech, potentially life-saving equipment to a comparable degree to other advanced industrialised economies. Figure 35a documents the deficit, in terms of the availability per million population, for three standard items of high-tech medical equipment. The deficit of access is most pronounced for CT scanners, but is significant in each case.

Whether as a by-product of lower and slower rates of detection of cancers and other irregularities, costly cancer and heart disease drugs are less widely used than in comparable countries and fewer surgical procedures are carried out. Figure 35b takes the admittedly extravagant US health system as the base of its indices, but finds that the UK performed only 18 per cent as many coronary bypasses as the US per head of population in 1996. There is room for hope that some of these deficits have been closed since the reporting date, but also scope for concern that some of the most efficacious uses of resources in terms of disease prevention and detection are being spurned.

Figure 35a: **Per capita availability of high-technology medical equipment, in units per million population**
Source: OECD Health Data 2001.

Figure 35b: **Per capita number of surgical procedures performed, in units per 100,000 population indexed to US values**
Source: OECD Health Data 2000.

Figure 35a UK patients have less access to hi-tech equipment …
Per capita availability of high technology medical equipment in units per million population

	MRI units	*Radiation therapy equipment*	*CT scanners*
Japan	23.2	n/a	84.4
Switzerland	13.2	11.7	19.0
Austria	10.9	4.2	25.8
Finland	9.5	14.3	13.5
United States	7.6	4.0	13.2
Italy	6.7	3.8	19.6
Denmark	6.6	5.2	10.9
Germany	6.5	4.6	17.1
Australia	4.7	4.9	n/a
Spain	4.6	3.6	11.6
United Kingdom	**4.5**	**3.3**	**6.1**
South Korea	4.3	4.9	22.9
Canada	2.5	7.0	7.3
France	2.5	7.8	9.7

Observations refer to the most recent data in the range 1997–2000

Figure 35b … and to common surgical procedures

	Coronary bypass, 1996	*Operations on the eye (eg cataract), 1990*	*Operations on the musculoskeletal system, 1990*
United States (value)	222	138	1199
United States (index)	100	100	100
Belgium	63	578	194
Australia	39	603	159
Finland	36	299	136
Canada	26	180	70
United Kingdom	**18**	**30**	**8**
Portugal	14	99	31

International comparisons of occupancy rates for hospital beds

According to the Office of Health Economics, the ratio of beds per thousand population has dropped from 10.8 in 1959 to 4.1 in 1999/2000, leaving the UK with fewer in-patient beds per capita than most other developed countries. However, part of the difference can be explained by the exclusion of private hospitals and nursing homes from the UK figures. Most of the secular reduction in NHS hospital beds has occurred in psychiatric wards owing to changing attitudes towards the treatment of mental illness, and better medication. The ratio for acute-sector (surgical and non-surgical) beds has fallen much more slowly, from 3.6 per 1,000 in 1959 to 2.2 in 1999/2000. Meanwhile, the intensity of use of in-patient beds has increased eightfold over the same period.

Average in-patient occupancy rates in OECD countries have been edging lower in recent years, particularly in the US and Germany. The UK's occupancy rate has been very consistent in the 1990s (Figure 36a), and the current reading of 83 per cent compares favourably with that of other developed countries (Figure 36b). Nevertheless, Germany in the 1960s and the Netherlands in the 1970s achieved occupancy rates of more than 90 per cent. Considering the large fixed costs of hospital beds and the sizable waiting lists for surgical operations, it is surprising that occupancy rates are not higher.

Figure 36a: **In-patient occupancy rate as a percentage of available hospital beds**
Sources: OECD Health Data 2001; Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 3.13.

Figure 36b: **In-patient occupancy rate as a percentage of available hospital beds, latest observation (1997–99)**
Source: OECD Health Data 2001.

Figure 36a **Room for improvement in hospitals' resource allocation**

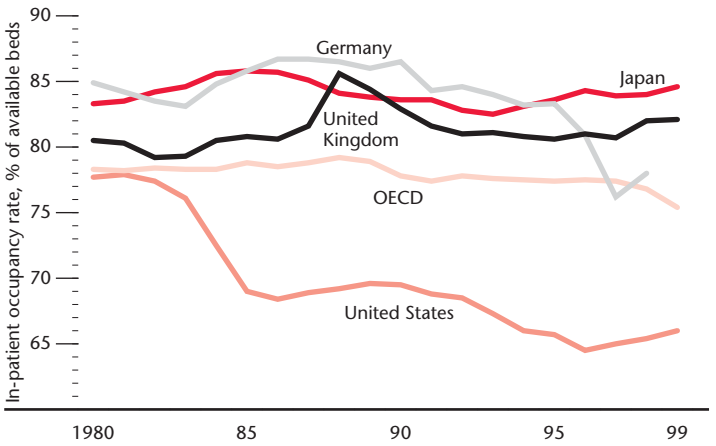


Figure 36b **Utilisation rates often exceeded 90% in the 1960s**

NHS waiting times and numbers waiting for hospital treatment

Waiting lists are a practical, yet inelegant, necessity in a universal health system that is almost free at the point of use. In the UK, the waiting game for non-emergency treatment can be divided into two stages: first, the wait for an appointment to see a consultant, and second, the time spent on the formal waiting list for an operation. At the first stage, 80 per cent of patients had a consultation within three months and 96 per cent within six months in the quarter ended June 2001. At the second stage, 74 per cent were admitted to hospital within six months and 95 per cent within twelve months.

Figure 37a shows the average time spent on the waiting list for a variety of common procedures. Knee replacements suffer a mean waiting time of more than nine months, hip replacements almost eight months, and coronary bypass operations just over six months. The alternative to waiting is to pay to have the procedure privately. There are no intermediate options whereby patients can express their individual preferences. In November 2001, the number of patients awaiting elective hospital admission was still above a million and virtually unchanged over the previous two years. However, the proportion of patients who have been waiting for more than a year fell to 3.2 per cent in the latter months of 2001.

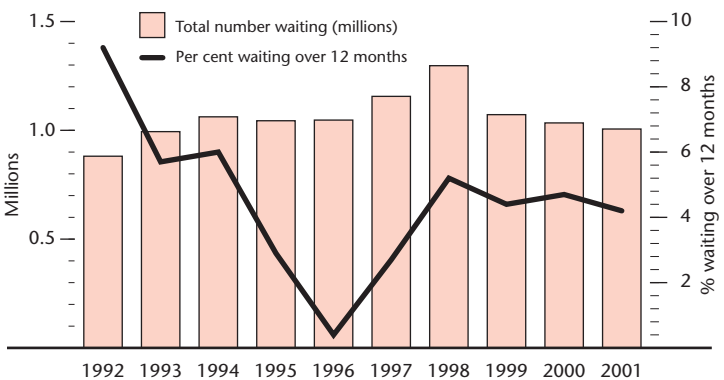
Figure 37a: **Mean waiting time for hospital admission by Health Resource Group in England, 1998/99**
Source: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 3.34.

Figure 37b: **Numbers of patients awaiting elective hospital admission in England and length of wait**
Sources: Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, figure 3.10; Department of Health, *Health and Personal Social Services Statistics*, 2001; Department of Health Statistical Press Release reference 2002/0017.

Figure 37a Rationing by waiting: the heart of NHS economics
Mean waiting time for hospital admission by Health Resource Group in England, 1998–99

	Mean waiting time (days)	*Number of admissions ('000)*	*Reference cost, 1999–2000 (£)*
Primary knee replacement	285	27.9	4390
Varicose vein procedures	251	52.0	557
Primary hip replacement	237	35.3	3899
Other cataract extraction with lens implant	236	32.3	577
Phakoemulsification cataract extraction with lens implant	227	156.6	568
Nose procedures (category 3)	205	47.2	757
Coronary bypass	198	16.7	4956
Ear procedures (category 4)	180	17.6	1135
Inguinal hernia repairs (over 69s)	179	25.6	961
Soft tissue or other bone procedures (category 2, under 70s)	176	38.2	1421
Inguinal hernia repairs (under 70s)	175	60.0	533
Arthroscopies	173	94.9	575

Figure 37b **1997 election promise awaits fulfilment**



International comparisons of access to physicians and family doctors

There is a wide dispersion in the ratios of physicians to population in OECD countries, aggravated once again by classification issues. Although steadily increasing, the UK ratio of 1.8 doctors per 1,000 (that is, a physician per 550 people) is low by OECD standards (Figure 38a) and the deficit has widened appreciably since the early 1980s. Since the majority of doctors work in hospitals, the UK's international deficit is partly a reflection of lower hospital capacity per head of population. Also, UK doctors work extraordinarily long hours, which compensates in part for a smaller head-count ratio.

The comparison is equally disadvantageous for general medical practitioners (GPs) per head of population. Figure 38b gives examples of countries with twice the density of GPs working in the community than in the UK. While Finland's high ratio is related to its low population density, this does not explain the disparity with Belgium or Germany. In 1999, the average UK family doctor looked after 1,779 patients, of whom 312 were aged over 65. It has been estimated that, in the UK, GPs see approximately 7 per cent of the population each week. The average cost of a GP consultation in Great Britain was £12.60 in 1998/99.

Figure 38a: **Number of physicians per 1,000 population**
Source: OECD Health Data 2001.

Figure 38b: **General practitioners per 1,000 population, latest observation (1997–99)**
Sources: OECD Health Data 2001; Office of Health Economics Compendium of Health Statistics, 13th ed., 2001, table 4.11.

Figure 38a **UK lags well behind in access to physicians**

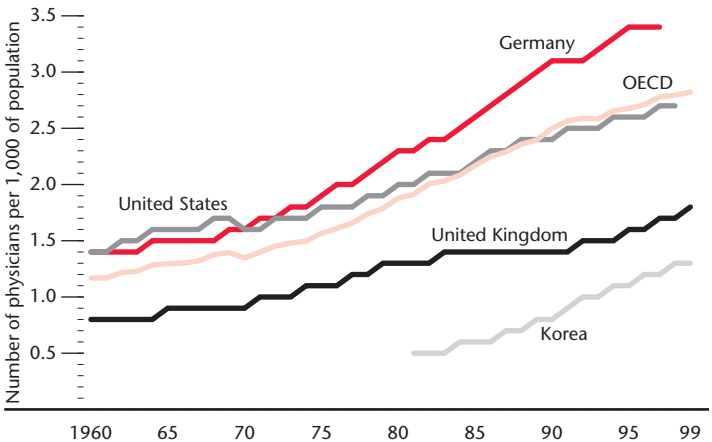
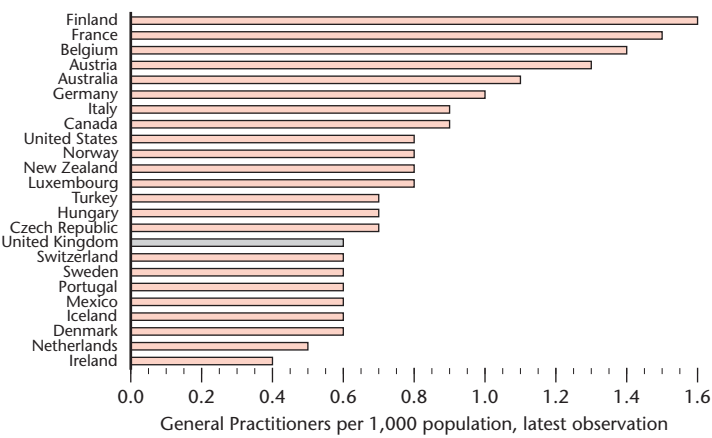


Figure 38b **Differing population density is not the whole explanation**



CHARTS PART 4

THE EFFECTIVENESS OF PUBLIC SPENDING ON EDUCATION

International comparison of public-sector education as a share of GDP

Figure 39a, relating to 1998, reveals a remarkable consensus among developed countries that public expenditure on education should amount to about 5 per cent of GDP. A dissenting minority in Scandinavia and New Zealand opted to spend considerably more. This contrasts with the situation in 1960, when Spain allocated 1.3 per cent of GDP to public education, Australia 1.4 per cent, and France 2.4 per cent. Tanzi and Schuknecht trace public education expenditures even farther back in time to reveal that, in 1937, the UK was a world leader with a 4 per cent ratio.

In Figure 39b, the separation of tertiary (further and higher, in UK terminology) education from primary and secondary education transforms the comparison. Public education spending in the tertiary sector averages just over 1 per cent of GDP in OECD countries, with few significant departures, while primary and secondary spending is arranged as a continuum from Japan's 2.8 per cent of GDP to New Zealand's 4.6 per cent. The UK, at 3.4 per cent, occupies a position very close to the OECD average.

Figure 39a: **Public expenditure on education as a percentage of GDP at selected dates**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table B2.1a; V. Tanzi and L. Schuknecht, *Public spending in the 20th century*, Cambridge University Press, Cambridge, 2000.

Figure 39b: **Breakdown of public expenditure on education as a percentage of GDP in 1998**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table B2.1b.

Figure 39a **UK public spending on education is comparatively modest**

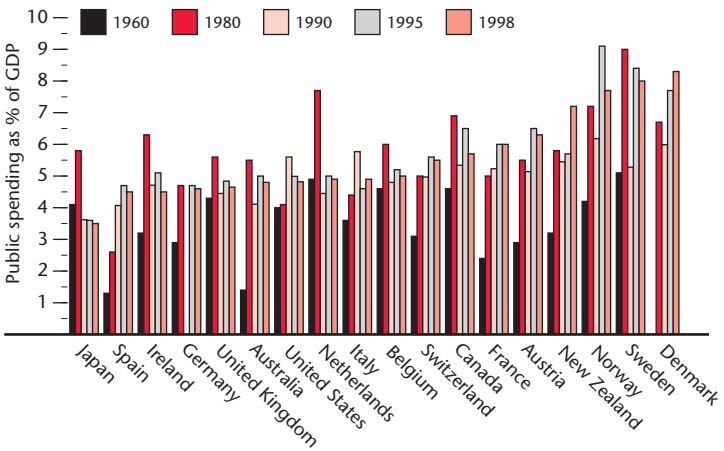
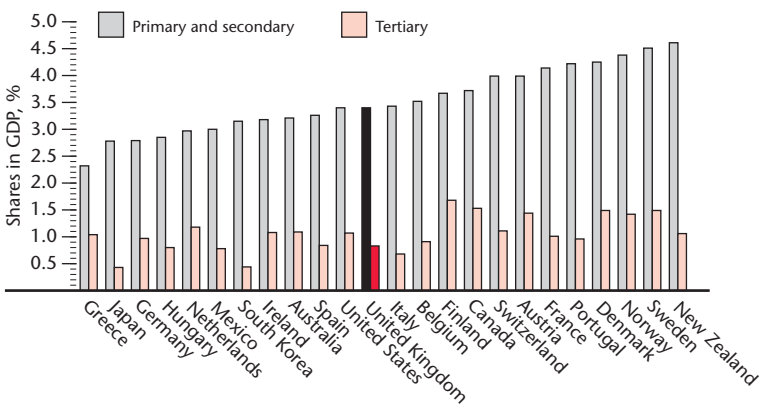


Figure 39b **Disparities in public spending larger for primary and secondary education**



International comparison of public-sector share in total education spending

The education industry, especially in the primary and secondary sectors, is very close to a public monopoly in most European countries. Figure 40a confirms that the public sector accounts for 94 per cent of UK education spending. Typically, the government finances the education system from general taxation, supervises and partly finances teacher training, determines the secondary school curriculum and examination system, and compels all children to attend school up to a certain age. The average termination age of compulsory education is sixteen in OECD countries, including the UK, but seventeen in the US and eighteen in Germany, the Netherlands and Belgium.

Professor James Tooley's essay in the first section demonstrates that, in the developing world, private education has produced some remarkable comparative results in terms of standards and efficiency. In OECD countries, the arguments in favour of greater consumer choice assert themselves more powerfully in the older age groups. Figure 40b reveals that South Korea, Japan and the US have dominant private tertiary sectors and the UK is among the leaders of the chasing pack. UK further education institutions are diverse in their organisation and orientation. They are rigorously monitored and their performance is reviewed annually on such criteria as funding targets, change in student numbers, in-year retention rates, achievement rates and contribution to national learning targets.

Figure 40a: **Percentage share of public expenditure in total education in 1998**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table B2.1b.

Figure 40b: **Percentage share of private expenditure in total tertiary education in 1998**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table B2.1b.

Figure 40a **Private education finance barely has a foothold**

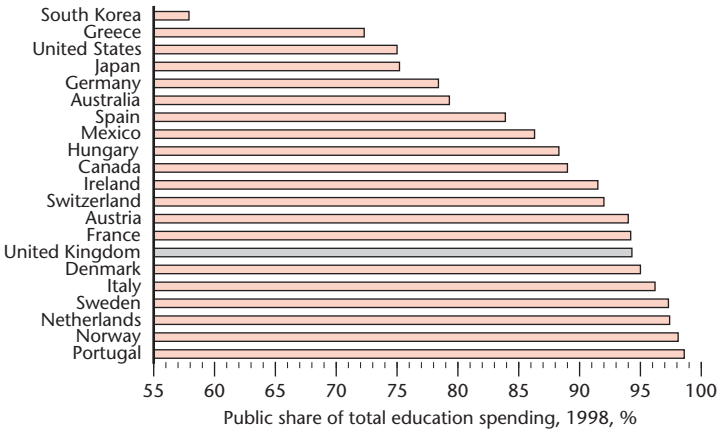
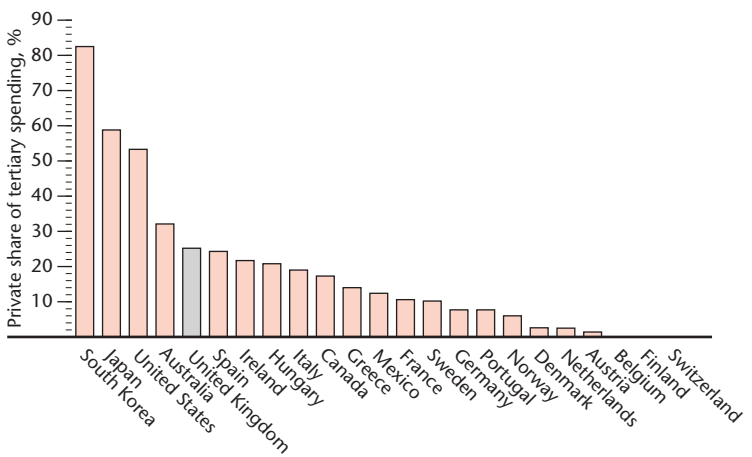


Figure 40b **UK is part of the private revolution in the tertiary sector**



Growth of UK public-sector education spending over time

Since 1987, UK public spending priorities have slightly favoured education, but not to the extent that would be imagined from the pronouncements of successive governments. However, there was a substantial increase in education spending in fiscal year 2000, representing the strongest real growth rate since the 1970s. The Labour government's plans, reaffirmed in the 2001 Budget, project a nominal spending growth rate of 8 per cent per annum for fiscal years 2001 to 2003. On the basis of these plans, the public spending ratio would rise to 5.35 per cent of GDP in 2003, implying about 5.6 per cent for total education.

The projected real growth rates shown in Figure 41a are derived using the standard GDP deflator, but there are grounds for believing that true volume increases will fall well short of these levels. As with the public-health sector, the departure of significant numbers of senior professionals has created a severe staffing shortage that can only be remedied by offering financial incentives or by paying agency rates for supply teachers. These extra costs will absorb some of the additional resources. Figure 41b highlights the increased centralisation of public expenditure on education as a proportion of the total. The outcome of this burgeoning bureaucracy has been a proliferation of administrative tasks for teachers: this is partly responsible for the exodus of experienced staff.

Figure 41a: **Annual nominal and real percentage growth rates of UK public expenditure on education**
Sources: HM Treasury, *Public Expenditure Statistical Analyses*, 2001/02 and earlier years (at www.hm-treasury.gov.uk); HM Treasury, Budget 2001, HC279.

Figure 41b: **Central government percentage share of UK public-sector education spending**
Source: National Statistics, *Annual Abstract of Statistics*, 2001 ed., table 10.18. UK data codes: KJCB and KJAA.

