

The Political Economy of Tax Policy¹

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1. Introduction

We believe that the purpose of studying the political economy of taxation, ultimately, is that a good tax system has to be politically sustainable within the institutions of government, and political economy helps us understand political sustainability. In part, empirically, there are some policy outcomes that are hard to understand without political economy but less puzzling with it. Some British examples that will be discussed below include the poll tax, why there is no VAT on children's clothing, and the co-existence of national insurance and personal income tax.

When looking at examples like these, it is not new to say "it's political", but we are trying to do more than that. We want to be more systematic in studying politics, and to study it in ways that are consistent with the tools and methods of economics, in order to draw lessons. Looked at this way, our purpose might seem to be part of specifying the constraint set, but it is again more than this. In tax policy distributional issues are central, so getting to sustainability is not going to be just an issue of getting good advice from economists. Administration is also part of this, but sustainability is not just an issue of collectability. Tax policy should be credible, especially in a dynamic setting, so considering elections and information is critical. In all these ways political economy makes us think more rigorously about constraints on policy, about what recommendations are feasible and sustainable.

Three Conflicts of Interest

In trying to study how electoral interests affect tax policy, it is useful to begin with the main conflicts of interest that are represented in the political sphere. The first of these can be thought of as a *class-interest view of politics*. Citizens have different views about taxation based on their position in the income distribution. In so far as taxes are broad based – on income or expenditure -- rich citizens will on the whole favour low taxation while poorer citizens will tend to favour higher taxation (assuming that the benefits of taxation are spent on a fairly broad basis). The first generation models of the politics of redistribution focused exclusively on this cleavage and will be review below.

The second important conflict is between *organized and unorganized interests*. There is a well-known public choice view in which those in public positions engage in rent-seeking, appropriating public revenues for private purposes (Buchanan). In this view government misappropriates revenues, and the results are far from being Pareto-efficient. The classic public choice view of the world sees the problem of excessive taxation as endemic in representative democracies.² Because politicians will always find ways to spend further revenues of projects that they favour, governments tend to raise the maximum amount of tax revenue that is feasible given the constraints that they face. In fact, the Leviathan approach is extremely pessimistic about the role of elections in disciplining such behaviour.

An alternative view of this conflict sees policy evolving in response to competing lobbies with differing degrees and sources of advantage (Olson). In this view, tax policy reflects people with different interests trying to influence allocation, and elections are irrelevant except as a source of contributions. The explicit role of interest groups in making electoral contributions, and the role of contributions in persuading the most persuadable voters, in exchange for securing favourable policy outcomes has been modelled most notably by Dixit

² The so-called Leviathan approach to tax policy (Brennan and Buchanan 1980) was partly inspired by attempts to understand the increase in the size of taxation as a share of national income throughout the 20th century.

and Londregan and Grossman and Helpman. These models provide a mechanism that rationalizes resistance by the rich as well as non-income targeted redistribution.

The third conflict is that between *citizens and government*. The history of taxation is one in which governments have found ways of making economic activity taxable, often in response to the exigencies of war. This power allows governments to appropriate resources and to use them in ways that citizens may not like. This is a particular issue in weakly institutionalized settings characteristic of the developing world where problems of corruption are rife. However, even in advanced democracies like the U.K., the issue of whether public funds are misappropriated is a frequent issue and may shape the political economy of tax policy.

“Political economy is about resolving these conflicts of interest through institutional processes.”

These three conflicts of interest correspond to main concerns about political systems work. The first is the criterion of representation. In a world in which citizens have different views about how taxes should be levied, there is a role for political systems to determine whose interests are represented and how. Much of the academic debate about electoral concerns the kinds of coalitions whose interests will be dominant under different electoral systems. The second criterion is accountability and is relevant mostly for the second conflict of interest. Here, the issue is whether electoral incentives are sufficient to limit any misappropriation of public money. Again, institutional settings may be important. It is often argued that Presidential government with a directly elected chief executive sharpens political accountability where the executive is only indirectly accountable to its citizens.

There is much written on these broad topics and here is not the place to offer a complete review. Most of the evidence is at a macro-economic level concerning the way in which governments set the level rather than the pattern of taxation. However, the consensus from the literature is that fiscal institutions matter. Persson and Tabellini (2003) study two main aspects of electoral institutions (i) the difference between proportional and majoritarian electoral systems and (ii) the difference between Parliamentary and Presidential systems. Exploiting data across countries, the evidence suggests that the size of government is higher in countries that use proportional representation and in Parliamentary systems. Besley and Case (2003) review evidence using differences in fiscal institutions across U.S. states. They review evidence on fiscal rules such as balanced budget rules and rules governing increases in taxation and public spending. They also look at the evidence that states that have greater scope for direct democracy through initiatives and referenda have smaller shares taxation and public spending. As we discuss further below, they also discuss the impact of term limits for Governors on policy. There is some limited evidence that the share of taxation from different sources – corporate, sales and income taxes respond different to these institutional differences.

2. Britain in Context

The UK Tax Process: description and comparison of institutional framework

Exactly *how* is tax policy made in the UK? What follows is a concise overview of this process and how it differs from the experience in other countries.

