

4. Growing productivity gradually – tax services

Tax-raising departments and agencies fulfil a unique role in any national or federal government by generating the inflow of financial resources upon which the work of every other department and policy sector depends (Osborne, 2002). So, maximizing the efficiency and effectiveness of tax-raising agencies has been a high priority for all liberal democratic governments for many decades. Yet taxation also essentially involves the state in directly requisitioning resources from firms, individuals and consumers, in what seems to most citizens and businesses to be an overtly coercive mode. Two key implications have followed for the operations of tax departments. On the one hand, requisitioning creates strong pressures for tax law to be absolutely clear-cut, and for its implementation to be comprehensive, strongly equitable (perhaps even rigid), and as exact (near flawless) in implementation as is achievable. On the other hand, there are also strong political and social limits upon exactly how vigorous or fine-grained the efforts made towards collecting tax can be, constraints that often shape tax departments' ability to develop their own productivity.

We begin with a short survey of the essential common characteristics of taxation systems in liberal democracies and advanced industrial states, showing how there are some fundamental principles that underlie both the strong and direct political control of tax policy, and the often distinctive organizational cultures of tax-raising departments. The second section shows in more detail how these imperatives and constraints have worked out in modern UK government, where a single tax-raising department has always been one of the largest administrative organizations across the country taken as a whole. Section 4.3 then shows in detail how the administration of UK taxes has been marked by moderate but significant productivity growth, especially in the decade from 1999. Finally, we give an interim review of which factors seem to have been most associated with Britain's improvements in tax system productivity.

4.1 TAXATION SYSTEMS AND THE MODERN STATE

Securing a tax base has foundational importance for any government if it is to function over any long period. The US political economist Mancur Olson (1993) tried to sum up this effect by characterizing any enduring state as a ‘stationary bandit’. Historically, roving bandits (such as robber barons, raiding Mongol tribes from the steppes of Asia, or invading conquistadores) can have great success against less vigorous, less technologically advanced or just more settled people by sweeping in, breaking things (including the governance systems), looting and levying penal taxation, and then moving on, leaving an economic desert behind them. But any ruling elite that becomes stationary, fixed in one place, confronts the need to foster the economic development of its own domain. However much it adheres to a revenue-maximization aim, a now stationary government must confront the problem that immiserizing its population will over time starve their state of funding also, leaving it vulnerable in turn to take-over by its more prosperous, militarily advanced or technically advanced neighbours. So, longer-term revenue maximization turns on stimulating economic growth, by adjusting taxation to levels optimal for societal development.

In a somewhat similar vein, the political theorist Margaret Levi (1992) stressed that even a ‘predatory’ state interested in extracting the maximum taxation from its subjects confronts acute choices. Coercive tax collection is expensive and historically ineffective, often entailing the use of sanctions that are actively counterproductive for future revenue growth. For example, the British Empire used an ill-fated ‘hut tax’ for many decades in its African colonies – here the sanction for a family being unable to pay the tax was to burn down their hut, impoverishing the inhabitants further. Similarly, concentrating taxation on marketized (and monetized) transactions creates strong incentives for farmers to remain stuck in a subsistence agriculture mode, and for craftspeople to limit the scale of their activities to informal (or ‘black market’) exchanges, or payments in kind. This effect is a recipe for social stagnation, and one that some critics argue is still depressing growth across many developing countries, in the form of bureaucratic corruption (Shleifer and Vishny, 1998, Chs 4–5). Above all, Levi argues that coercively collecting taxes is administratively very costly, consuming relatively high proportions of revenues raised on the collection task itself, as with the 25 per cent share commonly assigned to ‘tax farmers’ in pre-industrial times. It is also ineffective, leading to the extensive suppression of information and evasion of payments by taxpayers.

By contrast, modern liberal democracies have developed much lower-

cost taxation systems based on what Levi terms ‘quasi-voluntary compliance’ (Levi, 1992; Levi et al., 2008). Essentially the idea here is that the state maintains ‘just enough’ direct capacity to raise taxes to ensure that tax evasion is not a publicly sustainable option for individuals or companies due to pay tax. The role of government is not to directly compel the whole eligible population to pay taxes, but rather to ‘hold the ring’ so that the large majority who do pay taxes in a ‘quasi-voluntary’ mode can be confident that attempted evaders will be caught and punished. As a result most citizens and companies do not seek to evade payment of taxes, and will only follow legal options for tax minimization. This leaves the tax agency to focus concentrated attention on non-compliant individuals and firms, thereby providing assurance to compliant taxpayers that they are not ‘suckers’ bearing a disproportionate share of payments. Quasi-voluntary compliance would rapidly collapse if (most) tax evaders are not caught and controlled by the tax agency, since citizens at large would otherwise be encouraged to try free-riding – and once such a cycle gets started it is costly indeed to counteract.

In both liberal democracies and other forms of state, the extent of low-cost compliance and the resources needed to ensure it are both highly dependent upon the overall legitimacy of the government. Adopting visible taxes that are seen as unfair can quickly imperil the state’s capacity to function, even in modern societies. For instance, the UK has seen two attempts to introduce a ‘poll tax’ levied at a flat rate per head of the population, separated by many hundreds of years. On both occasions it proved a deeply unpopular notion – because it meant that rich and poor citizens alike paid the same level of tax. The first occasion was in 1377–81 when monarchs introduced the original poll tax, eventually provoking opposition known as the 1381 Peasants Revolt that led an insurgent army to nearly topple the king. The revolt’s leader was eventually killed and the uprising suppressed, but the tax was also withdrawn and not levied again for 300 years, and only then in a more graduated way. The second occasion was in the late 1980s when Margaret Thatcher’s government introduced a flat rate ‘community charge’ to finance local governments, a device that almost everyone except government ministers identified as a poll tax. Within two years the numbers of people refusing to register or pay the tax mushroomed so fast that the payment burdens on the remaining compliant citizens grew rapidly. Tax protests spiralled, climaxing in a demonstration that became a riot in Trafalgar Square (Butler et al., 1994). In 1990 Margaret Thatcher was deposed as Prime Minister by the ruling Conservative Party’s MPs, and her successor in office immediately abolished the poll tax in favour of a graduated ‘council tax’.

Similarly, in spring 2000, a Labour government led by Tony Blair was

caught by surprise after a protest against an ‘escalator’ arrangement for automatically increasing taxes on petrol and diesel led to lorry drivers and farmers blockading oil depots and endangering the country’s fuel supplies. The escalator rises in fuel duty were slackened and the government had to take extensive new measures to prevent any future fuel blockade from becoming similarly effective.

Although tax resistance to unpopular or unfair taxes can still grow quickly, the more normal picture is that elected governments who are responsive to public opinion retain a high level of legitimacy. As a result, governments in well-established liberal democracies have been able to develop taxation systems that are remarkably efficient compared to earlier models, and that especially allow for a remarkable minimization of the scale and intrusiveness of tax-raising operations. Three key steps are needed here:

1. *Relying on tax bases that rise automatically with inflation*, so that a given tax rate will deliver rising money amounts of taxation without a need to increase the tax rate – because increasing tax *rates* is politically visible and unpopular. Income taxes and general taxes on consumption, such as value-added tax (VAT) or goods and services tax (GST), both have this key characteristic, which is why their importance as funding sources has tended to grow strongly in modern times. In acute contrast, most property taxes do not meet this criterion, because although property values do indeed rise with inflation (and often by more than inflation), complex revaluation exercises are normally required to record these increases. Such exercises are administratively expensive to conduct, and hence infrequent. They are also always politically controversial, because long-delayed revaluations of property values can often have drastic implications for what residents or businesses have to pay.
2. *Getting companies to administer tax payments* for the government, rather than asking final consumers or individuals to do so, hugely cuts government costs. Hence in most countries income taxes and social security contributions are collected through ‘pay as you earn’ (PAYE) systems, where employers dock the taxes due from salaries before they are paid to their staff. Requiring that government, the employer and employee are all notified, and making companies file detailed accounts of their tax payments, greatly reduces the risk of tax evasion by creating publicly visible information (Kleven et al., 2009). Similarly, flat rate consumption taxes like VAT, GST and excise taxes are paid automatically to government by (larger) businesses, again minimizing fraud or evasion levels. Companies and other ‘interme-

diary' organizations can also far better insure against the risks and costs of tax administration than can individual citizens, making this a politically optimal choice for rational politicians (Horn, 1995). And unless tax rates are altered, citizens may not be clearly aware of how much 'invisible' taxes they are paying from year to year..

Some other flat rate or generally applicable business taxes (such as employment taxes levied per employee) also qualify under the heading of allocating tax payment obligations to companies wherever possible. Similarly a few substantial specific excise taxes are paid by just large businesses – such as the substantial petrol and diesel taxes in the UK, where an amount close to £27 billion was expected to be paid to Her Majesty's Revenue & Customs (HMRC) principally by just seven or eight major oil-retailing firms (Adam and Browne, 2011, p. 4).

But corporation taxes in many countries do not qualify here. These taxes are often littered with tax exemptions ('tax preferences' in US terminology), and they are dependent on companies' variable and distinctive performances and policies, which must be individually understood and established. As a result, business taxes of this kind can often prove relatively expensive to collect – for instance, because large companies can 'transfer price' assets between countries in hard-to-follow ways, and hire expensive lawyers to turn major disputes into protracted legal cases.

3. *Relying on general tax bases*, applied across the economy as a whole, is strongly recommended by public finance theory because it minimizes any subsequent distorting of the pattern of economic activity as people or firms seek to avoid paying tax. In administrative and political terms, the more general a tax is, and the earlier or more preemptively it is collected, the less visible it becomes, the less feasible it is for citizens to mobilize against paying it and the lower the transaction costs of collecting it. Hence PAYE income tax systems have tended over time to become flatter with fewer grades of tax due and an emphasis on reducing the number of tax exemptions or 'preferences' in the tax code – although progress here has been stuttering at best. Similarly, automatic sales taxes like VAT or GST have tended to grow at the expense of more economically distorting excise taxes levied on particular individual goods (such as petrol and diesel, luxury goods or imports). One or two small countries have moved towards a 'flat tax' levied at the same rate on everything (supposed to improve economic efficiency), but no large economies. However, it is nonetheless true that in the UK the basic rate of income tax and the VAT rate have tended to converge over the last two decades (Kelly, 2011).

These developments mean that in advanced industrial societies tax systems have become increasingly effective over time, but simultaneously less controversial to administer. The rather misleadingly labelled ‘tax productivity’ rate measures how much tax is collected as a percentage of the theoretical tax liability of businesses and individuals, and should normally be high for mature liberal democracies with long-lived tax systems (Becker and Mulligan, 1998). This is an acute contrast to countries with still developing tax competencies, where tax evasion levels can be very high, and to ‘failing states’ where government often collects only a minority of the theoretical taxes due. The efficiency of modern tax-raising systems is best dramatized in rapidly growing economies – such as those of South Korea, Malaysia and in recent years China (whose tax efficiency is underpinned by drastic punishments for evasion). Here if growth is X per cent, then it is common to see tax revenues growing annually by more than X per cent. For example, between 2001 and 2007 Malaysia’s tax receipts grew by 70 per cent in six years (Taha and Loganathan, 2008, p. 65).

Three factors shape how tax departments operate at a detailed level: how information is managed, the distinctive bureaucratic culture of tax agencies and how compliance costs for citizens and firms are minimized. We discuss these in turn.

Acquiring and Acting on Information

This is critically important for most operations of government, but never more so than for taxation. Governments need two different kinds of tools here (Hood and Margetts, 2007): (1) *detectors*, for finding out information about society, in this case about incomes, sales of goods and services, company profits, inheritances, etc., and (2) *effectors*, for getting things done, for implementing actions in society.

We can cross-reference these categories against five main mechanisms at government’s disposal:

- *Nodality*, the fact that (legitimate) governments occupy a central position within the information systems of their society, where other social actors tell them things for free (e.g., that someone is not paying taxes) and pay special attention to government messages (e.g., a notice that they must pay tax by the end of the financial year).
- *Authority*, the legal and regulatory basis that allows governments to compel citizens or firms to do things (e.g., file a tax return declaring their incomes or sales), and allows governments to take actions (e.g., raid a non-compliant firm for a tax investigation and seize its data and papers).