Figure 41a **UK public spending plans face a credibility gap**

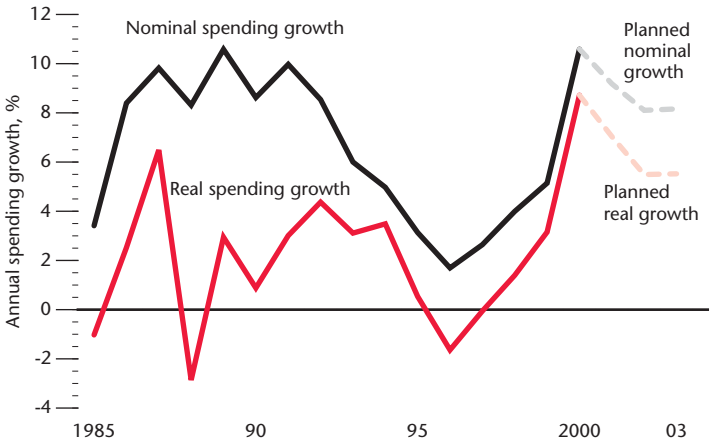
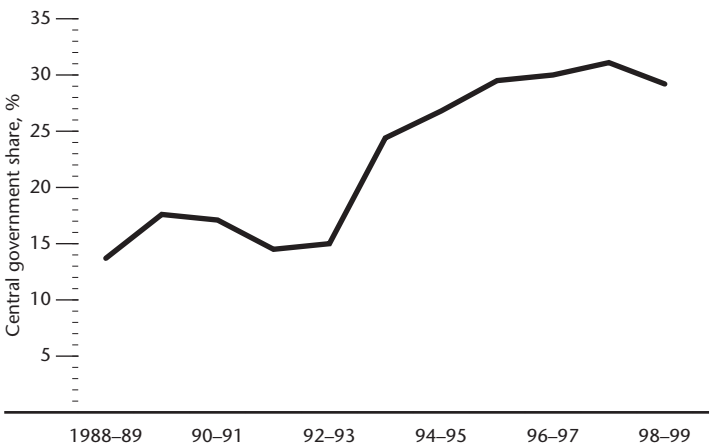


Figure 41b **The centralisation of UK education spending**



International comparison of resource allocation in education

The allocation of education budgets among the various competing claims – teachers, support staff, administration, materials and equipment and capital items – differs widely within OECD countries. Figure 42a shows the breakdown of spending in primary and secondary schools. It is understandable that high-spending countries, such as the US, Sweden and Denmark, should allocate relatively low percentages to teacher remuneration, preferring to spend additional resources on materials, equipment and other staff. However, it is odd to see a similar distribution of spending in the UK, which spent 45 per cent less per primary pupil than the US and 33 per cent less per secondary student in 1998. Less than 50 per cent of UK primary and secondary spending is used to pay the teaching staff.

The big spenders in tertiary education are the US (again), Switzerland, Canada and Sweden. The UK allocates proportionately fewer resources to the teaching staff than any of these countries, despite spending less than half the US amount per student. The UK tertiary sector combines the lowest capital allocation of any OECD country with one of the largest slices of administration and running costs. Classroom teachers in UK tertiary education constitute 0.3 per cent of the total labour force, as compared to 0.6 per cent in the OECD on average and 0.8 per cent in Canada.

Figure 42a: **Resource allocation in primary and secondary education in 1998, expressed as percentages of the total**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table B6.1.

Figure 42b: **Resource allocation in tertiary education in 1998, expressed as percentages of the total**
Source: As Figure 42a.

Figure 42a **Teachers receive less than half of UK education spending**

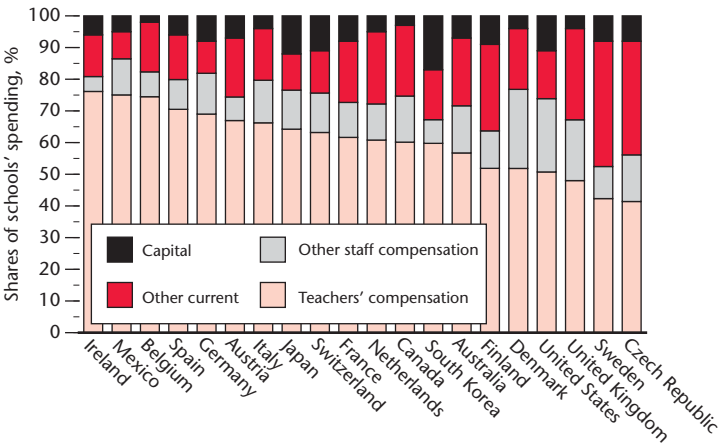
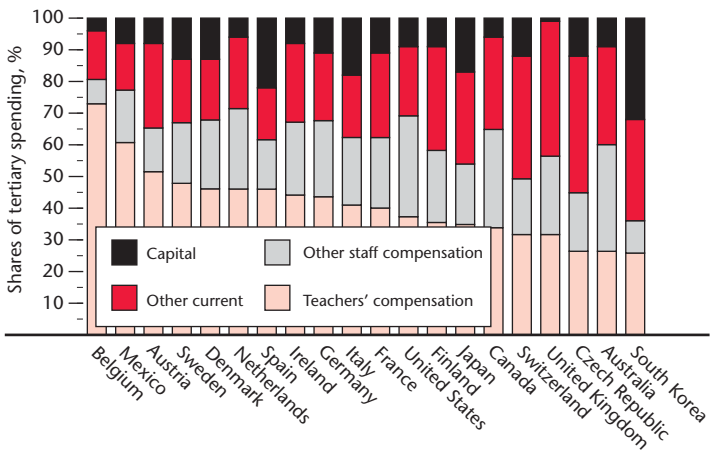


Figure 42b **UK is the administrative capital of the world**



Composition of employment in the UK education sector

Total UK education employment has risen rapidly in recent years to reach 2.15 million by June 2001, or 7.3 per cent of total workforce jobs. This figure is an overstatement to the extent that part-time working is much more prevalent in the education industry than in the economy as a whole. What is noticeable from Figure 43a is the growth of head-count employment outside local government. Structural changes, such as the transfer of the polytechnics to the private sector in 1989 and the further education and sixth-form school employees from April 1993, form part of the explanation, but an increase in central government positions and the expansion of private-sector colleges are also responsible.

Figure 43b shows that part-time staff account for a half of all employment in the UK education sector, with females filling over 72 per cent of posts. In the local government sector, this has the effect of reducing the full-time equivalent teaching complement to 65 per cent of the head-count total. Full-time equivalent teacher numbers in England and Wales rose by 2.5 per cent between January 1998 and January 2000, but the increase was just 1 per cent for full-time teachers in regular service. Occasional teacher numbers rose by 22 per cent over the same period, illustrating the difficulty of filling full-time teaching vacancies.

Figure 43a: **UK workforce jobs in education in millions**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes: CGYP, FHBU and CULZ.

Figure 43b: **Composition of UK workforce jobs in education at mid-year 2000**
Source: National Statistics, *Economic Trends*, no. 571, June 2001.

Figure 43a **Private-sector employment in UK education is soaring**

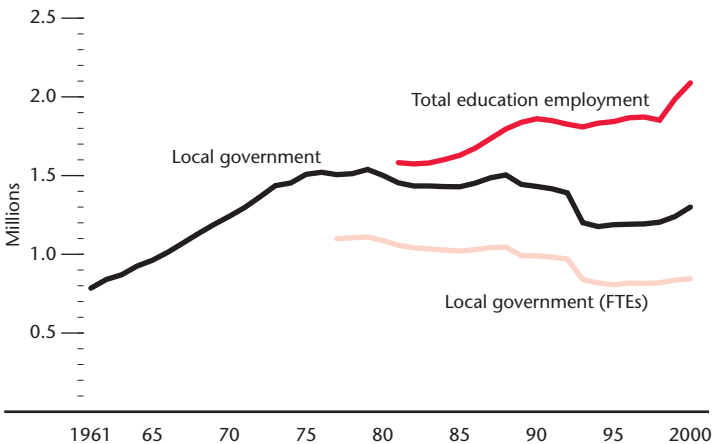
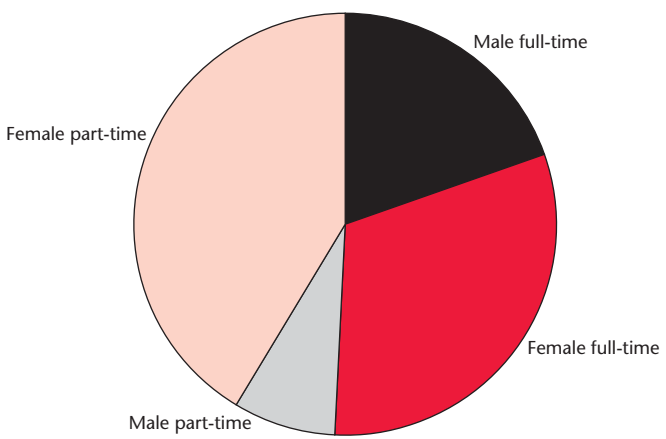


Figure 43b **Full-time staff accounted for only half of total UK employment in education, June 2000**



Composition of UK public education spending by category

These two pie charts present alternative breakdowns of the use of resources in the UK education sector. Figure 44a is drawn from the OECD database and offers a glimpse of the contributions of public subsidies and the allocation to research and development spending. Subsidies to the private sector amounted to 8 per cent of UK public expenditure on education in 1998, or about 0.4 per cent of GDP. Direct expenditure for private institutions accounts for 65 per cent of the transfer, with scholarships and other grants taking 25 per cent and subsidies to the student loan programme the remainder. The allocation of tertiary education resources to research and development is close to the OECD average, at 0.37 per cent of GDP.

Figure 44b, whose source is the UK's Department for Education and Employment (DfEE), provides further information on the division of public resources between educational establishments. The percentage share of continuing education has increased sharply since 1994/95, from 0.8 per cent of public education spending to 5 per cent in 1997/98. Over the same period, expenditure on student maintenance grants fell from 6.2 per cent to 3.3 per cent as greater numbers of students were transferred to the loan scheme. It is more than a little frustrating that the 2001 edition of the *Annual Abstract* does not provide a more up-to-date analysis of education spending than 1997/98.

Figure 44a: **Distribution of resources in the UK education industry in 1998**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, tables B5.2 and B6.2.

Figure 44b: **Composition of UK government expenditure on education by sector, 1997/98**
Source: National Statistics, *Annual Abstract of Statistics*, 2001 ed., table 10.18.

Figure 44a **Private funds supply less than 9% of UK education resources**

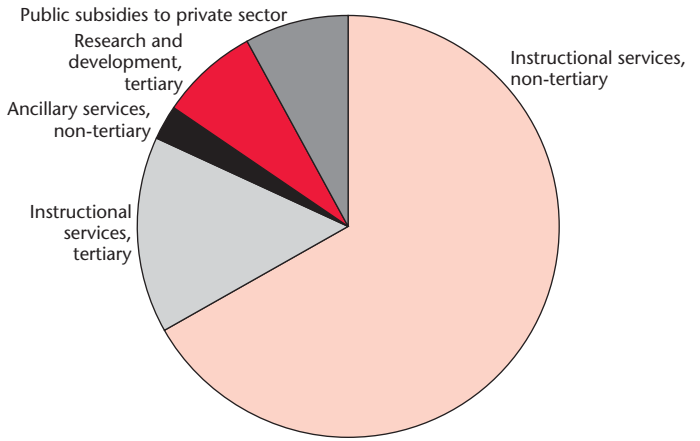
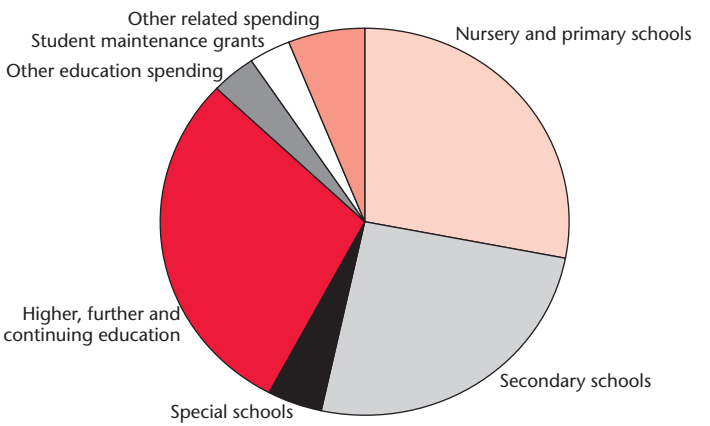


Figure 44b **Greater private tertiary provision would release resources for UK schools**



International comparison of participation in education by over-fourteens

Despite the broadening of the spectrum of educational opportunity for fifteen-to-nineteen-year-olds, the UK has been relatively unsuccessful in enrolling students beyond age seventeen. Taking secondary and tertiary education combined, participation rates in 1999 fell from 84 per cent for sixteen-year-olds to 73 per cent for seventeen-year-olds, 53 per cent for eighteen-year-olds and 49 per cent for nineteen-year-olds. Figure 45a demonstrates that most other OECD countries keep their older teenagers involved in full-time or part-time education for longer. Indeed, countries such as Brazil and Peru have as much success as does the UK.

The UK shortfall lies in the satisfactory completion of secondary education and participation in vocational training, rather than in university and college enrolment. In fact, 33 per cent of UK nineteen-year-olds were enrolled in tertiary education in 1999 as compared to an OECD average of 26 per cent. On average, a UK student enrolling in tertiary education in 1999 was expected to spend 2.6 years of study at this level, comprising 1.7 years full time and 0.9 years part time. The UK ranks in the middle of the OECD distribution on total years (Figure 45b), but lower down in terms of the expected years of full-time study.

Figure 45a: **Net enrolment rates for full-time and part-time students aged fifteen to nineteen in public and private education institutions**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, tables C1.2 and C1.3.

Figure 45b: **Expected years of study under current conditions in public and private tertiary education institutions**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table C3.2.

Figure 45a **Not enough UK secondary students staying the course**

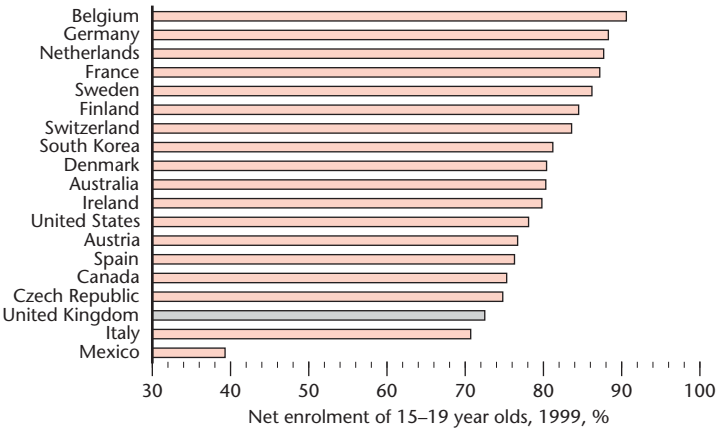
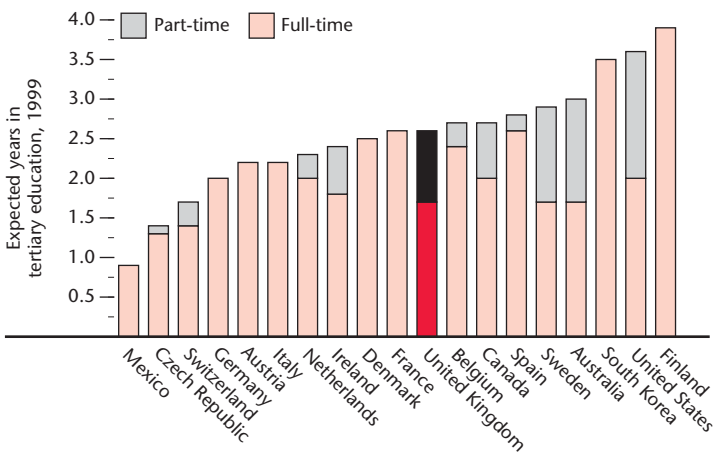


Figure 45b **Older UK students lack endurance**



Ratios of students to teaching staff by international comparison

In public education, as in public health, one of the key debates concerns resource ratios. Whereas healthcare services are delivered at a personal level, most education services are delivered in classes or groups. In a hospital with under-utilised beds, few doubt that the application of more doctors and nurses would enable more patients to be treated and health outputs to increase. In education, the effect of adding more teachers is much less clear cut. Eric Hanushek at the University of Rochester concludes that 'the most noticeable feature of policies to reduce overall class sizes will be a dramatic increase in the costs of schooling, an increase unaccompanied by achievement gains'.

Figure 46a presents data on pupil–staff ratios for the UK, OECD and other selected countries. The UK's ratios are unexceptional among developed countries, with the largest discrepancy at primary level. Far from being an impediment, South Korea's much larger class sizes at all stages of schooling have yielded some impressive results. At tertiary level, Figure 46b shows that the UK has one of the highest student–staff ratios as a consequence of rapid expansion of higher education places in the 1990s. This expansion coincided with a substantial shift towards students financing their own education through part-time working and loans.

Figure 46a: **Ratio of students to teaching staff based on full-time equivalents in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table D5.1.

Figure 46b: **Ratio of students to teaching staff in tertiary education, based on full-time equivalents in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table D5.1.

Figure 46a **UK pupil–staff ratios are little higher than OECD average**

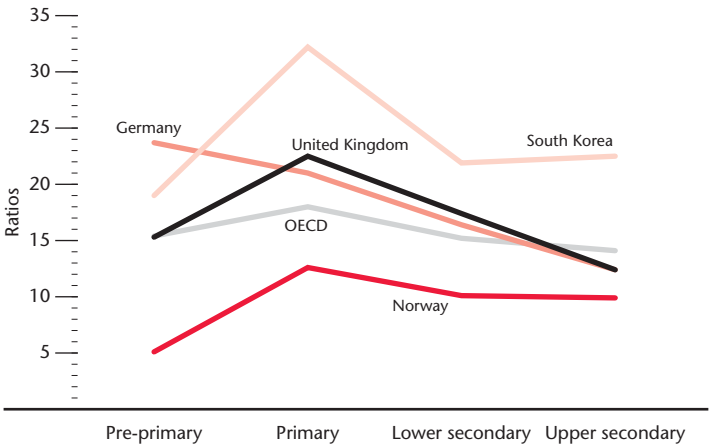
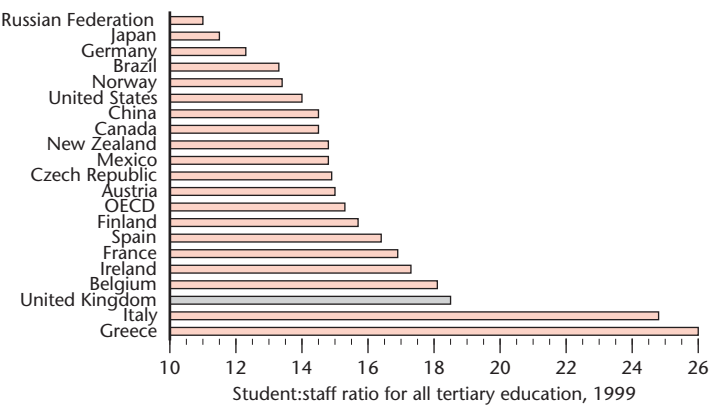


Figure 46b **Expansion of UK student numbers is unmatched by teaching resources**



Average mathematics and science achievement in the eighth grade

Comparative measures of achievement in education leave much to be desired, since the most significant test of education comes when it is applied in the context of worthwhile employment. Nevertheless, governments have participated willingly in standard assessment exercises, such as that described in Figure 47a. Achievements in mathematics and science lend themselves to international comparison more readily than tests of literacy, language and creative skills, but this should not be taken to imply that these are less important. Figure 47a ranks countries by pupil scores in maths at eighth grade. While English children performed disappointingly in maths, the science scores were close to the average.

The focus on maths and science clearly favours South Korea and Japan in the country rankings. Not only are their scores impressive, the consistency of pupil performance is also remarkable. Figure 47b examines the ratio of the standard deviation of scores to their respective means as a measure of the variability of student performance. The lack of standardisation in the English and American education systems, which in other contexts can be regarded as a sign of strength, shows through as a failure to communicate basic skills in maths and science to a sizable minority of students.

Figure 47a: **Mean achievement scores in eighth grade (aged twelve to thirteen years) for mathematics and science in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table F1.1.

Figure 47b: **Coefficient of variation, expressed as a percentage, for achievement scores at eighth grade in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table F2.1.