We begin by selectively illustrating the specific UK political institutions relevant to tax policy. The first-past-the-post electoral system used for the House of Commons usually

allows single parties to govern with large legislative majorities. Ministers responsible for tax policy (those at the Treasury) will be selected from the ranks of the governing party's MPs by the Prime Minister. This power of patronage is a major reason why these large legislative majorities also tend to be cohesive, with Government bills almost always being passed by a subservient House of Commons. One should also note that the British tax system is exceptionally centralized by international standards: little actual discretionary power is located anywhere outside central government.

The key point is that Britain has narrower base from which policy initiatives can be made: the only body that can put forward tax policy proposals is the Treasury. Very occasionally a tax-related provision turns up in some other bill (e.g. partnership law) but it would have to be cleared with the Treasury.³ This is tremendous advantage to the Government and empowers ministers to propose tax measures in the annual finance bill following the Budget⁴.

Importantly, there is no expert support for MPs in discussing the Finance Bill, so they can only look to expert advisors. As Person A put it,

[quote to be cleared]⁵

What are the sources of tax policy? First, all treasury ministers will have a set of aims for tax policy. These could be quite narrow and particular, e.g. Nigel Lawson's main aim was almost certainly promoting tax neutrality. Or they could be more general and wide-ranging, such as Gordon Brown's agenda of promoting employment, improving productivity, and protecting the environment. How these goals are defined varies from minister to minister. They could be personal views or they could be crafted for manifestos to achieve maximum electoral support. Clearly external influences - such as lobbies and the media - could persuade politicians of what a tax system should aim for, but they could also affect how these aims are perceived by voters.

A second source of tax policy proposals concerns measures to prevent tax avoidance. In administering the tax system, staff in the Revenue and Customs are able identify loopholes in the tax system that allows agents to avoid paying tax. They are then able to propose ways to close such loophole, or other ways to protect revenues. There is also a clear opportunity here for other specialist tax practitioners to suggest ways to reduce tax avoidance.

A third source of tax policy is more political, that made directly by ministers and advisors. This could come from election manifesto promises implemented soon after re-election, like the windfall tax on privatised utilities in 1997, or the cutting of top marginal rates of income tax in 1979. It could also be tax policy made between elections directly by ministers and their advisors, with or against the advice of tax policy officials.

The classical view of the evolution of goals to policy would say that civil servants respond by producing tax policy recommendations that seek to achieve these policy goals; the more visible a politician's policy goals are to civil servants, the better they can respond; and there is also a clear role here for external organisations, such as think tanks, to suggest suitable policies to achieve politicians' stated aims. But the last decade has seen two significant changes in the organization of policy.

³ Person A interview.

⁴ The unelected House of Lords has no power to block finance bills. The only other political authority that can alter the tax system is the Scottish Parliament, which can raise or lower the basic rate of income tax by 3p.

⁵ Person A interview. In fact, "[quote to be cleared]."

First and foremost, the organization of policy planning in the Treasury has changed dramatically. Previously, according to Person B, in the early 1990s,

HMT had only a few good technical people, and little capacity for policy development. There was one “team” for fiscal policy with three branches: taxes, indirect taxes, and budget coordination, with at most 2-3 people per branch. It was a “big challenge to get anything done”. Revenue and Customs produced material that was very technically phrased, but HMT was deeply dependent on the others for input.

Now, by contrast, following the O’Donnell review, the heart of policy development is in HMT, and new ideas could increasingly come from policy teams there.

Policy teams reflect ideas from outside, ministers objectives, HMRC and work within HMT. The organization of teams is formally structured. There are four subdirectorates and 19 teams: 2 for strategy, 1 for budget delivery, but the other 16 are policy teams, organized either by tax (for example, corporate) or labor market or sector (property tax). In an ideal world one might want any particular policy proposal dealt with by a single a team but real policy is too wide, so there will typically be involvement from a number of teams, from teams elsewhere in HMT (eg environment or productivity teams) or from other departments – for instance DWP on welfare and pensions issues. And of course HMRC is involved in all aspects of tax policy development

The consequences are not all benign according to Person A:

... [quote to be cleared].⁶

But it does have another very important consequence. Sometimes the teams are deliberately used in a competitive environment, to get different people giving different views. For instance, as the R&D tax credit was shepherded through the institutional process, the input from multiple departments:

[quote to be cleared]⁷

Second, as a consequence of the first set of changes, the process is now far more “political” than before, at the Special Advisor and ministerial level. As Person C described changes in the last few years,

... [quote to be cleared].

This change has created a systematic demand for information that can only be provided by outside organizations. For example, in the case of the R&D Tax Credit that we examine below

[quote to be cleared].⁸

⁶ Person A interview

⁷ Person C interview.

⁸ Person C interview.

Tax policy proposals need to be approved by ministers before they can be written into the annual Finance Bill. Evidently, there is now sufficient political advice within the process to make sure that consideration is given to how certain measures will play in newspapers and in the minds of voters. Despite legislative majorities being relatively cohesive in the UK, they will also consider how MPs will react -- so a Labour Chancellor would be less likely to propose extending VAT to children's clothing, on the basis that Labour MPs would almost certainly rebel.

