

IFS

Administration & Compliance

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Reforming the Tax System for the 21st Century,
Chaired by Sir James Mirrlees

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I. TAX SYSTEMS AND IMPLEMENTATION

Executive Summary

Assessing how much tax people owe and ensuring it is paid is a costly activity for both taxpayers and the government. Yet modern ‘optimal tax theory’ has for the most ignored these costs and has focused on those created by distorting people’s behaviour. But it is possible to adapt the standard framework to reflect administration and compliance costs, including real-world features of tax administration such as penalties for tax evasion, enquiry rates, and obligations to report information to the tax authority.

Part I of this chapter presents a simplified model of this type. The optimal policy is to use a mix of tax instruments determined so that the cost to society of raising an extra pound of revenue is the same for each instrument used. This would give tax instruments that raise revenue relatively efficiently a more prominent place in the tax system than those which raise revenue in a more costly way.

This model generates several valuable insights.

- First, the optimal mix of tax instruments cannot be determined by looking at only a subset of the costs of taxation. A tax instrument that looks attractive when considering only distortion costs may have little role to play because it imposes high administrative or compliance costs.
- Second, it is marginal costs that matter when making for incremental policy adjustments. Most publicly available data relate to average or total costs.
- Third, while enforcement activity by the tax authority is a true resource cost to society, any additional revenue such activity brings in is not a resource gain, but a transfer from private citizens. As a result, the superficially appealing rule that the tax authority should maximise tax revenue net of administrative costs is not optimal because it involve too high a level of enforcement.

An important question is what determines each of the costs of taxation. Increases in the probability of punishment or the size of the penalty should reduce evasion, though the latter has not been convincingly established empirically. If citizens are dutiful, evasion can also depend on the context and factors such as tax morale and dissatisfaction with the tax system. This implies that the tax authority should be careful not to alienate taxpayers when carrying out enforcement activity.

Administrative and compliance costs depend on a wide range of factors, including the complexity of the tax, characteristics of the tax base, structure of tax rates, frequency of reform, and organisation and efficiency of the tax authority. Taxes should therefore be kept as simple and stable as possible. In other areas, there is a trade-off between administrative and compliance costs: for example, whether it is the tax authority or taxpayers who have responsibility for calculating tax liability. Providing help and guidance increases administration costs, but reduces compliance costs.

In order to achieve a high level of compliance at modest cost, modern tax systems rely heavily on taxing market transactions, and involve extensive withholding and information reporting requirements. As a result, businesses (as opposed to individuals) play a central role in tax collection.

Part II of the chapter addresses some current UK policy issues.

HM Revenue and Customs has a number of public performance objectives, including targets for reduced non-compliance and for improved accuracy and customer satisfaction. The difficulty with these targets is that they do not give a good sense of the ultimate goal, nor of the trade-offs and priorities involved. The government's work on cutting the burden of regulation gets closer to measuring marginal costs than most previous attempts, but excludes some things normally considered part of compliance costs and focuses on businesses rather than all taxpayers.

HMRC is already taking steps to improve the operation of PAYE, but the time is perhaps right for a more fundamental rethink of how income tax is collected in the UK. The need for paper communication could be much reduced by an online coding system, something that deserves further investigation. Other changes could help reduce the frequency with which PAYE withholds the wrong amount of tax, but at the cost of more burdensome information reporting requirements. A more radical alternative would be to move to a system of universal self assessment. This would allow PAYE to be simplified substantially, reduce employer compliance costs and cut the number of errors that lie unnoticed for several years. Such a move is likely to be unpopular because of the additional burden placed on individual taxpayers. In part, this could be mitigated if HMRC pre-populated tax returns. And, were it possible to integrate tax credit claims into the tax return, some of the poorest taxpayers may benefit from such a change.

Another issue that has received much recent attention is tax avoidance. The perception remains that tax avoidance is a continuing source of considerable revenue leakage, complexity and cost. Ultimately, tackling avoidance is part of the process of defining the tax

base. This is easier where the tax base reflects a clear economic principle and avoids artificial and ambiguous boundaries. Governments are likely to have to continue to deploy a variety of measures to counteract avoidance and monitor the borders of the tax system where clear boundaries do not exist.

The overriding conclusion is that the UK's tax system is not doing too badly. But, as commercial life continues to change rapidly, there is increasing pressure for it to adapt. The question is whether it can adapt quickly enough. If not, it runs the risk of imposing unnecessary burdens while simultaneously allowing revenues to escape taxation so that the tax burden is shared in a more capricious and inequitable fashion.

1. Introduction

How taxes are administered and enforced matters – witness the debacle surrounding the introduction of tax credits in 2003. Most of modern tax theory, however, completely ignores administration and enforcement. The policy formation process is not much better, too often addressing implementation only after reform has been determined, rather than as an integral part of the decision-making process.

In this chapter, we step outside the usual framework for tax analysis to consider the administration and enforcement of the tax system. In essence, our primary focus is not what determines tax liability, but how that liability reaches the government's pocket. Our conclusions are of central relevance to the Mirrlees Review itself, since a number of the reforms being considered will require changes to the way in which taxes are administered and enforced.

The remainder of Part I introduces a simple theoretical framework that clarifies the key issues and trade-offs that exist. Part II applies this framework to current policy issues in the U.K and offers some recommendations. Part III concludes. Although we range broadly over these issues, some we touch on only peripherally. We also assume that the net revenue required is fixed - the policy issue is how best to raise this given amount. Box 1 defines some key terms.

Box 1. Definition of key terms

We use the term **remit** to mean transmit funds to the tax authority (by writing a cheque, for example).¹ The agent ultimately liable for a tax – the **statutory bearer** – need not be the agent with responsibility for remittance. **Withholding** refers to the situation where some or all of tax liability must be remitted by someone other than the statutory bearer (the most obvious example of this is employers remitting on behalf of employees).

We say that an individual **bears the burden** of a tax to the extent it makes him or her worse off (causes a loss of utility). The loss of utility can occur either because a tax reduces the return an individual receives on his labour or capital, or because a tax increases the prices of the good and services a taxpayer wishes to purchase with his income (or both). To the extent that taxes reduce the rate of return to investing in or running a corporate business, this burden must be traced beyond the impact on the profitability of a legal entity to its impact on the utility of the owners or suppliers of capital to the business.

Who ultimately bears the burden of a tax is generally different from both the agent who remits the tax and from the statutory bearer of the tax. This is because a tax system causes changes in pre-tax prices, thereby shifting the burden away from the statutory bearer. For example, a tax on labour earnings will in general increase the pre-tax wage, so that the after-tax wage does not fall by as much as the tax rate. Thus the burden of the tax is shared between the employer, who faces a higher cost of labour than otherwise, and the employee, who receives a lower after-tax wage rate than in the absence of the tax.² The response of prices and wages to taxation may not happen in the short run, especially in the presence of inflexible prices (due, for example, to long-term contracts). However, because prices are ultimately set by the interaction of supply and demand, the tax system will, in the long run, affect prices and these effects will determine ultimate incidence.

In the long run, what matters for the impact of a tax system is what actions trigger tax liability, who must remit that liability, and the expected penalties for the failure to remit. Aside from framing issues, what a tax is *called* is not relevant; for example, other things equal whether a tax is labelled an employer tax or an employee tax will not matter.

We employ the traditional distinction between evasion and avoidance: that of legality. **Evasion** is the use of illegal means to reduce tax liability – false statements on a tax return,

¹ Our use of the term should be distinguished from the UK tax system offering the “remittance basis” for the non-domiciled that allows an individual – usually someone resident in the UK but not domiciled in the UK – to be taxed on non-UK income only if it is brought into the UK.

² In the case of a tax on labour income, exactly how this burden is shared depends critically on the relative elasticity of the demand for and supply of labour: the less elastic is labour demand and the more elastic labour supply, the greater the proportion of the burden borne by employees.

for example – whereas **avoidance** is the reduction of liability through legal channels – such as setting up a company so that self-employment income (subject to income tax) can be relabelled as dividends (subject to corporation tax). If uncovered, evasion can be punished through fines or imprisonment, whereas avoidance cannot. In reality, however, the dividing line is not always clear; where this is the case we will clarify as necessary.

2. Analysis of tax system design

In this section, we show how standard tax theory can be extended to incorporate tax implementation concerns. We begin with a description of the costs of taxation, followed by the extended theoretical framework itself and an outline of its policy implications, and concluding with a discussion of caveats and broader issues that the model does not fully address.

2.1. *The costs of taxation*

Taxes impose costs. From an individual taxpayer's point of view, the most obvious of these is the tax revenue itself, which serves to reduce the taxpayer's purchasing power relative to what it would have been without the tax. Of course, from society's point of view, the lost purchasing power is not a cost – it is a transfer from individuals to the government, which can be used to provide public goods or redistribute towards individuals deemed worthy of support.

But taxes have other costs – costs that are true losses to society. We can distinguish three of these: distortion costs, administrative costs, and compliance costs.

Distortion costs arise because taxpayers' decisions, including but not limited to how much to work and what to buy, are distorted by taxes. As a simple example, an employee might be unwilling to do an hour of overtime given a post-tax wage of £12, but would willingly work late for his pre-tax wage of £20. If so, the tax has *distorted* the employee's choice over how many hours to work. It is a cost because, had the tax authority agreed not to tax the hour of overtime, the employee would have done the extra hour and been better off as a result (otherwise he wouldn't have been willing to stay late) while tax revenue is unchanged. The change in behaviour occurs because taxes change the relative price of activities so that they do not represent the relative social costs, and is sometimes referred to as the real substitution response. This is to be contrasted with evasion and avoidance, which

are efforts to reduce tax liability *without* changing work and consumption decisions (illegally in the former case, legally in the latter).

A different type of distortion cost is the risk exposure cost of tax evasion. An individual who evades part of his liability exposes himself to risk because he doesn't know whether he will be caught and penalised. Assuming he is risk-averse, this is costly: the individual would prefer to remit with certainty an amount equal to his expected tax liability. If the government is effectively risk-neutral, the social cost of the risk exposure is equal to the amount the individual would be willing to pay in order to eliminate the exposure.

Administrative costs are costs incurred by the tax authority in establishing and operating systems to manage all aspects of taxation. **Compliance costs**, in contrast, are incurred directly by taxpayers in complying with their tax-related obligations, and by third parties involved in the tax remittance process (such as employers who are required to remit tax on behalf of their employees).

Why administrative and compliance costs exist may be obvious, but it is worth making explicit. Even if all taxpayers were scrupulously honest, an administrative system would still be required to provide information about tax liabilities and to record and check payments, and taxpayers would still need to spend time and money finding their way through the increasingly complex maze of tax laws. But, of course, not all taxpayers are honest; nor are taxpayers obliged to arrange their affairs in a way that suits the tax authority. As a result, some taxpayers go to considerable lengths (avoidance or evasion) to reduce the size of their tax bill; this expense also constitutes compliance costs.³ In response to avoidance and evasion, all tax authorities judge it worthwhile to expend resources to limit their deleterious consequences.

2.2. *Optimal taxation*

Having described the costs of taxation, the crucial next step is to realise that not all tax policy instruments impose the same costs per pound of revenue raised. All costs (apart from the loss of purchasing power, of course) can vary depending on the characteristics of the tax and its implementation, as can the distribution of costs across individuals. This explains why economists have spent, and continue to spend, so much time trying to find the 'best' tax system (the one that minimises total costs, subject to distributional concerns).

³ It might be argued that one should distinguish between unavoidable compliance costs (that arise in complying with tax obligations), and voluntary compliance costs (that result from attempts by the taxpayer to reduce his tax liability). In practice, it is very hard to separate the two (it depends on the intentions of the taxpayer). Moreover, both are an equally wasteful use of resources from society's point of view.

In its search for the best tax system, modern optimal tax theory – begun by Mirrlees (1971) and Diamond and Mirrlees (1971) – has, for the most part, focused on distortion costs, ignoring both administrative and compliance costs as well as evasion. However, as a description of reality, the assumption that tax liability can be ascertained and collected costlessly is patently untrue.

Accounting for evasion and for administrative and compliance costs in normative models is, therefore, important. It turns out that the standard optimal tax framework can be extended straightforwardly to incorporate the other costs of taxation, and to address details of tax system implementation, such as penalties for tax evasion, enquiry rates, and obligations to report information to the tax authority, and so on. We will outline a simplified model of this type below. But before doing this, we spend a few paragraphs describing the normative framework that forms the basis for the model we present – a basis common to most optimal tax models.

2.3. Normative framework

The standard normative framework for evaluating tax policy assumes that the best tax system is the one that is best for citizens' well-being (or welfare), as they judge it. This means that the *process* that generates welfare levels is irrelevant except insofar as it affects those welfare levels. Whether a tax system is 'fair' depends on its effect on the distribution of welfare across individuals, not on the process that generates this distribution. This assumption may seem unreasonable given the possibility that the welfare of some individuals has been achieved illegally (through evasion). This is something we discuss in more detail later.

Individuals are assumed to make decisions based on what will maximize their level of well-being, as they judge it, given prices and their resources. We recognize that there are situations in which behaviour appears to violate this assumption. We address the issues this raises where appropriate.

To determine how society makes tradeoffs across individuals, a social welfare function is used. A social welfare function (implicitly) assigns a weight to each individual's welfare describing how important that welfare is from society's point of view. These weights may differ according to the level of welfare: the higher the weight on low-welfare individuals relative to high-welfare individuals, the more egalitarian is the social welfare function, and the more the society is willing to sacrifice aggregate welfare in favour of a more equal distribution of welfare across individuals. We will presume that the degree of egalitarianism is determined by the political system.

2.4. Raising revenue efficiently

As mentioned above, optimal tax theory can be straightforwardly extended beyond the traditional focus of inquiry – the choice of rates and bases – to address the policy instruments related to tax system implementation. In describing this extended framework, it is helpful to ignore distributional issues initially, and introduce them later, allowing us to focus first on how to raise revenue most efficiently (i.e. at minimum cost to society).

Assume the tax authority has to raise a fixed amount of revenue in order to fund public spending. Revenue is raised using a combination of different tax instruments; the task of the tax authority is to choose which tax instruments to use (and how much to use each of them) in order to raise the required revenue at minimum cost to society. This choice will depend on the **efficiency cost** of each tax instrument, which describes how costly it is to raise revenue using that instrument. Efficiency cost incorporates all of the costs of taxation identified above –administrative, compliance and distortion costs and the risk bearing cost of tax evasion, plus the loss of purchasing power (it is convenient for this exercise to treat lost purchasing power like all the other costs.)

What does the optimal policy look like in this model? It turns out that an optimal policy will equalise the Marginal Efficiency Cost of Funds (*MECF*) of any and all tax instruments that are employed.⁴ The *MECF* of a particular tax instrument is defined as the marginal (additional) cost to society of raising an extra pound of tax revenue using that tax instrument. The higher is a tax instrument's *MECF*, the less efficient is the tax instrument at collecting revenue. The equalise-*MECF* principle holds because, if it is violated, the same revenue could be raised at lower social cost by reducing reliance on high-*MECF* tax instruments and increasing reliance on low-*MECF* instruments.⁵ As shown in Slemrod and Yitzhaki (1996), the *MECF* of a given tax instrument is equal to:

$$MECF_i = \frac{1 + x_i + c_i}{1 - a_i}$$

where a_i and c_i are marginal administrative and compliance costs per pound of revenue raised, and x_i is the distortion cost per pound raised (including risk exposure costs). The

⁴ The *MECF* analysis applies to incremental policy changes, but the intuition applies to non-incremental policy changes, as well.

⁵ In the more general model where the level of public spending is chosen optimally, it will also be true that the common value of the *MECF* for all tax instruments is equal to the social marginal benefit of public spending. This suggests that the level of public spending should depend, in part, on the efficiency of the tax instruments available to collect the revenue.

numerator is the social cost of the tax change per pound raised; the denominator is how much of that pound is left once administrative costs have been accounted for. Because c_i is added in the numerator and a_i is subtracted in the denominator, the key conceptual difference between compliance costs and administrative costs is explicit: only the latter uses revenue raised from taxpayers.