Figure 47a **English schools lag a long way behind in maths attainment**

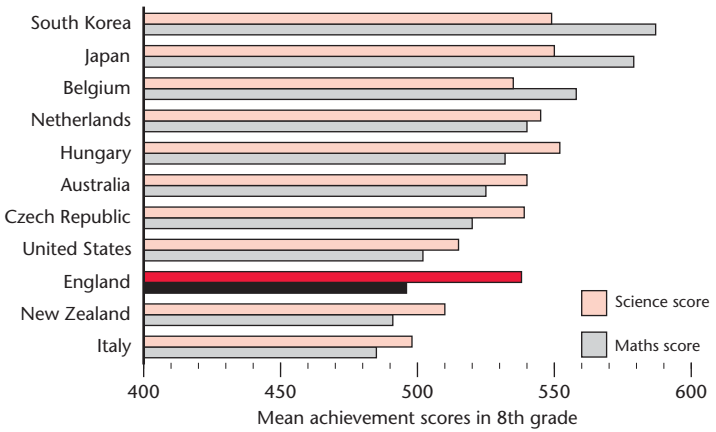
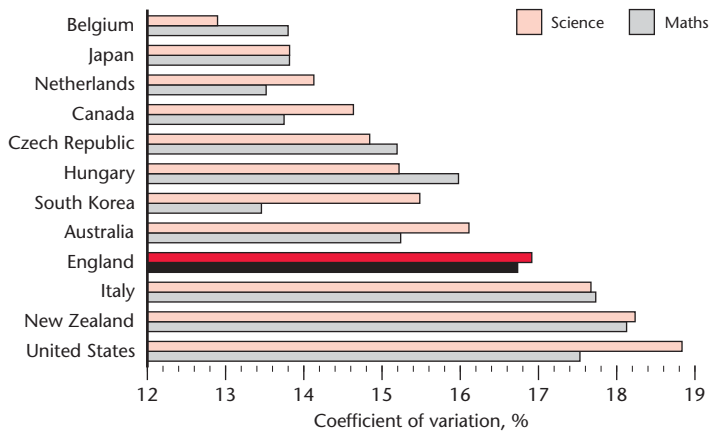


Figure 47b **Glaring divergences in pupil performance at 8th grade**



International comparisons of income and literacy inequality

Figure 48a considers the relationship between literacy skills in the population from ages 16 to 65 and total education spending. The lack of a close relationship is hardly a surprise, since current education spending is only a proxy for the accumulated stock of investment in human capital and the allocation of instruction time to literacy skills varies considerably between countries. Sweden, Norway and Denmark place a high priority on literacy in the curriculum of twelve-to-fourteen-year-olds, reserving at least 30 per cent of instruction time to reading and writing in the mother tongue and modern foreign languages. Low allocations for reading and writing in the mother tongue in the Netherlands (10 per cent), England, Scotland and Australia (each 12 per cent) contribute to their unimpressive literacy scores.

The scatter in Figure 48b traces the relationship between inequality in prose literacy scores in the population of working age and income inequality. There is a clear positive association across all developed countries, but the US observation is distinctive. While the dispersion of literacy skills between the top and bottom of the US distribution scale is much greater than elsewhere, this does not translate into a proportionate income advantage. The Gini coefficient of income inequality tends to be higher in an entrepreneurial economy than in a social market economy.

Figure 48a: **Comparison of literacy prose scores in the population aged 16–65 at various dates (1994–8) with total education spending as a percentage of GDP in 1998**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, tables B2.1b and F3.1.

Figure 48b: **Comparison of inequalities in the distribution of adult literacy and the distribution of income at various dates, 1994–8**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table F3.1.

Figure 48a **No simple link between spending and literacy**

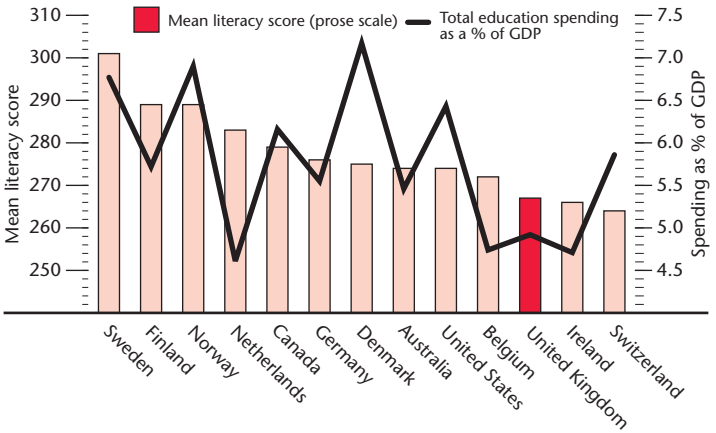
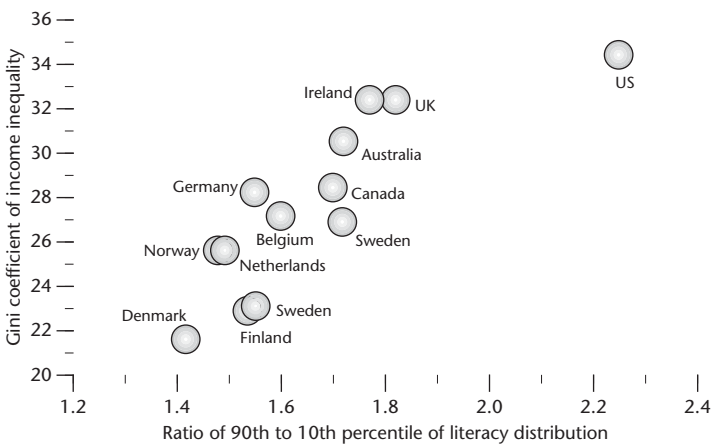


Figure 48b **Inequality in literacy and income go together**



Comparison of UK student examination performance over time

In the English education system, pupils aged fifteen at the beginning of the academic year sit GCSE examinations in a range of subjects, some of which are elective and some compulsory, namely English, maths and science. Prior to 1988/89, the data was collected on a school leaver basis, regardless of age. The pass grades extend from A* to G, but there is a particular focus on passes at grade C and above. Figure 49a reveals a notable improvement in pupil achievement since the mid-1980s. The gains in the 1990s have been primarily at the higher grades. The encouragement from these statistics rests heavily on the assumption that the stringency of the examinations remains constant.

A pleasing feature of the UK statistics is the much better performance of children of parents from lower socio-economic groups. Children of unskilled manual workers achieved A* to C grades in 30 per cent of cases in 2000, as compared to 12 per cent in 1989. Figure 49b reveals that, while there is a general improvement in all subjects, girls outperform boys in all featured subjects except geography. Achievements by boys and girls in 1992/93 in maths and science were very similar, but girls have opened up a clear lead in recent years.

Figure 49a: **Achievements at GCSE level of pupils aged fifteen at the start of the academic year in all schools in England, expressed as percentages of all examination entrants**
Source: Department for Education and Skills, *Statistics of Education: Public examinations GCSE/GNVQ and GCE/AGNVQ in England 2000*, table 1.

Figure 49b: **Pupils scoring grade C or above in GCSE during final year of compulsory schooling in selected subjects and by gender**
Source: National Statistics, *Social Trends 2001*, table 3.18.

Figure 49a **A notable improvement in results at GCSE level**

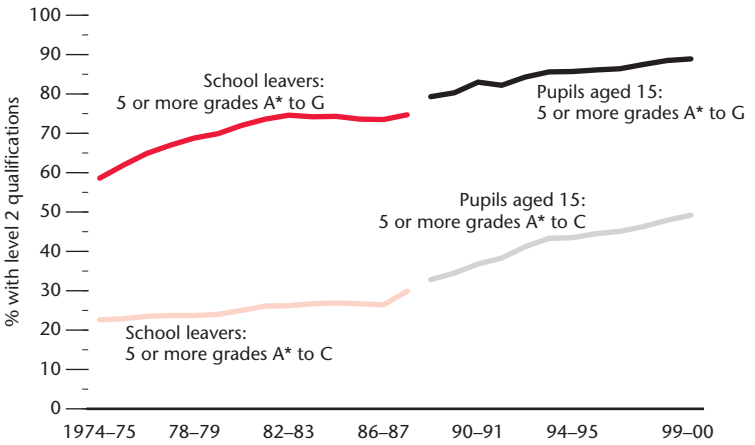
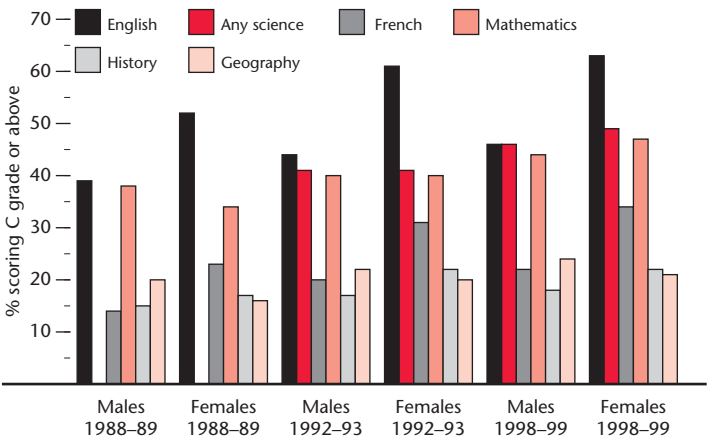


Figure 49b **Across the board improvements by subject**



International comparison of attainment at upper secondary level

What the OECD terms 'upper secondary' education corresponds closely to the A-level system in the UK. Figure 50a is based on the success of students aged seventeen at the beginning of the academic year. As with the GCSE system, there is a parallel skill-based qualification known as the Advanced GNVQ that represents a comparable level of achievement. Assuming, as before, that A-levels are still on the gold standard, there has been a distinct and sustained improvement in performance since 1988. This improvement is least evident in the proportion of males with two or more A-level passes and most evident for females with at least one A-level. The figures for Scotland, which has its own examinations, are included on the basis of one A-level being equivalent to two Highers and two or more A-levels to three or more Highers.

Figure 50b compares the proportion of the population by age cohort attaining upper secondary education. The countries are ranked according to the average proportion of the population of working age reaching this attainment. Most developed economies have managed a successive decadal improvement in the incidence of upper secondary education. South Korea has raised its upper secondary education percentage from 28 to 93 per cent in 30 years. The UK, at 66 per cent for the attainment of 25-to-34-year-olds, is well down the pecking order and below the OECD average.

Figure 50a: **Percentages of UK students (aged seventeen at the start of the academic year) at GCE A-level or equivalent achieving passes, by gender**
Source: National Statistics, *Social Trends 2001*, table 3.20.

Figure 50b: **Percentage of the population aged 25–64 that had attained at least upper secondary education in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table A2.2a.

Figure 50a **UK A-level attainments have risen, but boys much less than girls**

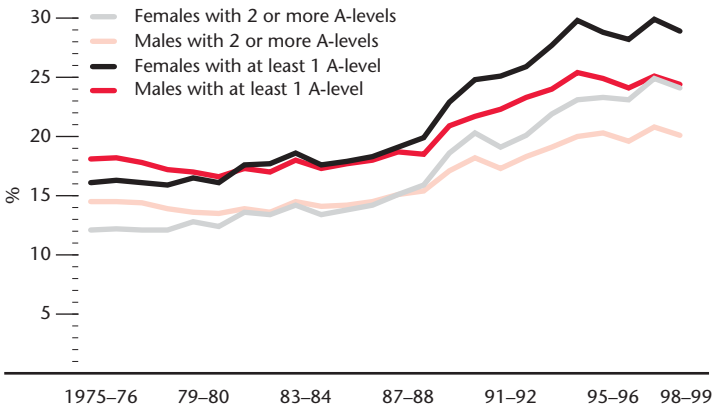
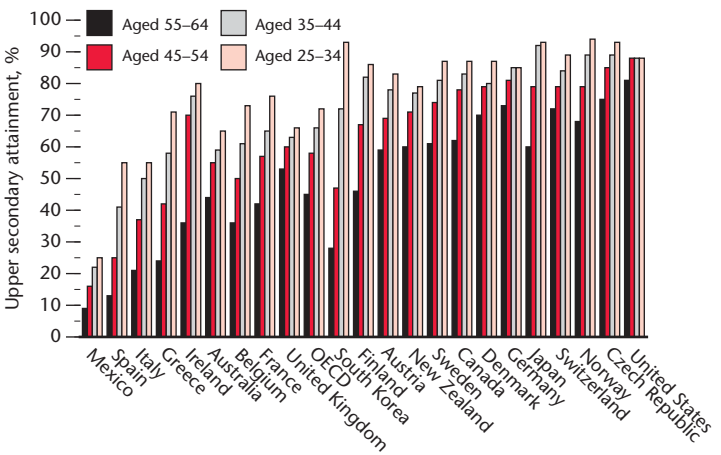


Figure 50b **Standards are racing ahead in some countries, but not UK**



Highest attainment of working-age population in OECD countries

The assimilation of education and skills by the population of working age is a laborious operation, not unlike the distillation process for whisky. From Figure 51a it can be inferred that the labour forces of the UK and South Korea have very similar levels of educational attainment. However, as Figure 50b shows, the maturing generation of Korean students has a much higher concentration of upper secondary achievement than that in the UK, which soon will lift the average attainment of the Korean labour force well above that of the UK. The ranking of the UK in terms of upper secondary attainment (or above) has fallen from twelfth for ages 55–64, to fourteenth for ages 45–54, to sixteenth for ages 35–44, to eighteenth for the 25–34 age cohort. Regardless of the improved success rates in the 1990s, in the short term the UK is destined to slide in the OECD human capital rankings.

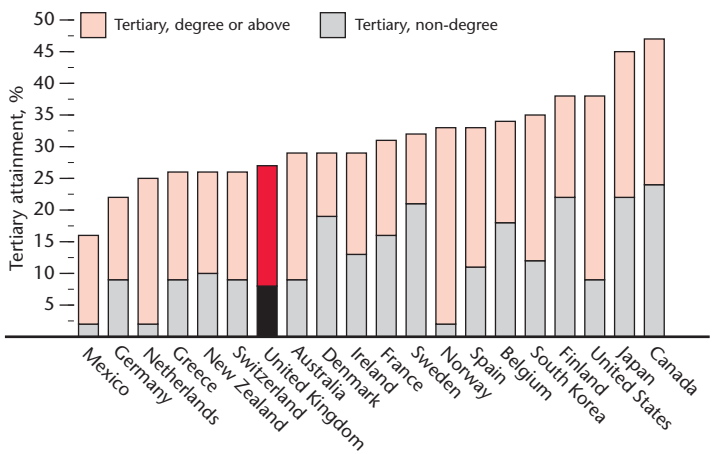
In terms of capital deepening, Figure 51b indicates that Canada and Japan have the best record. The share of the population of 25-to-34-year-olds who have a tertiary education qualification is 47 per cent in Canada and 45 per cent in Japan. These heady heights have been scaled gradually, with the previous ten-year cohorts achieving 40 per cent and 42 per cent success rates, respectively. The UK ratio of 24 per cent for those aged 45–54 is commendable, but the 27 per cent ratio for 25–34s is no better than average.

Figure 51a: **Percentage distribution of the population aged 25–64 by highest educational attainment, 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table A2.1b.

Figure 51b: **Percentage of the population aged 25–34 attaining a tertiary qualification, 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table A2.2b.

Figure 51a **UK adults can hold their heads high for the moment**

Figure 51b **But among the youngest adults, the UK has lost ground**



International labour force participation by level of attainment

Figures 52a and 52b examine the labour force participation rates for men and women according to their highest level of educational attainment. Among OECD countries, 90 per cent or more of male graduates are economically active, but participation rates are widely dispersed for those failing to reach an upper secondary standard. Of Switzerland's less-qualified males, 91 per cent are active in the labour market as opposed to only 67 per cent in the UK, the lowest quotient in the OECD. The UK's low participation rate cannot be blamed on the nearly retired 55–64-year-olds. It is difficult to avoid the conclusion that a significant proportion of UK males under age 55 are excluded from employment by their low education or skill attainments.

The comparable statistics for women encompass much wider ranges of labour market participation owing to the added dimension of child rearing and the variable provision of childcare facilities for working mothers. While Japan has the highest percentage of economically active male graduates, it has the lowest female graduate proportion. UK women graduates are heavily represented in the workforce, with an 88 per cent participation rate. At basic secondary education level, slightly more UK women are economically active than the average in OECD countries, in sharp contrast to UK men.

Figure 52a: **Labour force participation rates (as percentages) by level of educational attainment for males aged 25–64 in 1999**
Source: OECD, *Education at a Glance: OECD indicators*, 2001, table E1.1.

Figure 52b: **Labour force participation rates (as percentages) by level of educational attainment for females aged 25–64 in 1999**
Source: As Figure 52a.

Figure 52a **UK labour participation for men differs hugely according to educational attainment**

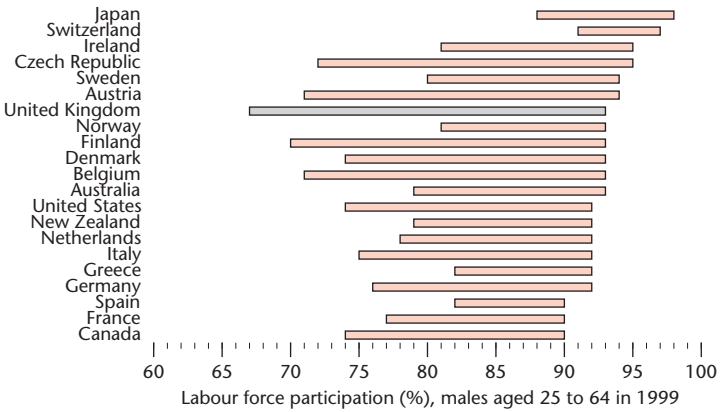
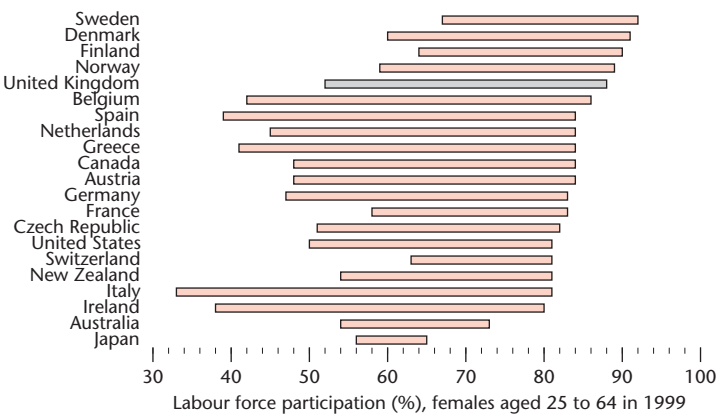


Figure 52b **UK labour participation for women graduates is highest outside Scandinavia**



CHARTS PART 5

THE EFFECTIVENESS OF PUBLIC SPENDING ON LAW, ORDER AND PUBLIC SAFETY

UK public spending on law, order and public safety as a share of GDP

UK public expenditure on law, order and public safety has tripled its proportion of GDP since 1951. The spending imperative has been driven by an inexorable upward trend in the overall crime rate, as shown in Figure 53a. In terms of macroeconomic factors, recessions and especially periods of high unemployment tend to be associated with a higher incidence of domestic and personal property crime. However, the overall crime rate tends to rise less rapidly when economic times are good, and sometimes falls as it did between 1992 and 1997. This improvement has stalled in the more recent past, using the old recording basis, and has begun to reverse on the new basis. New reporting procedures were introduced in 1998 to place greater emphasis on counting crimes, wherever possible, in terms of the number of victims.

Publication of the breakdown of public spending in terms of the police force, prisons and law courts and the fire service in a consistent format was suspended in 1997 (but see Figure 54b). The story up to that point was of a systematic increase in the allocation of resources to the administration of justice and the detention of criminals, with a particular step change between 1985 and 1990.

Figure 53a: **UK public expenditure on law, order and public safety as a percentage of GDP versus the crime rate per 1,000 population on the old reporting basis**
Sources: National Statistics, UK National Income and Expenditure Blue Books (various issues); analysis of general government total expenditure; National Statistics, *Criminal Statistics England and Wales*, 1999, table 2.2.

Figure 53b: **Composition of UK public spending on law, order and public safety, expressed as percentages**
Sources: As Figure 53a.

Figure 53a **Keeping in step with criminal intent**

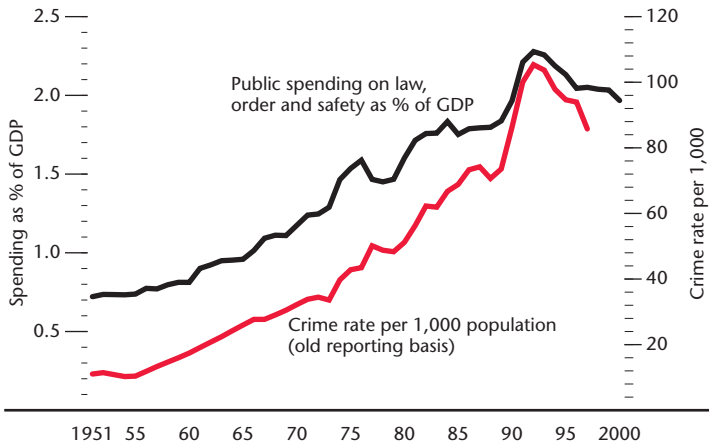
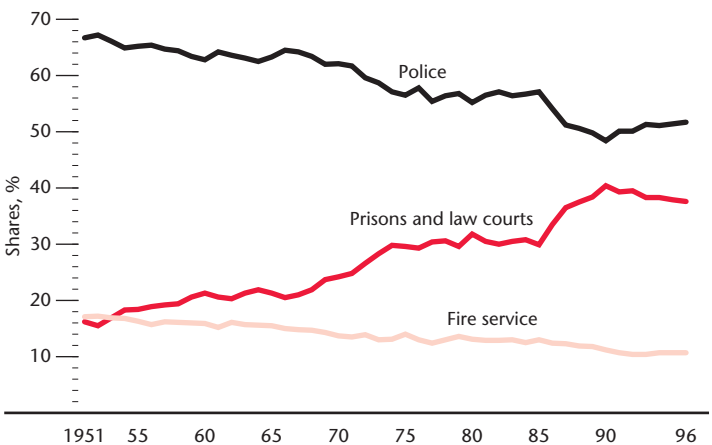


Figure 53b **Cost of administering justice is tipping the scales**



Composition of UK public expenditure on law, order and public safety

Reflecting what seems to be a recurring theme, the share of UK public expenditure on law, order and public safety committed to employee compensation is about 8 percentage points lower than in the mid-1980s. Figure 54a reveals that capital spending has accounted for a stable 5–10 per cent share of the budget. Other current spending under headings such as equipment, materials, and administrative and accommodation services has muscled its way into the cost structure. A more detailed breakdown is available for prisons in England and Wales, showing that staff costs declined from almost 54 per cent of the total in 1994/95 to less than 49 per cent in 1999/2000. Prison accommodation and other operating costs rose at an average rate of over 10 per cent per annum over the same period.