This is very different to how tax legislation evolves in the USA where legislators have a lot more influence than in the UK. Steinmo (1996) has already identified the role of committees and legislative bargaining as being crucial to understanding how US tax policy has evolved over time. The fusion of legislative input with the desire for social engineering is usually used to explain why the US tax code is so complicated:

“The British example shows that the American tax code could be much simpler if Americans were willing to reduce the extent to which [they] tried to administer social policy through the tax code...” William Gale, “What Can America Learn from the British Tax System?” in Joel Slemrod (ed.), *Tax Policy in the Real World* (Cambridge, 1999)

However, this difference may be eroding:

“Mr. Brown's penchant for fine-tuning taxes has doubled the size of the tax code to 8,300 pages ... the second-longest in the world's 20 top economies, after India...” *Wall Street Journal*, 3/21/07, p. 1⁹

The way tax policy is made in the UK is also very different to the situation in many other European countries, particularly those with systems of proportional representation and powerful veto players. For instance, in Germany where coalition governments are the norm, tax policy is made as a result of negotiations within coalitions, and third parties, such as trade unions, are often consulted much more than in the UK. A good current example is the proposed reform of social insurance contributions for healthcare, where negotiations are still on-going between the partners within the Grand Coalition (Christian Democrats and Social Democrats) and with outside parties (e.g. healthcare professionals and trade unions in the health sector). Another example showing the importance of veto players are the recent cuts in corporate and income tax undertaken by Gerhard Schroeder's Government. Ganghof (2006) shows that despite an apparent preference for the introduction of a dual-income tax system over across-the-board cuts in corporate and income tax rates, the latter was instead instituted. The dual-income tax system was primarily a non-starter in Germany because the constitutional court had already let it be known that differential tax treatment of income and capital would most probably be ruled unconstitutional.

Tax Policy in Practice

This section describes how tax systems have been reformed over the past thirty years in three broad areas – income (including social security contributions), indirect and corporation taxes. It will concentrate on drawing out which political forces and ideas have driven the process, with a particular focus on the UK, though also contrasting and comparing the cross-country experience. The final part will draw out the main lessons we can learn from looking at the UK and cross-country experience of tax reform

⁹ Citing a report by the World Bank and PriceWaterhouseCoopers.

Income Tax

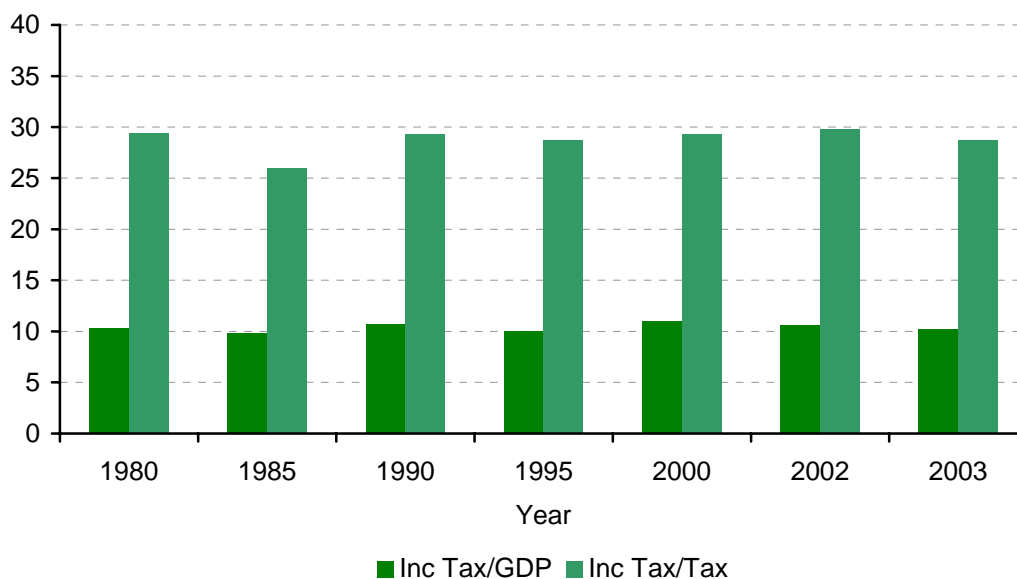
Statutory marginal rates of income tax have been cut substantially in the UK over the past thirty years. Following their election victory in 1979, the Conservatives cut the top rate from 83% to 60%, and the basic rate from 33% to 30%. Over the 1980s, these continued to be cut, with the top rate falling to 40% in 1988. Labour then re-introduced a starting rate of income tax in 1999, set at 10%.

Statutory rates of income tax are naturally important in determining its burden, but thresholds at which statutory rates kick in are also important. The threshold for paying income tax rose from £4,216 in 1979-80 to £5,035 in 2006-07, after accounting for economy-wide inflation – so grew by only 20% in real terms, compared with much faster growth in personal earnings. Partially as a result of this, the number of income tax payers has rose by 3.6 million over the same period. Moreover, the threshold for paying a higher rate of income tax has actually fallen since 1979, after accounting for economy-wide inflation. This has led to a rise in the number of higher-rate taxpayers, from 674,000 in 1979-80 to nearly 3.3 million in 2006-07 (note that this number grew under both Conservative and Labour governments). Both of these effects have led to so-called ‘fiscal drag’, where the base of a particular tax broadens as a result of thresholds not keeping pace with overall growth.