Three important implications of the model derive immediately from the form of the *MECF*. First, what matters for the evaluation of potential incremental policy changes are marginal costs, not total or average costs. This stands in contrast to much of the empirical evidence on administrative and compliance costs (discussed later), which concerns total costs. Second, since the *MECF* depends on all costs of taxation, policy reforms cannot be evaluated with reference to only a subset of the costs. A reform that looks attractive when considering only distortion costs may be very unattractive when administrative and compliance costs are taken into consideration. Third, to the extent that a trade-off exists between administrative and compliance costs, administrative costs should receive a slightly higher weight because administrative costs must themselves be met through taxation, which entails further administration, compliance and distortion costs.

Since the optimal policy rule requires that the *MECF* be equalised for all tax instruments employed, it should be clear that tax instruments with a high *MECF* will, all else equal, have a less prominent place in the tax system than those with a low *MECF*. Some high-*MECF* tax instruments should not be used at all.

In this context, it is worth noting that the *MECF* of one tax instrument may depend on the setting of other tax instruments. This implies that the optimal setting of one tax instrument cannot be determined without reference to the settings of other tax instruments. For example, the optimal progressivity of the tax system given a sub-optimal level of enforcement may be below the overall optimal level of progressivity.

Another implication of the equalise-*MECF* rule relates to the appropriate amount of resources to devote to increasing the probability that evasion is detected. One superficially intuitive rule – to increase the probability of detection until the increase in revenue thus generated equals the marginal administrative cost (so that $a_i = 1$) – is incorrect.⁶ This is clear from the *MECF* formula: if $a_i = 1$, then the *MECF* of increasing administrative resources is infinite, which can never characterize an optimal policy. The problem with the intuitive rule is that, although the cost of hiring more auditors is a true resource cost, the revenue brought

⁶ This is formally demonstrated in Slemrod and Yitzhaki (1987).

in does not represent a net gain to the economy, but rather is a transfer from private (non-compliant) citizens. The correct rule will involve a lower probability of detection than the one implied by the superficially intuitive rule.

This reasoning also makes clear that in general it is not optimal to expend resources to eradicate tax evasion, just as it is generally not optimal to station a police officer on every corner in an attempt to eliminate street crime. This is relevant for our later discussion of “tax gap” measures, because the actual tax gap may be greater than or less than the optimal tax gap.

Finally, from one country’s perspective, expending resources to crack down on cross-border income shifting is particularly attractive, because any revenue collected does not come with an offsetting utility loss to the taxpayer, as the taxpayer would have paid some tax to another tax authority. By ignoring the fiscal spillovers, this policy is very attractive from one country’s point of view, but not necessarily from a global welfare perspective.

2.5. *Distributional concerns*

Implementation is not only a question of how to raise funds with minimal resource cost – the distributional consequences of how a tax system is implemented are also relevant. Allowing for distributional concerns, the optimal policy now involves equating the marginal cost of funds, MCF_i , of each tax instrument.⁷ The MCF is just the $MECF$ (described above) re-weighted to reflect distributional consequences:

$$MCF_i = DC_i \times MECF_i$$

where DC_i is Feldstein's (1972) distributional characteristic of the tax instrument that describes *who* bears the utility changes caused by a change in the tax instrument. A higher value of DC indicates that utility changes are concentrated among individuals with a higher marginal social welfare weight (generally lower-income individuals), reflecting the additional social cost of using a tax instrument with adverse distributional consequences (assuming a preference for equality, all else equal). Since the optimal policy now involves equating the MCF of each tax instrument rather than the $MECF$, it will – not surprisingly – involve lower reliance on tax instruments whose burden is concentrated among the poor, and more on those whose burden is concentrated among the rich.

⁷ This is shown in Mayshar and Yitzhaki (1995).

As we will see later, evasion and compliance costs vary across the income distribution. At this stage, it is worth noting that systematic variation between individuals at *different points* in the distribution can be approximately offset by changing the structure of tax rates (making income tax more progressive, for example). In contrast, variation in evasion and compliance costs between individuals at the *same* point in the distribution cannot be offset by changes in tax rates; this issue of horizontal equity is discussed below. Administrative costs have no distributional implications as, in effect, they can be spread across the whole population as desired.

2.6. Caveats and broader issues

Like every economic model, the MECF framework is highly stylised. Inevitably, there will be some issues that the MECF framework does not capture adequately. We discuss a number of these in this section.

2.6.1. Private costs and social costs

A central assumption of the model just presented is that the private costs of taxation are equivalent to the social costs. In some cases, however, the private cost is clearly not identical to the social cost. One example of this is when the behaviour of taxpayers directly affects people other than the taxpayer concerned and the tax authority (an “externality”). Another example is fines for tax evasion. A fine is viewed as a cost by the individual, but from society’s point of view fines collected serve to reduce the amount of revenue that would otherwise have to be collected. This benefit is ignored by the individual – hence the divergence between private and social cost. Note that an increase in fines can look like an attractive policy option indeed: unlike employing additional inspectors, the increase in tax collections due to increased deterrence is achieved with no resource cost. As discussed later, there are reasons unrelated to efficiency cost minimisation that make it undesirable to increase fines for tax evasion without limit.

2.6.2. Welfare discounts for tax evaders

One issue that does not fit easily into the standard normative approach, raised by Cowell (1990, p. 136), is that it does not allow for the possibility that there should be a specific social welfare discount applied to the utility of those who are found to be guilty of tax evasion and thus “are known to be anti-social,” as opposed to the welfare weight applied to the innocent or uninvestigated (who may or may not be anti-social). By applying no such

discount, noncompliant taxpayers do not *per se* receive a lower welfare weight than compliant taxpayers. Resolving this issue is a matter of political philosophy rather than economics, and here we can only note that accepting this alternative perspective of discounting the welfare of non-compliers would suggest higher penalties for detected evaders and more resources spent on detecting evasion. It does not, though, in itself restore the logic behind expanding resources until the marginal revenue raised is equal to the marginal resource cost of raising that revenue.

2.6.3. *Horizontal equity*

The possibility of tax evasion raises the more general issue of horizontal equity – the extent to which a tax system results in the same tax burden among individuals at the same level of well-being. It is often invoked as a desirable criterion for judging tax policy that cannot be captured by the standard framework. Indeed, not only does our optimal policy fail to eliminate horizontal inequity caused by evasion (doing so would require ‘excessive’ anti-avoidance spending), it commonly involves creating *additional* horizontal inequity through the use of random audits and by making tax liability depend upon ‘tags’ (tags are relatively immutable characteristics of individuals that are correlated with well-being).⁸

The problem with accepting horizontal equity as an explicit criterion is, as Kaplow (1989, 1995) demonstrates, that it means abandoning the Pareto principle (that any reasonable rule should accept a policy that makes some people better off and no one worse off). This doesn’t seem to be a very desirable move. Even if one is willing to make this sacrifice, it is not clear how horizontal equity should be traded off against other objectives.

2.6.4. *Privacy and taxpayer rights*

Because the collection and evaluation of information is a critical aspect of implementing all taxes, the question arises of whether the government and other third parties to the tax system can be trusted with this information. Can the government be relied upon to keep it safe, make appropriate use of it in policy, and forgo using it inappropriately by, say,

⁸ Akerlof (1978) is the seminal article on the use of tags in tax, and other, policy. To see the potential efficiency benefits of tagging, imagine that having blue eyes is positively correlated with ability, and therefore well-being. Levying a tax on blue-eyed individuals would achieve a progressive distribution of the tax burden without the distortion costs associated with, say, graduated income tax rates (the possibility of a tax-reducing behavioural response to an eye colour tax is somewhat limited!) It is horizontally inequitable because an individual with brown eyes would have a lower tax burden than a blue-eyed individual at the same level of well-being.

selling it or exploiting it for political purposes? Concern over access to private information leads to tax data being fiercely protected in most countries.⁹

Much of this boils down to a question of privacy and whether our model adequately captures the value individuals place on it. Following Lessig (1999), it is helpful to distinguish three separate aspects of privacy. In the first, the concern is the burden of intrusion – what he calls the utility conception: a police search of one’s home or car is, to be sure, a hassle. This hassle is, in principle, captured as compliance costs and taken into account by the tax authority in policy making. The second aspect is privacy as dignity – even if a search is not bothersome or costly, it is an offence to one’s dignity. Again, in principle, the value of offences to citizens’ dignity would be captured in a utility-based measure of compliance costs, although practically speaking this is much more difficult to quantify than the hassle of a search. The third aspect of privacy is its potential use as a way to constrain the power of the state by restricting the scope of regulation that is practically possible. We note that studies that attempt to measure compliance costs do not account for taxpayers’ dislike of sharing private information.

If the government cannot be relied upon to take privacy adequately into account when devising policy, steps may be needed to limit the information the government can collect and use. One way this may be achieved is by relying on business-based taxes that do not make use of information about individuals, such as a VAT. Particular methods of collection can also act to constrain the use of information. The UK Pay As You Earn (PAYE) system used to withhold income tax is an example of this, since it works well only with a fairly simple tax base. Whether PAYE has been a constraint on policy – and if so, whether this has been beneficial – is an issue to which we will return in Part II of this chapter.

The downside of privacy is that it can make achieving other aims more difficult. In particular, the efficiency of the tax system may be harmed if the use of certain types of information is disallowed. Fairness also commonly requires information: tax allowances for pensioners and the disabled, for example, rely on information about age and disability. Ultimately, a balance must be struck between protecting the privacy of citizens and achieving other aims of the tax system.

Tax systems inevitably impose obligations on taxpayers. But is there a balance: do taxpayers have rights against the tax authority? In the case of a dispute, taxpayers can

⁹ It is important to distinguish the collection of information to implement policy, to monitor and prosecute taxpayers, and for statistical purposes (to inform policy). We note that in many countries data collected for statistical purposes cannot be used to prosecute an individual for tax non-compliance.

sometimes ask for some form of internal review, where the tax authority undertakes to have someone not connected with the case to look at the issues. Of course, this lacks the independence of a real appeal: recourse to the courts is usually how this is achieved.

In exercising their rights, taxpayers face two issues. The first is knowledge of the routes available. To some degree, this could be addressed by a taxpayers' Bill of Rights, setting out the standards of service taxpayers can expect and the courses of action available in case of a dispute, alongside a list of the responsibilities of taxpayers. But even with one of these, taxpayers may still have little idea of their options. The second issue faced by taxpayers is that, even with an understanding of options open, taxpayers often need time and money to take advantage of them. This is particularly the case with court proceedings, which can be both lengthy and expensive.

2.6.5. Transparency

The way a tax system is implemented can have an important effect on transparency, which has value to a polity not captured by the model we have presented, in that it facilitates an open dialogue about the wisdom of the policies in place and possible alternatives. Getting taxpayers involved in the remittance process (by requiring them to fill in tax returns, for example) is usually good for transparency because they gain some understanding of the calculations involved and see the size of the cheque sent to the tax authority. In contrast, complexity is the enemy of transparency: it contributes to the attractiveness of using tax advisers and computer software, leaving individuals with little idea what is going on.

3. Determinants of evasion, avoidance, and administrative and compliance costs

The previous section described how the modern theory of optimal taxation can be extended to incorporate these costs and address tax system implementation. In this setting, we saw that the marginal efficiency cost of funds (MECF) of each tax instrument played a central role in determining the best choice of tax instruments (the combination that raises the required revenue at lowest cost). We also derived a formula that showed how the MECF incorporates all the costs of taxation: administrative and compliance costs, distortion costs and the risk bearing cost of tax evasion, plus lost purchasing power. In this section we address what determines the size of each of these costs by focusing on evasion and avoidance as well as administrative and compliance costs and discussing the relationships and trade offs that exist between each of them.

3.1. Tax evasion and deterrence

The canonical economic model of tax evasion (the “deterrence model”) presumes that the taxpayer’s actions are not motivated by morality or duty, but are restrained only by the possibility of punishment. The seminal formulation is due to Allingham and Sandmo (1972), who, in the context of an income tax, modelled the punishment as a fixed probability that any income understatement would be detected and subjected to a proportional penalty over and above payment of the outstanding tax liability.¹⁰ The risk-averse taxpayer chooses a report in order to maximise expected utility, so that the choice of whether and how much to evade is akin to a choice of whether and how much to gamble. If, and only if, the expected payoff to this gamble is positive, a risk-averse taxpayer will chance some evasion, with the amount depending on the expected payoff and the taxpayer’s risk preferences.¹¹ The key result for policy is that increases in either the probability of punishment or the penalty rate will reduce evasion.¹² Perhaps surprisingly, the relationship between the tax rate and the level of evasion is *a priori* ambiguous, depending on the taxpayer’s risk preferences and whether the penalty for detected underreported income is tied to the tax liability evaded.¹³

Once an evader has been identified, imposing a financial penalty is (almost) costless from society’s perspective because it is a transfer rather than a resource-using deterrent like hiring more tax inspectors. As a result, a government concerned with maximising the expected utility of a representative citizen will want to set the penalty as high as possible to deter evasion – this has been well known since Becker (1968). But this argument ignores the possibility that the tax administrator might abuse the system, and the fact that individuals (and the tax authority) make honest mistakes. It also flies in the face of the common notion that the level of punishment should in some sense “fit” the crime.

In contrast to penalties, increasing the probability of detection is costly (it requires more tax inspectors, computers, etc). A large theoretical literature has explored the extent to which the probability of detecting a given act of evasion can be raised above the average audit coverage rate by exploiting the statistical relationship between what is revealed on tax

¹⁰ The penalty may include damage to one’s reputation.

¹¹ Like all economic models that are highly stylised, it is not meant literally in the sense that each taxpayer sits at his or her desk and solves a constrained maximization problem. It does, however, suggest that individuals weigh the potential gains from evasion with the costs and chances of being caught. The relevance of the model is ultimately an empirical question, resting on whether it can explain observed patterns of behaviour.

¹² Of course, what matters for decisions is the *perceived* probability of detection and attendant penalties rather than objective values.

¹³ The relationship between the tax rate and the level of evasion is ambiguous because, when penalties are proportional to the tax understatement, a tax rate increase raises both the reward to the successful evasion of a given amount of taxable income and the penalty for its detection. See Yitzhaki (1974).

returns and non-compliance. Sophisticated “risk-management” techniques of this sort are used in many countries (including the UK).

Perhaps the most compelling empirical support for the deterrence model in an income tax setting is the clear evidence that the non-compliance rate is lower for those acts of non-compliance with a higher likelihood of being caught. Klepper and Nagin (1989), for example, show that, across line items of the U.S. income tax form, non-compliance rates are related to proxies for the traceability, deniability, and ambiguity of items, which are in turn related to the probability that evasion will be detected and punished. In contrast, the relationship between non-compliance and the penalty has not been convincingly established.

The deterrence model, and most subsequent extensions and empirical analyses, focuses on evasion by *individuals*. Understanding non-compliance by *companies*, however, may require a different framework. This is particularly relevant for large firms, where tax reporting decisions are usually delegated to someone other than the firm’s owner or shareholders (creating the potential for misaligned incentives) and where attention focuses not on (illegal) evasion but on (legal) avoidance or the blurry border between the two.

3.2. *Duty, obligation and tax evasion*

The deterrence model of tax evasion presumes that individuals (and firms) are entirely amoral, and remit taxes only when a cost-benefit calculation indicates they should; the fact that evasion happens to be *illegal* is irrelevant aside from the effect penalties have on the cost-benefit comparison. Arguably, though, a non-trivial segment of individuals (and maybe even firms) would remit the taxes they owe due to a sense of obligation or duty even in the absence of any enforcement. Indeed, some have argued that duty and obligation are central to understanding taxpaying behaviour because evasion seems to be a winning proposition for many more people than actually do evade. From this perspective, the puzzle is not to explain why people evade, but rather why people don’t evade more.