Figure 54b updates the information in Figure 53b in a different format and using fiscal years. There have been few changes in the pattern of resource allocation in recent years, except for the phenomenal increase in spending on immigration and citizenship. This increase can be explained by the need for much greater security connected to the opening of the Channel Tunnel, a substantial increase in the number of asylum-seekers, and the response to a backlog of crisis proportions at the UK Passport Office.

Figure 53a: **Composition of UK public expenditure on law, order and public safety by category of expenditure, expressed as percentages**
Source: National Statistics, UK National Income and Expenditure Blue Books (various issues); analysis of general government total expenditure.

Figure 53b: **Composition of UK public expenditure on law, order and public safety by function, expressed as percentages**
Source: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, table 3.5.

Figure 54a **Capital spending takes a low priority in UK's law and order budget**

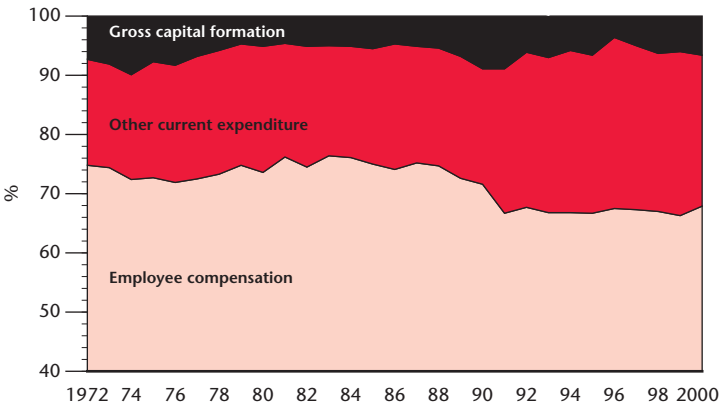
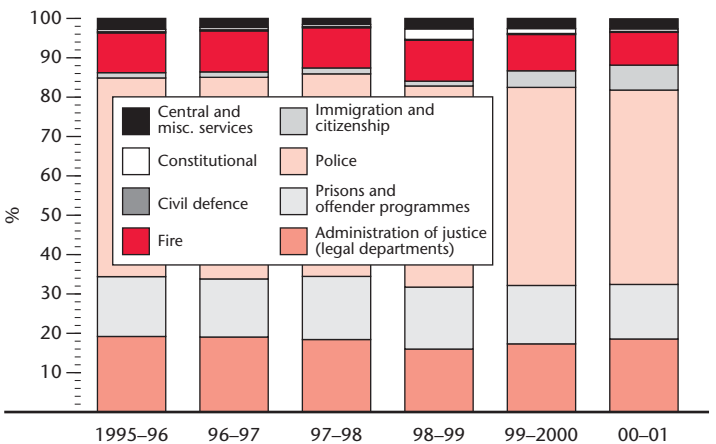


Figure 54b **Dramatic growth in UK immigration spending**



Composition of UK public employment in law, order and public safety

One of the paradoxes of the past ten years or so has been the gradual depletion of police strength at a time of increasing personal insecurity in most regions of the UK. While the overall crime rate in England and Wales for 1999/2000 was very similar to that in 1990, this conceals a fall in the rate for non-violent crimes involving property of about 5 per cent and a 59 per cent rise in violent crime, drug and other offences. Between 1989 and 1999, regular male police strength fell by 6.7 per cent. The erosion of the male force seems an inappropriate response to a sharp rise in violent crime. Over the same period, the number of police officers seconded to special units or granted a career break or lent out to other organisations increased by 64 per cent.

The increasing numbers of civilian employees in the police force have shouldered more of the administrative load, but the total number of police and civilian full-time equivalents has stagnated since 1992 (Figure 55a). The capacity to devolve and subcontract functions to the private sector is more limited in the law and order industry than elsewhere in the public sector. England and Wales can claim just 103,100 male police officers out of a law, order and public-safety workforce (Figure 55b) of 277,600.

Figure 55a: **UK police employment (including the civilian workforce) as a percentage of total public-sector employment**
Source: National Statistics, *Economic Trends*, no.571, June 2001. UK data codes: FHBX and CGYJ.

Figure 55b: **Composition of the law, order and public-safety workforce in England and Wales, average full-time equivalents in thousands, 2000/01**
Sources: National Statistics, *Social Trends 2001*, table 9.23; HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, table 5.2.

Figure 55a **Expansion of police personnel has resisted the UK public-sector trend**

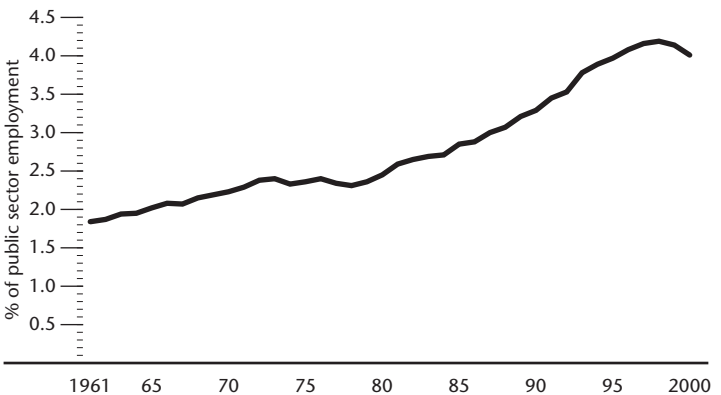
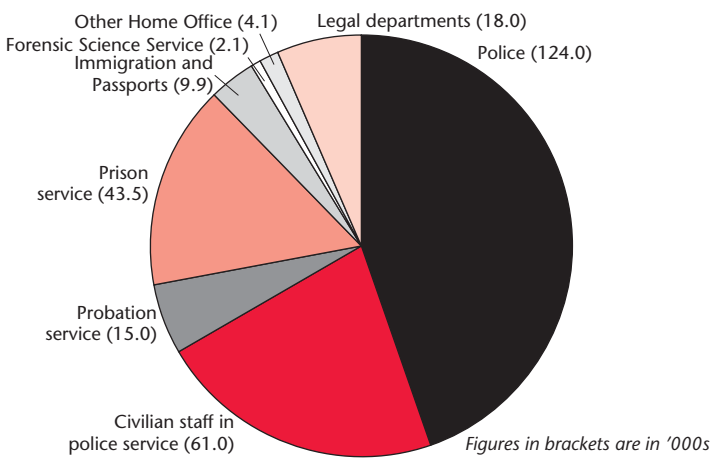


Figure 55b **UK police caught up in an administrative quagmire**



Evolution of UK crime rate and composition of recorded crime by type

The upward trend in the recorded crime rate for England and Wales (Figure 56a) has been reinstated in the past two years, using data on the new reporting basis. The true extent of crimes committed is unknown, but the 2000 *British Crime Survey* sheds some light on the degree of under-recording of different categories of crime. Whereas it is estimated that 84 per cent of all car thefts are notified to the police (presumably in connection with insurance claims), only 8 per cent of common assaults and 14 per cent of robberies and thefts from the person are recorded. Roughly a third of instances of burglary in a dwelling are notified to the police. The low level of notification suggests that there is still a great deal of disillusionment with the criminal justice system.

Recorded crime in England and Wales is composed mainly of property crime (Figure 56b). Theft of and from vehicles accounts for a fifth of the total, with other theft responsible for a further 22 per cent. Criminal damage weighs in with 18 per cent, and the most usual motive for burglary (17 per cent) is property theft. Fraud and forgery (6 per cent) complete the picture. While robbery (1.6 per cent) involves property, the use or threat of force causes it to be classified as part of violent crime (13 per cent), along with violence against the person and sexual offences. Drug offences and a miscellany of other offences make up the remaining 3 per cent.

Figure 56a: **Incidence of recorded crime per 1,000 population in England and Wales**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, table 2.2.

Figure 56b: **Composition of crime in England and Wales, 1999/2000**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, table 2.3.

Figure 56a **Rising trend has yet to be broken**

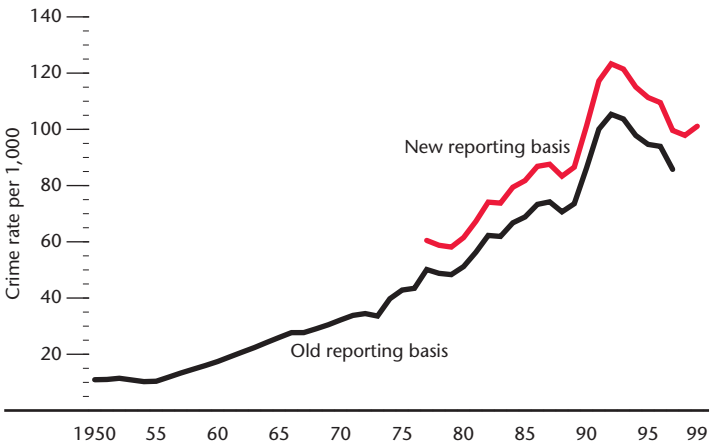
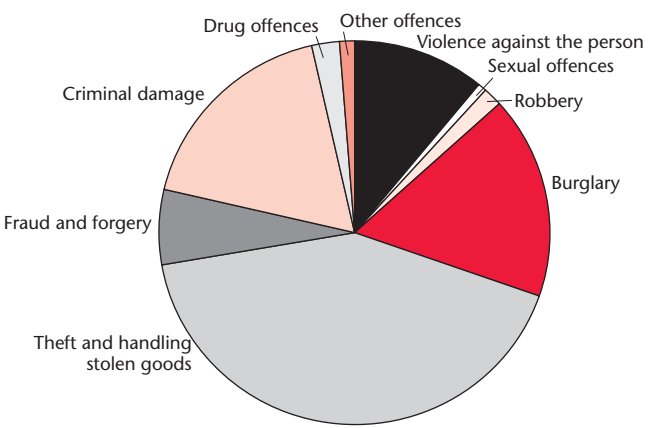


Figure 56b **Violent crime and drug offences are more prominent under new recording basis**



Detection rates for offence groups in England and Wales over time

Even after taking account of the expanded coverage of the new recording basis from 1 April 1998, there has been a recent and sudden decline in the percentage of crimes cleared up by the police. Figure 57a reveals that the clear-up rate for violent crimes has fallen 10 percentage points in two years, to 59 per cent, and for burglary by the same margin, to an abysmal 13 per cent. The police resolved two-thirds of fraud and forgery offences ten years ago, but only 30 per cent in 1999/2000. Nevertheless, despite the rapid growth of drug offences, the clear-up rate is 97 per cent.

In addition to the large variation in the percentage of crimes cleared up, regional variations are also highly significant. Figure 57b gives the Scottish police force credit for a consistently better rate of detection and resolution of crimes, particularly violent crimes, than that recorded in England and Wales combined or Northern Ireland. Within the police force areas of England and Wales, the average clear-up rate for all recorded crime ranged from 16 per cent for the Metropolitan Police to 65 per cent for Dyfed-Powys in 1999/2000. In general, the lower the clear-up rate, the lesser the deterrent to criminal activity and the greater the potential pay-off to the criminal.

Figure 57a: **Percentage clear-up rates for recorded crime in England and Wales**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, table 2.8.

Figure 57b: **Percentage of crimes cleared up by offence group and region, 1999/2000**
Source: National Statistics, *Social Trends 2001*, table 9.13.

Figure 57a **Missing a beat?**

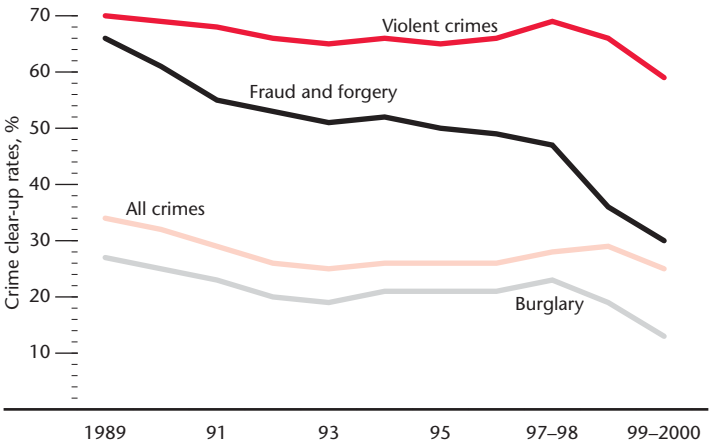
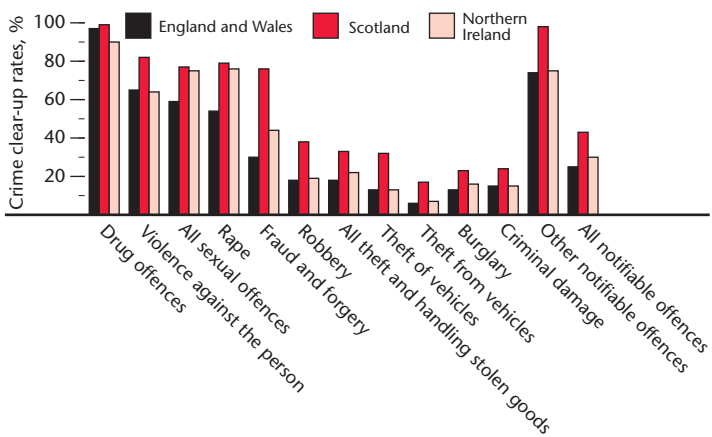


Figure 57b **Scotland's yards ahead in crime detection**



Incidence of immediate custodial sentencing in the UK over time

The Criminal Justice Act 1991 was implemented on 1 October 1992 and amendments made by the 1993 Act of the same name had a visible impact on sentencing procedures and practice in the UK. In between these two Acts, the murder of a two-year-old child, Jamie Bulger, by two young teenage boys in 1993 shocked the nation. Since 1993, a higher and still rising proportion of convicted criminals are sentenced to immediate custody, largely at the expense of suspended sentences. Figure 58a shows that the increases are most pronounced for males and females aged over 21.

The Bulger murder highlighted a disturbing trend towards serious offences by younger juveniles. Figure 58b indexes the number of males in various age groups sentenced for indictable offences to 1989 = 100. While the numbers of 18-to-20-year-olds sentenced has fallen over the past decade, for all the younger age groups there has been an increase since 1993. Alarmingly, there has been close to a tripling of male offenders aged ten or eleven over this period. A total of 555 boys and 47 girls aged ten or eleven were sentenced in 1999, triggering fears of a sharp rise in the population of active juvenile criminals in the UK over the next few years.

Figure 58a: **Percentage of male and female offenders in England and Wales sentenced to immediate custody**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, tables 7.8, 7.9 and 7.10.

Figure 58b: **Index of males in various age groups in England and Wales sentenced for indictable offences, 1989 = 100**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, tables 7.6 to 7.10.

Figure 58a **Increasing proportion of UK offenders go straight to jail**

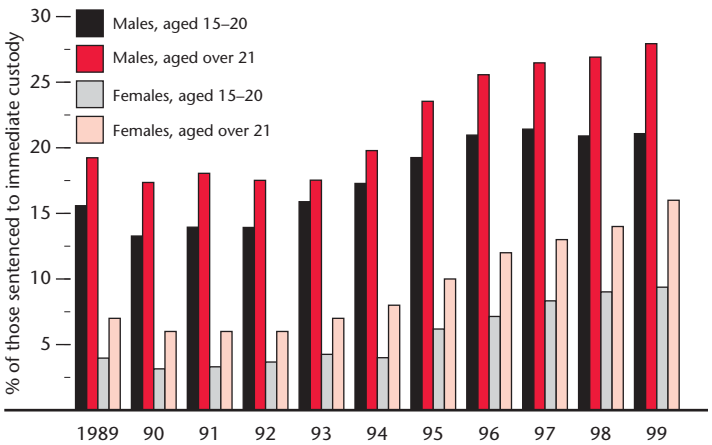
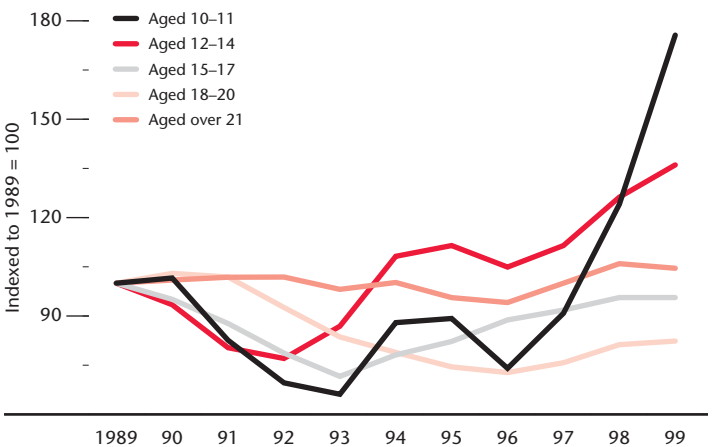


Figure 58b **The UK's young offenders are starting younger**



Severity of UK sentencing for indictable offences over time

The 1991 and 1993 Acts also had an impact on the typical length of sentences, but this was less obvious than their effect on the incidence of immediate custodial sentences. Excluding life sentences, the average length of Crown Court sentences increased by 14 per cent between 1992 and 1999, with steeper increases for burglary (39 per cent) and criminal damage (22 per cent). Strangely, the average length of sentence for violent crimes rose only slightly, and for robbery it fell over the same period, as Figure 59a reports.

A paper by Tarling (1993) found that about 6 per cent of criminals are responsible for half of all convictions in the UK. Most UK criminal careers are short, but there is a hard core of repeat offenders who are mostly males. Figure 59b reveals that 36 per cent of males and 54 per cent of females are virgin offenders. Males aged 35–54 have the highest density of multiple convictions, followed by males aged 18–34. Hardened criminality is much less common in women, but is persistent across adult age groups.

Figure 59a: **Average length of Crown Court sentence for male principal offenders, excluding lifers, in months**
Source: National Statistics, *Criminal Statistics England and Wales*, 1999, tables 7.6 to 7.12.

Figure 59b: **Analysis of convicted persons by age, gender and number of previous convictions in England and Wales, 1998**
Source: National Statistics, *Social Trends 2001*, table 9.12.

Figure 59a **Sentences lengthening for male principal offenders**

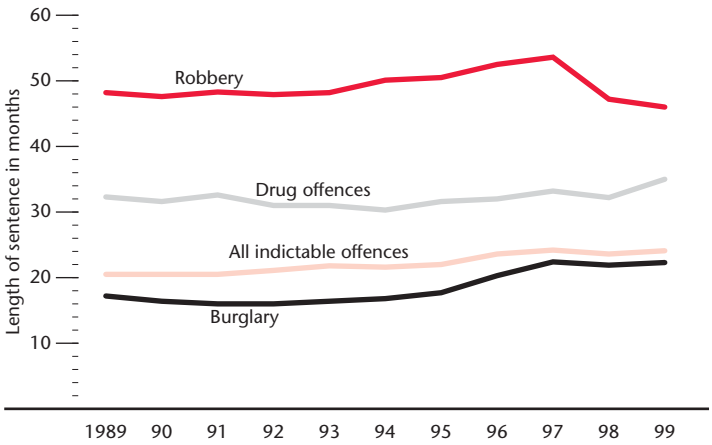
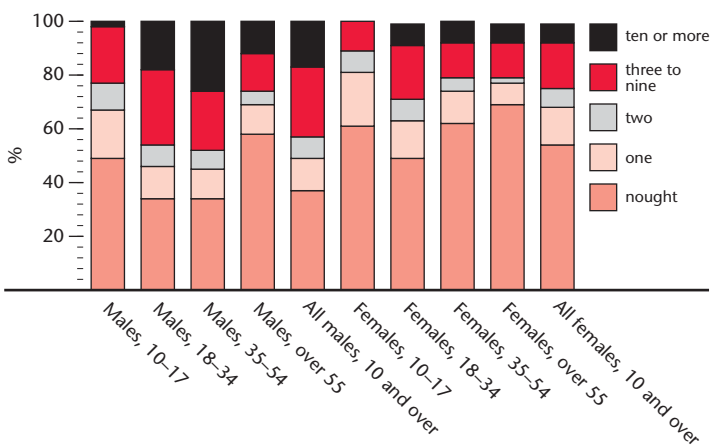


Figure 59b **Repeat offenders are mostly males**



International comparison of prison populations

Dr Peter Wynarcyk's essay in the first section addresses the issue of the effectiveness of imprisonment from an economic viewpoint. He concludes that there is persuasive evidence that criminal activity is deterred by both the likelihood of apprehension and the severity of the punishment. Nevertheless, a sizable expansion of the prison population in England and Wales since 1945 has not yet had the desired effect on the crime rate. Figure 60a reports a 44 per cent rise in prisoners between 1991 and 2000, with female prisoner numbers rising 114 per cent. Females still represent only 5.2 per cent of the prison population.