Another important feature of income tax systems that determines its overall burden is the extent of tax expenditures, i.e. those that can be deducted from gross income in order to calculate taxable income. In the UK, one major tax expenditure was abolished gradually during the 1990s: mortgage interest tax relief. This was a major tax expenditure, and combined with the removal of more minor ones, has broadened the base of income tax in the UK.

The combination of fiscal drag, active base-broadening and falling statutory rates has meant that income tax revenue as a proportion of GDP, and total tax revenues, has changed little over the past 25 years, hovering around 10%-11% of GDP or 28-29% of total tax revenue – both can be seen in Figure 1. This is interesting for all sorts of reasons. But from a political economy stand point, it is odd how important the statutory rate has been in political debate relative to thresholds, given their joint importance in determining its burden. Income tax “cuts” appeared to be quite popular in the 1980s and how much you pay in income tax is quite observable and transparent. Yet the burden of income tax has hardly budged. Naturally, the lack of change in the average burden could mask much change in the distribution of that burden – particularly amongst voters of differing persuasions.

Figure 1 – Income tax receipts as a proportion of GDP and total tax receipts



Source: OECD Revenue Statistics

The UK was not the only country to cut marginal rates of income over this period, nor the only country where income tax receipts were largely constant as a proportion of GDP and overall tax receipts. Firstly, marginal statutory rates appear to have been cut in two waves.

The first wave began with cuts in marginal rates by the USA, Canada, Ireland and the UK in the early 1980s, followed by what was almost certainly the most important reform of the US tax system in recent history – the Tax Reform Act of 1986. This combined large cuts in statutory marginal rates with base-broadening measures that cut the number of tax expenditures. Other countries that cut statutory rates around this time include France, Canada, Australia, New Zealand, Japan, Italy and Sweden.

A second wave of income tax reform began at the turn of the millennium. In Canada, the Liberal party introduced the largest income tax cut in Canadian history in 2000, which also happened to be the year a federal legislative election took place. In the USA, George Bush cut income tax rates in 2001 after being elected President. Many European countries have also cut their marginal rates of income tax substantially. Schroeder, Berlusconi and Chirac have all run for elections pledging to cut marginal rates of income tax, with these being at least partially delivered after the election. This pattern has been replicated in many other European countries such as Austria, Denmark and Netherlands.

Figure 2– Income tax receipts as a proportion of GDP

[figure to be inserted]

Source: OECD Revenue Statistics

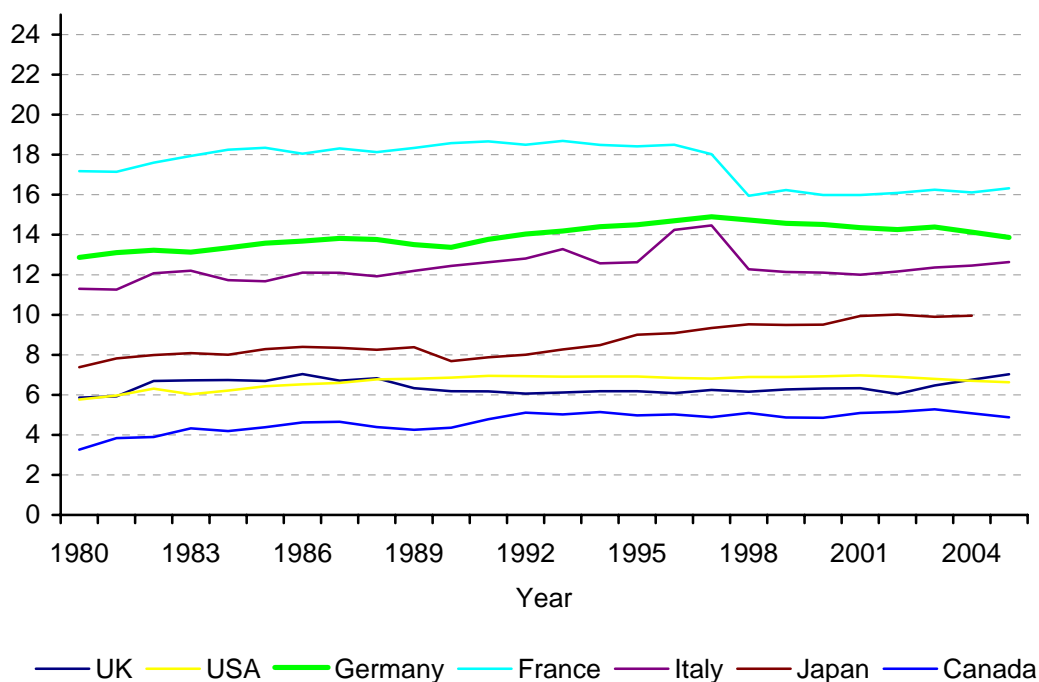
However, despite all the statutory rates that have taken place since 1980, the burden of income tax has only fallen significantly in Japan and Germany. In Canada, Australia and Italy it seems to have risen slightly. In the USA, despite a steep fall in the burden in the early 2000s, it is still at 12-13% of GDP, about the same as in 1990.