For three reasons, this argument for dismissing the deterrence model is not persuasive. Most important, it often relies on assuming that the probability of an act of evasion being detected is equal to the fraction of returns that are audited in a given year. For the bulk of income subject to tax in developed countries, this will be a vast understatement of the true probability because of the efficacy of risk management techniques (discussed above), information reports and withholding (discussed below). Second, it does not put a value on reputational damage to the taxpayer, something that may in practice be quite important.

Third, to the extent that past years' returns may be audited, the relevant probability is the probability of being caught over a number of years rather than in a single year.

While the usual argument dismissing the deterrence model is not persuasive, there are certainly reasons to doubt that it is the end of the story. Some experimental evidence finds that subjects respond not only to the probability of detection and the stakes in a tax evasion game, but also to the context provided to them (which shouldn't matter according to the deterrence model). There is also evidence that dissatisfaction with the tax system is related to non-compliance (again, it should not be in a deterrence framework).¹⁴

Frey (1997) argues that punitive enforcement policies may crowd out the "intrinsic" motivation of such people by making them feel that they pay taxes because they have to, rather than because they want to. Feld and Frey (1999) argue that where the relationship between the individual and the tax authority is seen as involving an implicit contract sustained by trust, individuals will comply due to high "tax morale." To sustain citizens' commitment to the contract, the tax authority must act respectfully toward citizens while at the same time protecting the honest from the free rider. It does this by giving taxpayers the benefit of the doubt when it finds a mistake, by sanctioning small violations more mildly, and by sanctioning large and basic violations (e.g., the failure to file a return) more heavily.¹⁵

If perceptions matter for tax compliance, a natural question is to what extent tax compliance behaviour can be manipulated by the government to lower the cost of raising resources. Appeals to patriotism to induce citizens to pay their taxes are common in recent times. That such campaigns are successful during ordinary (non-war) times in swaying taxpayers from their otherwise selfishly optimal compliance strategy has not, though, been compellingly demonstrated.¹⁶

Given businesses have a central role in tax remittance, an important question is whether arguments about honesty and dutifulness also apply to companies. If the tax director views paying taxes as a civic virtue and can determine policy, corporate evasion or

¹⁴ Scholz and Lubell (1998) found that, controlling for attitudes about tax fairness, civic duty, political efficacy, tax duty, opportunity for evasion, and being in a high non-compliance occupation, high scores on two trust measures ("You can generally trust the government to do what is right," and "Dishonesty in government is pretty rare") significantly decrease the likelihood of non-compliance.

¹⁵ Some survey evidence also provides support for this view, for example Torgler (2003) and Slemrod (2003) show there is a positive relationship across countries between survey-based attitudes toward tax evasion on the one hand and professed trust in government, and Slemrod (2003) finds that the same relationship holds across individuals within the United States and Germany.

¹⁶ In a randomized field experiment with Minnesota taxpayers in a peacetime setting, Blumenthal, Christian, and Slemrod (2001) find no evidence that either of two written appeals to taxpayers' consciences had a significant effect on compliance.

aggressive avoidance may take on an ethical dimension and become responsive to non-deterrence aspects of the tax system.

3.3. Tax avoidance

Discussion of tax evasion leads naturally into the subject of tax avoidance. The starting point is that avoidance is legal, unlike evasion. Evasion reflects the mechanisms that are used to assess and collect tax and the ease with which those mechanisms can be controlled and monitored. Avoidance, in contrast, reflects the choice of tax base and the ease with which the concepts it involves can be described in legislation in a way that offers the fewest opportunities to taxpayers to reduce or eliminate their tax liabilities by modifying their behaviour – or the tax characterisation of behaviour – in some way. In this respect, avoidance activity can provide an indication of the extent of distortion or non-neutralities that a particular tax base may entail. That said, the boundary between avoidance and evasion may not always be clear. In particular, where there is uncertainty about the correct taxation of particular arrangements or activities, the ‘success’ of particular avoidance may depend upon the tax authority not becoming fully aware of what the taxpayer has done so that the correct taxation of the arrangements or activities in question are never challenged and never have to be justified.

Every tax system is likely to generate some avoidance activity because every system involves the creation of boundaries of one sort or another – between what is taxed and what is not, between taxpayers with different tax characteristics – that will then lead to tax arbitrage. If a tax system can avoid creating unnecessary and difficult-to-police boundaries it is likely to be more robust against avoidance than one that does involve such boundaries. Any system, however, is likely to involve a variety of different instruments to minimise or impede avoidance activity. In Part II we outline the different approaches that have been adopted in the UK and make a number of observations on their relative success.

3.4. Administrative and compliance costs

In this section, we discuss the determinants of administrative and compliance costs. It is convenient to take the two together because many issues are common to both. Most work in this area has been empirical, attempting to measure how big administrative and compliance costs are for different taxes, and how it varies by size of taxpayer.¹⁷ Surprisingly little of this empirical work has tried directly to answer the question we are most interested in: what

¹⁷ Evans (2003a) is a helpful introduction to recent work on the administrative and compliance costs of taxation.

features of a tax or tax system *cause* high costs? Nevertheless, we can list a number of important factors.

Administrative and compliance costs are generally lower for simpler taxes – those with fewer rates, borderlines and reliefs. Less effort is required to understand how to comply, the mechanics of fulfilling obligations takes less time and there is less for the tax authority to have to record and monitor. If there is overlap between the bases of different taxes, the use of common definitions and procedures across taxes reduces costs by decreasing the number of calculations that have to be made (this has been one of the main motivations behind moves towards alignment of income tax and National Insurance in the UK in recent years). Complexity and lack of clarity in tax law in general will make for higher administrative and compliance costs.¹⁸

The characteristics of the tax base are particularly important for administrative costs. The important issue is the ease with which the tax base can be disguised, hidden or relabelled. Two characteristics are likely to be particularly relevant: physical size and mobility (it is harder to tax diamonds than installed windows, for example), and whether there is compulsory registration (as there is for car owners and holders of driving licences).

The structure of tax rates affects administrative and compliance costs for at least two reasons. First, average costs per pound of revenue collected are likely to fall as the tax rate increases because the cost of complying or inspecting a tax base does not depend on the tax rate (except to the extent that people are more inclined to avoid or evade when the tax rate is higher). Second, variations in tax rates can lead to large increases in administrative and compliance costs. To see this, consider two commodity taxes. If the tax rate is the same for both taxes, only total sales of the two commodities need be reported to and monitored by the tax authority. But if the tax rates differ, even fractionally, sales must be reported and monitored separately, implying considerably higher costs.

In recent years, tax systems in developed countries have moved towards giving small taxpayers the option of calculating their liability against a simplified scheme. The idea is to reduce administrative and compliance costs in cases where the risk of losing tax revenue is low. In practice, providing this sort of choice often turns out to be counter-productive, at least for compliance costs: taxpayers end up calculating their liability against all available schemes to make sure they choose the best one.

¹⁸ See Section 1.7 of Evans (2003b) for a discussion of simplicity and complexity.

A major component of compliance costs is the cost of understanding which tax-related obligations apply to the taxpayer, and what needs to be done to comply with them. In this regard, stability is a highly desirable feature of a tax system, since learning what to do is much more costly the first time than on subsequent occasions. As Sandford (1995) points out, stability is helped if governments get legislation right the first time, which in turn underlines the importance of proper consultation beforehand (the zero per cent starting rate of corporation tax is a classic example of where the government got it wrong). This argument also favours large one-off reforms over incremental changes that require new tax obligations to be understood multiple times. On the other hand, incremental reform might be preferable from the point of view of minimising the chance of serious breakdown in the new procedures.

Whether the tax authority or the remitter is responsible for calculating tax liability obviously affects compliance costs: the greater is the reliance on the remitter to calculate liability, the higher are compliance costs and the lower administrative costs. Of course, administrative costs also depend upon the organisation and efficiency of the tax authority.

Responsibility for remittance is important because there are economies of scale in tax administration and compliance: costs tend to be lower when the tax authority has to deal with fewer, larger remitters. The number of taxpayers (those with statutory liability) will also have some bearing on costs (more taxpayers means more calculations), but it is unlikely to be as important as the number involved in remittance. Administration and compliance is likely to be less costly if remitters understand the tax concerned, and have in place systems that are able to provide the necessary information without much additional work. For this reason it is less costly to tax a transaction that involves a large company, which may well need documentation for its own purposes, than to tax a small business, which may not require the same level of documentation.

There is a trade off between administrative and compliance costs in regard to the provision of help and guidance: comprehensive user-friendly documentation and telephone support is costly to provide but makes it easier for taxpayers to comply.

Note, as mentioned above, administrative costs have no distributional consequences: they are met out of tax revenue so can effectively be spread across the population as desired. In contrast, compliance costs can have quite marked distributional consequences. These will depend on the ultimate incidence of compliance costs, not on where they fall in the first instance (i.e. on remitters). Ultimate (and long-run) incidence depends on the extent to which prices and wages adjust to shift the burden away from the remitter – the logic is similar to that for the incidence of the tax itself. A limited amount of empirical work has been done to

try to estimate the incidence of taxes; to our knowledge, none of this has incorporated the effect of compliance costs (although one might imagine incidence to be similar). This is obviously an extremely important question if we are to understand the distributional consequences of compliance costs.

From the above discussion, it should be clear that, although some factors tend to move administrative and compliance costs in the same direction, others (such as who has responsibility for calculating tax liability) will move them in opposite directions. In fact, there is considerable potential for transferring between administrative and compliance costs. In this case, it is important to consider administrative and compliance costs together rather than targeting one separately from the other.

As a final point, so far we haven't drawn a strong distinction between compliance costs that are unavoidable (those incurred in meeting tax-related obligations) and those undertaken voluntarily (planning to reduce tax liability). Both represent social costs, because they use up resources that could otherwise have been put to valuable purposes. From a policy perspective, however, there may be an important difference: while reducing unavoidable compliance costs should help to reduce the overall costs imposed by the tax system, cutting voluntary compliance costs may facilitate avoidance and evasion and therefore increase the amount of avoidance and evasion that individuals find it beneficial to undertake. As a result, the tax authority may wish to concentrate on reducing unavoidable compliance costs (though distinguishing between the two is likely to be challenging!)

4. Enforcement systems

The previous section discussed some of the factors that affect non-compliance and administrative and compliance costs. In this section, we consider a number of common strategies used to achieve a high level of compliance at modest administrative and compliance cost. In particular, we discuss: taxing market transactions, information reporting and withholding. We also discuss the role of business and IT in tax implementation.

4.1. Taxing market transactions

Basing tax liability on market transactions – those between a willing buyer and an unconnected willing seller – has several advantages. First, in a market transaction information can potentially be obtained from either party, which provides a natural check on its accuracy. A second property is that market transactions tend to be better documented, and

the more documented a transaction, the lower is the cost of gathering information on it. Finally, market transactions establish arm's-length prices, which greatly facilitate valuing the transaction. VAT, for example, relies almost entirely on market transactions, while taxing capital gains on a realisation basis rather than the theoretically-preferable accruals basis takes advantage of the measurement advantage of market transactions.

Where no suitable market transaction exists, implementing a tax can become quite costly. An example of this involves subsidiaries of a multinational corporation that deal with one another and are based in different countries. Without appropriate safeguards, there is considerable scope for taxable income to be shifted to relatively low-tax jurisdictions through the manipulation of prices used for transactions between subsidiaries (transfer prices). To avoid this happening, the tax authority needs to ensure "arms-length" prices are used; this can be extremely complicated if the subsidiaries do not deal with outsiders (where prices won't be artificially manipulated).

4.2. Information reporting

Information reporting relates to the requirement that certain transactions incurring tax liability be reported to the tax authority by the party that does not have statutory liability for the tax. It provides the tax authority with information that can be compared against the amount of tax actually remitted, allowing suspect returns to be identified and chased up. Evasion now requires coordination between the party providing the information report and the party responsible for remittance, but – and here is the key – their incentives and willingness to falsify the data are unlikely to be the same (incentives can even work in opposite directions).

Thus, a working system of information reporting discourages non-compliance by increasing the risk of detection for a given amount of tax authority resources. It forms a central element of all modern tax systems. In common with all other OECD countries, the UK requires information reporting on wages and salaries. Information reporting is also required for various other areas.

A rather different requirement to report information to the tax authority is the obligation introduced in the UK to disclose tax avoidance schemes shortly after they are first marketed. The aim is essentially to improve the tax authority's ability to combat what is seen as unacceptable planning: the tax authority has the chance to take early legislative action and (importantly, though this aspect receives less emphasis) gets to understand who is promulgating and using such schemes.

4.3. *Withholding*

Withholding refers to the situation where some or all of a tax liability must be remitted by someone other than the statutory bearer. It facilitates administration by allowing the tax authority to take advantage of economies of scale that exist in dealing with a smaller number of larger remitters who, for other reasons, have sophisticated record-keeping and accounting systems. It also acts as a safeguard, ensuring that some tax is remitted even when the statutory bearer fails to file a return or otherwise disregards their tax obligations. Tax systems often contain an indirect incentive for accurate and well-documented withholding. For example, to be sure of being able to deduct wage payments from taxable profits, businesses need to have their payment records in order, otherwise the deduction will be at risk of challenge.

Withholding is usually restricted to businesses and government agencies. Individuals in their capacity as employees and consumers are usually excluded – they are too numerous and not sufficiently capable as a class to be suitable withholding agents. To be able to withhold the appropriate amount of tax, the withholding agent must have an ongoing relationship with the statutory bearer of the tax, or, alternatively, the withholding scheme must be sufficiently simple to avoid the need for such a relationship.

In the first instance, the (compliance) costs associated with withholding fall on the withholding agents themselves, but they generally count as business expenses that can be deducted from taxable income (reducing tax liability), so get partially transferred to the government. Who bears the ultimate burden of compliance costs depends on the same demand and supply forces as determine the incidence of taxes themselves (see earlier discussion). A few countries provide explicit compensation to withholding agents. Most do not, but effectively compensate withholding agents by allowing a time lag between when tax liability is triggered and when remittance is due (interest can be earned on the tax liability in the intervening period), but this will no more or less effective in relieving burden than would be a tax rate cut equivalent to the interest gained during the time lag.¹⁹

Withholding for income tax is widespread among developed countries: it is required for wages and salaries in all but two of the 30 OECD countries, and for interest in 21 of the

¹⁹ In fact, Sandford et al. (1989) find that this cash flow benefit can exceed compliance costs for large companies.

OECD countries. The use of withholding for other sources of income varies across the OECD.

4.4. The role of business and IT

The discussion of information reporting and withholding highlights the central role of business in the *implementation* of modern tax systems – in remitting tax revenue and in information reporting. On our calculations, more than 80 per cent of UK tax revenue is remitted by business (see Table A1 in the Appendix). The impetus behind the role of business has been elegantly stated by Richard Bird, who wrote: “The key to effective taxation is information, and the key to information in the modern economy is the corporation. The corporation is thus the modern fiscal state’s equivalent of the customs barrier at the border.”²⁰ Collecting taxes from businesses saves on administrative and compliance costs because of the economies of scale inherent in tax remittance and because businesses often already have recordkeeping and accounting systems in place that simplify the process of tax remittance and information reporting.

One of the greatest changes in the three decades since the Meade Report is the growth of information technology, now a completely indispensable part of the operation and management of taxes. IT cuts the cost of processing, reduces the risk of errors, helps to expose non-compliance, and may reduce the amount of information that needs to be collected. Its downside is that new IT systems can be extremely difficult and costly to implement and, because taxpayers no longer get involved in tax calculations themselves, lead to growing ignorance about the tax system.

5. Implementation guidelines

Before turning to some key implementation issues in the UK tax system, it may be helpful to summarise the discussion so far. Getting administration and enforcement right are central to making a tax system work. We have shown how standard optimal tax theory can be extended to address these issues. In such a framework, the characteristics of the optimal policy have a number of important implications. In particular:

- The optimal mix of tax instruments cannot be determined by reference to a subset of the costs of taxation: all costs affect the optimal policy mix, and must therefore be considered together. In particular, this means considering administrative and compliance costs alongside the more traditional distortion costs

²⁰ Bird (2002).