International comparisons are hard to come by in the field of criminal justice, but an exception is the relative size of the prison population in various countries. The US, with almost two million prisoners, is far and away the most disciplinarian country with a prisoner rate of 0.7 per cent of the population. Russia reduced its prison population drastically in 2000 to 673,000 but remains the second-strictest country. England and Wales incarcerate only 0.12 per cent of the population, and yet other countries have prison rates less than half of this. Japan's criminal activities are highly concentrated among gangs, leaving the majority of the population relatively untroubled by crime.

Figure 60a: **The prison population of England and Wales, by gender of prisoner**
Source: National Statistics, *Prison Statistics England and Wales 2000*, table 1 (a).

Figure 60b: **Number of prisoners per 100,000 population in various countries in 2000**
Source: National Statistics, *Prison Statistics England and Wales 2000*, table 1.21.

Figure 60a **Prison has become more socially inclusive**

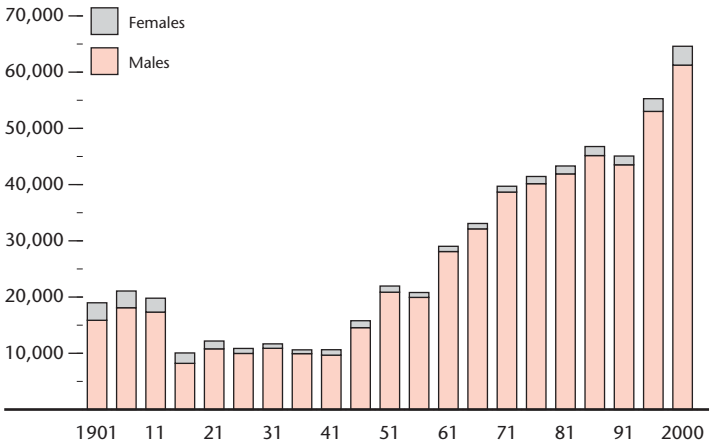
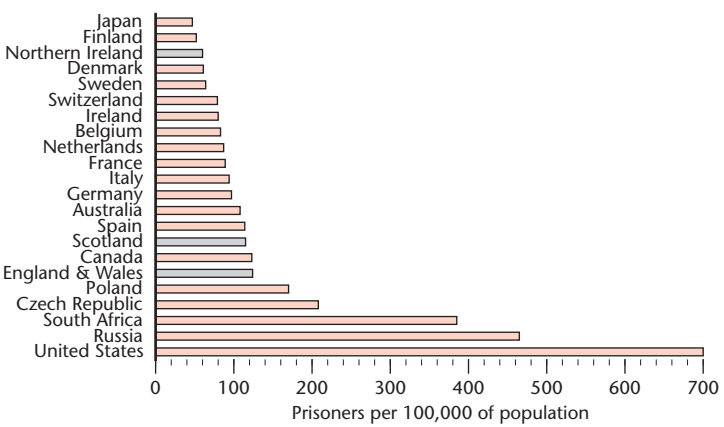


Figure 60b **International rates of incarceration: different views of life behind bars**



Dispersion of crime among UK communities

Neither of the measures of economic freedom quoted on p. 122 contains an assessment of personal safety from crime. The Fraser Institute's More Comprehensive Index uses six indicators to represent legal structure and security of property rights, but their focus is on legal entitlement rather than physical security. The British Crime Survey 2000 finds a high level of personal insecurity across a broad range of crimes. Figure 61a reports the percentages of respondents who were 'very worried' about becoming victims of various crimes. While women, especially young women, fear physical attack most, men are more worried about car theft than their personal safety. Generally, fear of crime diminishes in the older age groups, but the obvious exception is 'walking alone after dark'.

It appears that the best strategy to minimise the risk of victimisation, whether for household property crime or personal crime, is to live as far apart from proven offenders as possible. Figure 61b indicates that affluent 50-to-64-year-olds living in rural communities and prosperous pensioners in designated retirement areas suffer the lowest incidence of crime in the UK. In contrast, high-earning executives living in the inner cities are unable to protect their property or themselves effectively despite taking expensive security precautions.

Figure 61a: **Percentage of survey respondents expressing fear of various crimes or personal insecurity in the 2000 British Crime Survey, by age and gender**
Source: National Statistics, *Social Trends 2001*, table 9.8.

Figure 61b: **Incidence of crime per 100 households or 100 adults for various socio-economic types and habitations reported in the 2000 British Crime Survey**
Source: Home Office Department, *Criminal Justice: The Way Ahead*, Cm 5074, February 2001, p. 24.

Figure 61a **Fear of crime reduces personal freedom**

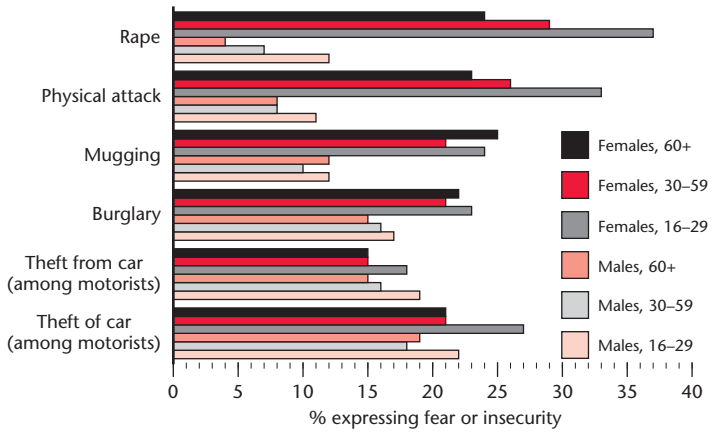
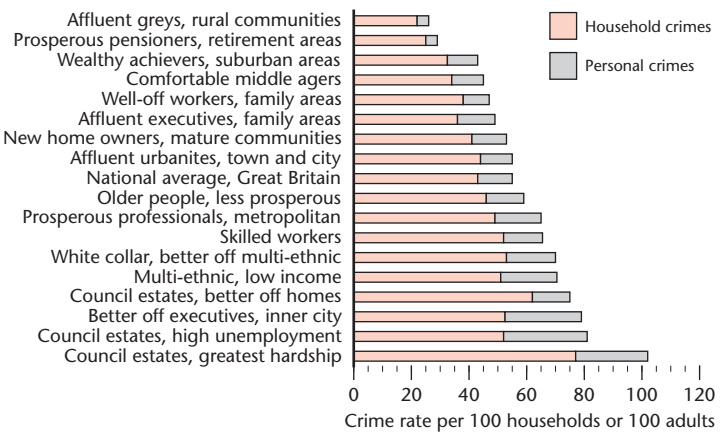


Figure 61b **Crime rates are highest in proximity to the offenders**



Evolution of drug seizures and illegal migration in the UK over time

If the number of seizures of illegal drugs can be taken as broadly representative of the extent of drug use, then there can be little doubt that the UK authorities are fighting a tough battle. On the new reporting basis, there were around 122,000 drug offences in 1999/2000. While seizures of cannabis still dominate the statistics, their share of the total has fallen from over 88 per cent in 1981 to 75 per cent in 1998. In Figure 62a, the seizures of each type of drug are indexed to 1991. Heroin shows by far the most rapid increase in the seizure rate, followed by crack and methadone. Seizures of LSD have dropped more than 70 per cent since 1994 as drug fashions have moved on.

Another boom industry is attempted illegal entry to the UK, shown in Figure 62b. In 2000, enforcement action was initiated against more than 50,000 illegal entrants, of which over 86 per cent were asylum-seekers. This was more than double the 1999 tally. It is estimated by the Home Office that 75 per cent of those entering the UK illegally have had their entry facilitated by organised criminal groups. Organised criminals are also responsible for much of the supply of drugs to the UK. Addicts of heroin and crack have average annual incomes from crime of £13,000 and account for between a third and a fifth of all acquisitive crime.

Figure 62a: **Seizures by the police and HM Customs of selected drugs, indexed to 1991 = 100**
Source: National Statistics, *Social Trends 2001*, table 9.6.

Figure 62b: **Net legal immigration to the UK and illegal entry detections in thousands**
Sources: National Statistics, *International migration 1999*, table A2, and press notice dated 1 November 2001; National Statistics, *Control of immigration: Statistics United Kingdom 2000*, Cm 5315, November 2001, table 7.1 (available at: www.official-documents.co.uk/cm53/5315-i/5315_i.pdf).

Figure 62a **UK drug seizures indicate dramatic growth in drug use**

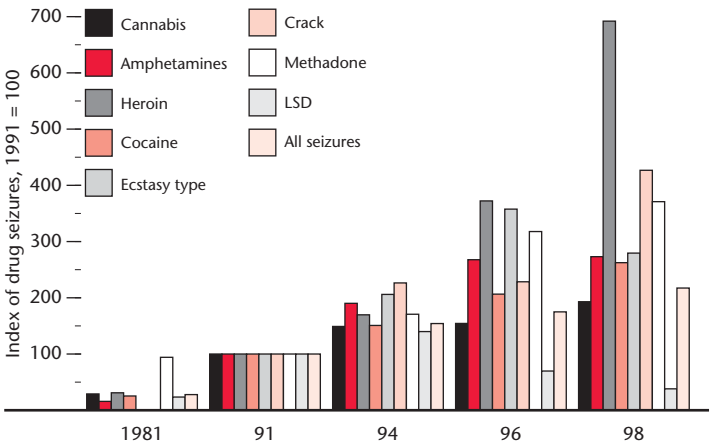
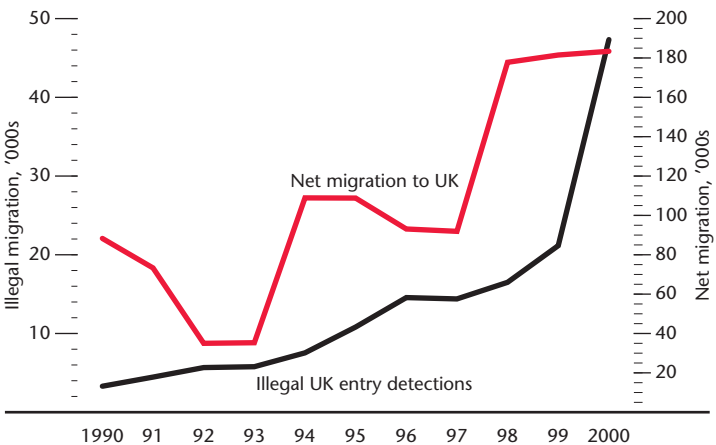


Figure 62b **Attempted illegal entry to the UK is a boom industry**



CHARTS PART 6

THE DIVERSITY OF PUBLIC SPENDING BY REGION

Total public spending as a share of GDP by UK region

Regional accounts have been available for the UK economy for a number of years, but as yet they do not include a fully articulated expenditure breakdown. However, a separate Treasury analysis apportions roughly 87 per cent of all UK general government expenditure according to the regions. Defence spending is the largest unallocated item. By combining these two authoritative sources, it is straightforward to derive the data presented in Figure 63a. Its stark message is that the South-East and Eastern regions have a similar government contribution to GDP as South Korea or the US, while Wales and the North-East are more directly comparable to Sweden, Denmark and France. Northern Ireland, for its own special reasons, lies even farther down the road to a command economy.

While the UK does not have an explicit regional policy, the unequal distribution of general government expenditure has a significant impact on regional consumption. Figure 63b shows how government expenditure smooths out the differences in per capita personal consumption between the regions. The effect of the adjustments is to lift consumption per head in Northern Ireland from third bottom in the league table to fourth, and Wales from second bottom to fourth bottom. The biggest loser is the South-West, which drops from fourth to eighth place in the spending table.

Figure 63a: **Territorially identifiable public spending as a percentage of regional GDP, 1999/2000**
Sources: HM Treasury, *Public Expenditure Statistical Analyses 2001-02*, tables 8.6a and 8.11; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 63b: **Aggregate per capita consumption in the UK regions in 1999/2000, in thousands of pounds**
Sources: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6b and 8.12; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 63a **UK regions span the free world and the command economy**

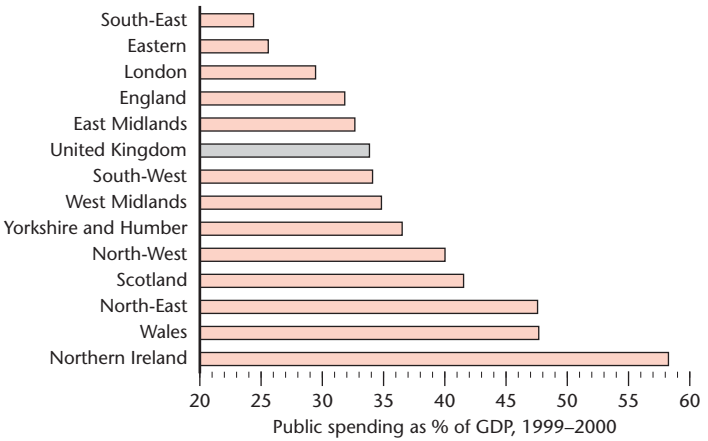
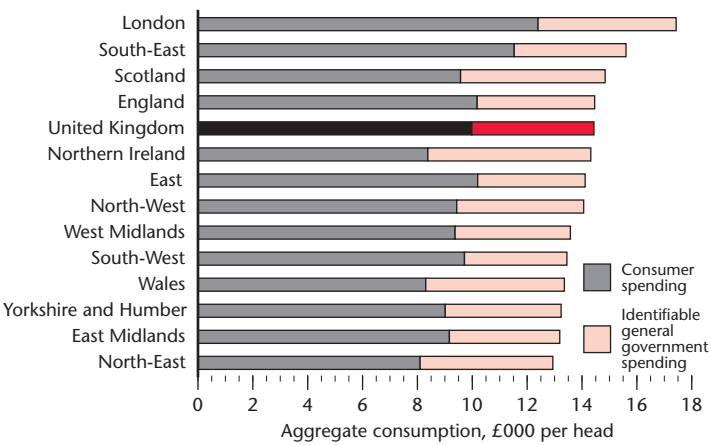


Figure 63b **UK government spending fills in the holes**



Public health expenditure as a share of GDP by UK region

The Treasury's regional analysis of public expenditure combines health and personal social services, but health spending is the overwhelmingly dominant component. Huge disparities are evident from Figure 64a, with the ratio for Northern Ireland reaching almost double that for the South-East. By this account, the top six regions in the table have already achieved the EU average ratio that is the government's stated target. The distribution of private health expenditures favours the more prosperous regions, but not to a degree that is sufficient to compensate for the disparities in public spending. A significant part of the explanation for these wide differences must lie in the physical wellbeing of the regional populations.

Figure 64b uses the public's self-perception of health as a useful barometer of demand for public health and personal social services. The regions are ordered according to the average reported state of health across the adult population, but only the responses for the 45-to-64-year-olds and the over-65s are shown in the figure. The rank correlation between Figures 64a and 64b is quite high, but Scotland is a glaring exception. On the basis that the over-65s incur the highest health expenditures, the inter-region differences in reported wellbeing do not seem large enough to justify the wide dispersion of public health expenditure ratios.

Figure 64a: **Identified general government expenditure on public health and personal social services as a percentage of GDP in 1999/2000 by UK region**

Source: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6a and 8.11; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 64b: **Percentage of population reporting 'good' state of general health by gender and age, 1998/99**

Source: National Statistics, *Regional Trends 2001*, table 7.4.

Figure 64a **Strong regional bias in UK public health and personal social services expenditure**

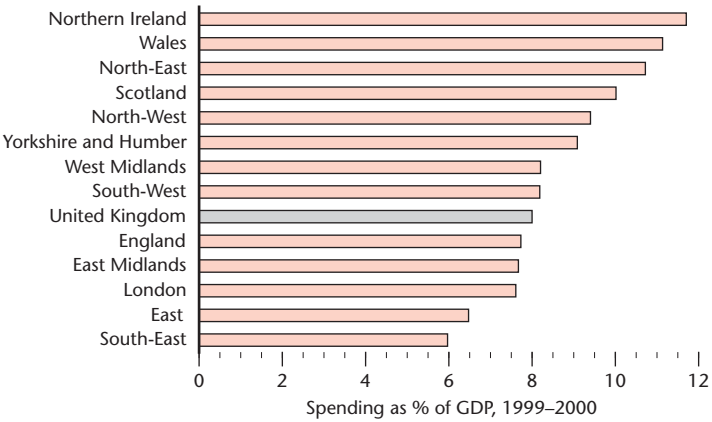
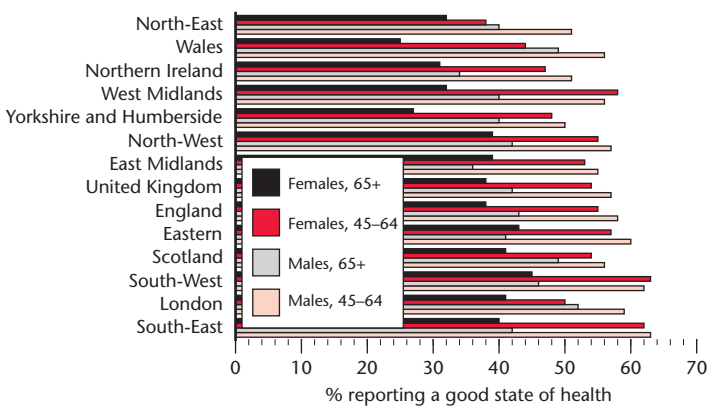


Figure 64b **Self-perceptions of general health differ markedly across UK regions**



Public education expenditure as a share of GDP by UK region

Leaving aside the extraordinarily high ratio for Northern Ireland, public spending on education is more evenly distributed across the regions than for health and personal social services. Pupil–teacher ratios are broadly similar in all UK regions except Scotland and Northern Ireland, where they are noticeably lower. Public education spending per capita was 31 per cent higher in Scotland than in England. Among the English regions and Wales, per capita spending is very similar, although it almost 15 per cent below average in the South-East. Overall, Figure 65a reflects differences in per capita GDP rather than per capita public education spending.

Scotland, which has a separate examination system, scores highest in terms of education performance, with 58 per cent of the working-age population attaining the equivalent of at least one GCE A-level. This advantage has built up over many years, due in part to a higher public spending allocation. Although the North-East has a similar public spending ratio to Scotland now, this has not always been the case over the past 40 years. Hence, the markedly lower level of attainment in the working-age population for the North-East (less than 20 per cent of the working-age population has any tertiary-level qualifications) should not be taken to imply that the current level of public expenditure would not raise standards in future.

Figure 65a: **Identified general government expenditure on public education as a percentage of GDP in 1999/2000 by UK region**
Source: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6a and 8.11; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 65b: **Population of working age in UK regions by highest qualification at spring 2001**
Source: National Statistics, *Regional Trends 2001*, table 4.12.