Therefore, other large OECD countries seem to have had a similar experience to the UK in terms of income tax. Statutory rate cuts combined with active base broadening and/or fiscal drag left income tax burdens not reduced as a proportion of GDP.

Social Security Contributions

As can be seen in Figure 3, UK and international trends in social security contributions and their burden can be summarised in two words: steadily increasing.

Figure 3 – Social Security Contributions as a proportion of GDP



Note: definition issue regarding France in the mid 1990s

The burden of social security contributions has been increased actively in the UK, such as the raising of national insurance contributions announced in Budget 2002. However, in most countries, rising social security contributions have more to do with ageing populations and the increasing cost of healthcare. Notable is that in no country has their burden been substantially reduced.

Indirect taxation

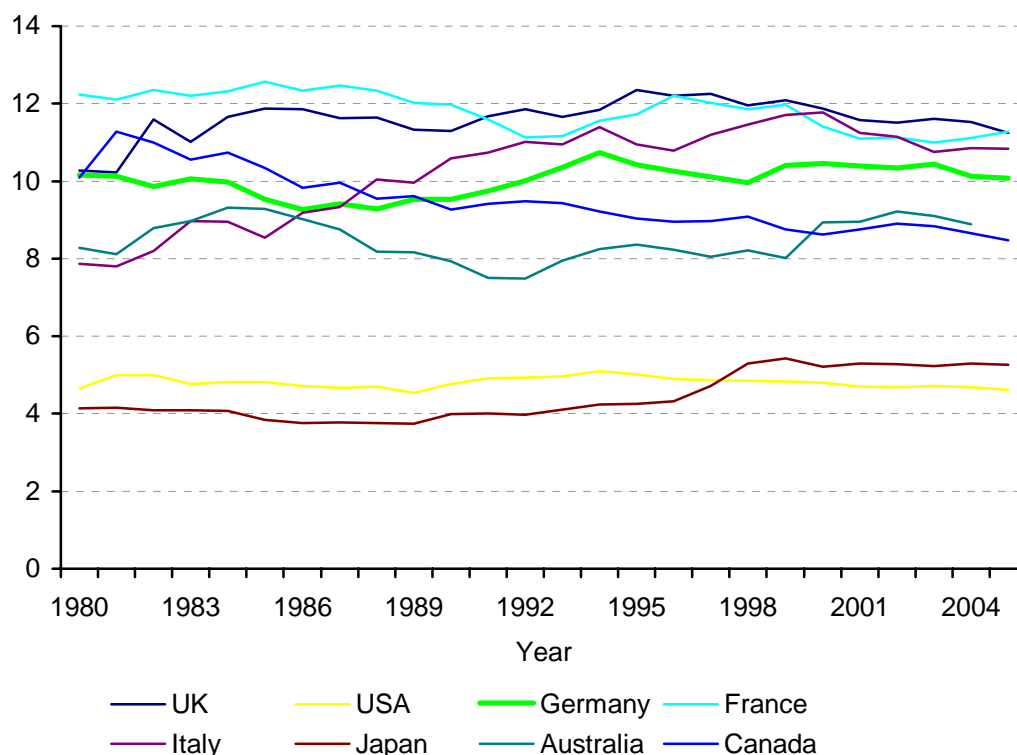
In the UK, Value Added Tax was introduced in 1973 as a condition of UK entry into the European Economic Community. Since then, the main rate was increased twice by the Conservatives: in 1979, from 10% to 15%, to help pay for lower statutory rates of income tax; and then again in 1991, from 15% to 17.5%, to help pay for reductions in the poll tax. Partly as a result of these changes, the proportion of GDP taken up by indirect tax receipts rose from 8.3% in 1979 (not shown in Figure 4 below) to reach 11.2% by 2005. This overall change in the burden of indirect taxes does not tell us much about the change in its composition. There has in-fact been a shift away from specific taxes on goods and excise duties towards the broadly-based and uniform VAT (as is shown in the UK tax chapter).

The main rate of VAT has not been a major political issue in the UK over the past 25 years. (This contrasts with its structure, which we will discuss in part in section 4.1.) Perhaps, this is because it helped to pay for things voters valued more, such as lower rates of income tax or a lower poll tax. However, perhaps it is the intertwining of the issue with the historically popular issue of EU membership.

In-fact we see that many current members of the EU have increased or introduced VAT over the past 25 years. This list includes founder members such as France (1995), Germany (1983, 1993, 1998, 2006), Italy (1982, 1988, 1997). But also includes newer members such as Spain (1986), Greece (1986) and most of the former communist countries of Central and Eastern Europe (early 1990s).

From Figure 4, we can see that over the period, indirect taxes represented a high and largely constant proportion of GDP in France, Germany and the UK (rising to similarly high proportions as Italy). This compares sharply with the non-European countries shown in Figure 4, where indirect taxes represent a much lower proportion of GDP, particularly in Japan and the USA.

Figure 4 – Indirect taxes as a proportion of GDP



In stark contrast to the largely uncontroversial raising of VAT in the EU, Canada, Australia and New Zealand have all introduced a Goods and Services Tax (GST) over the past thirty years amid a wave of political controversy. For instance, its introduction in Canada was a strong driving force behind the Progressive Conservatives’ spectacular defeat in the 1993 general election.