- *Treasure*, especially public expenditure, but also the state's ownership of other resources (like buildings or land, or sometimes the ability to conscript labour, as with compulsory service in the armed forces). Treasure allows governments to hire officials and to spend money (e.g., informing citizens of their tax liabilities and deadlines via TV or internet adverts).
- *Organization*, denotes the massing of officials into basic bureaucracies (such as a national government tax department) so as to process information from detectors (e.g., scrutinizing tax returns and issuing tax notices) and to concert action via effectors (e.g., pursuing non-payers or launching investigations of risky-looking taxpayers).
- *Expertise*, denotes going beyond basic 'machine bureaucracy' set-ups so as to develop highly specialized expertise and high-level artefacts, such as sophisticated tax IT systems for auto-handling online submissions of tax forms, or data-mining to identify non-compliant or high-risk taxpayers.

Putting together the five first letters of the headings above, we get the acronym NATOE, which serves as a handy mnemonic of the range of tools at government's disposal.

It would be easy to conclude that the primary tool at the disposal of any tax agency is authority, specifically the tax code and the legal powers that it gives to the collecting department to compel the submission of information and the payment of taxes assessed. The secondary tools would then be organization, especially the scale of personnel at the department's disposal, and treasure, its ability to spend to support that organization. Yet in an age of quasi-voluntary compliance, there is a strong case for arguing that it is the nodality of the tax agency that is crucial, its staff's ability to secure information from a wide range of societal sources and to secure attention for department messages in return; plus the expertise embodied in its ICT systems for correctly identifying and monitoring taxpayers according to their risk status. Table 4.1 shows a listing of the key internal and outward-facing tasks confronting modern tax departments.

A McKinsey benchmarking study (Dohrmann and Pinshaw, 2009) found large variations in the percentage of total spending by functional area of tax administration spending across nine mainly OECD countries, shown in Table 4.2. The most consistently sized activities were the proportion of resources devoted to examinations and collections. Taxpayer service and tax submissions costs showed the greatest variations across countries, although this might also reflect variations in how these terms were understood across different departments. (As in other consultancy

Table 4.1 The key tasks of taxation departments

	Organizational and Managerial Tasks	Service Delivery and Operational Tasks
Internal-facing and corporate tasks	Planning, budgeting and resource allocation Monitoring and evaluation Coordination of department Financial management Personnel management (especially talent development and retention of skilled inspectors) ICT management Asset and property management Internal audit and control	Fiscal studies and research Policy development and liaison with stakeholders New tax legislation and tax code updating Monitoring tax liabilities and information levels Intelligence operations Collecting information from third parties
Outward-facing tasks	Risk management policies and settings Managing legal actions and debt recovery efforts Anti-corruption External relations	Registering new taxpayers Taxpayer services, especially activities building up voluntary compliance, including: <ul style="list-style-type: none"> – developing and operating easy-to-use online services; – management and design of the department website; – design of tax forms and customer communications; – taxpayer education; – assisting taxpayers in difficulties; – policies towards tax intermediaries Processing declarations and payments Monitoring of tax withholders and collection agents Risk analysis and ‘customer segmentation’, leading to: <ul style="list-style-type: none"> – targeting of investigations and audits; – search and seizure actions; – launching legal actions and prosecutions Debt management and recovery of arrears Handling of appeals and complaints

Source: Own research, plus Dunleavy et al. (2003); Gill (2003); Hasseldine (2010, Table 1, p. 4).

Table 4.2 Shares of total administrative costs spent on four main functional areas by nine national tax departments

Function	Percentage of total administrative spending by tax departments			
	Median	Minimum	Maximum	Range
Examinations	36	28	46	18
Taxpayer service	24	13	52	39
Submissions	24	1	28	27
Collections	17	9	26	15

Source: Dohrmann and Pinshaw (2009).

reports, it is often hard to tell how precisely variable labels were defined to respondents here.)

Distinctive Bureaucratic Culture of Tax Agencies

The bureaucratic culture of tax departments and agencies is characteristically strongly shaped by their unique tasks within the government apparatus. Because they are essentially requisitioning resources from firms and citizens, tax departments always operate in a strongly legalistic way. Their every action has to be related to specific powers given by the legislation and the tax code, to which they must stick exactly. Tax departments are usually set up with a measure of bureaucratic independence in operational matters from direct control by the ministers or presidential cabinet running the government, so that they are in a position to defend (mostly) the integrity of existing systems and structures. But tax *rates* are directly set by top government leaders and legislation, while the tax department's internal operations are often closely supervised by the legislature. Hence officials themselves proclaim that there is much less delegation of discretion to professional staffs in tax bureaucracies than in other departments. Rule of law considerations are paramount.

However, tax departments may also operate a more professional or discretionary style when dealing with large companies and big players in income tax terms, partly because the taxpayers here deploy strong legal and tax expertise that is complex to manage and match, and the legal and enforcement costs can also rapidly mount up – placing more of a premium on negotiations. In the UK there were scandals in 2008–12 about top-level deals being cut between HMRC top officials and lawyers (Osborne, 2011). Campaigns about company non-payment of taxes by UK Uncut and other

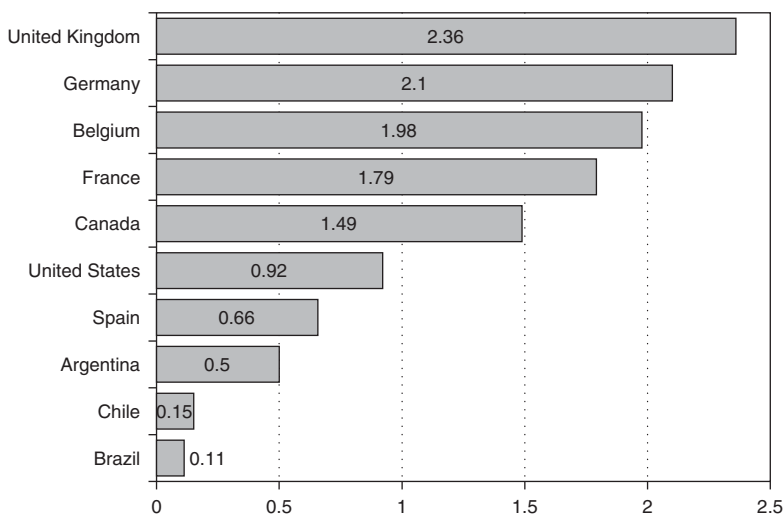
critical groups have called into question the reality of ‘rigid’ tax administration for at least some macro-negotiations between tax officials and major firms. One difficulty in assessing the real state of affairs is that in the UK and USA, tax bureaucracies are also deeply conservative (almost paranoid) about retaining data and information they have collected. Tax information about the incomes of individuals, company profits information and the tax compliance status of firms and people is highly sensitive in most Western countries – but not in Norway where tax returns are public documents.

In terms of their size, national tax departments are usually large or very large organizations when set against the landscape of other government agencies or even major firms in the country as a whole. Their essentially coercive role and large size both mean that they are characteristically organized as what Mintzberg (1983) terms a ‘machine bureaucracy’, with an emphasis upon the complete standardization of procedures, which are then comprehensively and impartially implemented. Of course, many subsections within tax departments function more on the lines of professional bureaucracies, especially the specialist staff (in ICT or legal services) and teams of elite tax investigators. But in both personnel and administrative cost terms the dominant ‘operating core’ of tax departments (in Mintzberg’s terms) remains the field offices and services covering the whole country (usually in regions). Also included here are the ICT services supporting them – although IT functions are often outsourced to system integrator IT corporations in the modern period (Dunleavy et al., 2008, Ch. 6).

The decline of large manufacturing industries in many Western countries has tended to emphasize even more than before the large size of tax departments. In 1999 at the start of the main period we shall focus on here, Figure 4.1 shows that in advanced industrial countries around 1.5 to 2 people per 1000 population worked for national tax departments. In somewhat less industrialized countries with less of an effective mass taxation system, the numbers of staff were proportionately much lower. The USA is unusual amongst national agencies in having proportionately fewer staff – but many important taxation functions also reside at the level of the 50 states in the USA, which are not counted here.

One of the by-products of working in a large, secretive organization that is semi-detached from the rest of government, and having a job that is often unpopular with other citizens, is that tax department staff can often be rather inward-looking in their culture and attitudes. They typically join the department at a young age and maintain lifetime careers within it, in the UK with much less of the inward and outward movement of staff that increasingly characterizes other sections of government. In the USA, the

Figure 4.1 The number of tax staff per 1000 people in the national population, in the late 1990s



Source: Gallagher (2005, Table 8, p. 138).

Internal Revenue Service (IRS) is so unpopular with citizens at large that (possibly apocryphal) stories amongst federal officials suggest that its staff quite frequently marry each other, and rarely reveal to other people their precise jobs within government.

Historically, tax agencies developed a style of communicating with their grassroots ‘customers’ that is imperative, rigid and unresponsive, with infrequent contacts – often just once a year with self-assessing taxpayers and small firms. The emphasis upon impartial implementation characteristically produces dense, legalistic prose in letters and forms, inflexibility in applying payment deadlines and an enforcement style that can look unsympathetic to individuals’ situations (Dunleavy et al., 2003). This can create particular problems where (as in Britain) the tax department is later assigned responsibility for paying out subsidies for working people (or families with children) via tax credits linked to low household incomes. Such subsidies can be quite critical for family living standards and often require much more frequent updating of reported incomes by tax credit recipients, and much more flexible and sensitive handling of cases by the tax department (Millar, 2008). This can demand a culture shift that is hard for a tax department’s staff to adapt to.

In more routine ways tax departments also interact more frequently

with businesses – for instance, dealing with monthly declarations of income taxes under PAYE and VAT returns. But here they deal mainly with more specialist staff or personnel in companies, or professional tax intermediaries (such as accountants filing for small businesses). So routine communications are often more fluent, cooperative and effective in problem-solving.

Cutting the Transactions Costs of Being Compliant

This is a relatively new emphasis within tax bureaucracies, and it is still often a rather controversial orientation for older staff and ingrained departmental traditions to come to terms with. In the USA there has been a strong emphasis throughout the post-war period on ‘paperwork reduction’ and keeping the size of forms and information demands to an absolute minimum for taxpayers – even while the tax code itself became longer and longer. But US tax practice also requires everyone over an income threshold to file a declaration of their incomes, which imposes considerable costs on millions of citizens. In other advanced countries there has been a main emphasis on taking low-income citizens and smaller businesses completely out of the income tax and VAT nets respectively. The development of PAYE systems also increases the automaticity of income tax payments for the vast majority of taxpayers, especially compared with the US universal filing approach – although the US does have pre-pay workplace withholding arrangements for lower-paid staff that mimic some PAYE effects. In most income tax systems higher-rate or non-PAYE taxpayers have to file returns, but simplified returns are sometimes feasible for smaller income levels.

Setting the thresholds at which citizens or companies have to file tax returns at all is one of the most critical decisions that policy-makers can make, since it determines how fine the regulatory mesh is and largely sets what the administrative burden is on the tax department. For instance, OECD data in 2001 showed that the levels set for firms to file VAT declarations ranged from a turnover of around £5000 a year in Italy (so that virtually all own account workers had to file), through £53 000 in the UK (which many self-employed workers did not have to be concerned with) up to around £150 000 a year in Japan (high enough not to pull in two- or three-person firms).

In the period since 1995 there has been far more emphasis on stimulating voluntary tax compliance through the greater simplification of tax filing processes and payments, especially via the better design of tax forms and greater ‘segmentation’ of customers into low-, medium- and high-risk categories. Often conservative tax agencies remained wedded

to complex, multi-question forms in the income tax area, arguing that tax codes required very comprehensive responses (Dunleavy et al., 2003). But the development of online tax filing in the internet era has allowed tax information and forms to become much more closely tailored to different individuals' situations than previous paper-form technologies. The complexities can be retained, but they are no longer apparent to users with simple tax situations, since they never need to fill in complex sections. Similarly, tax departments have gradually come to fully accept that taxpayer education, maintaining an excellent website, and providing responsive assistance to taxpayers seeking to be compliant are all key aspects of their work – and increasingly important in minimizing subsequent administrative burdens.

4.2 TAX ADMINISTRATION IN THE UK

Historically, the collection of taxes in Britain was the responsibility of two departments of ancient origin, each with a strong and distinctive character. First, the Inland Revenue (hereafter Revenue) was in charge of collecting direct taxes on individuals, especially income tax deducted at source via PAYE by companies, and for self-employed people paid by individual self-assessment forms. In addition, the department collected inheritance tax, a social security tax (called National Insurance Contributions, in fact paid mostly via the PAYE system) from individuals, some taxes on companies, especially corporation tax (on companies' declared profits) and petroleum revenue duty on petrol and diesel. Second, Her Majesty's Customs and Excise (hereafter Customs, discussed in Chapter 3) was in charge of collecting indirect taxes, overwhelmingly from firms and small businesses, especially VAT on almost all goods sold, some particular excise duties on alcohol and tobacco (taxed at much higher rates) and import duties, as well as processing imports and exports. (The customs arrangements for its trade regulation work are covered in section 3.2, Chapter 3.)