Figure 65a **North-East has same public spending ratio as Scotland …**

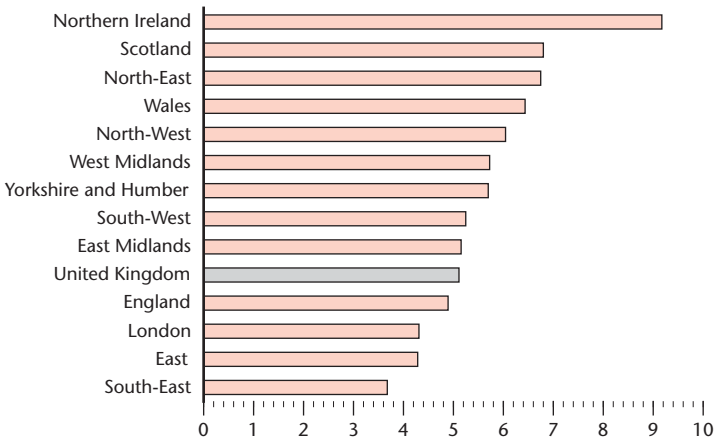
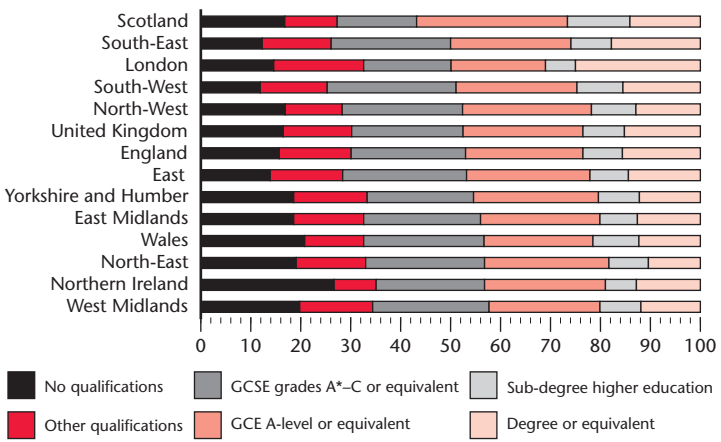


Figure 65b **… but delivers much poorer results**



Public spending on law and order as a share of GDP by UK region

In broad terms, the allocation of public spending on law, order and public safety as a proportion of regional GDP fits well with the public's perceptions of insecurity. Figure 66a recognises the particular threat to personal safety posed by the sectarian tensions in Northern Ireland, which seem not to have diminished a great deal even after the Good Friday agreement of 1998. Government spending per capita in Northern Ireland, at £649 in 1999/2000, is more than double the UK average. London's spending, at £454 per head, reflects the threat and occasional reality of terrorism in the major cities. The Eastern region has the lowest crime rate on most measures and receives a per capita allocation that is 25 per cent lower than the national average.

The 2000 British Crime Survey, and the corresponding surveys for Scotland and Northern Ireland, highlight a three-tier pattern of insecurity. Figure 66b portrays the survey responses for females only, as those for males were generally very low. Northern Ireland is out on a limb with very serious levels of personal insecurity; regions containing large conurbations form an intermediate group and more dispersed, rural regions are clustered around slightly lower survey responses.

Figure 66a: **UK public spending on law, order and public safety as a percentage of GDP by region in 1999/2000**
Sources: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6a and 8.11; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 66b: **Percentage of women feeling 'very unsafe' at night when walking alone or alone at home by UK region, 2000**
Source: National Statistics, *Regional Trends 2001*, table 9.14.

Figure 66a **Eastern region has lowest public spending on law and order …**

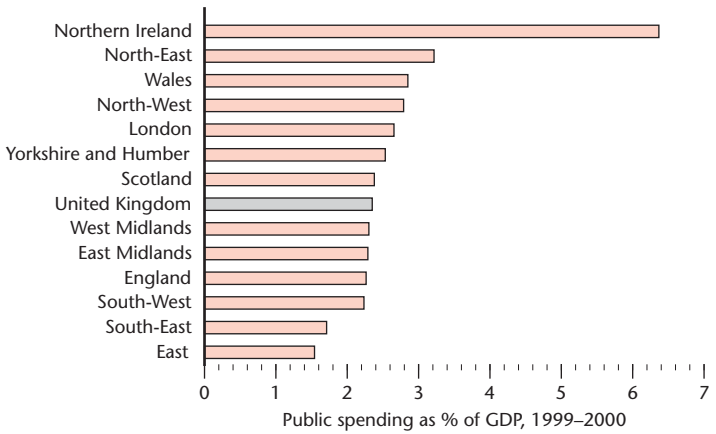
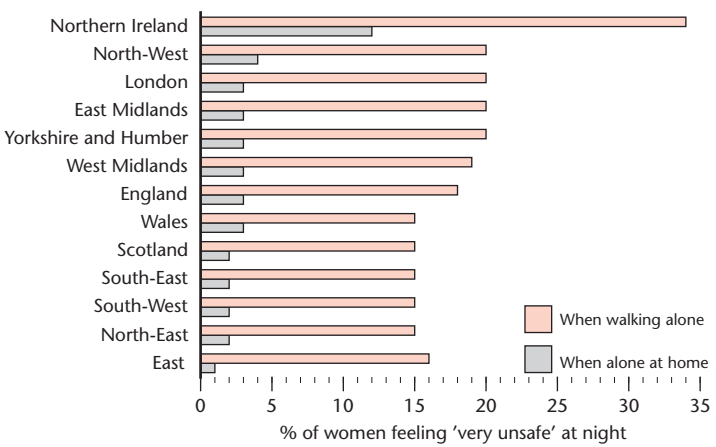


Figure 66b **… and yet has a reputation for public safety**



Public spending on social security as a share of GDP by UK region

Even greater than the regional disparity in government health and personal social services spending is the gulf in social security payments between regions, expressed as a percentage of GDP. Per capita social security payments were more than £2,000 in Northern Ireland and the North-East and only slightly lower in Wales in 1999/2000. The lowest average payment, of £1,453, was in the South-East. Because a significant element of social security payments constitutes income redistribution, the variation in the GDP ratios (Figure 67a) is accentuated.

In August 2000, when unemployment represented only 5.4 per cent of the overall labour force, and only 3.6 per cent on the claimant count basis, it is little short of fantastic that 20 per cent of the working-age population should be benefit claimants in Wales and the North-East. Admittedly, these figures represent a sizable reduction from the 25 per cent in the North-East and 24 per cent in Wales in February 1996, when unemployment was much higher. Geographical variations in health cannot support such large differences in the entitlement to incapacity benefit. More likely, this is a source of disguised long-term male unemployment for the top four regions of Figure 67b.

Figure 67a: **UK public spending on social security as a percentage of GDP by region in 1999/2000**
Sources: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6a and 8.11; National Statistics, *Regional Trends 2001*, table 12.1; National Statistics, *Economic Trends*, March and August 2001.

Figure 67b: **Percentage of working-age population claiming key benefits by statistical group and by region, August 2000**
Source: National Statistics, *Client Group Analysis: Quarterly Bulletin on the Population of Working Age on Key Benefits*, August 2000, table 8.2.

Figure 67a **Degree of UK benefit dependency is staggering**

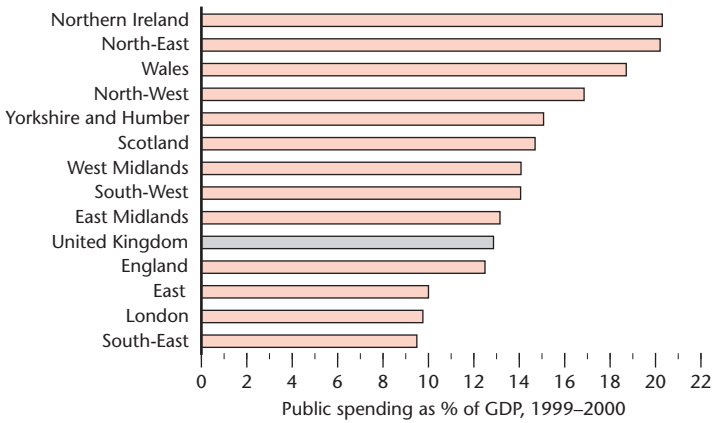
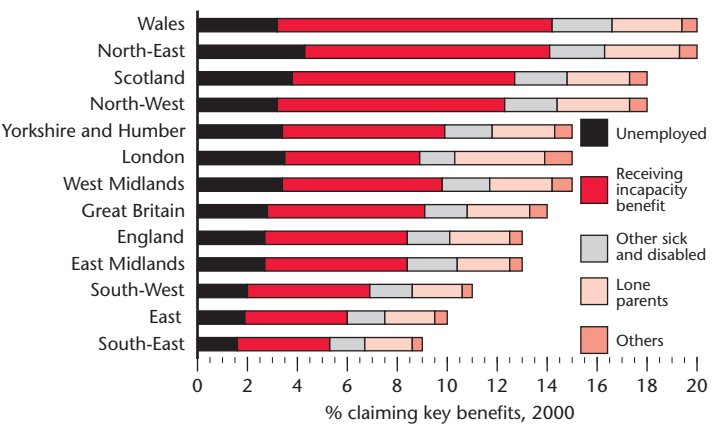


Figure 67b **Incredible regional disparity in UK benefit claimants among working-age population**



Deductions as a proportion of household income by UK region

Deductions, primarily of income tax and employees' National Insurance contributions, averaged 31.3 per cent of UK household income in 1999, the highest figure since 1991. The regional distribution of taxation has varied little in recent years, with the highest burdens to be found in London and the South-East and the lowest in Wales and Northern Ireland. The ranking in Figure 68a places the South-West in an unusually low position, given that the region has the fourth-highest per capita household income. The low average deduction rate arises from a composition of income that contains proportionately more pensions and net property income and less employee compensation than the UK average.

The regional concentration of high individual earners in London and the South-East is confirmed in Figure 68b. Overall, almost 36 per cent of net income tax receipts in 1999/2000 were contributed by individuals with annual incomes above £50,000 and only 13 per cent by those receiving less than £15,000 per annum.

Figure 68a: **Deductions as a percentage of gross household income by region in 1999**
Source: National Statistics, *Economic Trends*, August 2001.

Figure 68b: **Percentage share of UK net income tax receipts by band of individual gross income in 1999/2000**
Source: National Statistics, *Inland Revenue Statistics 2001*, table 3.11.

Figure 68a **London and South-East bear the heaviest tax burdens**

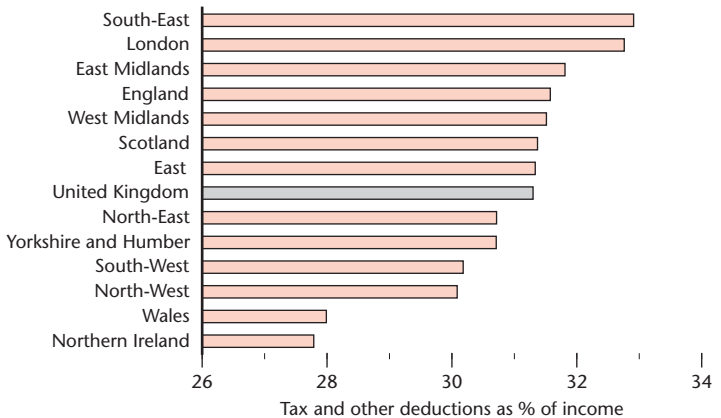
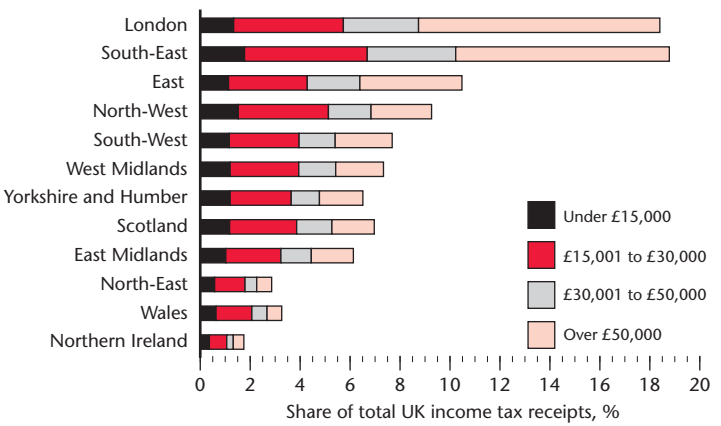


Figure 68b **Top earners heavily concentrated in the capital**



Regional comparisons of infant and adult mortality rates

The regional dispersion of the infant mortality rate in the UK is comparatively wide, considering that the vast majority of the population live within fifteen miles of a hospital maternity unit. While regional variations in the quality of maternity services must bear some responsibility for the variation in the mortality rate of infants, the social context of the parents is probably more important. London has the strongest socio-economic characteristics of any region, which would normally be associated with a low mortality rate, as is evident for the South-East. However, London also has the largest proportion of legally aborted conceptions, 53.4 per cent, and one of the highest pregnancy rates for women under eighteen, which may help to explain the low ranking in Figure 69a. Most UK regions have infant mortality rates typical of southern, rather than northern, Europe.

Contrary to regional myth, Figure 69b indicates that the warmer climates of the south coast are more conducive to longevity in the human population than the rugged climes of Scotland or the North-West. Once again, the variability of healthcare provision and socio-economic factors contribute to the explanation of the different mortality rates. The average proportion of the population in non-manual occupations, for which age-standardised mortality rates are typically lower, was 61.9 per cent for the top four regions in spring 2000, as against 57.5 per cent in the average of the four lowest ranks.

Figure 69a: **Numbers of deaths in the first year of life per 1,000 live births in UK regions and selected EU countries, 1998**
Source: National Statistics, *Regional Trends 2001*, table 2.1.

Figure 69b: **Age-standardised mortality rates for males and females by NHS region**
Source: National Statistics, *Regional Trends 2001*, table 7.3.

Figure 69a **UK infant mortality rate is similar to southern Europe**

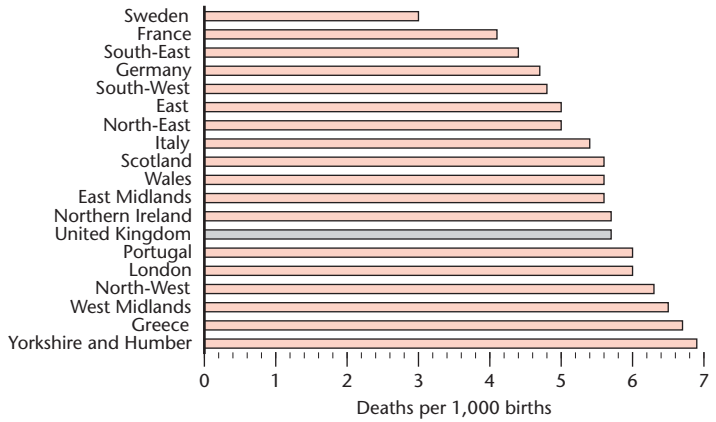
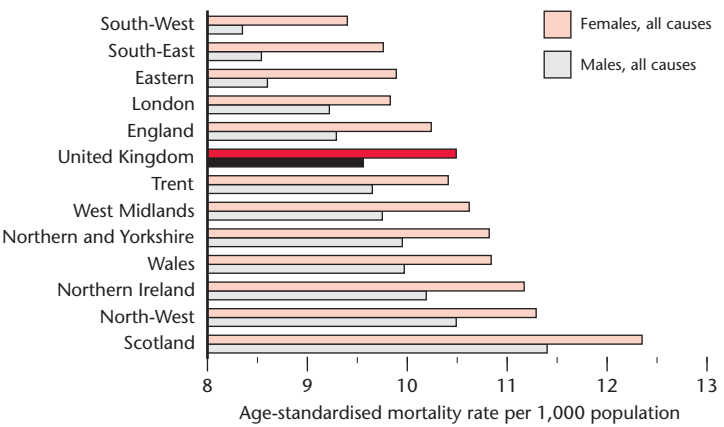


Figure 69b **UK southerners are the most resilient**



Regional variations in NHS hospital usage and waiting times

Usage of health services based at NHS hospitals comprises in-patient episodes lasting more than a day, day cases, accident and emergency attendances, and out-patient attendances to visit a consultant. Figure 70a summarises this information by adding together the number of in-patient hospital days with the other three categories. By this measure, the occupants of the South-East and Eastern NHS regions use public hospital services the least, and Scots and Londoners use them the most. On average, Scots spend almost 1.5 days in hospital each year, almost twice the occupancy rate of the South-East.

A benefit, one might imagine, of a national health service is that it would distribute resources so that waiting times for hospital admission would be approximately equal in each region. Figure 70b illustrates the reality for the NHS, which is that the heavy users in London and Scotland also live in the regions with the shortest waiting times.

Moreover, twice the proportion of citizens of Northern Ireland are awaiting hospital admission as in the West Midlands, and almost five times as many have been waiting six months or more for treatment as in Scotland. (It should be noted, however, that the data for Northern Ireland include all patients waiting for treatment at Northern Ireland trusts.)

Figure 70a: **In-patient and out-patient hospital attendances per 1,000 population for NHS regions in 1999/2000**
Source: National Statistics, *Regional Trends 2001*, table 7.16.

Figure 70b: **Percentage of the population awaiting hospital admission at 31 March 2001, by NHS region**
Source: National Statistics, *Regional Trends 2001*, table 7.15.

Figure 70a **Scots and Londoners use NHS hospitals the most**

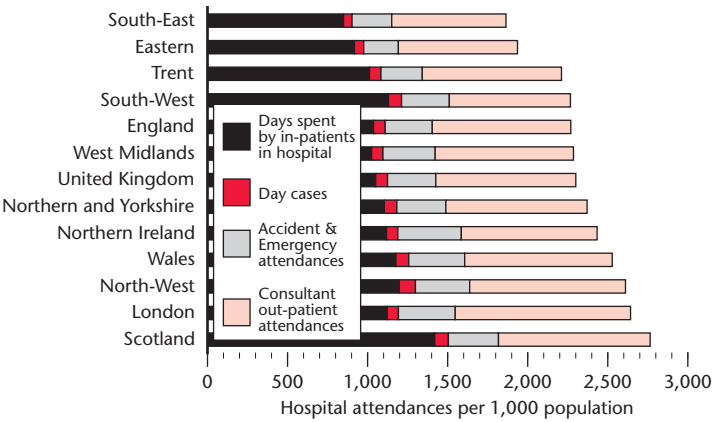
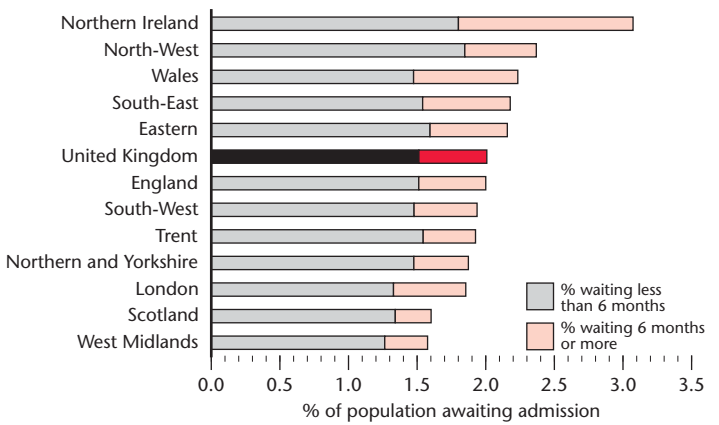


Figure 70b **NHS resource allocation does not even out waiting lists**



Class sizes and student performance by UK region

The UK government's 1997 pledge to reduce class sizes has strengthened the expectation that smaller class sizes will deliver higher student attainments, although there is scant empirical support for this proposition. As described in Figure 46a, the UK has higher average pupil–teacher ratios than the OECD average at primary (22.5 versus 18) and lower secondary (17.4 versus 15.2) levels. Behind these averages lie some wide regional variations as revealed in the proportions of large Key Stage 2 classes (more than 30 pupils) shown in Figure 71a. Key Stage 2 refers to the 'upper primary' age group.

The North-West, South-West and East Midlands regions have the highest incidences of large class sizes, and yet their performances at Key Stages 2 and 3 are at least as good as the average for England. London schools have proportionately fewer large classes but perform below average at all stages. Figure 71b, which reports the attainments in English only, is also notable for the widening dispersion of student performances between Key Stages 2 and 3. Excluding Northern Ireland, there is a range of only 5 percentage points between the regions at Key Stage 2, but 13 percentage points by Key Stage 3.

Figure 71a: **Percentage of UK school classes with 31 or more pupils in 2000/01**
Source: National Statistics, *Regional Trends 2001*, table 4.3.

Figure 71b: **Percentage of pupils reaching or exceeding expected standards in English in summer 2000**
Source: National Statistics, *Regional Trends 2001*, table 4.7.