One reason for this could be the differences between a GST and VAT, for instance a GST is almost certainly more visible to consumers. More important though may be the increasing role of the EU in VAT policy, which has largely been to aid the creation of the Single Market. The 6th VAT Directive of the EU, introduced in 1977 (amended in various years and complemented by other directives since then), states that all EU countries must have a VAT rate above 15%, though goods can be granted reduced-rate status and new exemptions for goods and services must be agreed to by the EU. This means that voters in current or aspirant members of the EU have to weigh the benefits of membership of the EU and the single market against the specific cost of being forced to increase/introduce VAT. The intertwining of the issue of VAT with the popular issue of EU membership has thus largely defused the introduction/extension of VAT as a potential political concern.

From all this, we can observe that the introduction of national rates of VAT or GST in single countries can be very controversial indeed. However, connecting the issue with membership of the EU has helped EU countries defuse any potential political controversy connected with VAT almost completely. This clearly demonstrates the importance of understanding the role of political economy in having a fundamental effect on the nature of tax policy.

Corporation tax

Almost all major OECD countries show a very similar pattern in the timing and nature of reforms to their corporate taxation systems. One phrase can sum it up “Gradual cuts in the statutory rate of corporation tax, combined with base-broadening measures.” This has occurred across almost all countries, no matter the political persuasion of governing parties nor the institutional setting. Moreover, there is little evidence to suggest that corporation tax has been a major issue in elections in any of these countries. Corporate tax receipts as a proportion of GDP have remained fairly constant in all major OECD countries. Base-broadening measures have largely offset the effect of falling statutory rates.

Some comparative analysis and implications

Tax Reform is Safer in Groups

One of the most notable trends in major tax reform over the past 25 years is that it appears to have been conducted by groups of countries in two quite distinct phases.

Phase 1 runs from approximately 1986 to 1992 and always involved cuts in marginal rates of income and corporation tax. This was often combined measures aimed at broadening of at least the corporate tax base, but sometimes the income tax base as well (e.g. reduced number of tax expenditures in the Tax Reform Act of 1986 in the USA).

Phase 2 runs from about 2000 up until the present time. Tax reforms over this period have been fairly similar to those in Phase 1, with cuts marginal rates of income tax, and cuts in the statutory rate of corporation tax. It is noteworthy that this period of tax reform also seems to have broadly started with a Republican President of the USA cutting marginal rates of income tax.

The fact that tax reforms happen in groups of countries in particular phases may not be that surprising to an economist. Perhaps all these countries are subject to the same structural change that requires similar changes in tax policy. However, the fact that major tax reforms seem to occur in groups of countries in a fairly narrow frame seems to suggest that something else must be going on.

One explanation that a political economy reading may give is cross-country policy learning or “yardstick competition”. Perhaps politicians and voters judge what might be an appropriate policy from what other countries are doing, e.g. the USA. So the tax reforms of the later 1980s may have partially been initiated by policymakers using the tax reforms in the USA at that time as a queue. Obviously, separating out cross-country policy learning from tax competition would be very difficult indeed; they are very difficult to separate from each other conceptually and even more so empirically. However, Besley and Case (1995) do find some evidence for yardstick competition, which is discussed in more detail in section 5.

'Big Bang' Reform or Gradualism

Leading directly on from this is the fact that there have been a large number of major one-time tax reforms. Such an instance might not be that surprising when we attempt to use the tools of political economy. Perhaps it is the case that to undertake major tax reform a grand bargain must take place between interested parties, lest those that fear they are losing out veto the entire process. Meaning that major tax reforms may need to be holistic and one time in order to be feasible.

This is likely to be more relevant to countries whose constitutions naturally create more veto players. Examples of these include Sweden and the USA, who also happen to be the most notable examples of 'Big Bang' tax reformers with the Tax Reform Act of 1986 in the USA and the *Tax Reform of the Century* in 1990 in Sweden. Therefore, we may be able to explain why the USA was able to simplify the US tax code by the degree it did in 1986.

This may not be that relevant to the UK, since there are far fewer veto players than in other political systems. And indeed we do see that the UK has combined gradual tax reforms (elimination for Mortgage Interest Tax Relief or gradual cutting of basic rate of income tax during 1980s) with 'Big Bang' tax reform (tax reforms announced in 1979 and 1991 Budgets).

Similar Tax Reforms by Left and Right

Another notable trend that major tax reforms over the last 25 years highlights is that tax reforms have been similar across both left and right wing Governments. For instance, during the late 1980s, Conservative-led Governments in the UK and USA were cutting marginal rates of income and corporation tax, at which time Labour-led Government were doing very much the same thing in New Zealand and Australia. In the last 6 years, Gerhard Schroeder (a social democrat) and Silvio Berlusconi (a conservative) have both seen income tax cuts as a centrepiece of their legislative agenda.

It is surprising to see different parties with quite different ideologies practising such similar tax policy. Such an occurrence is, however, consistent with a model of voting that shows office-seeking politicians appealing to decisive voters. This is an issue, together with the seeming convergence of tax policies among the three main parties in the UK, that we return to in the section below.