The UK's system of taxation has evolved into the pattern shown in Table 4.3, where half of all receipts come from PAYE income taxes and National Insurance, plus another addition from self-assessment income tax. Indirect taxes (collected by Customs and Excise prior to 2005) account for a further 30 per cent of taxes. The last sixth of taxes come mainly from corporation tax and capital gains tax. The last column of the table also shows that 91 per cent of all taxes remitted to the central government are actually paid across by businesses. Most of the big taxes are wholly paid across by firms, and there are only a few taxes (like stamp duties) where both firms and individuals pay across substantial sums.

Table 4.3 The relative importance of taxes collected by HM Revenue & Customs in 2005–06, and the proportion remitted to HMRC by businesses

	Receipts in Billions (£000 m)	Percentage of all Central Taxes	Proportion (%) Remitted by Businesses
Income tax, PAYE	113.9	28.6	100
National Insurance (social security contribution)	85.7	21.5	97
<i>VAT</i>	<i>72.9</i>	<i>18.3</i>	<i>100</i>
<i>Other Customs and Excise taxes/ duties/levies</i>	<i>48.0</i>	<i>12.0</i>	<i>100</i>
Corporation tax (on profits)	42.0	10.5	100
Capital gains tax (on property and investments)	22.9	5.7	0
Income tax, self-assessment (net of repayments)	18.2	4.6	0
Stamp duties (on property and share transactions)	10.9	2.7	40
Other receipts	8.4	2.1	52
Tax credits (income support payments to low-income households in employment)	–4.7	–1.2	90
Other repayments	–5.0	–1.3	96
Inheritance tax	3.3	0.8	0
Petroleum revenue tax	2.0	0.5	100
Total	398.4	100.0	91

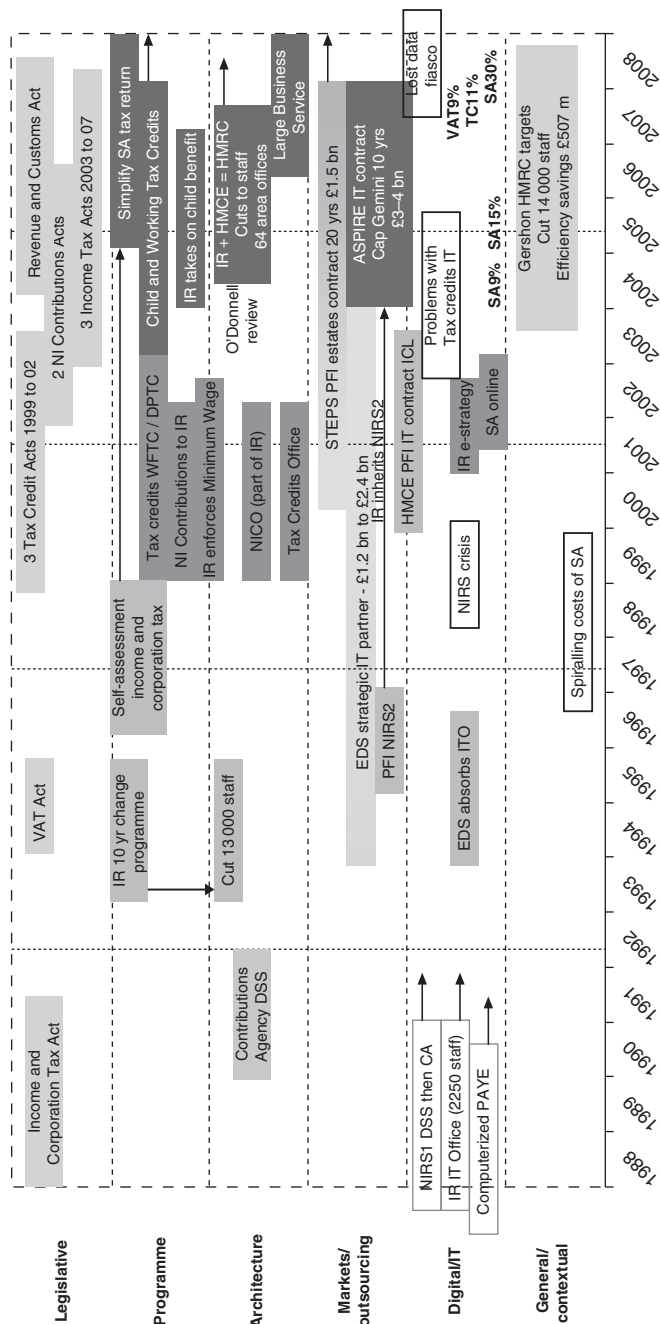
Note: The taxes collected by HM Customs and Excise before 2005 are in italic. All other taxes were collected by Inland Revenue.

Source: HMRC (2006), *Annual Report, 2005–06*.

Individuals directly paid to HMRC only self-assessed income tax, capital gains tax and inheritance tax.

We first review the organization and development of both departments relevant for this chapter. (We start from the late 1980s, partly because tax changes are slower moving than many other policy areas, and partly because we have some data series on productivity that can be pushed this far back.) We then look at what happened after the merger of the two departments to form Her Majesty's Revenue & Customs (HMRC) in 2005. To help in following this story, Figure 4.2 provides a summary overview of the main changes that have taken place in the area of UK

Figure 4.2 Main changes in tax collection administration in the last 20 years



Note: In Figure 4.2, the abbreviations used are: ASPIRE consortium of computer firms; DSS Department of Social Security; EDS and ICL major computer firms; HMCE Customs and Excise; IR Inland Revenue; ITO Information Technology Office (an agency within Inland Revenue); NI National Insurance; NICO National Insurance Contribution Office; NIRS National Insurance Register System; PFI Private Finance Initiative; SA Self-assessment Income Tax; STEPS acronym for property transfer consortium; TC Tax credit; VAT value-added tax; WFTC Working Families Tax Credit.

tax collection during the 20 years from 1988 to 2008. On the bottom axis, general elections are marked with broken lines. On the vertical axis there are six general areas where changes have taken place: legislative agenda; implementation and change of specific programmes; organizational architecture; market outsourcing developments; digital/IT developments; and general/contextual changes such as the impact of the influential Gershon Review (2004) on improving the efficiency of government departments.

Inland Revenue

Like Customs, the Inland Revenue was run as a non-ministerial department by a board of civil servants, making it the largest 'semi-detached' unit in Whitehall. The Commissioners of the Inland Revenue were first constituted as a department in 1849, and the organization could trace its history back before that under a different label (Board of Stamps) to 1665. Although brigaded under the Treasury, and accountable for its overall performance to the Chancellor of Exchequer, Revenue jealously guarded the operational conduct of tax enforcement from 'political' or partisan interference. Consequently tax administration has never been seen as politically or ministerially influenced in the UK, and corruption in the levying of incomes or corporation taxes is almost unknown. The department also always sought to maintain the 'integrity' of the tax code in its dealings with ministers, avoiding if possible changes away from previous law and precedent, and generally resisting new and unfamiliar tax ideas. To help in these tasks, by the 1990s it maintained a large policy staff.

In 1988 the Thatcher government launched its 'Next Steps' initiative to hive off the control of large-scale delivery operations by civil servants from being directly run by Whitehall departments and into newly created executive agencies. Both Inland Revenue and Customs were at first little affected, since they were already set up as non-ministerial departments in an 'executive' configuration. However, the longer Next Steps went on, the greater the stress placed by ministers on both departments formulating business plans on more private sector lines and accounting more explicitly to ministers for their performance within the same 'framework' used for executive agency reporting. Like Customs, Inland Revenue was also regularly reviewed by the House of Commons' Public Accounts Committee and Treasury Committee.

The Conservative governments of Margaret Thatcher and John Major were slow to push for changes in Inland Revenue, partly because their attention was fixed on the agencification drive elsewhere across Whitehall, and partly because they were anxious to maintain the inflow of public finances. However, at the height of efforts to curb Whitehall personnel

numbers in 1992 the Treasury cut its staff by a quarter. The following year Treasury ministers announced a ten-year change programme for Inland Revenue, which aimed to reduce the department's staff numbers by 13 000, with an ultimate aim that by 2002 its total staff numbers should fall to 42 000.

As a key part of achieving this change, Revenue's top officials targeted the department's big in-house IT capacity (called the Information Technology Office), which had nearly 2250 staff. The Revenue's main IT operations were completely outsourced in 1994 to the US systems integrator company EDS, already the dominant corporate player in the UK. EDS's market share in civil government IT rose to 64 per cent after this deal. Under the ten-year Revenue contract, 1900 staff in the Revenue's data centres moved across to EDS under the normal TUPE ('transfer of public enterprises') provisions. The initial contract price was a low-looking £250 million over ten years, a hugely long contract. But in what became the normal 'six for one' arrangement for UK government information technology, the contract cost rose first to £1.2 billion, because the incumbent main contractor EDS could negotiate change contracts worth five or six times the initial competed-for value of the contract. When the EDS deal finally ran out in 2004, Inland Revenue had in fact paid EDS over £2.4 billion. However, from the start of the contract there were operational problems with Revenue computer systems, with officials complaining about downtime, delays in fixing problems and so on (see Dunleavy et al., 2006b, p. 142).

Another important aspect at the outsourcing level, was the award of a PFI (Private Finance Initiative) contract called STEPS to a firm called Mapeley for the administration and development of office accommodation for both Revenue and Her Majesty's Customs and Excise (HMCE) in 2001. While the contract was subject to some controversy regarding the financial situation of Mapeley, independent assessments judged that the contract had been beneficial for both departments (National Audit Office, 2009b).

The low initial cost of the IT outsourcing and its subsequent escalation reflected the fact that in other areas the Conservatives in the 1980s and 1990s were largely content to squeeze Inland Revenue for 'efficiency savings', while actually letting the modernity of its buildings, work processes and information technology gradually worsen, year on year, with no major new investments. The one big project in the department that was pushed ahead and launched in 1996 was a brand new and lengthy self-assessment form (on paper), which now legally had to be completed by around 9 million self-employed and higher-rate taxpayers. It 'represented one of the largest changes in tax administration for decades' according to the National Audit Office (NAO, 2001b). Spurred on by Conservative

ministers who admired the leanness of the IRS's operations in the USA, some senior Revenue officials had pressed for all UK citizens to have to file a self-assessment form. However, from the outset, the assessment system was also much more expensive to administer than collecting taxes via PAYE, so that ministers in the end never agreed to the universal filing idea. Instead the vast bulk (92 per cent) of income tax continued to be collected via PAYE, and the remainder via self-assessment.

The declining numbers and sizes of major employers in the UK, plus the growth of 'portfolio careers' where people work for much briefer periods for many more employers, might have been expected to over time cause a drift of people out of the PAYE system and into self-assessment. The threshold for the higher-rate (40 per cent) tax band was also uplifted by less than inflation for many years, which brought more and more people into the higher-rate category. This might have meant that more people had to submit self-assessment forms over time. However, in the late 1990s and 2000s Inland Revenue counteracted many of these trends by periodically reviewing who was required to submit assessments, and how onerous the burden was on different types of taxpayers. By the mid-2000s the department had taken most older people with occupational pensions, and some higher-rate taxpayers with very simple tax affairs, out of the self-assessment net.

The paper form for self-assessment that Revenue produced was also controversial from the outset. It was intended to be comprehensive and so was extremely long and complex for non-accountants to fill in, with dozens of questions, most of which had little relevance to ordinary taxpayers. The main self-assessment paper tax form was widely criticized as completely inaccessible for ordinary individuals. A 2003 National Audit Office (NAO) study of *Difficult Forms* noted that it was still massively too complex for most people filling it in, and that Inland Revenue had taken years to design and introduce a shorter tax form (Dunleavy et al., 2003). The department ran a highly over-cautious 'pilot' of the shorter form that took five years, and involved 50 000 people using the new form, before very slowly rolling it out nationwide.