Figure 71a **Large class sizes matter less than good teachers**

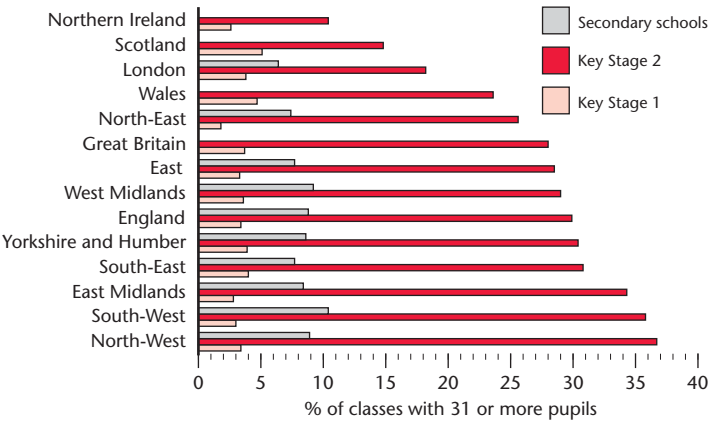
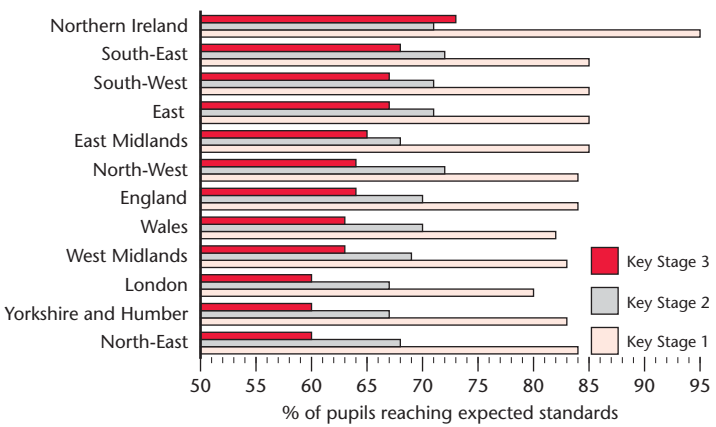


Figure 71b **Achievements diverge as pupils develop**



Pupils achieving GCSE grades A*–C by UK region

Pupils in their last year of compulsory education in England, Wales and Northern Ireland take three core subjects: English, mathematics and science. The closest comparable equivalents in Scotland are the SCE Standard Grade awards. The differential performance of girls over boys (Figure 72a) has been widening for a decade at GCSE level. For the UK as a whole, the margin stands currently at 10 percentage points for pupils attaining the upper grades, A* to C, in all core subjects. The gap between the best and worst regions has also increased to 15 percentage points for boys and 18 points for girls. Education spending as a share of GDP is above the national average in the North-East, Yorkshire and Humber and West Midlands, yet their GCSE attainment levels are the lowest.

Figure 72b shows a high degree of correlation between mathematics and science attainments for every region except Wales and Scotland. Looking at the results for core subjects, Scotland scores best in each, but excels by the greatest margin in English. In addition, Scottish students typically take pole position in modern languages. Only in geography (South-West), history (South-East) and craft, design and technology (South-West) is Scotland's dominance broken.

Figure 72a: **Percentage of UK pupils achieving GCSE grades A* to C in all core subjects in 1999/2000**
Source: National Statistics, *Regional Trends 2001*, table 4.6.

Figure 72b: **Percentage of UK pupils achieving GCSE grades A* to C in each core subject in 1999/2000**
Source: As Figure 72a.

Figure 72a **Girls outscore boys easily in every UK region**

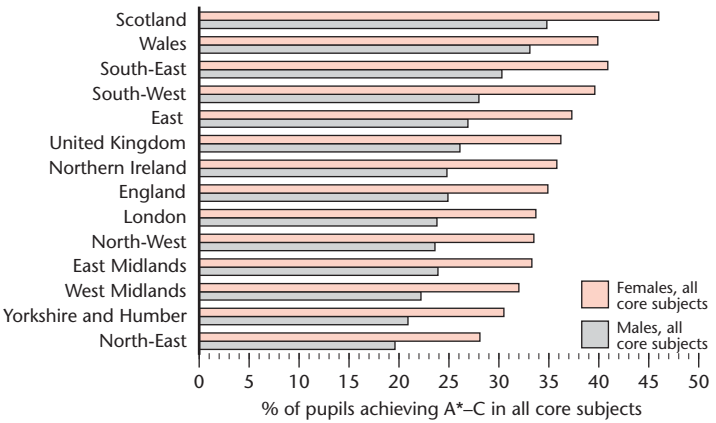
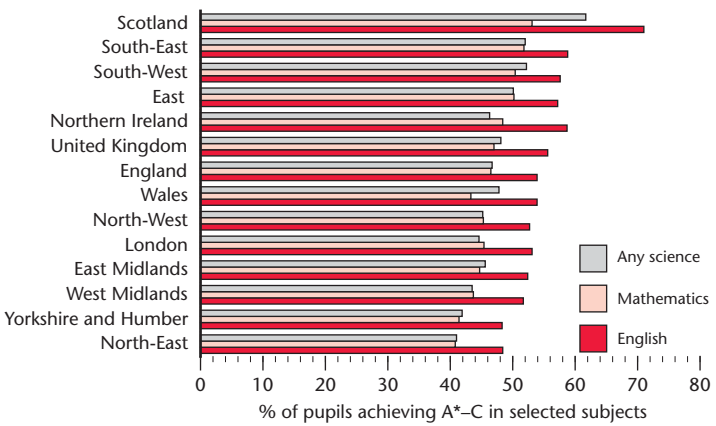


Figure 72b **Scotland takes the crown for GCSE-level attainment**



Density of policing by UK region

The presentation of Figure 73a presupposes a negative correlation of the two series, the density of policing by ordinary officers among the population and the frequency of household victimisation, but the reality is otherwise. Excluding the special circumstances of Northern Ireland, there is virtually no correlation. The troughs in the line for three regions – North-West, Yorkshire and Humber and London – can be explained by the significantly higher incidence of vehicle crime in these regions than elsewhere. Taken together, these observations suggest that denser policing may be associated with a lower frequency of vehicle crime. For all other forms of property crime, the number of police officers per head of population seems not to make a great deal of difference.

Neither does a greater intensity of policing appear to improve the clear-up rate for recorded crimes (Figure 73b). The percentage of crimes resolved by the police across the regions is virtually identical, except for London's low clear-up rate and the significantly better outcomes in Scotland and Wales. The differences are at their widest for violence against the person and sexual offences and at their narrowest for drug offences, criminal damage, theft and handling stolen goods.

Figure 73a: **Density of policing versus the average frequency of offence per household in 1999/2000**
Source: National Statistics, *Regional Trends 2001*, tables 9.4 and 9.8.

Figure 73b: **Density of policing versus the clear-up rate for all crimes, 1999/2000**
Source: National Statistics, *Regional Trends 2001*, tables 9.5 and 9.8.

Figure 73a **Would more police officers reduce the frequency of household crime?**

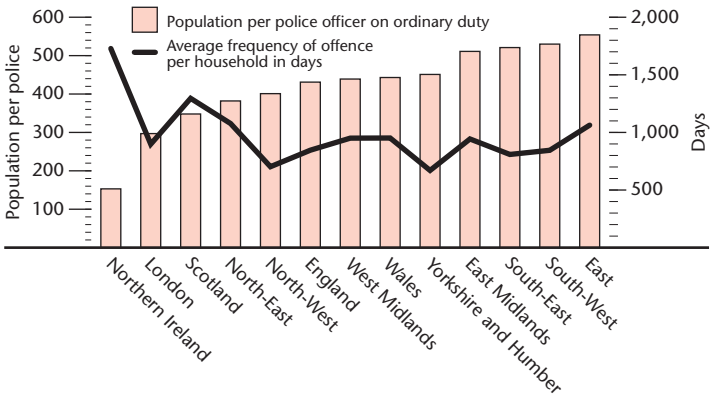
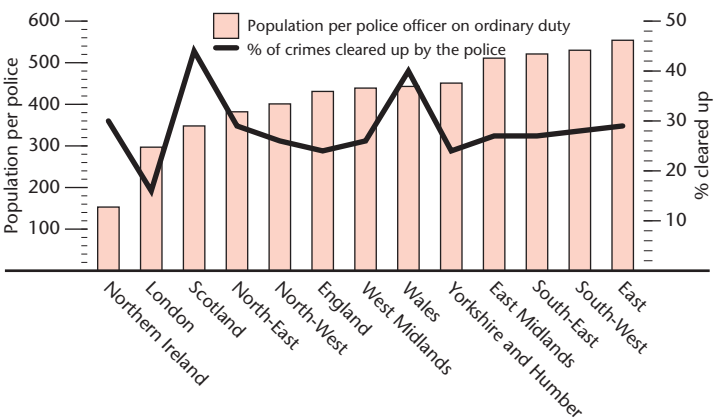


Figure 73b **Density of policing does not correlate well with clear-up rate for crimes**



Incidence of recorded crime by UK region

The regional allocation of public resources devoted to law, order and public safety strongly favours London (Figure 74a), but it would not be difficult to argue that London should be given a weighting twice as high as the UK average. London has a population density of more than 4,500 people per square kilometre, which is nine times greater than any other region, and far greater ethnic diversity than any other region. Ethnic minorities constitute 28 per cent of the London population, which is four times the national average. Even in a tolerant and predominantly law-abiding society, the threats and obstacles to peaceful coexistence are far greater in large cosmopolitan cities than elsewhere.

Areas of high population density, predominantly cities, are also renowned for organised criminal gangs. Gangs spawn a disproportionate level of criminal activity and merit a correspondingly determined response from law enforcers. Whereas London has a violent crime rate that is about 40 per cent higher than the average for England and Wales, it has 70 per cent more firearms offences and more than double the incidence of Class A (e.g. heroin, cocaine, crack, etc.) drug seizures. The same arguments for a more concentrated application of resources in large cities can be applied, but with less intensity, to Manchester, Birmingham, Leeds, Glasgow and Liverpool.

Figure 74a: **Comparison of public spending on law, order and public safety per head and the incidence of acquisitive and violent crime in the regions of Great Britain, 1999/2000**
Sources: HM Treasury, *Public Expenditure Statistical Analyses 2001–02*, tables 8.6b and 8.12; National Statistics, *Regional Trends 2001*, table 9.1.

Figure 74b: **Seizures of Class A drugs and recorded firearms offences per 100,000 population in UK regions, 1999/2000**
Source: National Statistics, *Regional Trends 2001*, tables 9.6 and 9.7.

Figure 74a **Incidence of crime appears to drive UK public spending**

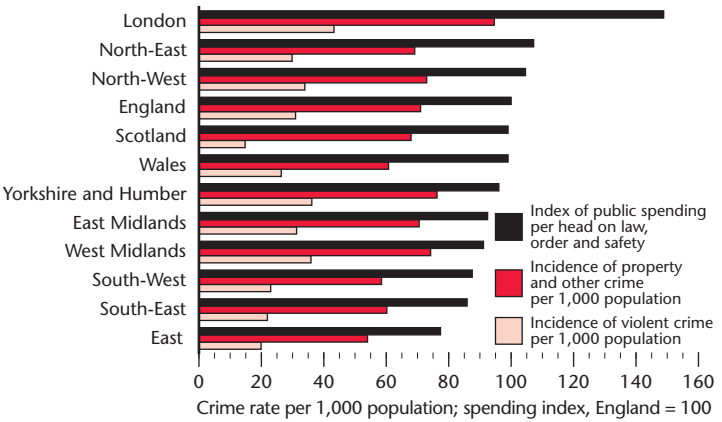
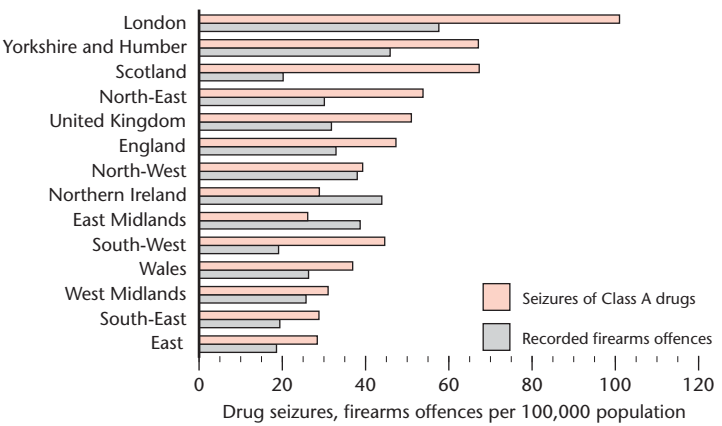


Figure 74b **Use of guns and drugs is concentrated in big cities**



Recorded crimes cleared up by the police by UK region

Dr Peter Wynarcyk's essay in the first section makes explicit reference to the economic desirability of a balance between the costs of criminal activity and the costs of incarceration. Whereas the similarities of crime rates between the other regions suggest that a reasonable balance has been struck in terms of crime deterrence, the apparent economic and social costs of crime in London greatly outweigh the costs of custodial sentences. The concentration in the capital of 'super-baddies', whose cost to society per annum exceeds the estimated average of £28,500 by a factor of ten (based on US studies), makes a strong case for a greater relative application of resources and a larger prison population. Indeed, the dissolution of criminal gangs may offer the only viable strategy for restoring the likelihood of prosecution for violent offences in London to the national average.

The significantly lower rates of crime detection in London (Figures 75a and 75b) suggest that this acts as an encouragement to criminal activity and reinforces the adverse comparisons evident in Figures 74a and 74b. The relative success of the Welsh police in clearing up all types of offences, but robberies in particular, provides a glimmer of hope that this success will one day be replicated by other regions.

Figure 75a: **Percentage of violent crimes against the person and sexual offences cleared up by the police in England and Wales, 1999/2000**
Source: National Statistics, *Regional Trends 2001*, table 9.5.

Figure 75b: **Percentage of robberies, burglaries and thefts cleared up by the police in England and Wales, 1999/2000**
Source: National Statistics, *Regional Trends 2001*, table 9.5.

Figure 75a **London's clear-up rate for violent crimes is pitiful**

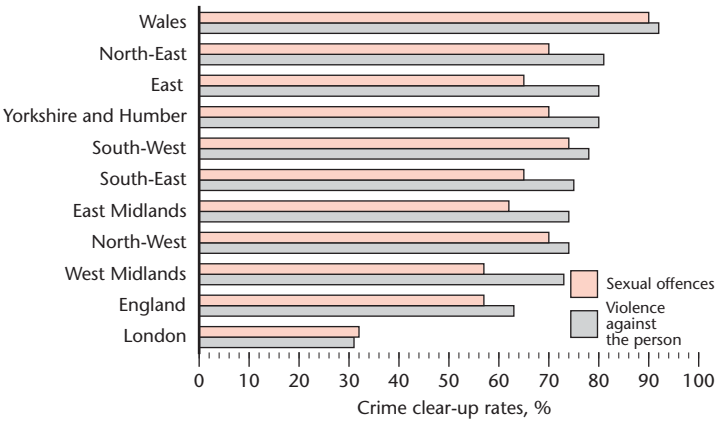
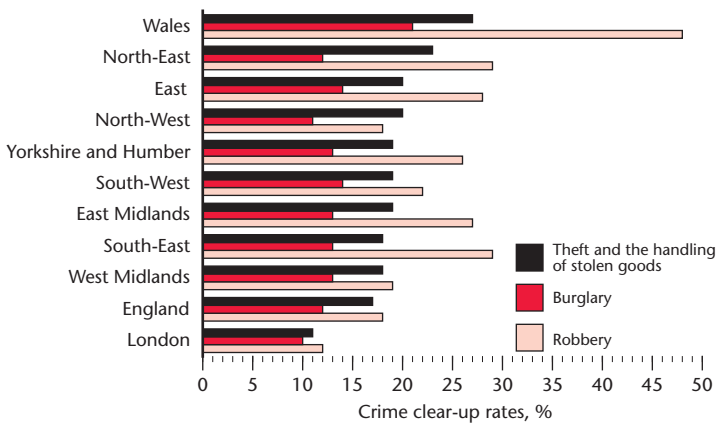


Figure 75b **What do the Welsh police know that the rest do not?**



CHARTS PART 7

MISCELLANY

The changing composition of the UK Civil Service

The army of civil servants that is charged with implementing government policy numbered 482,560 in April 2001, which is 3 per cent more than when the Labour government took office in 1997. However, its composition (Figure 76a) has altered significantly. In terms of numbers, rather than percentages, three departments or ministries have added 5,000 or more full-time equivalent staff since 1997. The Home Office heads the list, with massive proportionate expansion in the areas of immigration control and the passport agency. Education and Employment has gained over 5,000 civil servants, as has the Inland Revenue (after adjusting for the transfer of the Contributions Agency from the Department of Social Security). Other beneficiaries of the shuffle have been the regional bureaucracies as a result of the establishment of devolved assemblies in Scotland, Wales and Northern Ireland.

The two largest Civil Service battalions suffered staff reductions in Labour's first term: the Ministry of Defence shed more than 8,600 civil servants and the Department of Social Security a further 3,000. The net gain since July 1997, of 14,375 posts, is calculated exclusive of the Department of National Savings. Figure 76b shows a detailed breakdown of the deployment of civil servants throughout government.

Figure 76a: **Percentage changes in UK Civil Service staffing between July 1997 and April 2001, measured in full-time equivalents**
Source: www.civil.service.gov.uk/statistics/documents.

Figure 76b: **Composition of UK Civil Service staffing at 1 April 2001**
Source: As Figure 76a.

Figure 76a **Winners and losers in Labour's Civil Service reshuffle**

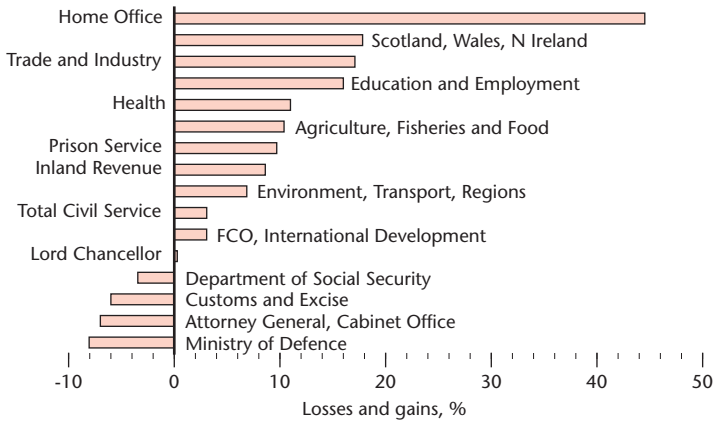
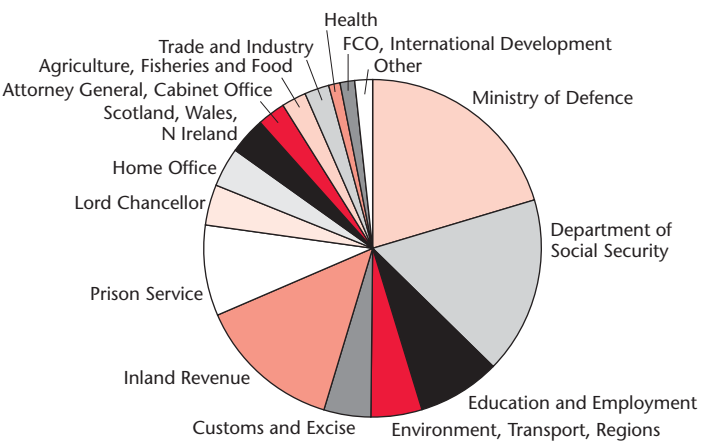


Figure 76b **There is one civil servant for every 122 of us**



Cumulative costs of UK tax and regulation changes since 1997

Nicholas Boys Smith, in a research paper for Politeia, has compiled a comprehensive account of the additional costs to UK businesses of tax and regulatory changes implemented by the Labour government since 1997. In particular, there have been three significant new business taxes: the windfall tax, the abolition of dividend tax credits for pension funds, and the replacement of Advanced Corporation Tax with advance payments for Corporation Tax. These have been partly offset by reductions in the rates of corporation tax and employers' National Insurance contributions, and other business tax cuts. Figure 77a emphasises the recurring impact of the pension fund tax change.

A vast array of new regulations (see Figure 77b) has come into force since 1997, whose impact is much more difficult to cost with precision. Some may object that the introduction of the National Minimum Wage (NMW) was merely a rectification of a previous injustice, but in comparative terms it still counts as an additional business cost. Taken together, the cumulative costs of labour market regulation, the NMW, changes to the operation of the welfare system, European and other regulations are estimated at £12.7 billion to May 2001. An updated estimate of the combined cumulative net costs to businesses of tax and regulation amounts to more than £50 billion by January 2002.

Figure 77a: **Cumulative costs of UK business tax changes in the 1997–2000 Budgets**
Source: N. Boys Smith, *No Third Way: Interfering government and its cost to business*, Politeia, 2001.

Figure 77b: **Cumulative employer costs resulting from government regulation, May 1997–May 2001**
Source: As Figure 77a.