- For incremental policy adjustments, what matters are marginal costs, not total or average costs
- The optimal policy does not involve eradicating tax evasion. Nor does it involve maximising revenue net of administrative costs. The correct rule involves lower enforcement spending than either of these alternatives require

A number of conclusions also follow from our discussions of the determinants of different costs of taxation and of effective enforcement systems:

- Whilst increasing the probability of detecting non-compliance is costly for the tax authority, it does seem to be associated with reduced evasion. In contrast, the effectiveness of higher fines has not been convincingly established
- When enforcing, authorities should be careful not to alienate taxpayers and thereby reduce the extent to which they comply out of a sense of duty rather than a fear of the consequences of being caught
- Taxes should be kept as stable and simple as possible to minimise administrative and compliance costs and minimise non-compliance
- Where possible, it is best to rely on market transactions between arms-length parties, where information from one side can be easily checked against information from the other
- Information reporting and withholding are key mechanisms for achieving a high level of compliance at modest administrative and compliance cost. For the same reason, it is generally sensible to maximise reliance on a small number of financially sophisticated entities (i.e., large firms)

II. ADMINISTRATION AND ENFORCEMENT ISSUES IN THE UK TAX SYSTEM

Having provided an analytical framework for addressing administration and enforcement issues and having discussed what procedures are of practical use in implementing a tax system, we can now assess how the UK tax system measures up. How good is its administration and enforcement and how can it be improved?

The big picture is that the UK tax system makes broad use of the key administration and enforcement mechanisms. It has a wide range of information reporting and withholding requirements, prime among which are the obligations on employers to withhold income tax from employees' wages and inform HMRC of wages and benefits-in-kind and of leavers and joiners. The UK system relies heavily on remittances by businesses, with approximately 88 per cent of all tax revenue being remitted by businesses (see Table 1 in the appendix).²¹

Table 2 details the administrative costs, compliance costs and non-compliance for the main UK taxes. Note that these are average costs rather than the marginal costs as would be required to evaluate an incremental policy change. With the exception of income tax self assessment, administrative costs (including overheads) are always less than one per cent of revenue.²² Compliance costs are usually at least as large as administrative costs, but much depends on which of the two sets of figures are consulted. The KPMG estimates (see 6.4 below) are more recent (they relate to 2005) but exclude a number of things normally considered part of compliance costs such as tax planning, dealing with change and understanding which tax obligations are relevant.

For PAYE/NICs, ITSA and corporation tax, the column headed "non-compliance" contains figures from HMRC random enquiry programmes. Note that random enquiries are not able to capture losses to the informal economy and, for PAYE/NICs and corporation tax, include only small and medium-sized companies (no more than 500 employees). The figure for VAT is an estimate of the VAT gap – the difference between the theoretical liability and actual tax revenue – so does include losses to the informal economy. Most striking are the estimates for ITSA, CT and VAT, all of which are above 10 per cent of true liability. In

²¹ This is very similar to the proportion found for the U.S. by Christensen, Cline and Neubig (2001), who calculate that in 1999 businesses "paid, collected, and remitted" 83.8 percent of total taxes to all levels of government.

²² Two important reasons why administrative costs for self assessment are much higher than for other taxes are that much of the income tax liability of some self assessment taxpayers is collected through PAYE, and that individuals who have to self assess tend to have fairly complicated financial affairs.

contrast, the figure for PAYE/NICs is only 1.4 per cent. No estimates are available for distortion costs and avoidance.

Table 2: Administrative and compliance costs and non-compliance for major UK taxes (2006/07 unless stated)

Tax	Number of taxpayers	Revenue raised	Administrative costs (% of revenue)	Compliance costs (% of revenue)		Non-compliance (% of true liability)
				Sandford/Inland Revenue	KPMG	
PAYE	36.0m	£124.8bn	0.7%	1.3%	0.4%	1.4%
NICs	28.3m	£87.3bn	0.4%			
ITSA	9.5m	£20.3bn	4.5%	N/A	N/A	14.6%
CT	0.9m	£44.3bn	0.8%	2.2%	1.5%	14.7%
VAT	1.9m	£77.4bn	0.6%	3.7%	1.4%	14.2%

Notes:

PAYE is Pay As You Earn, NICs National Insurance contributions, ITSA income tax self assessment, CT corporation tax and VAT value added tax

Number of taxpayers (source unless stated: www.hmrc.gov.uk/stats/tax_receipts/table1-4.pdf)

PAYE: number of individuals under PAYE including individuals who also self assess. 2005/06. Source: communication from HMRC. NICs: 2005/06. Source: www.dwp.gov.uk/asd/tabtool.asp. ITSA: source: Bourn (2007b). CT: 2005/06. VAT: number of registered traders at 31 March 2007.

Revenue raised (source unless stated: www.hmrc.gov.uk/stats/tax_receipts/table1-2.pdf)

PAYE: includes revenue raised from self assessment taxpayers through PAYE. Source:

www.hmrc.gov.uk/stats/t_receipt/table2-8.pdf. ITSA: excludes revenue raised from self assessment taxpayers. Source: www.hmrc.gov.uk/stats/t_receipt/table2-8.pdf.

Administrative costs (source: HMRC autumn report 2007) Includes direct collection costs (staff salary costs and other operating expenditure) and overheads (IT costs, accommodation, other non-cash costs, stock losses, corporate overheads and, where applicable, a share of Valuation Office costs)

Sandford/IR compliance costs (source unless stated: Sandford et al. (1989)). Excludes cash flow benefit.

PAYE and NICs: 1995/96. Source: Inland Revenue (1998). CT: 1986/87. VAT: 1986/87.

KPMG compliance costs (source: KPMG (2006)) Estimates are for 2005 and cover “administrative burdens”, which exclude tax planning, dealing with change and understanding which tax obligations are relevant.

PAYE and NICs: denominator is 2005/06 PAYE income tax and estimated Class 1 and 1A receipts (£113.9bn and £82.2bn respectively). CT: denominator is 2005/06 corporation tax receipts (£608m). VAT: denominator is 2005/06 VAT receipts (£72.9bn).

Non-compliance (source unless stated: www.hmrc.gov.uk/pbr2007/mdtl-direct.pdf):

PAYE and NICs: Includes only small and medium-sized employers (no more than 500 employees). 2003/04.

This ignores tax recovered through compliance work and non-payment. If these are taken into account, the figure falls to 1.2 per cent. ITSA: 2001/02. This ignores tax recovered through compliance work and non-payment. If these are taken into account, the figure falls to 12.6 per cent. CT: Includes only small and medium-sized companies (no more than 500 employees). 2003. This ignores tax recovered through compliance work and non-payment. If these are taken into account, the figure falls to 12.5 per cent. VAT: Source:

www.customsandrevenue.eu/pbr2007/mitl.pdf.

OECD (2007) gives some sense of how UK administrative costs compare with other countries. The overall UK figure for 2004 of 0.97 per cent of revenue is close to the OECD median, but considerably higher than the US figure of 0.56 per cent. It is important to note, however, that international comparisons of administrative costs are fraught with difficulties because ratios can vary for all sorts of reasons other than efficiency.

Getting estimates of compliance costs that are comparable across countries is even more difficult. Our sense is that overall compliance costs are lower in the UK than in the US, but it is impossible to place this in a comparative OECD context. A

PricewaterhouseCoopers/World Bank study (2007) suggests that the UK compares favourably with many other countries. Using a mid-sized case study company, it ranks each of 175 countries according to the “ease of paying taxes” (a combination of total tax rate, compliance time and the number of tax payments required). The UK comes 12th, ahead of a number of obvious competitors – the USA at 63rd, Germany at 73rd and France at 92nd.

Space constrains us from providing an exhaustive discussion of all of the current administration and enforcement issues in the UK tax system. Many are addressed in other chapters in the Mirrlees Review – VAT and missing trader fraud in the [ref VAT chapter] chapter, tax credit administration in the [ref rates chapter] chapter, international cooperation in the [ref international] chapter, and issues relating to small businesses in the [ref small business] chapter. In the following sections, we concentrate on just three issues: HMRC’s objectives and targets, the future of PAYE, and tax avoidance.

6. HMRC

Tax administration in the UK is undergoing considerable change. The UK was one of very few countries to start the 21st century with two tax authorities. In 2005, these were amalgamated to form Her Majesty’s Revenue and Customs (HMRC). The resulting department is now undergoing a process of rationalisation and modernisation to improve its efficiency and ability to meet taxpayers’ needs.

HMRC assesses its performance using a wide range of indicators. Along with other government departments, it has committed to a number of targets to improve performance and cut costs. The aim of this section is not to comment on the likelihood that HMRC will meet its targets; rather it is to assess some of the indicators and targets themselves in the light of the principles for tax administration outlined in Part I of the chapter.

6.1. Performance targets

At the outset, it is worth noting the potential problems with concrete performance targets in government. Unlike in a private business, where the ultimate objective is usually relatively unambiguous, the overall objective for a government department is less tangible. In principle, it should make decisions to enhance the well-being of the citizens, but that is not plausibly measurable. Nevertheless, some subsidiary objectives that are well-defined – for example, minimising the cost of achieving a well-defined and easily measurable subcategory of output should be pursued regardless of whether the ultimate objective is profits or social welfare.

What is different for the tax authority compared to most other government departments is the availability of something that has the superficial appearance of a quantitative output measure – revenue collected. Note, though, that in Part I of this chapter we showed that aiming to maximise revenue net of resource expenditures was the wrong objective because it failed to recognise that tax revenue is a transfer rather than a real resource gain.

HMRC has a large set of quantitative performance targets. At the time of writing, HMRC had not released details of their targets for the period 2008/09 to 2010/11 but has indicated that they will be similar in substance to those for the years 2005/06 to 2007/08 – so we concentrate on these in this section. For the period 2005/06 to 2007/08, HMRC had three core objectives, the first two of which are directly relevant to the topic of this chapter:

- Improve the extent to which individuals and businesses pay the tax due and receive the credits and payments to which they are entitled
- Improve customer experience, support business and reduce the compliance burden

These two objectives were underpinned by a number of quantitative targets, including targets to:

- Reduce the scale of VAT losses to no more than 11% of the theoretical liability
- Reduce the illicit market share for cigarettes to no more than 13% and for spirits by at least a half, and hold the illicit market share for oils at no more than 2%
- Reduce underpayment of direct tax and National Insurance contributions due by at least £3.5 billion a year
- Increase to at least 90% the proportion of small businesses that find it easy to complete their tax returns, and to at least 85% the proportion of individuals who find their self assessment statements, PAYE coding notices and tax credit awards easy to understand
- Increase the percentage of self assessment returns filed on time to at least 93%
- Increase to at least 95% the rate of accuracy achieved in administering SA, PAYE, Tax Credits and NICs
- Increase to 35% the percentage of SA tax returns and to 50% the percentage of VAT returns received online²³

Alongside these performance targets, HMRC was on course to achieve a substantial monetary saving between 2005/06 to 2007/08 and has agreed to a real terms reduction in its

²³ See <http://www.hmrc.gov.uk/psa/psa2005-2008.htm>.

budget of 5 per cent each year over the period 2008/08 to 2010/11, as part of the government's efficiency savings programme.

At first sight, these targets look like a list of "good" things that HMRC aims to get a bit better at. They do not give a good sense of what is optimal, nor of the priorities and trade-offs involved. For example, why not reallocate resources and aim to reduce VAT losses to 12 per cent (rather than 11 per cent), and direct tax and NI contributions underpayment by £3.75 billion (rather than £3.5 billion). And do the compliance-cost-reducing initiatives reflect the same tradeoffs as the enforcement-increasing policies?

A potential pitfall of targets is that they may not be consistent with one another – in particular, can improvements in performance be achieved alongside real-terms cuts in the HMRC budget? HMRC has claimed that operational changes will enable both to be met, but this view does not seem to be shared by the Treasury Committee, who suggested that the failure of HMRC to meet many of their 2007/08 targets may be linked to the need to make efficiency savings (p51).

6.2. The tax gap

HMRC has published estimates of the size of the tax gap – the difference between the amount of tax collected and the theoretical liability – for VAT and illicit market share for spirits, tobacco and diesel (HMRC, 2007). For income tax, random enquiry programmes have provided information about tax 'at risk' (this is only part of the tax gap – it only covers individuals who file a tax return). NAO (2003, p.8) concluded that "there are benefits in terms of overall risk management in having an aggregate estimate of the shadow economy if a reliable practical technique can be found." Although we are sympathetic with the latter view because a tax gap study can inform resource allocation decisions in key ways, it is important to realize that measures of the total tax gap and its components do not *directly* inform policy. This is because policy choices are generally marginal and depend on the relative effectiveness of alternative policies in raising revenue relative to the resource cost of doing so. For example, learning that the non-compliance rate for self-employed individuals is higher than that for multinational corporations does not necessarily imply that it is optimal to beef up enforcement on the self-employed at the expense of the multinationals. Rather, an MECF-type calculation should, in principle, be relied on.

6.3. Administrative costs

Each year, HMRC's annual and autumn reports list cost of collection per pound collected for each of the main taxes, and overall. For 2006/07, the overall ratio is listed as 1.13 pence per pound (HMRC, 2007b p.31).²⁴ For each of several enforcement operations, it also lists the additional tax and penalties collected and estimated cost/yield ratios. These ratios range from 2.0:1 to 98:1. Critically, they are average, rather than marginal, figures, and it is marginal costs that matter for evaluating policy initiatives.

The text accompanying the yield/cost ratios in the 2004/05 annual report says that they "are used as one of a number of factors to help management make considered judgment on the allocation of resources" (p. 106). The only other factor listed is the need "to maintain an effective presence in all areas where there may be non-compliance." Potential policy reforms cannot be satisfactorily evaluated without considering all costs of taxation – deadweight costs, administrative costs and compliance costs. The danger of evaluating policies on the basis of their yield/cost ratios is that it ignores any distortion costs and compliance costs induced. If the ratio of distortion and compliance costs to administrative costs varies across policies, then ranking by their administrative cost will lead to misallocation.

Focusing on yield/cost ratios also risks obscuring the fact that additional yield is a transfer from private (albeit non-compliant) citizens while administrative costs are a real resource cost. Even if marginal ratios can be inferred from the averages presented and distortion and compliance costs are negligible, it is not optimal from society's point of view to expand enforcement up to the point where the ratios are equal to one.

6.4. Compliance costs

The government has embarked on an ambitious programme to quantify and cut the burden of regulation. As part of this, HMRC commissioned KPMG to undertake a large-scale study of the "administrative burdens" of HMRC regulation on business, the results of which are presented in KPMG (2006). Following publication of the KPMG report, the government committed to reductions in various aspects of the burden (dealing with forms and returns and dealing with audits and inspections).

These developments suggest a growing awareness of the importance of compliance costs in the policy-making process, something that has been neglected in the past. Particularly

²⁴ How overhead costs are allocated is critical to this assessment. See notes to Table 2 for which overheads are included.

welcome is the fact that the KPMG report attempts to provide a detailed breakdown of costs that can be useful in targeting their reduction. This comes closer to measuring marginal compliance costs than most previous work, which tended only to suggest that total compliance costs were high.

An important note of caution is in order, however. Administrative burdens exclude a number of things normally considered part of compliance costs, such as costs of tax planning, dealing with change and understanding which tax obligations are relevant. Moreover, the focus is on business rather than all taxpayers, and only a subset of administrative burdens is currently being targeted. The danger is that compliance costs that do not count as targeted administrative burdens are neglected or – to the extent that burdens from targeted areas can be transferred – are increased (for example by shifting obligations from business to individuals).

It is also not clear how closely tied to the policy-making process the targeting of administrative burdens is. Since 2000, the means by which compliance costs have formally entered policy deliberations is through mandatory impact assessments (IAs). An IA sets out the costs, benefits and risks of the proposed reform, comparing alternative options, with the aim of improving policy-making. But doubts have been expressed over both their quality and the extent to which they have any meaningful impact on legislation.