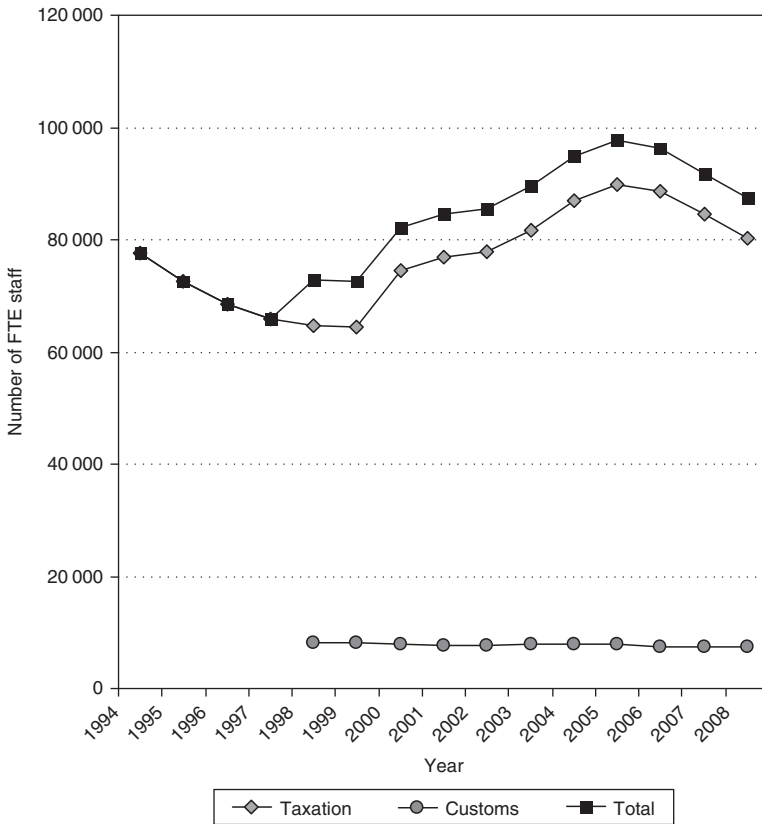
Far more significant changes in Revenue's structures and operations took place following the election of a modernizing Labour government led by Tony Blair in 1997. For their first two years in office Labour ministers stuck with the Conservative spending plans, which included no allowance for administrative improvements. But members of the new government were in fact taken aback by the degree to which civil service offices, IT and working methods had been allowed to decay under the Conservatives. They quickly resolved that when public spending could grow again many long overdue, modernizing improvements must be made. Collecting taxes

more effectively was a priority here, since Labour's wider public spending plans depended on first bringing in resources.

By 1999 ministers were impressed by the level of IT service delivered by the outsourced Revenue arrangements, compared with the difficulties experienced at the Department of Social Security (DSS) that ran the welfare payments systems, and where a major reorganization was anyway in progress (see Chapter 5). Part of the DSS set up on 'Next Steps' lines, the Contributions Agency (CA), was responsible for collating information on individuals' liabilities for National Insurance (NI) contributions, monies that in fact the Revenue had collected on behalf of DSS for years. Now ministers decided to transfer the whole function to Revenue, renaming it the National Insurance Contribution Office. The shift increased Inland Revenue's staff in 2001 by roughly 10 000 FTEs (full-time equivalent' staff), year on year. One factor that impelled ministers to change was acute controversy over a computer system used for NI, the National Insurance Recording System, which was set up as a PFI contract between the Department of Social Security and the management and technology consultancy firm Accenture. The company failed to deliver the new NISR2 system that it had promised in time for the switch off of the old system in 2000–01. This led to the underpayment of thousands of pensioners whose records could not be satisfactorily validated, and expensive manual rectifications.

A second accretion of Revenue's functions involved a major functional (and identity) change when it began to act as a transfer agency as well as a revenue collection agency. This shift followed from efforts by the Chancellor of the Exchequer, Gordon Brown, to expand the state's support for families in work, so as to create extra incentives for people to move off welfare rolls and into employment. In 1999 a system of 'Child Tax Credits' was introduced, where households with children and low incomes would be paid a monthly amount by Inland Revenue. Subsequently in 2003 the tax credits ceased to be solely linked to children and became general for low-income households with people in work. The new responsibility created many difficulties for Inland Revenue, which had to move from dealing with individual taxpayers only once a year to updating data on household incomes far more frequently. Acute problems arose where the department paid tax credits to households based on their last period incomes, but where someone was now earning more money than before. Essentially families would be over-paid credits and then subsequently Revenue would try to recover the monies after they had already been spent. Where households failed to notify Revenue promptly of increases in incomes, the amounts of over-payments could quickly mount up, creating serious debt liabilities for low-income households. Despite massive

Figure 4.3 *The numbers of FTE staff working on taxation and customs trade regulation roles, 1994 to 2008*

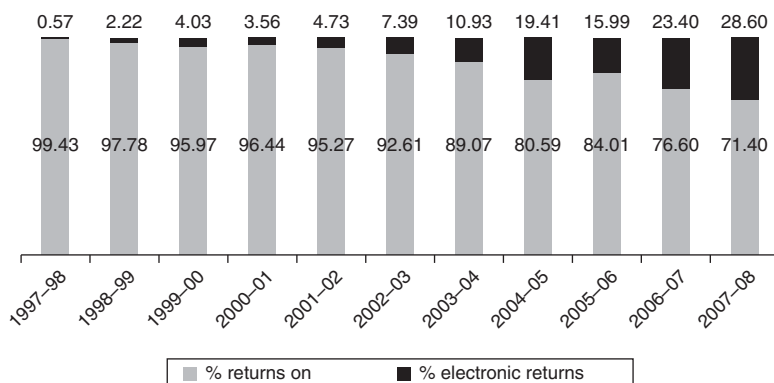


Source: Analysis of data in annual reports for Inland Revenue, Customs and Excise and HMRC.

advertising campaigns designed to remind tax credit recipients to always tell the department when their circumstances changed, the problems of over-payments and recoveries mushroomed, deluging Revenue call centres with angry customers and leading to a doubling of complaints in 2005–07.

The addition of new functions to Inland Revenue’s responsibilities considerably increased the number of staff working on overall taxation issues, as Figure 4.3 illustrates. From a low point in 1998 the two departments covered here grew by more than a quarter to peak in 2006. This change contrasted sharply with the stable numbers of staff working on Customs’ regulatory functions, discussed in Chapter 3.

Figure 4.4 The development of self-assessment tax returns online, 1997 to 2008



Source: Computed from HMRC data provided by the department's statistical teams.

Another area of change was more positive, but proved slow to develop, namely the introduction of online forms for self-assessment taxpayers and businesses dealing with Inland Revenue. In a 1997 speech to the Labour Party conference, the Prime Minister Tony Blair pledged that all public services would go online by 2008, a limit that a 1999 National Audit Office report demonstrated was so far away that no Whitehall department was taking it seriously (Dunleavy et al., 1999). The government responded to a resulting critical Public Accounts Committee report by bringing the online service deadline forward from 2008 to 2005. Additionally, they specified for both Inland Revenue and Customs and Excise that they must be achieving 50 per cent of their overall transactions with customers online by 2005. Immediately after Blair's speech, Revenue identified online submission of the self-assessment income tax form as one key change it needed to make a priority. By 1998 it had an early service in place and Figure 4.4 shows that the proportion of taxpayers submitting online very gradually expanded up to 2002. One of the key problems was how to uniquely identify taxpayers online, and the cumbersome solution that the civil service came up with (which persists to the present day) is called the Government Gateway. Its clunky operations meant that it was only from 2003 onwards that the numbers of taxpayers filing online really began to grow at all.

In 2002 another NAO report considered the slow take up and commissioned consultants to report on cultural barriers to e-government (Margetts and Dunleavy, 2002). Arising from this work and other criticisms Revenue commissioned a later paper on how to use incentives to

induce businesses to switch over to digital submissions, which recommended a ‘staircase’ approach of strengthening incentives via gradually mandating online returns (Margetts et al., 2006). From 2009 the new department HMRC required self-assessment taxpayers wanting to file on paper to do so before the end of September, while those who delay to the last minute and submitted their forms later on would have to use the online service. Since most taxpayers hang on to near the final deadline, this change to partial mandation had an immediate effect, with the proportion of self-assessment forms sent in online growing very fast. The digital share reached more than three-quarters by the 2010–11 financial year and began to plateau off. The online service was also much easier to use than the paper forms and the answers that taxpayers gave dropped straight into HMRC tax databases.

However, the progress on growing individual taxpayers’ responses disguised an underlying stagnation in Inland Revenue’s and later HMRC’s thinking (NAO, 2002a, 2002b and 2005). By the 2000s around 10 000 businesses in the UK accounted for two-thirds of PAYE income tax receipts, but the systems they were using (although computerized in some respects) were essentially static, dating back almost to the 1944 origins of the PAYE system itself. Businesses remitted amounts to the Revenue for their employees’ total tax liabilities, monthly or quarterly depending on their size, and they provided wages and payslips to the workers involved, detailing how much tax had been paid. But firms did not tell Revenue monthly or quarterly how to split up the tax paid across the staff involved – because right through into the 2010s’ decade the Revenue had no computer systems capable of accepting this ‘real-time’ information. Instead firms had to complete an annual return at the end of each tax year, which told Revenue on an annual basis how much each staff member had earned and how much tax they had paid. These annual statements had to be submitted by July (after the end of the tax year), but the information in them was often only really processed by Revenue by September in the year. Thus tax officials were never handling tax information about individuals that was less than six months out of date, and for data affecting the start of the year the information was 18 months out of date. All the real-time information that firms collected and remitted to employees monthly was never used by Revenue – because it could not be accepted or processed. Yet one of the first laws of taxation is that the more time elapses between a tax liability being incurred and tax officials learning about it, the greater the loss in revenues collected that can be expected. It was not until 2011 that ministers finally pressed for and agreed to implement a large contract to bring in ‘real-time information’. Even here the pressure came in large part from the Secretary of State for the Department for Work and Pensions, who

wanted to better integrate the payment of tax credits with payments for welfare benefits.

A key reason for the huge lapse of time in grasping the nettle of out of date information was ministers' and officials' aversion to launching the substantial IT contracts needed to modernize Revenue's huge and dated legacy IT systems. The department's relationship with its original IT supplier (EDS) proved to be reasonably problematic, as the company negotiated hard over any changes in what it was contracted to do, progressively raising the prices that the department had to pay for any alterations and new provisions insufficiently anticipated in the original contract – a process that most IT contractors with government thoroughly understood and relied on in their initial contract pricing. In 2004 the problems of tax credits being overpaid to low-income households exploded, with complaints against Revenue spiking sharply upwards, and ministers and MPs being sharply critical of the department. Revenue blamed EDS for many of the problems and launched a legal case against the company to recover hundreds of millions of pounds overpaid to families who later had problems repaying the amounts that they had inadvertently accumulated. Eventually the case was settled out of court at a cost of £95 million to the company.

The souring of relations with EDS meant that Revenue was resolved to re-compete its ICT contracts in a rigorous fashion, and not to become 'locked in' to depending on the company. In 2004–05 the department's top management rejected an EDS renewal tender in favour of a rival bid that was seen as more cost-effective, from a consortium called ASPIRE, within which the leading company was Capgemini. The new HMRC contract for 14 years was costed at more than £4.5 billion. Subsequently it too was renegotiated within a few years to give average 'price-point' reductions of around 10 per cent in costs, in return for which Capgemini gained a further four years on the deal, taking the contract length to 18 years. This was an enormous slice of time, especially in IT terms, where technology generations change wholesale every two to three years.

Customs and Excise

The main taxes collected by Customs at the start of our period were VAT, a flat rate sales tax paid by all businesses with a turnover above £50 000 a year (excluding only very small own-account worker businesses) and excise taxes. VAT required traders to file very simple monthly or quarterly returns of the VAT amounts that the firm had collected on its sales, to log and deduct from this sum the amount of VAT that the firm had itself paid, and to make payments of the resulting net amount due. Excise taxes

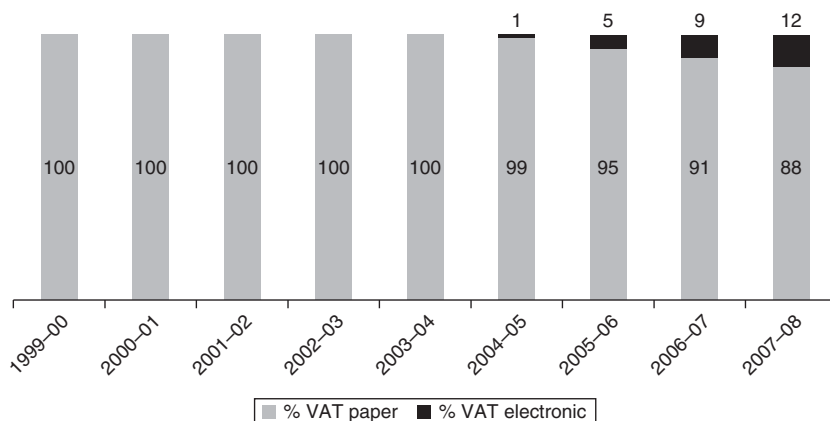
required mostly similar filing by businesses selling particular commodities, especially tobacco and alcohol, both taxed very heavily. Almost all Customs tax transactions were carried out with businesses rather than with individuals. The main exception was individuals paying import duties, far and away the most expensive of all the taxes to collect, but of very minor significance in the department's overall tax activities.