3. Electoral Interests

In this section, we discuss how electoral interests shape tax policy in theory and practice. We discuss the issues at a fairly general level as well as the evidence. In all cases, we try to tie this back to the policy and institutional issues in the U.K..

Elections are at the heart of policy making in representative democracies and for many open and fair elections are the key institution that shapes how democracies work. However, even though all democratic societies put elections at the core, there is a wide variety of institutional variation in the way elections are conducted. Electoral systems – for example majoritarian versus proportional representation -- are one aspect of this. But others include the nature of parliamentary authority and accountability of the executive, whether politicians are term-limited and whether there is scope for direct democracy. Political scientists discuss these details and their implications at length in their writings.

These broad-ranging studies of fiscal institutions and their impact on taxation contrast offer little insight in specific policy reform debates such as

3.1 Representation

The canonical model of political representation that has dominated political for fifty years is the case of two parties competing by announcing election strategies that they will carry out if they win office. The most stylized version of this model has no role for post election politics – with announcements being carried out after the election and parties whose sole motivation is to win.

This approach was applied most influentially to the political economy of tax policy in Meltzer and Richards (1981). They focused on a single dimension of conflict between citizens due to the fact that they have different incomes. They also reduce the tax system to a single dimension – the rate of income tax with the proceeds of taxation being spent on goods and services or income transfers which accrue uniformly to the citizens. As long as preferences are appropriately “single-peaked”, then two party competition by two parties each of which cares only about winning, will result in the tax being chosen to suit the voter with median income. One interpretation of this is that we should expect the middle classes to have most political weight in determining tax policy outcomes.

The level of taxation chosen by the median voter is determined by two things: (i) the distance between the median and mean income and (ii) the extent to which increase in income taxation reduce pre-tax labour earnings. The first holds since, on the margin, an increase in income taxation costs the median voter in proportion to his income (the median income) and, since taxes come back on a uniform basis, it benefits him in proportion to mean income. The latter is due to the fact that a higher elasticity creates a large deadweight loss from income taxation.

Another key implication of the theory which bears emphasising is that both parties who compete to offer tax packages will offer the same policy. This is characteristic of the Downsian class of models in which this is based. There are periods in the U.K. in which such policy convergence seems plausible and there are clearly some important issues of tax policy where this is the case. For example, Labour in 1997 was committed to maintain the 40% top rate of tax introduced by the Conservative party in 1988. But as a general proposition, there are sufficient differences in policy between parties – even in two party systems to make this a questionable intellectual foundation for studying political economy issues. We will discuss this further below.

This approach is hard to take to the data directly. First, the kind of tax system that it describes does not correspond very well to what we see in reality. Second, measuring the extent to which pre-tax income distributions are right skewed is also difficult on a consistent basis. Most of the empirical work tended to look across countries where the basic institutional structure which is needed to yield the median voter prediction – two voting seeking parties in a majoritarian system seems implausible.

In any case the popularity of the model was never matched by the success of its empirical prediction that more pre-tax inequality should go hand in hand with more income-targeted redistribution. As a consequence, the approach spawned a significant literature which tried to extend the basic framework in a number of directions. For example Snyder (xxxx) added an

additional bracket to the income tax to add greater realism. This created difficulties for the existence of equilibrium. Another innovation was to redefine the goal of policy in welfare states as providing insurance rather than redistribution (Moene and Wallerstein 2000x). An electoral system based on proportional representation and legislative bargaining changes everything in ways that can explain observed patterns of redistribution and redistributive policies like affirmative action (Austen-Smith 2000, Iversen and Soskice 2006). The last paper produced a further literature that looked at the impact of divided societies on a Meltzer-Richards model: sources of division include religion (Scheve and Stasavage 2006), moral values (Roemer 200x, Benabou 200x), race (Alesina and Glaeser 2005), and jobs (Austen-Smith & Wallerstein 2004).

The introduction of all these aspects of “divided societies” simply underscores that a key limitation of the standard Meltzer-Richards model of the political economy of taxation is that in the real world tax policy is in fact multi-dimensional. This requires extending the model to allow for a much richer set of conflicts of interest since, for any given instruments there will typically be coalitions on either side. However, these coalitions will likely be overlapping across different issues. To illustrate, consider the example of child care tax credits. One conflict of interest is between families with and without children of an age that qualifies for the credit. However, if there is an income taper of the kind that we see in the U.K. then there is also a conflict of interest within the group of citizens who receive the credit as to how that taper is determined. Finding insightful and practically useful models that show how such conflicts of interest play out has been major topic of research in the field of political economy. It is generally not reasonable to look at one dimension of policy at a time as clearly there is scope to propose policy reforms that change both dimensions and this has been characteristic of many policy reforms in the U.K..