In the context of compliance costs, the impact assessment that accompanied the new tax credits in 2003 provides a good example of difficulties that have been experienced. The impact assessment suggested that the new tax credits would reduce employer compliance costs by up to £11m per year. But this estimate excluded what turned out to be the most burdensome part of paying tax credits via employers – amendment notices. The reason for this exclusion was that it could “only be estimated once the system is up and running” (2.17 TC IA). The result was an inaccurate estimate of the overall impact on compliance costs (even allowing for the fact that some of the burden was the result of unforeseen difficulties with the HMRC tax credit computer system).

In summary, efforts to quantify and cut the administrative burden of HMRC regulation and the fact that compliance costs form part of the evaluation of proposed policy changes are both welcome. But desirable reforms cannot be identified accurately without consideration of their incremental impact on *all* compliance costs (as well as administrative and distortion costs), as indicated by the MECF framework.

7. The future of PAYE

How tax is collected is important because it has implications for the costs it imposes and because it affects what tax designs are feasible. In this section, we examine the way income tax is collected in the UK, assess the performance of the primary withholding mechanism (PAYE) and consider some options for reform. We do not address the issue of whether income tax and National Insurance should be integrated; we refer the interested reader to Adam and Loutzenhiser (2007). A description of how UK income tax works is contained in Chapter [\[ref UK chapter\]](#).

7.1. Collection of income tax in the UK

Withholding is an extremely effective way of collecting income tax because it reduces the risk of non-compliance and takes advantage of the economies of scale in tax remittance. But withholding the correct amount of tax is far from straightforward. Individuals often have more than one income source, and income is received at varying frequencies. Since income tax is progressive and liability depends on annual income aggregated across all sources the amount of tax that should be withheld from one income source may depend on how much income there is from other sources. But withholding happens separately for each income source, and withholding agents (e.g. employers) may not know anything about each other.

Two main ways to address this problem have been devised. The first involves giving withholding agents fairly complicated instructions about what to withhold so that the correct liability is collected from the majority of taxpayers; for the remainder, some form of end-of-year reconciliation is necessary. The alternative approach is to rely on a compulsory end-of-year tax return. Since there is then no need for withholding to get the right answer, the withholding process (but not necessarily the tax liability computation process) can be drastically simplified, with any additional inaccuracy introduced being cleaned up by the tax return.

The UK takes the former approach. Income tax due on employment earnings and private and occupational pensions (the most important sources of income for most people) is withheld via a system known as Pay-As-You-Earn (PAYE). PAYE is an extremely important part of income tax collection, accounting for over 80 per cent of income tax revenue. The way PAYE works is discussed in detail below. Tax on interest income is withheld by banks and other financial institutions under the assumption that it is not subject to the higher rate of tax. There is also withholding on royalties, payments and certain rents. Withholding does not exist for dividends (a form of imputation tax credit is used instead); nor is there any kind of withholding for self employment profits, the state pensions or taxable benefits (although withholding for government transfers involves a different set of issues).

Small tax liabilities on sources where there is no withholding can be collected via adjustments to PAYE; non-PAYE withholding is *never* adjusted for this purpose. Relying on PAYE to collect tax liabilities incurred elsewhere works because the majority of individuals liable for income tax have substantial amounts of income that come under PAYE.

PAYE and other withholding cannot always collect an individual's full tax liability. In cases where withholding is likely to get the answer wrong, individuals have to complete a self assessment tax return.²⁵ Currently, around nine million taxpayers (approximately one third of the total number liable for income tax) are required to self assess. The majority of these individuals do not come under PAYE at all (the main group is the self employed). A substantial minority, however, do come under PAYE, but have to self assess because PAYE and other withholding cannot be guaranteed to get the answer right (this might be the case for individuals with substantial foreign income or income from property).

Tax returns are issued to these taxpayers shortly after the end of the tax year. The filing deadline is 31 January (almost 10 months later) if the taxpayer calculates his own liability, but if he wants HMRC to do it, the return must be filed by 30 September.²⁶ Tax liability (beyond that already withheld) is typically remitted in three instalments. The first two (one on 31 January in the year of assessment, one on 31 July following the end of that year) are usually estimated on the basis of the previous year's liability. The balance is due on 31 January after the end of the tax year, coinciding with the deadline for tax returns.

Each year, there are a number of individuals who are not required to self assess but who end up having had the wrong amount of tax withheld. This might happen as a result of changes in circumstances (becoming unemployed shortly before the end of the tax year, for example). For these individuals, HMRC is responsible for calculating the adjustment that is required, informing the taxpayer and negotiating a payment schedule. Underpayments are often collected via adjustments to future PAYE withholding; overpayments are refunded lump sum.

For PAYE, employers do not automatically have access to all the information they need to calculate how much tax to withhold (they may not know age, disability or income from other sources, for example). HMRC provides employers with a summary of this information in the form of a tax code, one for each job (or pension) of each individual. A tax code is a combination of numbers and letters that describes the tax-free entitlement for that

²⁵ Details of who has to file a return can be found at www.hmrc.gov.uk/sa/guidelines.htm.

²⁶ The deadline for paper returns will move forward to 31 October for 2007/08 tax year onwards, whether or not taxpayers calculate their own liability.

job (or pension) and the rate at which income should be taxed. Since HMRC is responsible for calculating tax codes, it must keep track of individuals and their employers during the year.

The amount of tax withheld in any given week or month depends on earnings in the whole tax year to date. In each week or month of the year, tax allowances and tax bands are scaled down according to the proportion of the year that has elapsed ($\frac{1}{52}$ for week one, $\frac{1}{26}$ for week two, etc, or $\frac{1}{12}$ for month one, $\frac{1}{6}$ for month two, etc). These rescaled allowances and bands are used to calculate *total* tax liability for the year so far based on *total* earnings so far. The amount of tax remitted in a given week or month is equal to total tax liability for the year so far less the amount of tax already remitted. This type of withholding is known as cumulative withholding. Its advantage is that, when earnings vary across the year it is much more likely that the correct amount of tax will have been deducted at the end of the tax year than under a non-cumulative system that treats each pay period in isolation. Its disadvantage is that it requires employers to know what happened earlier in the year. If an individual changes jobs, information needs to be passed between employers about total earnings and tax remitted so far this year (achieved under PAYE using P45 forms).

Most employers must remit the tax due once a month (small employers can remit quarterly). This happens roughly three weeks after the end of the month to which the tax relates. Remittances cover National Insurance contributions and student loan deductions as well as income tax, and employers simply remit the total due across all their employees (there is no breakdown by employee and tax). At the end of the tax year, however, employers do provide such a breakdown, allowing all the calculations and remittances to be checked by HMRC.

In 2005/06 there were around 1.7 million active PAYE schemes covering around 36 million individuals.

7.2. *An assessment of PAYE*

Over recent decades PAYE has been the object of sustained criticism arguing that it is becoming less able to cope and needs to be reformed. Here we discuss the problems with PAYE and its advantages over alternative systems, addressing accuracy, flexibility, administrative and compliance costs and non-compliance.

Accuracy

In conjunction with other withholding, PAYE is designed to collect the right amount of tax over the tax year for most taxpayers. In around 30 per cent of cases, however, the

amount of tax remitted during the year does not tie up with the end-of-year information sent to HMRC by employers (Bourn, 2006). Addressing these occurrences has a high administrative cost for individuals outside self assessment. There are also cases where the wrong amount of tax has been withheld but the error is not uncovered. Bourn (2007) suggests this may apply to 0.8 million taxpayers for 2006/07.

Inaccuracy in PAYE can be traced to four main issues:

- Errors made by HMRC
- Errors made by employers
- Breakdown in the transmission of information
- Inertia or lack of understanding from employees

We discuss these issues in turn. The most common error made by HMRC is failing to calculate tax codes correctly. Bourn (2006) reports that 8 per cent of tax codes were incorrect in the 2005/06 tax year. Many of these errors are the result of HMRC failing to bring together income from different sources – the current PAYE computer system is spread across 12 databases and is based around jobs rather than individuals.²⁷ The task becomes more difficult when income from other sources is not known for certain when tax codes are calculated. Tax codes then have to be based on estimates, which may turn out to be incorrect. HMRC hopes that modernisation already underway will eliminate many of these errors.

Inaccuracies also arise because of errors made by employers. Bourn (2007b) reports that 1.4 per cent of end-of-year returns for 2006/07 had to be sent back to employers for correction. There is also some evidence that employers do not always follow instructions to amend tax codes (Bourn, 2006), but the extent of this is not known.

The third source of inaccuracies is the transmission of information breaking down. PAYE requires information faster and in greater quantities than a non-cumulative withholding system meant to approximate tax liability. But Bourn (2006) reports that around 70 per cent of employees starting a new job do not immediately provide their new employer with a P45 containing their National Insurance number, and more than 70 per cent of employees who are asked for information about their earnings history fail to return the necessary form. In such cases, guesses often have to be made, frequently resulting in the wrong amount of tax being withheld.

The final source of inaccuracies is employees. Few check the coding notices HMRC sends them, so errors often lie dormant. They also forget to notify HMRC of relevant changes

²⁷ See p27 HMRC 2005/06 annual report. PAYE modernisation plans include moving PAYE onto a unified database.

– or simply don't understand the need so to do. But whether it is fair to blame individuals for failing to deal with errors and exceptions in a system that is designed to do everything for them is a moot point.

These problems are being exacerbated by changes in the economic environment. For example, there are a growing number of individuals with multiple employment or multiple income sources. Internal HMRC estimates suggest that, in 2005/06, approximately 13 per cent of individuals under PAYE had more than one PAYE income source. Job changes have become more frequent, with twenty percent of jobs lasting less than one year, and five percent less than three months (Bourn, 2006). Approximately 16.5 million income sources terminated during 2005/06. There is also more part-time and temporary work and remuneration has become more complex (particularly the growth of benefits in kind).

Flexibility

Although in some ways PAYE has proved to be adaptable, there have been complaints over a number of decades that it lacks flexibility and therefore constrains tax policy. As long ago as 1972, a Green Paper on tax credits (quoted in Barr, James, and Prest 1977, p. 47) said that PAYE “has been found to lack flexibility and governments of both political parties have found it difficult to adapt it to accommodate changes that they have felt desirable.”

PAYE is argued to constrain tax policy because end-of-year adjustments and recoding are costly exercises, so any policy change that threatens the ability of PAYE to withhold the correct amount of tax without the need for extensive recoding is likely to be prohibitively expensive. Three examples will suffice: a graduated structure of rates, payment of tax credits by employers and some form of expenditure tax.

It has often been claimed that PAYE won't work well with a highly graduated structure of tax rates because there needs to be a single wide tax band covering the vast majority of taxpayers. The reason is multiple income sources. If secondary income sources all fall within a wide basic rate band, it is possible to guess with reasonable accuracy the rate at which each income source should be taxed, avoiding large numbers of end-of-year adjustments. But the greater the number of tax rates and the narrower each band, the less likely it is that all secondary income sources fall within a single band and the more difficult it is to guess what rate each source should be taxed at. So, if withholding needs to collect exactly the right amount of tax from a large number of individuals, there is a constraint on the number of different tax rates there can be for the majority of taxpayers. It is worth noting that a lower rate band (below the basic rate) existed in 1978/79 and 1979/80 and again between

1992/93 and 2007/08, so there is evidently some flexibility in the schedule of rates. But even with the lower rate band in place, the vast majority of taxpayers still had the basic rate as their marginal tax rate.

A second example is the payment of tax credits through the pay packet. Between 2000 and 2006, the vast majority of employees eligible for tax credits received them from their employers rather than directly from the government. HMRC told employers the amount employees were entitled to, and employers were required to add this amount to salary payments. The funds for employers to do so came from the tax they had withheld from their employees. Although the payment of tax credits made use of some of the machinery of PAYE, it never involved adjustments to tax codes. The Regulatory Impact Assessment (RIA) for the 1999 Tax Credits Act said: “The option of delivering tax credits through the PAYE coding system was considered, but was rejected on the grounds that PAYE codes could not deliver the necessary accuracy and reliability. Nor would they provide transparency for employees” (p5 Inland Revenue, 1999).

Following persistent administrative problems, payment of tax credits via employers was abandoned in 2006. The government’s stated reason for doing so was reducing compliance costs on employers (HMRC, 2005), but the cost incurred by the government was probably also a contributory factor. Payment via employers was primarily symbolic (intended to demonstrate that tax credits were a reward for work), and effectively added an additional link in the payment chain without simplifying administration.

The final example of a constraint imposed by PAYE concerns a progressive expenditure tax of the kind proposed in the Meade Report, in which deposits into savings accounts (and purchases of assets) are deducted from taxable income and withdrawals from such accounts are added to taxable income, similar to the treatment of pension funds now. As with the graduated rate structure, the issue relates primarily to the difficulty of taxing multiple income sources when there is more than one marginal tax rate. Currently, not all higher rate taxpayers are required to self assess. For those that are not, income outside PAYE may be taxed at the wrong rate (for example, interest on bank accounts, where withholding is correct for basic-rate taxpayers), but the tax revenue at stake is likely to be fairly small. This is not true of an expenditure tax, where all deposits must be given tax relief and all withdrawals taxed, not just the interest. Here, the sums involved are presumably too large to ignore.

These arguments suggest that PAYE may have kept the UK tax system simpler than it would otherwise have been. Income tax in the UK is certainly less complex than in the US

(which has simple non-cumulative withholding and universal self assessment) but this need not be due solely to PAYE. And, as discussed below, the Government's incentive to keep the rules simple in other respects may be limited because it does not directly bear the major cost of operating PAYE. If the tax system has been kept simpler, it is not clear whether this means the tax system is better: this depends on whether the policy-making process takes full account of complexity created.

While it is impossible to know how binding the constraint imposed by PAYE has been, it seems reasonable to suggest that it has become less binding over time. In part this is because PAYE has become increasingly computerised, reducing the cost of recoding and end-of-year adjustments. But it is also due to a reduced appetite for policies likely to cause problems for PAYE for reasons unrelated to administrative ease. For example, there has been a move away from highly graduated schedule of rates (for example, in 1976/77 there were ten different non-zero tax rates on earned income; in 2008/09 there are only two), partly for political reasons, but also due to concern over the distortionary effects of high marginal rates on top incomes.

Administrative costs

As Table 2 indicates, in 2006/07, the cost to HMRC of administering PAYE (including overheads) was 0.74 per cent of income tax revenue collected through PAYE. Historically, the UK has fared badly in international comparisons of administrative costs. More recent estimates, however, put UK costs on a par with many other OECD countries (see for example OECD, 2007). Moreover, there is a growing recognition that such comparisons can be misleading because cost-of-collection ratios depend on all sorts of things other than the efficiency of the tax authority. These include the number of taxpayers, tax rates and structures, the scope of the tax authority, the extent of enforcement activities, broader economic conditions and differences in measurement methodology.

Because PAYE is a cumulative system that aims to collect the right amount of tax from the majority of taxpayers without an end-of-year adjustment, within-year costs are high and end-of-year costs low relative to a non-cumulative system of withholding. Whether overall administrative costs would be lower in the UK with an alternative collection mechanism is unclear.

Compliance costs

For most taxpayers under PAYE, the correct amount of tax is withheld and remitted by employers without taxpayers having to file an annual return. Consequently, compliance

costs of PAYE fall, in the first instance, on employers.²⁸ The Inland Revenue (1998) investigated the compliance costs of PAYE and National Insurance for 1995/96 (widely known as the “Bath study”). Total compliance costs were estimated to be £1.32 billion, or 1.3 percent of the PAYE and (Class 1 and 1A) NI revenue collected.²⁹

The KPMG (2006) study referred to above measured “administrative burdens” on a basis substantially narrower than compliance costs as normally defined. In particular, costs are estimated for a “normally efficient business”, and exclude costs associated with tax planning, dealing with change and understanding which tax obligations are relevant. It is not surprising, therefore, to find that the burden on employers of PAYE and NICs is estimated to be substantially lower than the Bath study found: £759m in 2005, or 0.4 per cent of PAYE and (Class 1 and 1A) NI revenue.