Because of the success of the CHIEF system for imports and exports (described in Chapter 3), Customs was not immediately worried by the prime minister's requirement that 50 per cent of their transactions should be online by 2005 – when we interviewed them in 1999 they felt that the statistical returns here would cover much of their 'electronic' total. We looked at Customs' computer systems for registering VAT and excise liabilities and payments in detailed work for the NAO, and at that time they closely resembled those in Revenue. Customs ran a jungle of over 90 different legacy, mainframe systems that were complex to coordinate. We have commented on Customs' relations with its IT supplier, ICL/Fujitsu in Chapter 3. The company ran mainframe systems and networks effectively enough, but it was very slow to develop any level of web expertise.

The department very slowly set about introducing VAT returns online, but its initial approach (in 1998–2002) was a dismal failure because it required companies to pay a substantial cost for a digital certificate that they could use for no other purpose. The VAT return was also easy to fill in manually (consisting of only seven pieces of information), and small companies especially liked sending in a paper form and paying by cheque to best protect their cash flow. Paradoxically the return's very simplicity meant that the department found it difficult to bring VAT returns online in a way that would save much money, especially while they were running paper and online systems together. At one point the Customs Board thought about creating a new IT-based unit to develop VAT returns online in competition with its existing main line of business, but in the end did nothing. It stuck with its clunky system and neglected the Customs website, on which much of the information by 2002 was partial or incorrect.

A 2002 NAO report expressed deep scepticism about the department's online strategy and doubted whether the department would have 50 per cent of its transactions online by 2005 (Dunleavy et al., 2002). The Chief Executive assured the Public Accounts Committee that it would meet that commitment, but he subsequently left the department within the year to return to the private sector, as did his IT director. Figure 4.5 shows that in fact Customs made much slower progress than Revenue in getting its customers to file VAT returns online, which only began to grow appreciably after Customs was merged to form HMRC in 2005. Online VAT

Figure 4.5 Online and paper-based VAT



Source: Computed from data provided by HMRC statistical teams.

transactions remained a small minority of the total by the end of our study period in 2008.

The Merged Department

In 2005 the Labour government led by Tony Blair decided to take a decision shunned by previous cabinets and to merge Customs into the Revenue, creating a new super-department, Her Majesty's Revenue & Customs (hereafter HMRC). The move was made partly at the urgings of the Treasury's top official, its permanent secretary Gus O'Donnell, who was persuaded that staff and cost economies would flow from pushing Revenue and Customs operations together. In particular, the O'Donnell Review (2004) concluded that the merger would allow staff savings – and would mean that businesses would no longer have to deal with two Whitehall tax departments, each with different cultures, IT systems and methods of working. O'Donnell was also frustrated that so many policy staff worked for Revenue and so few for the Treasury on tax issues, so in the reorganization a substantial transfer of top tax policy expertise into the Treasury took place (Treasury Select Committee, 2004).

A new HMRC board was created to maintain a degree of collegial overview of both direct and indirect taxes collection, but a Chief Executive (rather than just a board chair) was appointed to produce stronger accountability for change. A number of non-executive directors, all from business, were created to sit alongside the top officials. In 2008 a new role

of Chairman of HMRC was also created on business lines to take responsibility for providing strategic leadership, approving the department's business plans, monitoring performance and policing the standards of corporate governance. This left the Chief Executive to focus on day-to-day management and operation policies.

A merger of two such historically distinct and large-scale bodies as Revenue and Customs was bound to be costly and disruptive, a key reason why previous British governments held off from making the change, even though by the twenty-first century the norm across the OECD was for national governments to have a single tax agency. (France was the other main exception here along with the UK. Historically it had two long-lived tax departments, dating back to the French Revolution – one of which was responsible for assessing tax liabilities and the other for collecting taxes. The French government also finally decided to merge these two in 2005.) The costly creation of HMRC was to be paid for by tactics familiar from 'mergers and acquisitions' strategies in the corporate sector – namely rationalizing areas of overlap, pooling the two departments' staff, integrating their links with taxpayers (especially with businesses who collect the vast bulk of taxes for government), and cutting out duplications in office networks, staffing and ICT systems (O'Donnell, 2004).

A huge 'transformational change' programme was also created in Inland Revenue in 2000, long before the merger took place, representing a substantial drive to modernize its procedures, update its ICT systems and exploit the increased use of ICTs and online filing systems to try to reduce staff numbers. Upon its formation HMRC promulgated a similar plan, with the same ambitious (hence almost bound to be disappointed) 'transformational change' title. It initially had no fewer than 21 'high priority' objectives, marrying long-term modernization projects with efforts to exploit merger 'synergies', later reduced to 'just' 13 main programmes (NAO, 2008d).

At the same time as these difficulties some senior officials and 'insider' observers claimed that strong improvements in performance followed from the application since 2005 of another management initiative, the PaceSetter programme. Implemented with the McKinsey management consultancy and focusing on the department's field services the programme aimed to:

- Redesign service delivery processes so as to eliminate waste and variability and maximize flexibility. HMRC senior management argued that this would improve productivity and service quality, as well as reducing lead time on innovations.

- Change the department's current management processes so as to create appropriate management infrastructure to sustain improvements.
- Change the mindsets and behaviours of leaders and frontline staff to support the new lean business systems and to deliver continuous improvement.

HMRC implemented the PaceSetter programme in ten of its major processing sites. There were three main components: lean implementation (following private sector initiatives, originally led by the Toyota car manufacturer), operational management (OM) and senior leadership (SL). Bottom-up approaches to improving performance through lean implementation were supposed to be closely connected to the more top-down OM and SL elements, driven by the strong commitment of the leadership team down into the wider organization. Official reports from HMRC claimed that the PaceSetter programme received strong acceptance from managers and frontline staff (HMRC, 2007). However, its concrete impacts on tax collection productivity have been closely bound up with the programme of staff reductions, and so the National Audit Office (2011b, p. 10) found only 'a small positive impact on staff engagement'.

In terms of departmental IT systems, under the merger, the Revenue's systems and staff became the dominant ones. The National Audit Office pointed out how the HMRC could not only save costs but also develop a strategic relationship co-partnering with a single supplier and having a better overall accountability for IT delivery (NAO, 2006). The previous Customs contract with ICL/Fujitsu was now absorbed within the ASPIRE contract. Independent evaluations highlighted the utility of re-centralizing the formerly separated Revenue and Customs IT contracts. One of the benign changes occurred in VAT payments, where Figure 4.5 shows that some slow progress at last began to be achieved in getting processes online. The Revenue adopted a strategy of first incentivizing companies to go online, and later mandating the largest firms to do so in tranches, and this began to make slow headway.

However, Capgemini and the ASPIRE consortium continued to have great problems in getting the administration of tax credits improved. The introduction of a New Payments System (NPS) was also billed by HMRC as a radical modernization and integration of its complex legacy computer systems. But in fact the system rapidly ran into massive difficulties in the period 2008 to 2010, and had great difficulty in coping with people receiving incomes from multiple sources. It especially lost track of many pensioners' receipts from the Department for Work and Pensions in working out millions of PAYE taxes, meaning that elderly people were suddenly

confronted with ‘overdue’ tax bills of thousand of pounds (Dunleavy, 2011b).

The attempted implementation of the myriad ‘transformational programmes’ and the NPS also overlapped strongly with the pushing through of a government-wide efficiency effort (launched by Tony Blair in the run up to the 2005 general election), called the Gershon Review. This was supposed to ‘free up resources for the frontline’ by cutting ‘back-office’ staff, removing waste and improving overall efficiency. Since HMRC in 2005 accounted for 91 000 staff (a fifth of the Home Civil Service), and was now more closely accountable to the Treasury (responsible for ensuring that the Gershon Review succeeded), it was inevitable that the new merged HMRC had to offer up large-scale staffing reductions – eventually reaching 34 000 jobs in total.

The combination of large-scale job cutbacks occurring at the same time as a Herculean effort to force together the historically entrenched bureaucratic cultures of Revenue and Customs was not a happy one. Staff morale and confidence in the HMRC senior management fell precipitously from 2007 onwards, reaching a nadir in December 2010 after the scale of the NPS fiasco emerged. An internal survey of 51 000 staff showed that just one in nine employees were then confident in their senior management, and just one in seven felt motivated to deliver the best service to customers (UHY Hacker Young, 2010). Unsurprisingly a Cabinet Office ‘capability review’ (2009a) of HMRC leadership sketched a large agenda for improvement.

4.3 PRODUCTIVITY IN UK TAX ADMINISTRATION

Since HMRC is now an integrated department, we measure productivity for its two predecessor departments combined. As Table 4.4 shows, we thereby cover all direct and indirect taxes for ten years forward from 1997–08. (We exclude some small aspects of Revenue activities here, such as petroleum revenue tax, where the number of returns from major oil companies is very small, and stamps on property transactions. Including these tiny constant elements would make no remotely visible addition to the department’s activities or output data.)

The key data series used here for outputs is the numbers of tax returns for the major tax categories above, the indicator that was also recommended in the influential Atkinson Review (2005b). The logic of using the returns is that almost all other elements of HMRC tax activity (such as taxpayer education, investigations and audit work, or debt recovery) are closely related to returns, usually by ratios that are broadly stable

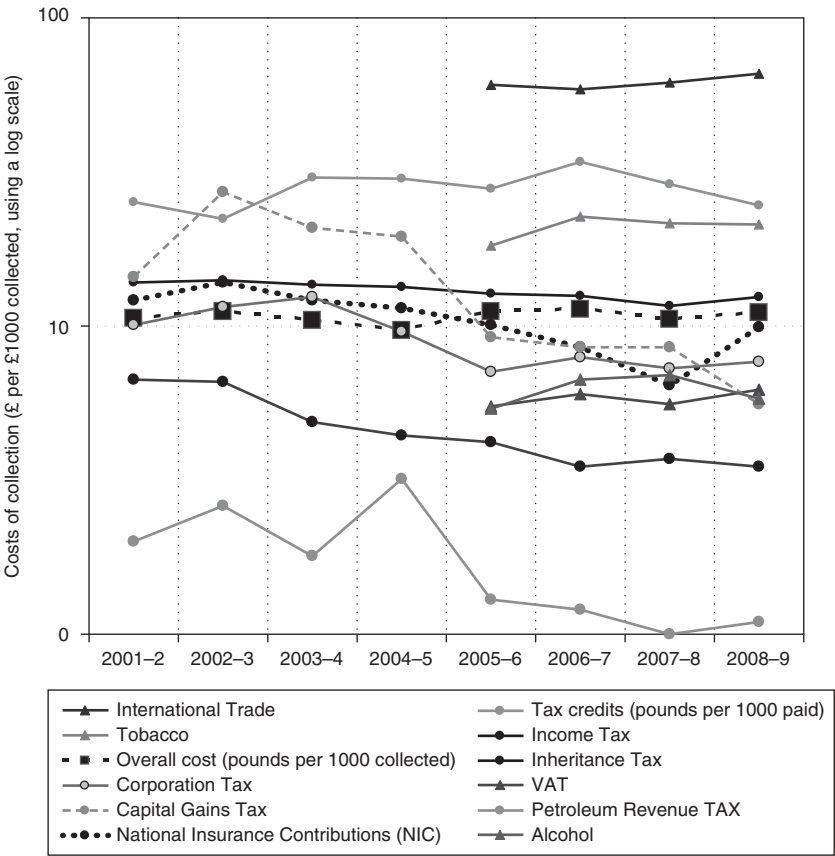
Table 4.4 Data and adjustments used for the measurement of productivity in UK taxation, 1998 to 2008

Variable	Evidence Used, and Adjustments Made
Outputs for processing of taxes	Number of tax returns processed for: income tax; corporation tax; capital gains tax; inheritance tax; VAT; excise duties; other indirect taxes. Internal data were provided by HMRC covering 1997–2008 onwards
Cost-weighting of outputs	Unit costs for each tax above, estimated from HMRC and Inland Revenue/HMCE annual reports
Inputs, for total factor productivity	Deflated total labour and other administration costs obtained from HMRC and Inland Revenue/ Customs and Excise annual reports. However, it was not possible to reconstruct a reliable series for capital consumption because it is inconsistently covered in annual reports
Inputs for staff productivity	Number of full-time equivalent (FTE) staff allocated to tax processing, obtained from annual reports (our data excludes Customs and Excise/HMRC staff working on import/export and regulatory work, covered in Chapter 3)

and endure across time. Indeed, the annual reports for HMRC and its predecessors show a strong fixation with maintaining as far as possible constant unit costs and stable levels of indicators of performance. Top officials seemed to place a premium on maintaining ratios, taking strong corrective measures if the costs of collection, evidence of non-compliance or any other key indicator seemed to be veering off course or off trend. However, at the end of this section we do briefly consider an alternative approach to HMRC and predecessor departments' outputs, one focusing on the amounts of taxation collected. In terms of cost weights to get to an overall activity number we used the share of administration costs for the different taxes collected to weight the different tax volumes. The weighted tax volumes were then added and a total index of tax output was set up, using 2001–02 as the base year.