Figure 77a **Cumulative effect on business of tax changes in the 1997–2000 Budgets**

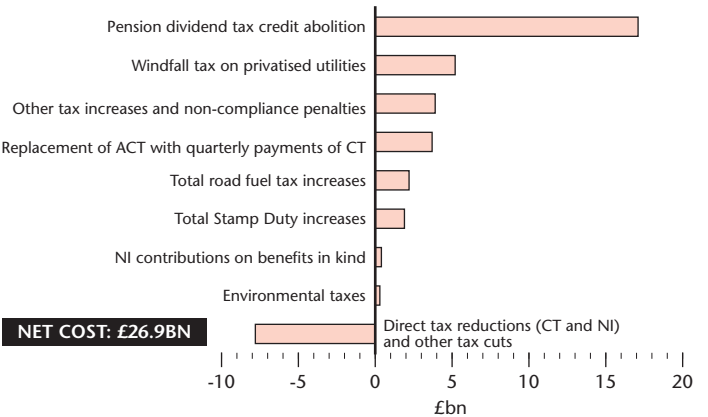
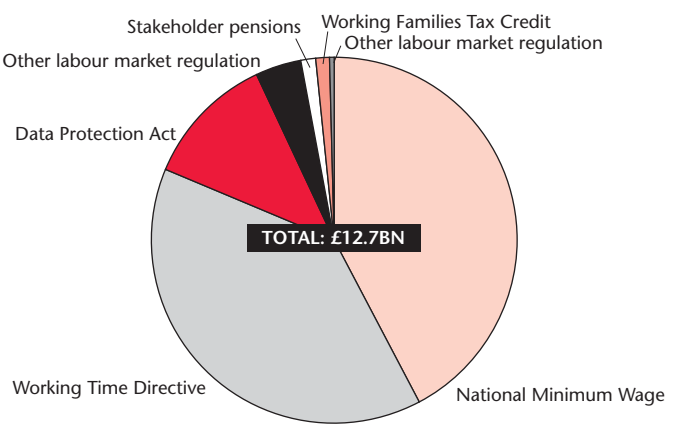


Figure 77b **Estimated employer costs resulting from government regulation, May 1997–May 2001**



Rules, regulations and the end of UK privatisation

Some regulations have a profound influence on economic behaviour and may impose huge additional costs by adding to the administrative burden or through the act of compliance. UK adoption of the EU Working Time Directive, limiting the maximum weekly hours of employees, will suffice as an example. However, there are also regulations that are individually trivial in their impact or cost, and yet in aggregate they also constitute a heavy burden. A quick trawl through the list of Statutory Instruments for 2001 reveals examples such as the Countryside Access (Draft Maps) Regulations, the Maternity and Parental Leave (Amendment) Regulations, the Electricity and Gas (Energy Efficiency Obligations) Order, and the Amusements with Prizes (Variation of Monetary Limits) Order. While these are seemingly innocuous, their numbers have been soaring, as Figure 78a attests.

On the other side of the account, the systematic transfer of public-sector corporations and other commercial assets to private ownership has virtually ceased. This is explained partly by the fact that the stock of commercial assets remaining under public-sector control is rather depleted and partly by a lack of enthusiasm for privatisation in government. Between 1984 and 1997 inclusive, UK privatisation proceeds totalled almost £68 billion. Since 1997, the total is £1.4 billion. Figure 78b documents the receding significance of UK privatisations in a global context.

Figure 78a: **Annual UK totals for new rules and regulations (Statutory Instruments only) for selected years**
Sources: D. Moller, 'Is Britain Being Strangled by Red Tape?', *Reader's Digest*, November 2001; www.hmso.gov.uk/si/.

Figure 78b: **The UK's percentage share in global privatisation proceeds since 1990**
Source: OECD, *Financial Market Trends*, no. 79, June 2001, p. 44.

Figure 78a **Annual UK totals for new rules and regulations (statutory instruments only)**

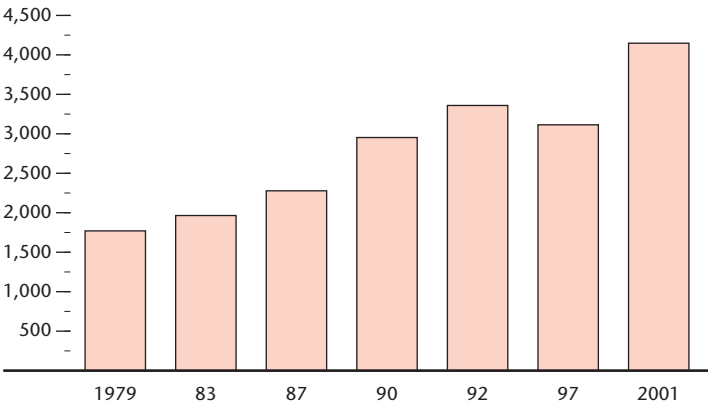
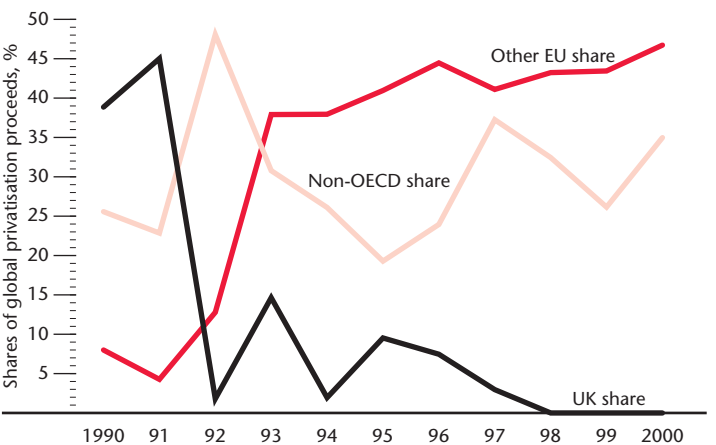


Figure 78b **The end of UK privatisation?**



Three centuries of UK central government taxation

The richness of UK historical data enables the present debate about the size of government to be set in a much broader context. Figure 79a combines ten-year snapshots of the ratio of central government tax revenues to GDP for the 19th century with annual data for the 20th century. Aside from the obvious war-induced spikes in the ratio, the most salient feature remains the upward ratchet of the tax burden from 1900 to the 1960s. Whereas the tax ratio was unwound after the Napoleonic wars in the early 19th century, in the aftermath of the two world wars UK governments consolidated the increased tax ratio to some extent. In 2001, the central government tax ratio is poised to break above the boundaries of its 30-year range.

In Figure 79b, the most striking feature of the annual composition of taxation since 1692 is the demise of land-based taxation. Land ownership constituted the basis for half of all central government taxation in the late 17th century, but land and assessed taxes were phased out in the 19th century. The one ever-present form of taxation has been customs and excise duties, representing 56 per cent of the total in 1692 and 40 per cent (if VAT is included) in 2001. Personal income taxes were introduced in the early 19th century, but did not come into their own until the early 20th century. Corporate income taxes are newer still, arriving only at the outset of World War II.

Figure 79a: **UK central government tax revenues as a percentage of GDP since 1801**
Sources: B. R. Mitchell, *Abstract of British Historical Statistics*, Cambridge University Press, New York, 1976; National Statistics Statbase, www.statistics.gov.uk/statbase/. UK data codes from *Financial Statistics*, tables 2.1C and 2.1D.

Figure 79b: **Composition of UK central government taxation by broad category since 1692**
Sources: As Figure 79a.

Figure 79a **The UK tax ratchet in action over two centuries**

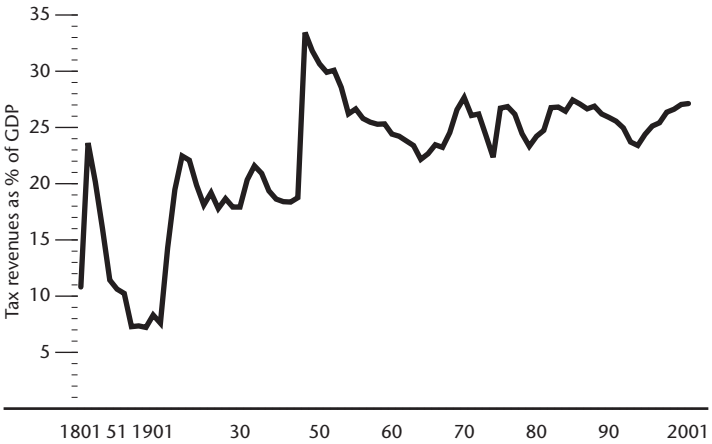
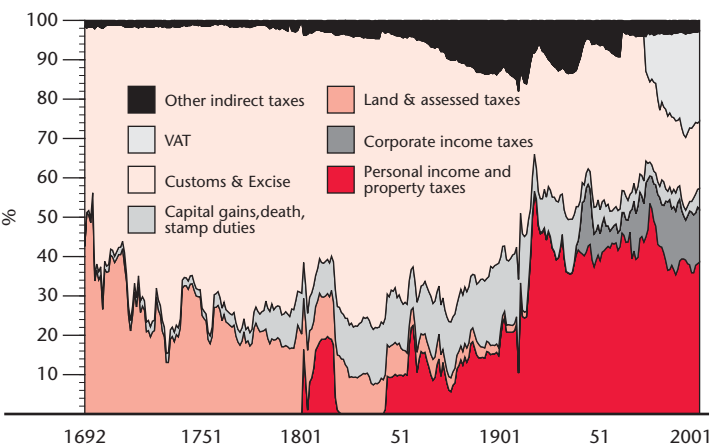


Figure 79b **Personal income tax is a 20th-century phenomenon**



The long perspective on UK public spending and employment

It is a sobering thought for today's politicians that the prevailing size and scope of government activity in the economy are similar to those at the height of World War I (Figure 80a). The Conservative government that took office in 1979 was the first successful attempt of the 20th century to dismantle public-sector influence in the aggregate. Nevertheless, there is still a deeply ingrained expectation among large sections of the UK population that government should operate as the primary problem-solving agency. This predisposes governments to accept new roles and responsibilities, to provide subsidies and reliefs to injured parties and to mitigate every form of disaster regardless of whether private insurance is available. Without a determination to resist the rising tide of expectation among the general public for greater powers of regulation and intervention, the share of government spending in GDP is likely to resume its long-standing upward trend. Another pertinent indicator of public-sector economic influence is the share of public-sector jobs (Figure 80b). After a sustained 20-year decline, a modest increase in the employment share is probable.

Figure 80a: **General government expenditure as a percentage of GDP**
Source: National Statistics Statbase, www.statistics.gov.uk/statbase/, dataset ST30531.

Figure 80b: **Share of UK public-sector jobs in total workforce jobs, percentage**
Sources: National Statistics Statbase, www.statistics.gov.uk/statbase/, and Economic Trends no. 571, June 2001, pp. 35–50. UK data codes: FHCE, FHCB, FHBW and CGYL.

Figure 80a **The long upward drift of UK public spending**

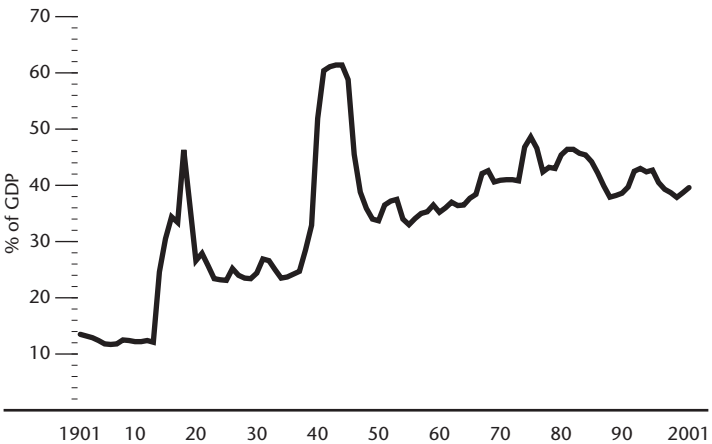
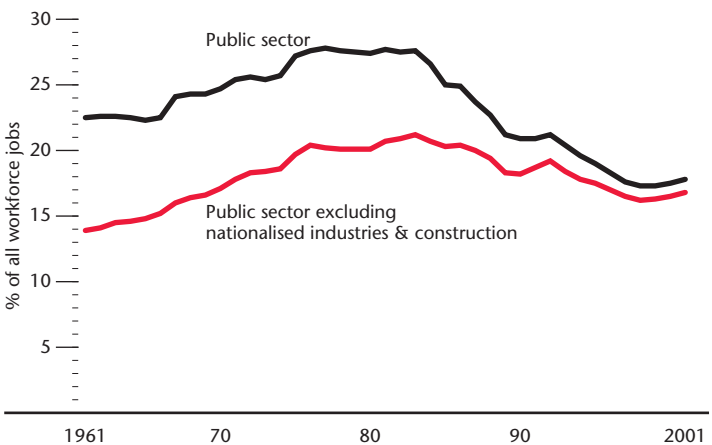


Figure 80b **20-year decline in UK public sector jobs share at an end?**



A long international comparison of the public employment share

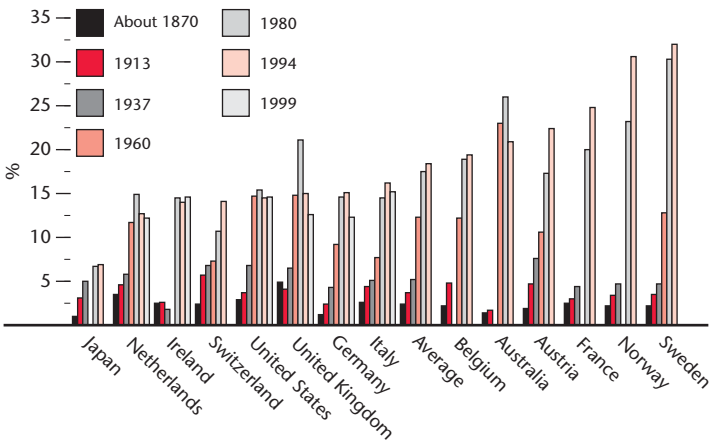
Must government always get bigger? Is it the ambition, or even destiny, of all governments to become all embracing, comprehensive, prescriptive and directive? Figure 81 provides some frightening illustrations of overgrown government. When the government becomes such a significant source of personal income, as employer or as provider of benefits and pensions, as in Norway and Sweden today, there is a risk that local private entrepreneurs will give up and move out, leaving behind a command economy. Remarkably, the comparatively low public-sector employment ratios for 1913 and 1937 included sizable proportions of military personnel.

The UK story has been one of the more encouraging in western Europe. The effect of privatisation and the transfer of elements of the public-sector workforce into the private sector (e.g. local council services, health trusts and the former polytechnics) have reduced the public employment share from 21 per cent in 1980 to 13 per cent in 1999. Indeed, the UK now boasts a smaller direct public employment share than the US, on account of the much larger complement of US military personnel. (The Department of Defense had a head count of over 644,000 in 2000.) On the other hand, Japan seems able to manage with a public employment share of only 7 per cent.

Figure 81: **Public-sector employment as a percentage of total employment since 1870**

Sources: V. Tanzi and L. Schuknecht, *Public Spending in the 20th Century: A global perspective*, Cambridge University Press, New York, 2000, table II.2; OECD, *Public Management Service*, 2001.

Figure 81 **The very long perspective on public employment share**



ABOUT THE IEA

The Institute is a research and educational charity (No. CC 235 351), limited by guarantee. Its mission is to improve understanding of the fundamental institutions of a free society with particular reference to the role of markets in solving economic and social problems.

The IEA achieves its mission by:

- a high-quality publishing programme
- conferences, seminars, lectures and other events
- outreach to school and college students
- brokering media introductions and appearances

The IEA, which was established in 1955 by the late Sir Antony Fisher, is an educational charity, not a political organisation. It is independent of any political party or group and does not carry on activities intended to affect support for any political party or candidate in any election or referendum, or at any other time. It is financed by sales of publications, conference fees and voluntary donations.

In addition to its main series of publications the IEA also publishes a quarterly journal, *Economic Affairs*, and has two specialist programmes – Environment and Technology, and Education.

The IEA is aided in its work by a distinguished international Academic Advisory Council and an eminent panel of Honorary Fellows. Together with other academics, they review prospective IEA publications, their comments being passed on anonymously to authors. All IEA papers are therefore subject to the same rigorous independent refereeing process as used by leading academic journals.

IEA publications enjoy widespread classroom use and course adoptions in schools and universities. They are also sold throughout the world and often translated/reprinted.

Since 1974 the IEA has helped to create a world-wide network of 100 similar institutions in over 70 countries. They are all independent but share the IEA's mission.

Views expressed in the IEA's publications are those of the authors, not those of the Institute (which has no corporate view), its Managing Trustees, Academic Advisory Council members or senior staff.

Members of the Institute's Academic Advisory Council, Honorary Fellows, Trustees and Staff are listed on the following page.

The Institute gratefully acknowledges financial support for its publications programme and other work from a generous benefaction by the late Alec and Beryl Warren.

The Institute of Economic Affairs
2 Lord North Street, Westminster, London SW1P 3LB
Tel: 020 7799 8900
Fax: 020 7799 2137
Email: iea@iea.org.uk
Internet: iea.org.uk

Other papers recently published by the IEA include:

WHO, What and Why?

Transnational Government, Legitimacy and the World Health Organization

Roger Scruton

Occasional Paper 113; ISBN 0 255 36487 3

£8.00

The World Turned Rightside Up

A New Trading Agenda for the Age of Globalisation

John C. Hulsman

Occasional Paper 114; ISBN 0 255 36495 4

£8.00

The Representation of Business in English Literature

Introduced and edited by Arthur Pollard

Readings 53; ISBN 0 255 36491 1

£12.00

Anti-Liberalism 2000

The Rise of New Millennium Collectivism

David Henderson

Occasional Paper 115; ISBN 0 255 36497 0

£7.50

Capitalism, Morality and Markets

Brian Griffiths, Robert A. Sirico, Norman Barry & Frank Field

Readings 54; ISBN 0 255 36496 2

£7.50

A Conversation with Harris and Seldon

Ralph Harris & Arthur Seldon

Occasional Paper 116; ISBN 0 255 36498 9

£7.50

Malaria and the DDT Story
Richard Tren & Roger Bate
Occasional Paper 117; ISBN 0 255 36499 7
£10.00

A Plea to Economists Who Favour Liberty: Assist the Everyman
Daniel B. Klein
Occasional Paper 118; ISBN 0 255 36501 2
£10.00

Waging the War of Ideas
John Blundell
Occasional Paper 119; ISBN 0 255 36500 4
£10.00

The Changing Fortunes of Economic Liberalism

Yesterday, Today and Tomorrow

David Henderson

Occasional Paper 105 (new edition); ISBN 0 255 36520 9

£12.50

The Global Education Industry

Lessons from Private Education in Developing Countries

James Tooley

Hobart Paper 141 (new edition); ISBN 0 255 36503 9

£12.50

Saving Our Streams

The Role of the Anglers' Conservation Association in Protecting English and Welsh Rivers

Roger Bate

Research Monograph 53; ISBN 0 255 36494 6

£10.00

Better Off Out?

The Benefits or Costs of EU Membership

Brian Hindley & Martin Howe

Occasional Paper 99 (new edition); ISBN 0 255 36502 0

£10.00

Buckingham at 25

Freeing the Universities from State Control

Edited by James Tooley

Readings 55; ISBN 0 255 36512 8

£15.00

Lectures on Regulatory and Competition Policy

Irwin M. Stelzer

Occasional Paper 120; ISBN 0 255 36511 X

£12.50

Misguided Virtue

False Notions of Corporate Social Responsibility

David Henderson

Hobart Paper 142; ISBN 0 255 36510 1

£12.50

HIV and Aids in Schools

The Political Economy of Pressure Groups and Miseducation

Barrie Craven, Pauline Dixon, Gordon Stewart & James Tooley

Occasional Paper 121; ISBN 0 255 36522 5

£10.00

The Road to Serfdom

The Reader's Digest *condensed version*

Friedrich A. Hayek

Occasional Paper 122; ISBN 0 255 36530 6

£7.50

Bastiat's *The Law*
Introduction by Norman Barry
Occasional Paper 123; ISBN 0 255 36509 8
£7.50

A Globalist Manifesto for Public Policy
Charles Calomiris
Occasional Paper 124; ISBN 0 255 36525 X
£7.50

Euthanasia for Death Duties
Putting Inheritance Tax Out of Its Misery
Barry Bracewell-Milnes
Research Monograph 54; ISBN 0 255 36513 6
£10.00

Liberating the Land

The Case for Private Land-use Planning

Mark Pennington

Hobart Paper 143; ISBN 0 255 36508 x

£10.00

To order copies of currently available IEA papers, or to enquire about availability, please contact:

Lavis Marketing
73 Lime Walk
Oxford OX3 7AD

Tel: 01865 767575
Fax: 01865 750079
Email: orders@lavismarketing.co.uk

The IEA also offers a subscription service to its publications. For a single annual payment, currently £40.00 in the UK, you will receive every title the IEA publishes across the course of a year, invitations to events, and discounts on our extensive back catalogue. For more information, please contact:

Subscriptions
The Institute of Economic Affairs
2 Lord North Street
London SW1P 3LB

Tel: 020 7799 8900
Fax: 020 7799 2137
Website: www.iea.org.uk