Both the Bath study and the KPMG report find that compliance costs relative to the size of the employer are much higher for small firms than large ones. For example, the Bath results suggest that average compliance costs for employers with 1-4 employees were £288 per employee in 1995/96, compared to less than £5 for employers with 5000 or more employees.³⁰ The Bath study also estimated the “cash-flow benefit” of the PAYE/NIC system, and found it to exceed compliance costs for large employers (those with more than 1,000 employees). This benefit arises because PAYE and NIC remittances are due about three weeks after employees are paid, so firms can earn interest on the tax liability in the intervening period.³¹

Tellingly, the Bath study concluded that the high fixed compliance costs in some cases deterred small business owners from taking on their first employee. Sandford concluded that when small firms compete with large firms they are placed under a “state-created competitive disadvantage” (p. 200 Sandford, 1989). Whether this disadvantage for small businesses is socially inefficient, though, is not clear because it might to some extent reflect the higher cost of raising revenue from small businesses.

²⁸ Compliance costs may be shifted to some degree according to the same supply-and-demand logic that applies to the shifting of explicit tax liabilities. Consequently, it cannot be presumed that compliance costs reduce after-tax profits pound for pound relative to what they would have been in the absence compliance costs.

²⁹ This £1.32bn includes £93m for SMP and SSP.

³⁰ Authors’ calculations based on KPMG (2006) and data from the Small Business Service reveal that the KPMG results imply average costs for employers with 1-9 employees of £173 per employee, compared to around £6.50 for employers with 250 or more employees. It wasn’t possible to reproduce the same firm size bandings as the Bath study. The Carter Review of Payroll Services (2001) states that intermediaries can provide a monthly payroll service for employers with up to four employees for £200-£250 per year, and that the marginal cost for additional employees is low.

³¹ The cash-flow benefit is not a social cost but instead a transfer from the government to the employer equal to the time value of the money held by the employer.

From the employer's point of view, there is little doubt that the compliance costs of PAYE are higher than those of a simple non-cumulative system. But the size of the difference may be small, particularly given that most employers now run a computerised payroll, either in-house or outsourced. It is worth emphasising that the P45 forms used to keep track of pay and tax to date when individuals change jobs do not cause a great deal of extra work for employers. Under a non-cumulative system, employers typically still need to give the employee notice of pay and tax deducted (so they can complete their tax return) and send a copy to the tax authority (for information reporting purposes) (Inland Revenue, 1979).

Whiting (2002, p.44) argues that, because much of the cost of operating PAYE falls in the first instance on employers, the government has little incentive to keep the tax system simple. As a result, the tax system becomes complex with high compliance costs. It is impossible to tell how much this has happened in reality, but, as noted above, the US hasn't managed to avoid a complex tax system despite having universal self assessment. The fact that taxpayers covered by PAYE incur almost no direct compliance costs mean that most of them are largely unaware of the tax system. Few understand what their tax code means or how their tax liability is determined. This can lead to less disciplined policy-making because individuals are not in a position to criticise bad policy.

Non-compliance

Information from HMRC's employer compliance random enquiry programme indicates that £0.9bn of income tax and National Insurance was understated on returns from small and medium-sized employers in 2003/04 (HMRC, 2007c). This is equivalent to 1.4 per cent of the total true liability, considerably lower than the figure for self assessment (see Table 2) but very similar to comparable US data (despite the fact that the US operates non-cumulative withholding). No UK figures are available for non-compliance among large employers.

7.3. A decade of self assessment

Self assessment – under which individuals whose full income tax liability cannot be collected through PAYE and other withholding have to complete a tax return – has been in place for a little over a decade. Before we consider options for reforming PAYE, it is worth spending a few paragraphs analysing how successful self assessment it has been. Self assessment was introduced from tax year 1996/97, replacing the previous system of assessments made by tax inspectors. It was hailed as “the biggest change [in tax administration] since the introduction of PAYE over 50 years earlier” (para 4 of IR

memorandum). While it certainly was a big change, the difference for individuals who file their tax return in time for HMRC to calculate the tax liability is actually not that great. Indeed, under the old system of HMRC assessments, taxpayers were often obliged to provide information about their sources of income on a form not dissimilar to the current tax return.

Perhaps the most fundamental change brought about by self assessment is the increased responsibility taxpayers are expected to take for their own tax affairs (Green, 1996). HMRC no longer issues estimated assessments; instead, the onus is on taxpayers to file and remit on time. Taxpayers who file after 30 September are expected to calculate how much they owe. HMRC also has much more extensive enquiry powers, including the ability to conduct audits randomly (previously there needed to be grounds for suspicion), and taxpayers are statutorily required to keep business records for a period of six years.

Eliminating old-style assessments and appeals, combined with transferring to the taxpayer some responsibilities that previously lay with HMRC, was projected to provide an administrative saving of £500m by 2007/08. In 2006/07, the cost to HMRC of administering self assessment (including overheads) was 4.46 per cent of revenue collected directly through self assessment.³²

While many taxpayers and tax advisers acknowledged that self assessment was a necessary modernisation, there was a widespread feeling that not enough effort had been put into making the process as simple as possible for taxpayers. As far as we are aware, no comprehensive study of self assessment's implications for compliance costs has been undertaken.³³

The self-assessment return is long (often up to 20 pages) and complex, though a shorter four-page return for those with simple tax affairs was eventually rolled out starting with the 2004/05 tax year. Other improvements over time have included better taxpayer statements and some removal of those with very simple affairs from the system altogether. Around 90 per cent of tax returns are filed on time under the current system – much better than the 50 per cent under the old system (Inland Revenue, 2002) – though many arrive very

³² This is considerably higher than the figure for PAYE, but comparing the two figures is misleading. This is both because individuals under self assessment tend to have more complicated tax affairs than those who are outside self assessment and because some self assessment taxpayers have most of their liability collected through PAYE.

³³ KPMG (2006) includes estimates of the burden of self assessment for businesses, but excludes groups such as employees and pensioners who have to self assess. Some idea of the amount of time involved in completing tax returns can be gained from the BMRB evaluation of the 2002/03 short tax return pilot (Inland Revenue, 2004). It found that median total compliance time was reduced from 162 minutes (for the main return) to 120 minutes (for the short return). Obviously, these results cannot be generalised across all self assessment taxpayers because those eligible for the short return are likely to have simpler affairs than those who aren't. Also, the results do not include the cost of advisors.

close to the 31 January deadline. The time between the end of the tax year and the final due date for tax payment is, at 10 months, the longest of any OECD country bar Finland.³⁴

Based on data from the 2001/02 random enquiry programme (the latest year for which there is information), HMRC estimates that 33 per cent of returns under-declare tax liability. £2.8bn of tax is not disclosed, equivalent to 14.6 per cent of the £19.2 billion net receipts from self assessment in 2001-02 (HMRC, 2007c). Around three quarters of this is accounted for by five per cent of returns; errors contained in many of the other returns may have been unintentional. As the self assessment random enquiry programme only covers registered taxpayers, it does not provide any estimate of unpaid tax on income from the informal economy or other undisclosed income. It is unclear how these figures compare with the previous system, because there was no random enquiry programme that could provide statistically reliable estimates of unpaid tax. In 2006/07, HMRC accurately calculated the tax due for 96.5 per cent of Self Assessment returns.³⁵

Overall, self-assessment was indeed a necessary modification to the tax system. Perhaps too much was expected of it too soon, with insufficient expectation of the need for continuous improvement. Now that more effort is being put into that improvement process, it is delivering more.

7.4. Policy Options

In this section we consider ways in which some of the problems described above could be addressed. The first set of reforms attempt to improve the ability of withholding arrangements to collect the right amount of tax. The second set is a radical alternative: drastic simplification of PAYE combined with universal self-assessment. Throughout, we assume that there is no change to the way income tax is assessed.

1. Improvements to current withholding arrangements

HMRC has already begun to modernise PAYE in ways that should considerably improve its accuracy. But these changes are unlikely to remove the need for large quantities of paper communication, such as HMRC sending tax codes to employers, and employees taking P45s from their old employer to their new one. In principle, it would be possible to

³⁴ Proposals to shorten this period in the Carter Review (2006) were widely attacked, not least because there was no parallel attempt to simplify or streamline the reporting system which might justify a shorter timescale. The only change that got implemented involved moving forward the filing date for paper returns to 31 October for 2007/08 returns onwards.

³⁵ The annual reconciliation process that forms part of Self Assessment uncovers a large number of other errors before they are able to have an impact on final tax remitted.

develop an online computer coding system that would allow much of this to be done electronically. Withholding agents could be required to register any employee they take on and, in so doing, would be provided with a tax code to use based on information about all income sources of the individual. Without pay-period information reporting, employers would still need to provide information about pay and tax to date when an employee changes jobs, but this could be done through the computer system without the need for employees to carry the information manually between employers. This sort of arrangement has the potential to reduce the cost of communication considerably, but the extent to which it improves the accuracy of PAYE depends on how often employees are to blame for the P45 failing to turn up. For any such computer system to be possible, security issues would need to be addressed: if employers are able to find out information about employees by registering them, there is obviously potential for personal data to be compromised. This is particularly pertinent given the controversy over lost Child Benefit records in 2007, but with careful consideration, it should be possible to address this issue satisfactorily.

A second possible change is to make other withholding non-flat-rate. Currently, withholding is designed to get the answer right for basic rate taxpayers. Non-PAYE withholding (such as that on interest income) happens at the basic rate – so the right amount of tax is withheld if this income falls in the basic rate band, but the wrong amount is withheld if it does not. For individuals outside self assessment, adjustments are often made to the PAYE code to resolve the difference. Potentially, the need for such adjustments could be reduced if withholding on other sources of income was not done at a flat rate. But this could only be achieved at the cost of requiring banks and other withholding agents to tailor withholding to individual circumstances. Information would need to be passed between HMRC and these other withholding agents each year. Were this combined with some sort of online computer system as envisaged above, it may not be too burdensome, though it is certainly administratively more complicated. Any decision would need to weigh any administrative savings against the additional compliance costs imposed.

A final possibility would be to move to monthly information reporting. Currently, information reporting happens annually as part of the end-of-year employer return. During the year, employers just remit the total tax, National Insurance and student loan repayments they owe (based on their own calculations) without any breakdown of what the money covers. This reduces within-year compliance costs for employers, but means that tax codes are not updated to reflect changes in circumstances, so often the wrong tax is withheld. If employers had to report information each time they remit tax liability (usually monthly), this

information could be used to modify tax codes and reduce the number of cases where the wrong amount has been withheld at the end of the year. Although the majority of OECD countries have annual information reporting for employers, a substantial minority have monthly reporting, including Finland, Japan and New Zealand. In the US it is quarterly (OECD, 2007).

Given HMRC is already moving towards requiring electronic transactions from employers, monthly information reporting may not be much of an additional burden assuming it takes the same form as information that has to be provided at the end of the year in any event. Currently, medium and large employers (50+ employees) must file end-of-year returns electronically, and from April 2011, this will apply to all employers. Although there are no published plans to make electronic remittance compulsory, it would not be surprising if this happened at some point. Nevertheless, the burden may be greater on small employers because their computer systems may not be so easily adapted to cope.

It is important to realise, however, that if PAYE is to withhold more accurately based on monthly information reporting, it will require more frequent coding instructions to employers. Individuals whose circumstances change frequently may end up with different tax codes every month. Again, the extent to which this is a burden depends on how computerised the system is. In principle, it need not make that much difference if payroll software can be automatically linked up to the coding instructions provided by the online coding system. The extent to which such a change would reduce the number of cases where the wrong amount of tax is withheld over the course of the year depends on how common it is for circumstances to change once tax codes have been calculated.

Of these three reforms, an online coding system seems the most clearly beneficial, and we recommend it should be investigated further. Any move in this direction must, however, be tempered by the knowledge that the history of large-scale government IT projects is far from glorious. Both of the other reforms are more marginal and a proper assessment of their value would require detailed operational information. Nevertheless, it seems unlikely that either would be viable in the absence of an improved computer system.

2. Universal self assessment and simple non-cumulative withholding

A radical alternative would be to extend self assessment across the whole population. For this to result in any administrative savings it would need to be combined with a drastically simplified system of withholding. In the words of a 1979 Inland Revenue review

of PAYE (1979, p24): “Grafting self-assessment on to the present PAYE system would be pointless; it would secure the worst of both worlds – no savings on in-year work, but much more end-of-year effort – and call for many more staff, not less.” It would need a non-cumulative system of withholding in which the tax authority is not responsible for calculating tax codes (so it need not keep track of employees and employers during the tax year). This is the system operated in the US.

Whether it would result in much of a reduction in employer compliance costs is debatable. The KPMG (2006) burdens report suggests that the majority of the cost to employers of operating PAYE was remitting tax liability and filing end of year returns, both of which would be largely unchanged under a non-cumulative system. Calculation of liability – one of the main things simplified by non-cumulation – did not form a large part of the total.

Self assessment should improve the accuracy of tax calculations for some individuals and remove any constraints on policy imposed by PAYE. It may encourage individuals to take a greater interest in the country’s tax system, but to a degree this will be mitigated if individuals rely on advisers and software to complete their returns. It may also create greater impetus to simplify the tax system (since a universal self assessment return would have to be simpler than the current form), though this has not really happened in the US.

The main objection to universal self assessment is the implications for compliance costs of compulsory tax returns. If PAYE works reasonably well for the majority of taxpayers, why force them to file a return because of the minority for whom PAYE does not work well?

One response to this is that, with the introduction of tax credits, many families effectively have to complete a tax return each year anyway. Around 6 million families receive tax credits, of which approximately 4 million also interact with PAYE. Were it possible to combine tax credit claims into a system of universal self assessment (as happens in the US), the implications of self assessment for tax credit recipients would not be that great. But achieving this would be difficult because, unlike the US, the UK has individual assessment for income tax but joint assessment for tax credits. And it still leaves perhaps 25 million individuals under PAYE who do not self assess and do not receive tax credits, for whom universal self assessment would be a considerable change.

A second response is pre-population. Over the last couple of decades, a number of Nordic countries have started sending out tax return forms that have been ‘pre-populated’

with information already held by the tax authority.³⁶ Typically this information comes from third-party information reports, such as salary information from employers. Taxpayers then need only check the pre-populated information and complete the parts of the tax return that are blank.

Pre-population has a number of obvious advantages (OECD, 2007). In particular, it offers the potential for substantial compliance costs savings because taxpayers have to spend less time completing their tax returns. It is also likely to lead to more accurate tax returns because taxpayer errors are avoided in pre-populated sections. This will reduce the administrative resources required to deal with incorrect returns. One disadvantage of pre-population is that it reveals what information the tax authority holds. Individuals may be less likely to report income missed by a pre-populated return because, if the tax authority doesn't know about it, they infer that their chances of being caught are small. It is unclear how important this is in practice. Successful pre-population is also very demanding. The information held by the tax authority must be accurate, and the tax authority must be able to link together all information relating to a given taxpayer soon after the end of the tax year. Historically, HMRC has not found this straightforward.

Given current policies, the value of universal self assessment depends both on the feasibility of pre-population and on the extent to which withholding can successfully be made to collect the right amount of tax from more taxpayers with less need for manual intervention. Were the policy context to change – particularly were it to move in favour of some form of expenditure tax – the balance may swing in favour of universal self assessment. But, in either case, the long-term benefits of such a change would need to be substantial to outweigh the considerable disruption caused by switching.