All the tax departments provide good over-time information on the costs of collecting different kinds of taxes. Figure 4.6 shows how the overall pattern of costs per £1000 collected moved over time. The dominant trait here is for tax costs to stay rather stable over time, although there are noticeable declines in the costs of collecting capital gains, corporation and inheritance taxes. The costs of collecting income taxes fall

Figure 4.6 The costs of collecting the major UK taxes, from 2001 to 2008

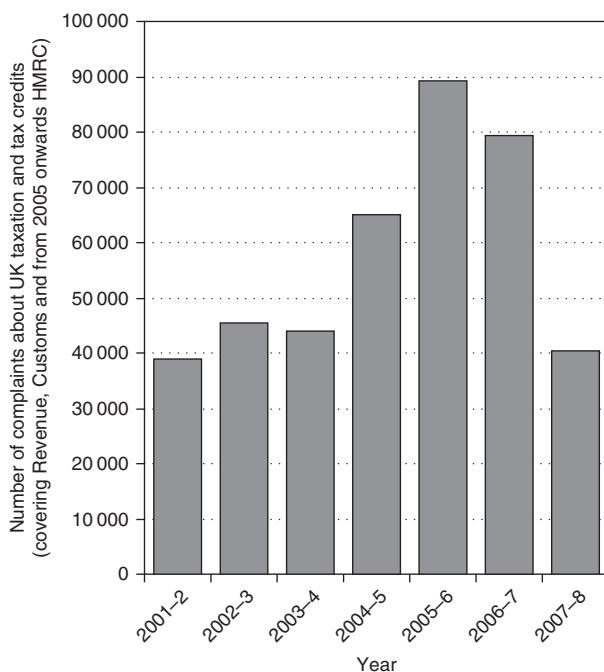


Source: Recalculated from HMRC (2006, Annex C, p.69; 2009).

slightly. Excise taxes if anything became more expensive over time, and tax credit costs remained consistently high. The most cost-effective tax was petroleum revenue tax, paid in large instalments by the few major oil companies. Nevertheless, cost-weighting does make important differences across the years, and is essential to capture an appropriate overall measure of taxation outputs as a whole. However, in the figures below we use a rather different series for our cost weights, namely internal department cost weights per return processed.

Should quality-weighting be applied to the tax outputs series as constituted above? Most of the operations carried out by HMRC and predeces-

Figure 4.7 Complaints against HMRC and its two predecessor departments, 2001–08



sor departments have remained relatively unchanged. This is true not only across the more recent ten-year period 1998–2008 on which we mainly focus here, but also in a longer-term perspective covering two decades forward from 1988, for which we briefly consider some indicative evidence at the end of this section. At various times in the last ten or 20 years, there have been significant teething troubles with one or another aspects of the tax system – including the launching of self-assessment, the initial introduction of online assessment (where the Inland Revenue’s website crashed at the busiest time), and the early years of tax credit and over-payments. (The NPS problems occurred after our study period.) Figure 4.7 shows that in 2004–07 complaints to HMRC virtually doubled, mostly because of tax credits problems.

Towards the end of the period cutbacks in HMRC staff numbers plus continuing high levels of customer enquiries resulted in many calls going unanswered. Only 57 per cent of the 103 million attempted phone calls to HMRC in 2008–09 were answered. This compares with 71 per cent in the year before (2007–08) and a call-centre industry benchmark standard of

Table 4.5 Two key forms of tax gap in UK taxation

Tax Gap as % of Total Theoretical Tax Liability in:	Financial Year (April to March) Beginning in:									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Self-assessment	10	12	14	16	16	15				
VAT gaps				15.7	12.1	11.8	15.4	13.3	12.3	15.3

Source: HMRC (2009).

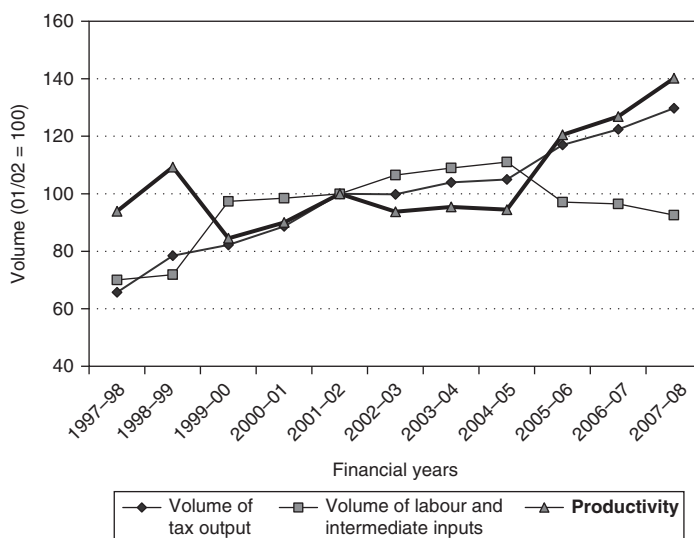
more than 90 per cent (NAO, 2010a). Performance worsened in 2009–11, when some estimates put the proportion of unanswered calls above half. This is a significant indicator of organizational stress, and an important breach of the taxpayer assistance role that is integral to modern quasi-voluntary compliance systems (see Table 4.1 above), but it reached a height outside our study period.

On the other hand, there have also been some indications of service quality increasing in some aspects – notably the development of online self-assessment for income tax, which users generally rate as much easier to use than the paper forms; the new short form for self-assessment; a range of online forms in HMRC and Revenue dealings with business; and the slower progress on electronic VAT filing after 2005.

The most fundamental index of quality that HMRC officials closely monitor concerns the extent of the ‘tax gap’ in income tax self-assessment and in VAT, between what should be theoretically collectable at prevailing tax rates and the amounts that are in fact being collected. Table 4.5 shows that the VAT gap has tended to wobble up and down between 12 and 15 per cent, with no clear trend. The self-assessment gap seemed to increase from 2000 to 2002 and to stay high for three years, but HMRC stopped publishing this data thereafter, so that more recent movements are not known. The National Audit Office and Parliament’s Public Accounts Committee also maintain a close watch on tax system operations. Their numerous quality assurance reports in this period are generally consistent with the maintenance of a stable quality standard over time and across different tax services (albeit with wobbles, fluctuations and even crises in different areas and aspects). We conclude from these data that the overall quality of service has been basically consistent across the broad range of direct and indirect taxes, and hence that quality-weightings are not needed for the outputs of HMRC and its predecessors in our study period.

In terms of inputs, we reiterate that the change from Customs and Inland Revenue to HMRC posed a few problems in identifying the correct share of labour and other administration costs, since Customs’ systems

Figure 4.8 *Labour and intermediate inputs productivity in UK taxation, 1997 to 2008*



Source: Computed by the authors, from data supplied by HMCE, IR, HMRC.

were different. For total factor productivity (TFP) analysis we seek to consider all administration costs, divided across labour, procurement and capital consumption. However, there is a problem for the present study in calculating a measure similar to TFP, because data on HMRC's and its predecessors' capital stock and its estimated lifespan and depreciation (necessary for the calculation of capital consumption) are not available from public sources in a way that could be related to the tax collection effort. On the other hand good-quality data are available on labour and intermediate input costs, especially on the costs of the outsourced ICT services and procurement.

Accordingly, in Figure 4.8 we have estimated productivity ratios by dividing our cost-weighted output measure by an index based on the department's deflated labour and intermediate costs. We acknowledge that this measure is not the same as a TFP measure, but given the limitations of the available official data it nonetheless provides a good overall picture that gets closer to the idea of measuring TFP for the taxation departments. We use 2001–02 as the base year in calculating indices of outputs, inputs and productivity.

The pattern in Figure 4.8 is rather clear-cut. For most of the period

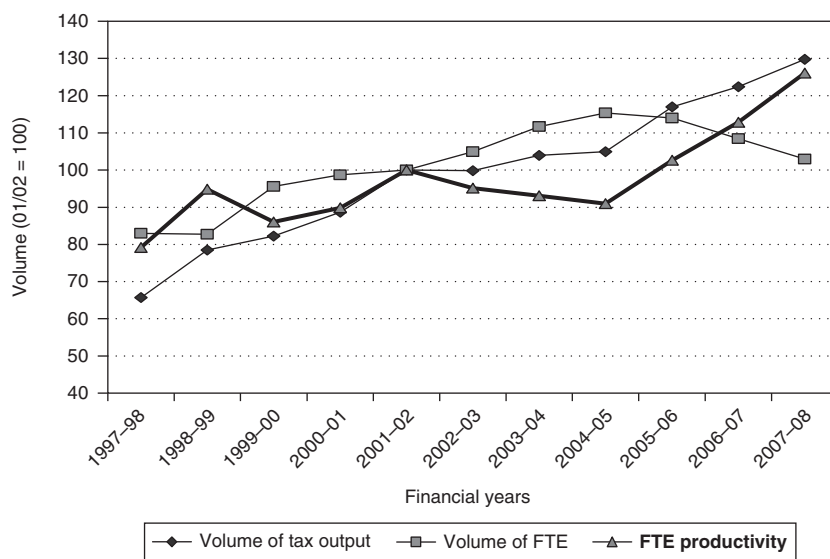
covered there was no apparent pattern of overall growth in productivity, no upward trend similar to that found in Customs in Chapter 3. Instead there were relatively small fluctuations, with productivity above or close to the starting level only for a couple of years. This is chiefly because the costs volume for labour and intermediate inputs rose strongly (by almost five-sixths) from 1997–2008 to 2004–05, more than offsetting a three-quarters increase in the number of outputs in the same period. It is especially noticeable that in the middle period (from 2000–01 to 2004–05) the productivity trend was either flat or slightly downwards. This reflected the expenses of Inland Revenue incurred by absorbing other agencies; making significant investments in new ICT; introducing tax credits; and lastly the reorganization costs of creating a unified HMRC in 2005. Wage and salary settlements with the HMRC's unions were also relatively generous at this time, in common with a pattern across Whitehall as departments sought to attract and retain specialized employees in a relatively tight job market.

However, from 2005–06 onwards, for the last three years of our period, productivity growth was strong. This coincided with two related changes – the post-merger implementation of the intensified ‘transformation’ programme inherited from Inland Revenue; and the key period of implementation of the Gershon Review measures, targeted at reducing back-office costs and moving budgets to frontline services (NAO, 2007a). NAO concluded that the claimed headcount reductions for HMRC were clear-cut.

We turn next to labour productivity, with the inputs measure here defined in simple volume terms as the number of FTE staff collecting and processing taxes in HMRC and its predecessor departments, on which high-quality information is available across the period. Again, this provides an important specific productivity measure for comparing across different public services, because it employs a common ‘denominator’, and might be thought to link more closely to innovation. However, it is important to recognize that the extensive ICT outsourcing in HMRC and its predecessors influences labour productivity, and that over the period considered here there was a considerable business process outsourcing trend that transferred some functions from department staff to contractors and consultants over time. Again we use the financial year 2001–02 as our base year.

Figure 4.9 shows a pattern that is similar to but shows more pronounced patterns than Figure 4.8. We can roughly identify three periods. Up to 2001–02 labour productivity fluctuated as FTE inputs grew strongly while outputs also expanded. Staff numbers continued to grow for a further three years, but output volumes more or less stagnated, so that labour

Figure 4.9 Labour productivity for central government taxation, 1997 to 2008

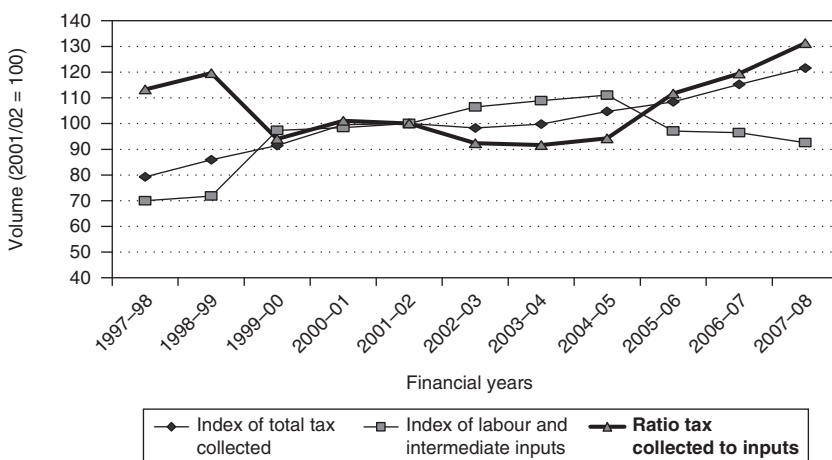


Source: Computed by the authors from public data collated from HMCE, IR and HMRC departmental reports.

productivity dipped markedly downwards from 2001–02 to 2004–05. In the final three years, staff numbers were first curbed and then markedly reduced back towards 2001–02 levels, at the same time as outputs grew markedly. As a result there was a strong growth of labour productivity through to 2007–08. We estimate that FTE in tax collection fell by almost 10000 staff from 2005 to 2008. However, we note again that the consequent apparent productivity increase may have reflected quality shading of previous service standards. The National Audit Office (NAO, 2010d) noted that in 2007–08 tens of millions of attempted phone calls were not answered. The Treasury Select Committee (2010, p. 33) also noted exceptionally low levels of staff morale and trust in senior management at a later stage (see page 100).

Before leaving the analysis of tax productivity, it is worth giving some attention to an alternative way of trying to measure outputs in the tax collection area, using an appropriately deflated measure of the amount of tax collected as the output measure. This approach was rejected by

Figure 4.10 The ratio of the deflated amount of tax collected to labour and intermediate inputs, for HMRC and predecessor departments, 1997–2008



Note: We considered the same taxes as in the rest of the chapter. Data was deflated using 1997–98 as the base year and it was then adjusted using the same cost weights employed in the rest of the chapter.

the Atkinson Review in favour of the activity measure considered above. A receipts-based measure might be criticized as ‘gifting’ HMRC and its predecessors with the credit for increased tax receipts in boom periods, when receipts are often especially buoyant as a result of no extra effort or achievement by the tax collectors themselves. But the approach is one that is worth considering, because it chimes with the concerns of top politicians and the Treasury to keep on investing in tax departments so long as they are effective in bringing in resources. Accordingly, Figure 4.10 reruns the TFP-like analysis of labour plus intermediate administration costs productivity using deflated taxes collected as the output measure. This output measure was also cost-weighted using the share of administration costs for each type of tax as the weight.

One visible major effect in Figure 4.10 is to somewhat smooth out the output curve on this new basis, which now grows fairly markedly across seven financial years, the exceptions being 2001–02 and the next two years. With the same labour and intermediate costs as in Figure 4.9, the result is to produce a much longer slump in taxation productivity, which peaked in 1998–99 at a level that was then not consistently matched again until 2006–07, eight years later. Only in the two years at the end

of our series did productivity clearly pass above the previous earlier peak.

A Longer-term Picture

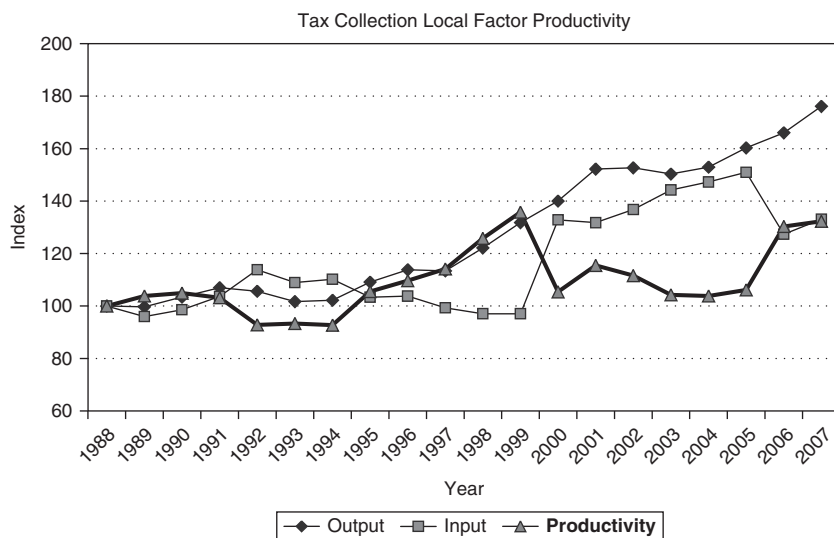
A key advantage of an index-based approach to analysing organizational productivity is that the length of the available series increases inexorably, year on year, while (hopefully) the organization's essential identity and the consistency of its statistics remain intact. Because the statistical background to tax collection is reasonably sophisticated in Britain, we are also able to look back in time as far as 1988, albeit on a limited basis that must be hedged around with significant caveats (explained in more detail in the Appendix at the end of the book).

First, we can only go back using a 'taxes collected' measure of Revenue and Customs outputs, so that the caveats made for Figure 4.10 apply here also. The cost-weighting of outputs is especially 'rough and ready' the further back in time that we go, although we believe that it is still usefully indicative of the scale of the two departments' tax activities. Second, our measures of inputs differ here because we must use only aggregate published data for the 1988–98 period, and the same (for consistency) in the period thereafter. For the TFP-like analysis, we use the total staff pay bill and other expenditure costs as our measure of input. These measures are deflated, added and then converted into an index of input. For the staff productivity analysis, we use the deflated staff pay bill expenditure as our measure of inputs.

Bearing these words of caution strongly in mind therefore, Figure 4.11a shows a long-run total factor productivity pattern marked by four periods. From 1988 to 1995 overall productivity in central government tax services was broadly flat or lower. It then grew especially sharply in the 1997–99 period under Labour's initial tight spending constraints, combined with strong economic growth. From 2001 to 2005, the impact of departmental reorganization, new investment and tax credits sent productivity lower. But in the final two years productivity recovered to match that in 1998 (but not quite the unsustainable 1999 peak year). Across the whole period, productivity grew by a third, but the adverse impacts of significant productivity slumps in 1991–2004 and very markedly in 2000 to 2004 (neither fitting closely to economic recessions or downturns) is strongly apparent.

Turning to longer-term labour productivity, Figure 4.11b shows the same four periods, with no growth at all from 1988 to 1995. This was followed by strong growth to 1999–2000: labour productivity increased by well over a third in these few years. Again there was a marked dip downwards in 2000–01, not recovered in the next two years, and with a further

Figure 4.11a Longer-term total factor productivity patterns in UK central taxation, using a 'taxes collected' measure of outputs, 1988 to 2008

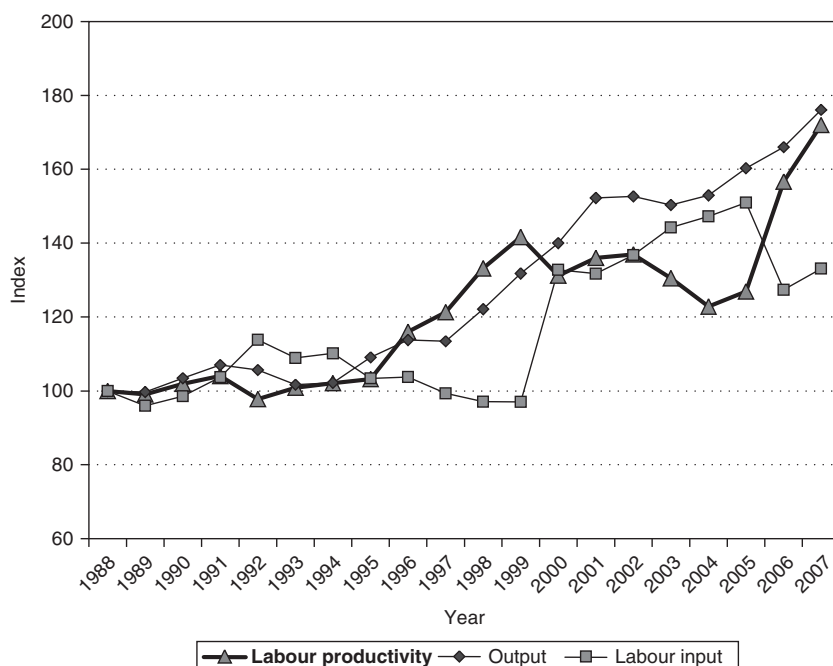


downwards dip in 2002–05. Strong growth followed after the 2005 departmental merger, coinciding with the Gershon Review and extensive staff cuts. These combined influences helped to achieve a further improvement of around a fifth in labour productivity by the end of our study period, when compared to 1999–2000 levels.

The overall picture of productivity change that emerges from this analysis is of some significant growth at the start and the end of our main study period 1998 to 2008, with a period of either 'marking time' or declining productivity in the middle, whose length varies somewhat depending on the measures being considered. Both our longer-term figures above are consistent with this pattern, confirming that productivity has grown significantly, but in quite short bursts of good years, interspersed with long periods of stagnation or even (in the early 2000s) significant declines.

An interesting corroboration of this picture is given in Figure 4.6 (page 102), which shows amongst other things that the overall costs of collecting taxation in the UK stayed almost exactly the same across the period from 2001 to 2008, neither increasing nor decreasing by any noticeable amount. Most of the biggest taxes (in terms of administrative burdens and revenues brought in) also show little change, with income

Figure 4.11b Longer-term labour productivity pattern in UK central taxation, using a 'taxes collected' measure of outputs, 1988 to 2008



tax costs falling but almost imperceptibly, and collection costs for VAT and excise taxes showing trendless fluctuation. The costs of collecting tobacco increased for external reasons to do with the smuggling in of large amounts from other EU countries for VAT evasion reasons, a development not directly within the administrative control of Customs and HMRC.

4.4 KEY INFLUENCES ON PRODUCTIVITY CHANGE

Our productivity series for taxation is still a short one, and hence the possibilities for further data analysis are limited. However, the Inland Revenue, Customs and Excise and HMRC are all very substantial departments, and their tax collection activities are large. So over time they have produced for Parliament a useful amount of information on a number of factors

that Chapters 1 and 2 highlighted as likely to be strongly associated in the modern era with changes in productivity. In particular, we have been able to assemble useful data series covering:

- *Expenditure on ICT*, which Chapter 1 showed was a key factor in modern business firms' productivity changes.
- *Outsourcing* via Private Finance Initiative projects, almost all of which in this period concerns major construction projects. Perhaps especially in the UK civil service, we know that moving into new buildings is strongly associated with organizations' substantial redesigning of their work teams and business processes. Hence we take PFI construction expenditure as a good proxy for the extent of major managerial change.
- *The use of consultants*, which is especially associated in the British civil service with the implementation of major reorganizations. Departments bring in consultants chiefly when they do not have enough staff to manage at the same time both their ongoing operations and the reorganization of activities or planning of major new projects. HMRC and its predecessors often used consultants to help implement IT-enabled business process changes.

Our data assembly task here was not without its complications, because before 2005 the two departments were not generally consistent in reporting this information over time, with some unexplained gaps or problems in the way that data were reported. For Customs and Excise (and later HMRC) we also needed to separate out the proportion of these data that was absorbed on collecting taxes (excluding the trade and customs regulation work). We estimated the size of the share to be assigned to non-tax work by using percentage weights based on total administration costs for each Customs activity.