8. Tax avoidance

8.1. Some causes of avoidance

As we have previously noted, the origins of avoidance lie in the difficulty of defining what is sought to be taxed – the tax base. In defining the tax base tax systems create boundaries, some inevitable and others as matters of the political or other choices that are made in designing the system. Avoidance and the difficulty of constructing adequate countermeasures reflect the ease or difficulty of finding objective and verifiable criteria to

³⁶ The US state of California piloted a pre-populated state income tax return in 2004 and 2005, and in 2008 two of the major Democratic presidential candidates proposed such a system for the federal income tax.

determine those boundaries in order to prevent taxpayers seeking to eliminate or reduce their tax liabilities by changing their behaviour in particular ways. Significant avoidance activity is often clustered around the least satisfactory areas of a tax system. Complexity and avoidance can go hand in hand and it may also be the case that avoidance is on occasion difficult to distinguish from illegal evasion. In particular, the harder the tax base is to identify and locate within a particular taxing jurisdiction, the more difficult it is likely to become to tax and, as a corollary to that, the greater the scope for taxpayers to avoid tax on the tax base of a particular taxing jurisdiction. At the same time the inability of revenue authorities to monitor and control satisfactorily taxpayer behaviour in such situation means that there may be considerable scope for evasion by less scrupulous taxpayers.

Much of the UK government's anti-avoidance agenda has been focussed on corporate taxpayers. Companies will, in general, seek to minimise their taxes (both on profits and on employee remuneration) plus the cost of this minimisation. There is an acknowledged tension between their understandable perception of taxes as a cost to be minimised, and the tax authorities seeing companies as needing to act responsibly and constrain their planning actions carefully. It is unsurprising that tax avoidance has attracted considerable attention in areas such as the taxation of international companies, where several tax systems must interact and the scope for tax arbitrage, playing the rules of one system off against another, is considerable.³⁷ Another area is the taxation of financial companies, where financial innovation (such as the use of derivative instruments) has allowed transactions to be constructed in ways that attract a more favourable tax treatment, while having essentially the same economic effect as simpler transactions that would be taxed less favourably.

At the same time a key challenge facing tax authorities is how to evolve to address the changing methods of commerce. The UK's tax system has struggled to keep up technically with such issues as financial instruments and the general way business financing is carried out.³⁸ At the other end of the spectrum, the growth of e-business – exemplified by eBay – brings particular challenges to the tax collector. In principle there is nothing new in tax terms: it is still an issue of whether a taxable trade is being carried out or disposals subject to CGT are made. In days gone by the taxman tried to control cash sales at market stalls; more

³⁷ As noted in Section 1, the welfare consequences of a taxpayer's choice regarding to which jurisdiction to pay a given tax are quite different from the choice of whether to pay tax to a given jurisdiction.

³⁸ Though in some areas it has been commendably quick to adapt: the way that considerable effort has been put into devising a way of catering for Shari'a compliant financing products in FA 2005 and subsequent Acts is very creditable. The driver has been to make sure London is positioned as a centre of the developing Islamic international finance market.

recently activities moved to car boot sales; now the business takes place in cyberspace. This presents greater challenges, however, as to how HMRC can police this effectively.

Another dimension is the position of intellectual capital, which is increasingly replacing physical assets as the basis of wealth creation. If a company owns a trademark or patent that can in principle be “located” anywhere, leading to profits being diverted abroad, HMRC must solve the question of how it defines a tax base that it can monitor without leaving open opportunities for uncontrolled avoidance or evasion.

There is no simple answer to these issues. A combination of measures to refine or redefine the tax base and to counter the avoidance opportunities that would otherwise undermine the tax base entirely is needed, without at the same time inhibiting ordinary commercial behaviour. The UK as a member of the European Union is forced to operate within the constraints imposed by the EC Treaty freedoms. Claims that ordinary cross-border anti-avoidance rules breach these freedoms has led to a succession of cases before the European Court of Justice that affect all states, undermining their ability to implement measures designed to protect domestic tax revenues against cross-border activity notwithstanding the ECJ’s development of an abuse (of Community law) doctrine. In the international context cooperation between revenue authorities, both in terms of finding solutions and in working out ways of policing tax systems efficiently, is likely to be the only satisfactory way forward. National customs authorities have co-operated over many years because they are outward facing. By contrast, Revenue authorities responsible for direct taxation have tended to be inward facing. The establishment of the Joint International Tax Shelter Information Centre (JITSIC) between Australia, the UK, the US, Canada and Japan is, however, a significant step forward in sharing information between the revenue authorities of those countries in order to identify abusive products or arrangements and those marketing them.

8.2. *Categorising avoidance and identifying the tax gap*

Tax avoidance is action ordinarily designed to reduce a taxpayer’s tax bill in one way or another by legal means (in contrast to evasion which aims at the same objective by fraud, deceit or other illegal means). Not all tax reduction is characterized as ‘avoidance’ but for present purposes we do not seek to differentiate ‘avoidance’ from other forms of tax mitigation, planning or reduction. However, certain avoidance has been demonised of late in the UK and various other countries as being ‘unacceptable’. This raises difficult questions: if the taxpayer is operating in accordance with the law, disclosing fully and meeting all

compliance obligations, what is the problem if the result of actions taken is not to the tax authorities' liking? The rejoinder is usually that the result is not in accordance with the legislative intention. But what does the taxpayer have to go by, if not the language of the legislation? If the law can be overridden at the discretion of the tax authorities, where does that leave fairness and certainty?

In some cases the boundary between 'acceptable' and 'unacceptable' avoidance becomes a matter of proper disclosure, i.e. that unacceptable avoidance is often down to incomplete disclosure – possibly bordering on evasion if the success of arrangements depends upon non-disclosure. Some of the controversy can be taken out of the debate if there is full and frank disclosure. In addition, initiatives in countries such as the US and UK to require speedier disclosure of tax planning schemes (see below) seek to ensure a better balance in the system or at least an acknowledgment that current intelligence is important in dealing with avoidance. Even with full disclosure, however, there remain arrangements that continue to generate controversy, being designed for no purpose other than to eliminate tax liabilities or that operate as a 'raid on the Treasury' by generating tax repayments or double reliefs for particular expenditure.

There is undoubtedly room for the view that the UK's tax system, with its reliance on legal 'form' rather than on economic or financial 'substance,' is particularly open to avoidance.³⁹ At the time of the Meade Report promoters of tax avoidance schemes were fond of citing the following judicial dictum to justify their schemes⁴⁰—

“No man in this country is under the smallest obligation, moral or other, so to arrange his legal relations to his business or to his property as to enable the Inland Revenue to put the largest possible shovel into his stores. The Inland Revenue is not slow - and quite rightly - to take every advantage which is open to it under the taxing statutes for the purpose of depleting the taxpayer's pocket. And the taxpayer is, in like manner, entitled to be astute to prevent, so far as he honestly can, the depletion of his means by the Revenue.”

Countries that have a doctrine of 'abuse of rights' or have legislated an overarching General Anti-Avoidance Rule ("GAAR") leave less scope for argument or, at least, the grounds for argument are somewhat different. The government consulted on an overarching statutory GAAR in 1998 but decided against adopting one. It has therefore been left to the judiciary to develop its approach to construing tax legislation to counter avoidance. Initially, the House of Lords dealt many artificial 1970s schemes a judicial blow when it decided in *W*

³⁹ The best known case illustrating this is probably *The Duke of Westminster v CIR* (1935) 19 TC 490.

⁴⁰ *Ayrshire Pullman Motor Services and D M Ritchie v The Commissioners of Inland Revenue* (1929) 14 TC 754.

T Ramsay v IRC (1981) 54 TC 101 that composite pre-planned tax avoidance schemes could be rendered ineffective if the legislation in question justified that approach. Subsequent decisions on the *Ramsay* doctrine, however, have illustrated the limitations of this judicial action against avoidance.⁴¹ Furthermore, judicial sentiment on avoidance can change and few governments can delay counter-action against avoidance once discovered to await a judicial answer as to whether particular schemes are effective or not. Earlier legislative action is usually required to protect tax revenues.

Recent years have seen the UK Government step up its efforts to reduce the amount of tax revenue that it perceives to be lost as a result of various forms of tax avoidance. As shown in Table 3, measures described as “protecting tax revenues” introduced since Budget 2002 alone are estimated to raise around £9.4 billion in 2008–09. Some revenue-raising anti-avoidance measures are always likely to be required to prevent additional tax leakage as new avoidance schemes are developed. But the Government clearly wants to do more than just run to stand still, and hopes to reduce avoidance over time.

⁴¹ See e.g. *Barclays Mercantile Business Finance Ltd. v. Mawson* (2002) 76 TC 446.

Table 3: Treasury estimates of amounts raised through measures announced since Budget 2002 aimed at “protecting revenues”, (£ billion 2008–09 terms)

Announcement	Year					
	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Budget 2008	N/A	N/A	N/A	N/A	N/A	0.7
Between Budget 2007 and Budget 2008	N/A	N/A	N/A	N/A	0.1	0.2
Budget 2007	N/A	N/A	N/A	N/A	0.2	0.3
Between Budget 2006 and Budget 2007	N/A	N/A	N/A	0.3	1.0	1.0
Budget 2006	N/A	N/A	N/A	0.3	0.8	0.6
Between Budget 2005 and Budget 2006	N/A	N/A	0.2	0.6	0.8	0.8
Budget 2005	N/A	N/A	0.8	1.2	1.1	1.1
Between Budget 2004 and Budget 2005	N/A	0.3	1.2	1.3	1.3	1.3
Budget 2004	N/A	0.4	0.9	1.0	1.0	1.0
Between Budget 2003 and Budget 2004	0.0	0.3	0.5	0.7	0.7	0.7
Budget 2003	0.6	0.6	0.6	0.6	0.6	0.6
Between Budget 2002 and Budget 2003	1.1	0.9	1.1	1.1	1.1	1.1
Total	1.7	2.6	5.3	7.1	8.8	9.4
<i>% of national income</i>	<i>0.1</i>	<i>0.2</i>	<i>0.4</i>	<i>0.5</i>	<i>0.6</i>	<i>0.6</i>

Sources: various Budgets. Only measures scored under “protecting revenues”, “protecting tax revenues” or “anti-avoidance measures” included. Nominal figures uprated to 2008–09 terms using the Treasury’s latest estimates of money GDP. Where Treasury estimates are not published, the revenue raised is assumed to remain constant as a share of national income.

8.3. Legislative anti-avoidance techniques

UK governments have tried most legislative techniques to curb avoidance and in recent years the volume of anti-avoidance legislation has increased, due to the ingenuity of tax planners and a determination by the Government and Revenue authorities to stamp out what they perceive as avoidance, in turn informed by the disclosure regime (see below). The legislative assault on avoidance has mainly involved specific anti-avoidance measures in the standard detailed rule-based form. Increasingly, however, legislation has incorporated a general tax avoidance test based on the existence of an avoidance motive or purpose or the derivation of tax benefits; effectively ‘mini GAARs’ attached to specific parts of the tax code (e.g. VAT option to tax and various share schemes provisions) or so called ‘targeted anti-avoidance provisions’ (TAARs – notably on capital losses).

These have met with varying degrees of success.⁴² The government's latest idea is to introduce, probably starting in 2009, 'principles-based' anti-avoidance legislation designed to achieve a better balance of simplicity and revenue protection. The perception that continues to be conveyed by Government and HMRC, however, is that avoidance remains a major issue requiring substantial legislative measures every year.

A less conventional approach has involved the threat of retrospective legislation,⁴³ in particular targeted at employment schemes that sought to eliminate tax and/or NICs on bonus payments. At the time the threat was made, specific measures were introduced to counter identified avoidance but, in a clear signal that the authorities were no longer prepared to tolerate the situation, the Paymaster General threatened retrospective action against schemes uncovered in the future. There is anecdotal evidence that this threat, coupled with the fact that it has been acted upon (see S92 FA 2006), has been largely successful in stopping the annual bonus scheme round, where each year a series of devices targeted at eliminating tax/NICs on 'city' bonuses appeared.

8.4. *Tax Avoidance Disclosure*

A major initiative, however, has been the introduction of a Tax Avoidance Disclosure (TAD) regime in 2004. The TAD regime was brought in initially for direct tax (income tax, corporation tax and CGT) and VAT; it has since extended to SDLT and NICs. The direct tax provisions were recast in 2006 and were extended in 2007 with the grant of greater information powers. The TAD regime has two distinct objectives: to identify new schemes, so that it is possible to take early anti-avoidance action; and to show who is using the schemes so as to help HMRC adjust their risk assessments.

The hub of TAD is the requirement for promoters to notify new schemes within five days of making them available or when implementation has started. Whilst the target might be marketed schemes, bespoke advice can also be caught and one of the practical problems (on both sides) has been identifying what else has to be disclosed. Various provisions in the successive Finance Acts of 2005, 2006, 2007 and the Finance Bill 2008 can be traced to disclosures made under the TAD (though, curiously, no VAT changes to date). To that extent, the regime is clearly working in allowing HMRC to identify and counteract avoidance more quickly. Statistics of disclosures to the end of September 2007 (867 for direct tax, 702

⁴² See TLRC (2008) for a detailed examination of the different approaches.

⁴³ See the statement by the Paymaster General accompanying the December 2004 Pre-Budget Report

for stamp duty land tax, and 852 for VAT) suggest that the system is certainly delivering substantial data to HMRC.⁴⁴

At the same time, however, the added stimulus to introduce further anti-avoidance legislation and to tweak incessantly existing anti-avoidance provisions has contributed to the sense that the UK's tax system is too complex and lacks stability in the affected areas. This feeling has led to the Government's current simplification reviews, one element of which has been its announcement of principles-based anti-avoidance legislation designed to replace longer and more complex provisions with shorter and simpler anti-avoidance provisions based on clear statements of the principle that they designed to achieve. While there has been general support for the aims of the review, the consultation initiated in December 2007 generated significant criticism that the proposals would create unacceptable uncertainty and went beyond their intended scope. The essential problem is that avoidance is frequently concentrated on those areas of the tax system where there is no clear principle. Accordingly, finding a satisfactory alternative, simpler, legislative approach is unlikely to be straightforward. In the meantime TAD will continue to generate pressure for further detailed rule-based anti-avoidance measures.

8.5. *'Tax in the Boardroom'*

A further stratagem that the Government has deployed against avoidance has been publicity. This has not quite amounted to 'naming and shaming' those involved, but there was clearly a campaign in 2005 to demonise avoidance and portray tax avoiders, both corporate and individual, in a very poor light.⁴⁵ Some observers saw a degree of irony in the welter of publicity in that evasion, which is illegal, seemed to be overlooked almost as if it were regarded as less reprehensible than avoidance.⁴⁶

HMRC also sought to raise awareness among senior management of large companies of the potential risks of being caught on the wrong side of what the authorities consider to be unacceptable tax avoidance. In autumn 2005, HMRC officials wrote directly to the chairmen of the UK's largest 500 companies, seeking to establish a dialogue over the management of

⁴⁴ www.hmrc.gov.uk/avoidance/avoidance-disclosure-statistics.htm.

⁴⁵ For example, in announcing the opening of a second JITSIC office in London in September 2007, the Financial Secretary spoke in terms of the need to stamp out avoidance because "tax avoidance gives those who seek to cheat the system an unfair advantage over the vast majority of taxpayers who play by the rules." However much governments and revenue authorities may dislike avoidance, legal avoidance is playing by the rules.

⁴⁶ The social responsibilities of corporations with respect to taxpaying are discussed in Slemrod (2004).

tax issues and tax risk. There are certainly positive aspects to greater communication between tax collectors and taxpayers, which should lead to greater understanding of the other side's position. There was a perception in some quarters, however, that HMRC was seeking to exert pressure on companies by raising questions about their tax strategies at boardroom level.

HMRC's increased emphasis on "tax risk" can also be perceived as an attempt to increase uncertainty among taxpayers about the border between acceptable and unacceptable forms of tax planning, and to foster increased nervousness about the reputational risk of being seen to fall on the wrong side of the divide. Promoting opacity and unpredictability may seem a clever way to raise revenue in the short-run, but transparency and certainty have long been seen as hallmarks of a fair and efficient tax system.

8.6. Conclusion

The disclosure regime has been successful in enabling HMRC to take counteracting measures against avoidance more quickly. This success, however, has come at the cost of an outpouring of specific or 'targeted' tax avoidance rules that, on top of other recent legislative activity in the tax field, threatens to clog the system. Even if anti-avoidance provisions are of 'limited' application – consigning schemes to the history books or ensuring that they never work – they involve a continuing cost to taxpayers, and business in particular, in ensuring that their ordinary commercial and personal arrangements do not fall foul of particular provisions and so avoid unintended effects.

It is important for the integrity of the tax system that people should contribute their 'fair share' of tax revenues and that there should not be undue scope for particular individuals to reduce their share of those revenues. This is the basis of the Paymaster General's statement on employment liabilities. In this respect the tax system that existed in the UK at the time of Meade, with high nominal rates of tax offset by opportunities for avoidance by those with access to specialist advice, represented a poor combination of disincentives and inequity. While the reduction in nominal tax rates since that time has lowered the benefits of specific avoidance, the essential link between avoidance and the tax base remains so that even at lower nominal tax rates avoidance emerges where the tax base is, for whatever reason, difficult to define. Business taxation is a particular illustration because the tax base – 'profits' – is difficult to state and in today's conditions is global in nature. It is an inherently difficult tax base both to define and to identify with the UK. In this respect, it is difficult to achieve a coherent policy that, on the one hand, demands that businesses pay their 'fair share'

of taxation without undue avoidance, and, on the other, aims for a globally competitive tax system. Ongoing targeted anti-avoidance provisions may contribute to the former objective while undermining the latter by clogging of the arteries of what aims to be a competitive tax system.

III. CONCLUSIONS

Administration and enforcement are often neglected in tax policy, but they are central to making a tax system work. In Part I of the chapter, we showed how standard optimal tax theory can be extended to address these issues and described a number of important implications. Here, we highlight just two. First, the optimal mix of tax instruments cannot be determined without reference to all the costs of taxation (distortion costs and administrative and compliance costs). Second, for incremental policy adjustments, what matters are marginal costs, not total or average costs.

In Part II, we addressed three main issues relating to the administration and enforcement of the UK tax system: the objectives and targets of HMRC, the future of PAYE and tax avoidance.

The reorganisation that created HMRC promises efficiency savings, and recent initiatives make it clear that HMRC takes both administrative and compliance costs into consideration, as is entirely appropriate. Moreover, HMRC is clearly concerned with both raising revenue as well as raising it equitably and accurately. The focus on setting and attaining a long list of quantitative targets, though, runs the risk of obscuring the tradeoffs that are implicit in HMRC resource allocation decisions, and potentially making these decisions internally inconsistent. There is also a danger that different costs are not considered simultaneously, and that incremental policy changes are decided on the basis of average rather than marginal costs.

PAYE functions reasonably well for the majority of taxpayers whose circumstances are straightforward but struggles in more complicated cases, particularly for individuals with multiple income sources and frequent job changes. HMRC has already begun to modernise PAYE in ways that should considerably improve its accuracy, but we recommend that more fundamental changes should be considered. In particular, an online system of coding has the potential to remove the need for much of the paper communication currently required, reducing both the number of errors made and administrative costs. The case for universal self assessment depends both on the extent to which modernisation of PAYE manages to address its current shortcomings and on the feasibility of pre-populating tax returns.

Despite significant legislative and other activity designed to counter tax avoidance, the perception remains that tax avoidance is a continuing problem and a source of considerable tax leakage (as compared with the tax that government believes it should be collecting) as well as complexity and cost. In reality, while there is taxation there will be avoidance and the avoidance will tend to be concentrated on those parts of the tax system where lines are drawn between different activities, products, taxpayers and taxing jurisdictions. A balance must be found between attempting to eliminate every avoidance opportunity and not inhibiting unnecessarily ordinary commercial and personal activities. And tackling avoidance must not mean that tackling evasion is neglected.

Ultimately, tackling avoidance is part of the process of defining the tax base. This will be easier where the tax base reflects a clear underlying economic principle, that does not attempt to tax close substitutes differently, that draws lines where satisfactory objective and independently verifiable criteria exist to distinguish what is intended to be taxed and what is not, and that avoids drawing unnecessary lines without those characteristics.

Beyond such design issues, governments are likely to have to continue to deploy a variety of measures to counteract avoidance and monitor the borders of the tax system where in reality no very clear boundaries exist. A significant problem in the UK has been the tendency to be reactive to avoidance – to address the symptom by negating the latest device without considering the underlying cause of the problem. As a result, taxpayers have revised their plans to circumvent or exploit the latest set of detailed anti-avoidance rules. The attempt to move away from a detailed rule-based approach and find a principles-based answer may signal a recognition that the process of refinement and complication is not ideal and that better methods may be needed to monitor the borders of the tax system.

The overriding conclusion has to be that the UK's tax system is, all things considered, not doing too badly. But it is undoubtedly creaking and as commercial life continues to change rapidly, there is increasing pressure for it to adapt. The question is whether it can adapt quickly enough. If not, it runs the risk of imposing unnecessary burdens while simultaneously allowing revenues to escape taxation such that the tax burden is shared in a more capricious and inequitable fashion.

Table 1: Remittance Responsibility in the U.K. Tax System: 2006/07

	Receipts (£m)	Remitted by business (£m)	Proportion
HMRC-administered taxes			
<i>Income tax:</i>			
PAYE	124,799	124,799	1.00
Self Assessment, net of repayments	20,306	0	0.00
Other receipts ¹	8,331	4,868	0.58
Tax credits ^{2,3}	-4,435	-3,992	0.90
Other repayments ^{2,4}	-5,673	-5,514	0.97
National Insurance ⁵	87,273	84,504	0.97
Corporation tax	44,308	44,308	1.00
Petroleum revenue tax	2,155	2,155	1.00
Capital gains tax	3,813	0	0.00
Inheritance tax	3,545	0	0.00
Stamp duties	13,392	13,392	1.00
VAT	77,360	77,360	1.00
Other indirect taxes ⁶	48,485	48,485	1.00
Subtotal	423,659	390,366	0.92
Non-HMRC-administered taxes			
VED	5,100	1,020	0.20
Business rates	21,000	21,000	1.00
Council tax	22,200	0	0.00
Other taxes and royalties ⁷	13,900	13,900	1.00
Subtotal	62,200	35,920	0.58
Total	485,859	426,286	0.88

Notes (figures in brackets are fractions assumed to be remitted by business):

1. Other receipts category comprises tax deduction scheme for interest (TDSI) (1.00), other tax deducted at source (1.00) and others (0.00).
2. Repayments are classified not according to how repayments was made but according to the tax for which they are repayments.
3. Tax credits comprise the negative tax part of WTC/CTC expenditure (0.90), MIRAS (0.90), LAPRAS (0.90) and other (0.90). The 0.90 for WTC/CTC is based on an estimate of the number of self-employed recipients. The 0.90 figure for all other tax credits is the proportion of gross income tax receipts remitted by business.
4. Other repayments comprise individuals (1.00), personal pension contributions (1.00), pension fund and insurance companies (1.00), charities (0.90), overseas (1.00), PEPs and ISAs (0.90) and other (0.90). Again, 0.90 is the proportion of gross income tax receipts remitted by business.
5. Class 1 National Insurance contributions (1.00), Class 2-4 contributions (0.00).
6. Other indirect taxes comprise (all 1.00): fuel duties, tobacco duties, spirit duty, beer duties, wine duties, cider & perry duties, betting and gaming duties, air passenger duty, insurance premium tax, landfill tax, climate change levy, aggregates levy, and customs duties and levies. A small fraction of customs duties may be attributable to individuals, but it is not easy to assess how much.
7. The main components of other taxes and royalties (all assumed 1.00) are VAT refunds to central government and local authorities, rest of the world taxes on products, national lottery distribution fund and fossil fuel levy

Sources: www.hmrc.gov.uk/stats/tax_receipts/table1-2.pdf, www.hmrc.gov.uk/stats/t_receipt/table2-8.pdf, www.hmrc.gov.uk/stats/t_receipt/table2-9.pdf, Appendix 6 of www.gad.gov.uk/Documents/Social_Security_Uprating_Order_07.pdf, Table C6 of Budget 2008 http://www.hm-treasury.gov.uk/media/9/9/bud08_completereport.pdf and authors' calculations.

References

- Adam, Stuart and Loutzenhiser, Glen. 2007. *Integrating Income Tax and National Insurance: an interim report*, IFS Working Papers, W07/21, December 2007.
- Akerlof, George. 1978. "The Economics of 'Tagging' as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning." *American Economic Review* 68: 8-19.
- Allingham, Michael G. and Agnar Sandmo. 1972. "Income Tax Evasion: A Theoretical Analysis." *Journal of Public Economics*, Vol. 1, No. 3-4, pp. 323-338.
- Barr, N.A., S.R. James, and A.R. Prest. 1977. *Self-Assessment for Income Tax*. London: Heinemann Educational Books.
- Becker, Gary. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy*, Vol. 76, No. 2 (January/February), pp. 169-217.
- Bird, Richard. 2002. "Why Tax Corporations?" *Bulletin for International Fiscal Documentation* 52: 194-203.
- Blumenthal, Marsha, Charles Christian and Joel Slemrod. 2001. "Do Normative Appeals Affect Tax Compliance? Evidence from a Controlled Experiment in Minnesota." *National Tax Journal*, 54(1), pp. 125-138.
- Bourn, John. 2006. *Comptroller and Auditor General's Standard Report on the Accounts of the Inland Revenue 2005-06*. 7 July.
- Bourn, John. 2007b. *Comptroller and Auditor General's Standard Report on the Accounts of the Inland Revenue 2006-07*. 6 July.
- Carter, Patrick. 2001. *Review of Payroll Services*. November.
- Carter, Patrick. 2006. *Review of HMRC Online Services*. March.
- Christensen, Kevin, Robert Cline, and Tom Neubig. 2001. "Total Corporate Taxation: 'Hidden,' Above-the-Line, Non-Income Taxes." *National Tax Journal* 54 (September), pp. 495-506.
- Cowell, Frank. 1990. *Cheating the Government: The Economics of Evasion*. Cambridge: The MIT Press.
- Diamond, Peter and James Mirrlees. 1971. "Optimal Taxation and Public Production. I- Production Efficiency." *American Economic Review*, 61(1), March, pp. 8-27.
- Evans, Chris. 2003a. "Studying the Studies: An overview of recent research into taxation operating costs." *eJournal of Tax Research*, 1(1), pp. 64-92.
- Evans, Chris. 2003b. *Taxing Personal Capital Gains: Operating Cost Implications*. Australian Tax Research Foundation. Research Study No 40.

- Feld, Lars and Bruno Frey. 2002. "Trust Breeds Trust: How Taxpayers Are Treated." *Economics of Governance*. July, 3:2, pp. 87-99.
- Feldstein, Martin. 1972. "Distributional Equity and the Optimal Structure of Public Prices," *American Economic Review*, Vol. 62 (March 1972), pp.32-36.
- Frey, Bruno. 1997. "A Constitution for Knaves Crowds Out Civic Virtues." *Economic Journal* 107: 1043-53.
- Green, Sue. 1996. "Self-Assessment: A New Era for United Kingdom Taxpayers, But What About the Costs?," *British Tax Review*, No. 2, pp.107-119.
- HM Revenue & Customs. 2005. *The Abolition of Payment of Working Tax Credit via Employers: Regulatory Impact Assessment*. August.
- HM Revenue & Customs. 2007. *Measuring Indirect Tax Losses—2007*. October 2007.
- HM Revenue & Customs. 2007b. *Departmental Autumn Performance Report 2007*. December.
- HM Revenue & Customs. 2007c. *Developing Methodologies for Measuring Direct Tax Losses*. October.
- Inland Revenue. 1979. *PAYE – Possible Future Developments*. March 1979.
- Inland Revenue. 2004. *Self Assessment Pilots 2003/4: Technical Report*. IR Research Report 8. September.
- Inland Revenue. 2002. *Inland Revenue: Self Assessment Systems*. House of Commons Treasury Committee. 23 July.
- Inland Revenue. 1998. "The Tax Compliance Costs for Employers of PAYE and National Insurance in 1995-9." The Center for Fiscal Studies, University of Bath.
- Inland Revenue. 1999. *Tax Credits Act 1999 and Accompanying Regulations: Regulatory Impact Assessment*. December 1999.
- Kaplow, Louis. 1989. "Horizontal Equity: Measures in Search of a Principle." *National Tax Journal*. 42: 139-54.
- Kaplow, Louis. 1995. "A Fundamental Objection to Tax Equity Norms: A Call for Utilitarianism." *National Tax Journal* 48: 497-514.
- Klepper, Steven and Daniel Nagin. 1989a. "The Anatomy of Tax Evasion." *Journal of Law, Economics, and Organization*, Vol. 5, No. 1 (Spring), pp. 1-24.
- KPMG LLP. 2006. *Administrative Burdens: HMRC Measurement Project*. March 20.
- Lessig, Lawrence. 1999. *Code and Other Laws of Cyberspace*. New York: Basic Books.

- Mayshar, Joram and Shlomo Yitzhaki. 1995. "Dalton-Improving Tax Reform." *American Economic Review*, Vol. 85, No. 4 (September), pp. 793-807.
- Mirrlees, James. 1971. "An Exploration in the Theory of Optimum Taxation." *Review of Economic Studies* 38: 175-208.
- National Audit Office. 2003. *Tackling Fraud against the Inland Revenue*. Report by the Comptroller and Auditor General, February 28.
- National Audit Office. 2007. *HM Revenue & Customs: Accuracy in processing Income Tax*. Report by the Comptroller and Auditor General, July 6.
- OECD. 2007. *Tax Administration in OECD Countries and Selected Non-OECD Countries: Comparative Information Series (2006)*. Centre for Tax Policy and Administration.
- PricewaterhouseCoopers LLP and The World Bank. 2007. "Paying Taxes 2008 – The Global Picture" November 2007.
- Sandford, Cedric A. ed. 1995. *Tax Compliance Costs: Measurement and Policy*. Bath: Fiscal Publications.
- Sandford, Cedric A., M. Godwin, and P. Hardwick. 1989. *Administrative and Compliance Costs of Taxation*. Bath: Fiscal Publications.
- Scholz, J. T., and M. Lubell. 1998. "Trust and Taxpayers: Testing the Heuristic Approach to Collective Action." *American Journal of Political Science* Vol. 42, No. 2 (April): 398-417.
- Slemrod, Joel. 2003. "Trust in Public Finance," in *Public Finance and Public Policy in the New Century*. Sijbren Cnossen and Hans-Werner Sinn, eds., Cambridge, MA: MIT Press, pp. 49-88.
- Slemrod, Joel and Shlomo Yitzhaki. 1987. "The Optimal Size of a Tax Collection Agency." *Scandinavian Journal of Economics*, Vol. 89, No. 2, pp. 183-192.
- Slemrod, Joel and Shlomo Yitzhaki. 1996. "The Cost of Taxation and the Marginal Efficiency Cost of Funds," *International Monetary Fund Staff Papers*, March 1996, (43)1, pp. 172-198.
- Slemrod, Joel. 2004. "The Economics of Corporate Tax Selfishness." *National Tax Journal*. December, 57:4, pp. 877-899.
- TLRC. Forthcoming. *Tackling Avoidance: A Report by the Tax Law Review Committee on UK Anti-Avoidance Measures 1997 to 2008*.
- Torgler, Benno. 2003. "Tax Morale, Rule-Governed Behaviour, and Trust." *Constitutional Political Economy*. June, 14:2, pp. 119-140.
- Whiting, John. 2003. "Employment Taxes: Where Are We Going?" *British Tax Review 2002 No 1* pp. 42-55.

Yitzhaki, Shlomo. 1974. "A Note on 'Income Tax Evasion: A Theoretical Analysis.'" *Journal of Public Economics*. May, 3:2, pp. 201-202.