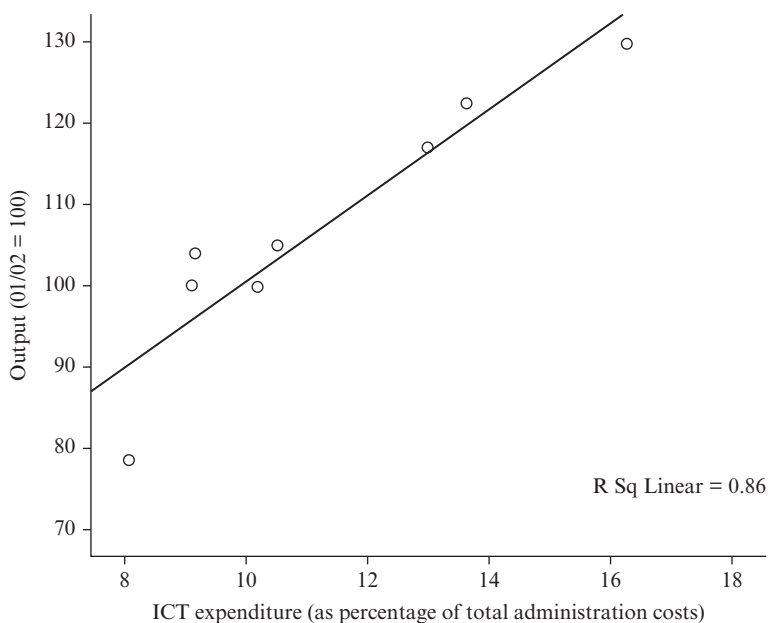
With these caveats, Table 4.6 shows the data on spending on ICT, construction projects (PFI ones) and the use of consultants, denominated in terms of their share of the total administrative expenditure for HMRC and its predecessor departments. The total amount of administrative spending absorbed on these elements almost doubled between 2000–01 and 2007–08, reflecting the huge extent to which the Blair government prioritized the renewal and extension of the administrative capacities of the civil service at this time. We cannot get fully comparable data for the first year of our study period (1997–2008). But there are strong indications that expenditure at the end of the period on the three organizational change aspects considered here was between two and a half and three times more than in the start year for Table 4.6 – a very major change. Both ICT and PFI construction

Table 4.6 Expenditure on information and communication technology (ICT), PFI construction projects and consultancy as a percentage of total administration expenditure in central government taxation, 1997 to 2008

Year	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
ICT	8.1	na	na	9.1	10.2	9.2	10.5	13.0	13.6	16.3	17.0
Construction	0.1	0.3	0.4	2.8	5.6	5.4	5.3	5.5	7.7	7.3	7.4
(non-ICT PFI projects)											
Consulting	na	na	2.3	2.2	1.7	2.0	2.3	3.0	2.9	2.0	1.9
Total for these aspects	9.2	na	na	14.1	17.5	16.6	18.1	21.5	24.2	25.6	26.3

Source: Computed by the authors using data from Inland Revenue, HM Customs and Excise and HMRC Departmental Reports.

Figure 4.12a *Lagged ICT expenditure plotted against outputs for tax collection*

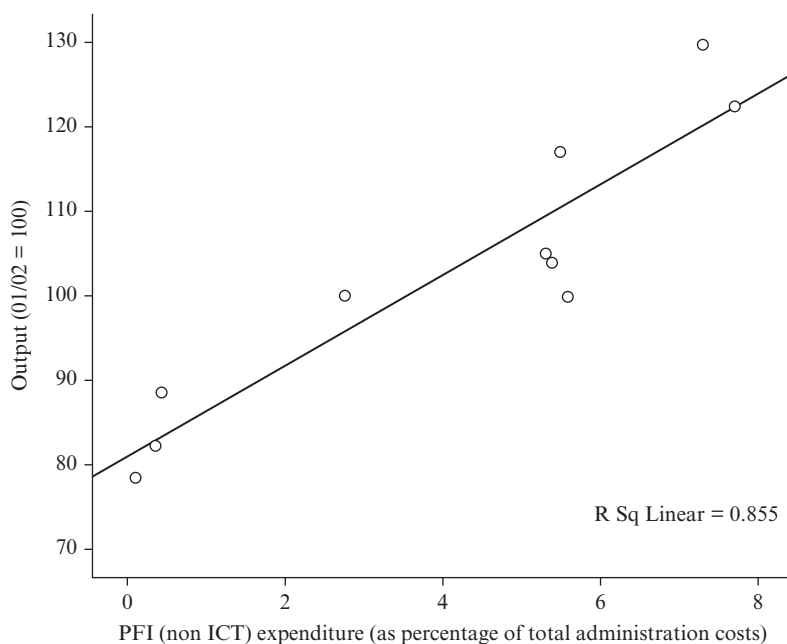


Source: Computed by authors based on data from HMRC and predecessors.

spending increased almost consistently across the years. Expenditure on consulting peaked in 2004–05 in the run up to the creation of HMRC.

To consider how the three possible explanatory factors are related to output levels, we lagged ICT, consulting and PFI (non-IT) expenditure by one year against the cost-weighted numbers of tax returns (our preferred total output measure). All three costs are investments that contribute to changing business processes, but they take some time to start to pay off. With this modification we then plotted each factor against the total output level and fitted a regression line across the plotted values. With so few observations, and with no controls applying for many other factors not included in the analysis here, it is inherently unlikely that there should be any close fit in these charts. And even where there appears to be an association, it can be taken as no more than a potentially interesting indication of some sort of association between the factor involved and output levels. Yet while we must be cautious on the interpretations of such results due to these two problems, the results can provide some initial evidence of the basic levels of association between the potential causal factors and output levels.

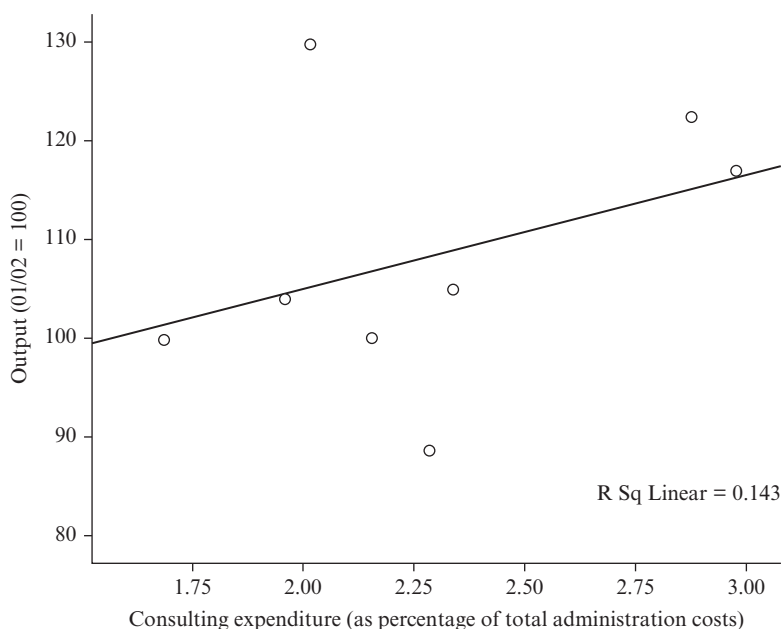
Figure 4.12b *Lagged expenditure on PFI construction projects plotted against outputs for tax collection*



Source: Computed by authors based on data from HMRC and predecessors.

Figures 4.12a to 4.12c show the resulting plots. There is a very close relationship between both ICT spending and PFI construction spending and the index of cost-weighted outputs levels. The raw regression score here suggests that up to five-sixths of the variation in outputs *might* be explained in terms of either of the two possible independent variables. By contrast, spending on consulting seems weakly related to the achievement of higher outputs. The raw regression score here suggests that only a seventh of the variation in outputs might be attributable to this factor. Expenditure on consultants may be more important during transitional times, but we also know from other work that periods of departmental and agency reorganizations in central government can often be associated with lowered output levels (NAO, 2010b; White and Dunleavy, 2010). With so few cases, these illustrations are only very lightly indicative, but the differences between the patterns for the first two factors and that for consulting are interesting and suggestive.

Figure 4.12c Lagged expenditure on consultants plotted against outputs for tax collection



Source: Computed by authors based on data from HMRC and predecessors.

Conclusions

The development of productivity in tax services at British central government level is an interesting and complex story. The early productivity peak evident in our series was clearly in part an unsustainable spike. It may have reflected the postponing of overdue investments and absence of modernizing business changes under spending plans set by the Conservatives under Prime Minister John Major, influenced primarily by ‘new public management’ thinking. The New Labour government of Tony Blair set about a whole series of changes that effectively recentralized tax raising, first pulling in National Insurance to be wholly administered by Inland Revenue, and later merging that department with Customs and Excise to form the integrated HMRC.

The resulting mega-department absorbed for a time almost a quarter of the entire British civil service. It was (and remains) an overwhelmingly business-facing agency, principally relying on companies to remit taxes due. Nearly two-thirds of the huge PAYE income tax and National

Insurance receipts are received from the UK's 10000 largest employers. Yet much of the department's workload also involved individuals or small firms. Large administrative efforts are still focused on individuals paying self-assessment income tax, capital gains and inheritance taxes; on small businesses whose compliance with PAYE and NI processes is weak or problematic; on a shifting canvas of major corporate and personal tax avoiders; and finally on a large numbers of small evaders threatening the viability of particular excise taxes (such as tobacco and alcohol duties in recent years).

The evidence reviewed here suggests that for much of the period from 1997 to 2008 progress in improving productivity in taxation was not conspicuously successful. There were some clear-cut achievements. Tax offices, some of the HMRC's major IT systems and the department's business processes were all extensively modernized. Yet the large-scale changes and capital intensification initiated by Labour only began to pay off clearly in the last three years of our study period. The growth achieved was most marked in terms of staff productivity, somewhat less clear-cut for a wide measure of productivity covering labour plus intermediate outputs, and almost not visible at all if we defined the key outputs measure to be the (inflation-adjusted) taxes collected per £ spent on administration. The overall cost of collecting £1000 in taxes (shown as the dashed line in Figure 4.6) was £10.60 in 1997–98 and £11.08 in 2007–08, a stasis that characterizes the whole series with minor wobbles. So on the one hand HMRC and its predecessor departments successfully counteracted the Baumol relative price effect by growing productivity enough to keep the costs of tax collection almost the same. But on the other hand, the departments' major investments in new ICT and business process reorganization were not enough to deliver sustainable reductions in costs of collection, even with the partial transition to online tax filing, on which many hopes for efficiency gains rested.

In addition, scholars of private sector service industries such as Grönroos (2007) have persuasively argued that improving productivity in services is not just about or primarily about saving costs (as it is in manufacturing). Instead, productivity change in services is often most closely associated with modernizing services and improving their quality, both of which are key for the sustainability of services firms. Unhappily the late growth in HMRC's productivity series also coincided with some significant indications of declining service quality, including not answering millions of phone calls by 2010, declining staff morale and other indicators of possible quality-shading. However, HMRC can at least point to success in overcoming the upwards jag in complaints around tax credits and the restoration of complaint levels that are consistent with previous experience.

Table 4.7 How the UK tax regime fared in international comparisons in 2000–01 (or other nearest year for which data was available)

Tax Collected per Tax Employee (\$ millions)		Administrative Costs per Revenue Employee (\$000)		Tax Declarations Processed per Employee (000s)	
USA	22.5	New Zealand	40	USA	2183
Australia	6.7	Ireland	48.0	New Zealand	1083
France	5.4	Australia	51.4	UK	725
Ireland	5.3	UK	57.2	Australia	610
UK	5.3	Canada	60.7	Canada	563
Canada	4.9	USA	87.5	Ireland	420
New Zealand	3.5			France	402

Raw Cost of Collecting \$1000 (in \$)		Cost of Collecting 0.01% of GDP in Tax Revenue (\$000)	
USA	39	Ireland	108
Australia	77	Australia	319
Ireland	92	New Zealand	663
UK	108	Canada	889
New Zealand	114	UK	1689
Canada	128	USA	4021

Note: Strong performers in terms of cost efficiency of staff efficiency are at the top of the table, and weak performers are at the bottom.

Sources: Bastow et al. (2003, Table DII.iii ‘Taxation and revenue’); data originally compiled from OECD tax data for 2000–01.

Finally, it is worth considering the scanty available evidence on how the UK appears to be faring in terms of international comparisons. In an analysis using 2000–01 data, Bastow et al. (2003) used OECD data to compare how Inland Revenue and Customs and Excise fared on some key indicators against other countries with some close characteristics, shown in Table 4.7.

Despite the UK departments’ generally high international reputations, an interesting feature of these tables is that the UK did not top any of them, and instead often lingered in the middle or at the bottom. The best performance was in processing declarations per tax employee, where the USA and New Zealand with compulsory self-assessments come top but the UK ran third. In costs per employee terms, the USA and Canada paid higher salaries but minimized other costs, while the UK ran Canada close. In tax collected per employee, the USA was the runaway winner, with Australia

a distant second, and the UK in a group of other countries. In terms of the nominal costs of collecting \$1000 in taxes the USA was again clearly ahead of all other countries, with Australia running second and the UK lagging well behind. However, because different countries have radically different levels of GDP, nominal cost comparisons flatter high GDP countries (like the USA) and may well misrepresent the performance of low GDP countries (like New Zealand). A far better basis for comparison is the amount of administrative costs required to collect a small fraction of GDP, in this case one-tenth of 1 per cent. On this basis Ireland's extensive PAYE system and simplified corporation tax approach came top by a clear mile, while the USA's universal self-assessment regime came last by a long way, with the UK second from bottom. These comparisons suggest that in the early part of our study period, the UK was far from being an exceptional performer in international terms. The growth in productivity from 2006 on is still too recent to be evaluated in the international data, but the UK clearly had plenty of ground to make up.