One way to think of this which is useful in a U.K. context is maintain the idea that political competition is broadly organized between two main parties. These parties have core supporters that will be loyal to the parties under most circumstances. However, there are also groups of “swing voters” who will vote for whichever party has a better policy stance on issues that it views to be salient.¹⁰ Some subset of these swing voters may view some kind of tax policy as being a salient issue. Then there is the electoral system: we should also factor in that swing voters belong to Parliamentary constituencies. Some are safe in the sense that the outcome is determined by loyal voters while others are marginal in the sense of being potentially winnable by either main party. To win a majority in the House of Commons electoral strategy will involve trying to appeal to swing voters in marginal seats. These will be the decisive voters in the sense that Meltzer and Richards cast the median voter as decisive, but the decisive voter will have to choose between alternative proposed by the competing parties. These alternatives may or may not converge.

The policy process and the kind of empowered government we described above makes it reasonable and realistic to think that we should move beyond the median voter to a model in which parties can make these proposals with commitment., since the Government faces few obstacles in implementing its program, but because of the electoral system may well not be the party for which the “median” vote was cast. A minimal, straightforward, tractable model of costly taxation model of that sort appears in McCarty, Poole, and Rosenthal (2006), adapting an earlier model developed by Bolton and Roland (“Breakup of Nations”, *QJE*

¹⁰ This is a characteristic of what are called “probabilistic voting” models, which Hettich and Winer (200x), among others, apply to tax policy.

1997). The model is based on the party pledges, the income distribution as in Meltzer-Richard, and some deadweight loss from taxation.¹¹

[Bolton and Roland] assumed that redistribution generates a deadweight loss that is quadratic in the tax rate. Specifically, the deadweight loss from a dollar of taxation is αt^2 , where α is a parameter and t is the proportional tax rate. So if $\alpha = 1$ and $t = 1/2$, a quarter is lost for every dollar collected, but if $t = 1$, the entire dollar is lost. In other words, tax increases generate increases in marginal cost. For $\alpha = 1$, tax revenue increases as t is increased from 0 to $1/2$ and then falls With the quadratic loss model, the most preferred tax rate of a person decreases as her income rises—the rich want low taxes. In fact, the desired tax decreases linearly with the ratio of the citizen's pre-tax income to mean pre-tax income. If $\alpha = 1/2$, the most preferred tax rate of a voter is simply $1 - (\text{voter's income}/\text{mean income})$.

Thus as inequality increases--the ratio falls for the median voter—there should be higher taxes and more redistribution. Note further that the median voter always wants some redistribution but that the desired tax rate will fall as government efficiency falls (α increases.) For any level of efficiency, there will be more support for redistribution as the ratio of median to mean income falls. A shift in the ratio, say from 0.8 to 0.7, has important consequences for policy The ratio of median to mean income is a simple way of capturing the pressure to redistribute.

Bolton and Roland (1997) assume that the utility of a generic voter is simply post-tax income, and that voter's utility (letting r_i stand for the ratio of individual to mean income and t be the tax rate) can be written as $U_i = r_i + t(1 - r_i) - \alpha t^2$. If the parties are polarized, voters have to choose between party promises, and the median voter may not be decisive. In this case, letting $t_L - t_R$ respectively stand for the tax proposals of the Left and Right party, a little algebra gets us to the following result for the party difference (here, the Right party advantage) in voter's utility:

$$\Delta U_{R-D} = r_i(t_D - t_R) - (t_D - t_R)[1 - \alpha(t_D + t_R)].$$

The first term is positive, proportional to income, and independent of deadweight loss: the Right are favored because they tax less. As long as the deadweight loss is not too large, the second term is negative and independent of income: the Left are favored because they redistribute more. Looking a little closer at the quantities of interest, we see that:

- As inequality increases, r_i gets smaller (bigger) below (above) 1, and ΔU_{R-D} changes correspondingly.
- If $(t_D - t_R)$ increases (that means the parties polarize more), this means that ΔU_{R-D} gets bigger.
- If α (the deadweight loss) or $(t_D + t_R)$ (the sum of proposed tax rates, which multiplied by some constant is the average, and represents the scale of government), or increases (burden or waste) means ΔU_{R-D} gets bigger (this always favors the Right).

¹¹ In the model voters have to select between different tax rates proposed by two parties who are, in effect, citizen-candidates. Taxation causes deadweight loss, but the explicit labor-supply effects in the Meltzer-Richard model are dropped.

So crucially the Meltzer-Richard “voter demand for redistribution” depends on how the first of these effects stacks up against the other two. We can investigate this. Below we will analyze the manifestos of the British parties to see how often the median voter voted for a party with a non-median promise, and also how the British parties’ tax promises compare to those made in other countries.

This view of the world has other related implications. First, a party that has a large advantage over the other party for non-tax reasons will find it less necessary to make tax promises that are designed to appeal to politically decisive voters. Such policies will be more important when there is a larger political decisive group that is not loyal to one party. The efforts by the Labour party to make commitments on the top rate of income tax can be thought of as provide policy that appeals to middle class voters who are not committed to the Conservative party.

Parties will least prefer to give election promises that least compromise their core values if they can find something else that appeals to swing voters. Hence, we should find in theory that policy promises differ between parties as the electoral compromises reached will be different. When we look at U.K. parties, there are distinct divergences in tax policy coming from election manifestos.

Manifesto politics

Margaret Thatcher ran for election in 1979 with a manifesto that stated, “We shall cut income tax at all levels to reward hard work, responsibility and success; tackle the poverty trap; encourage saving and the wider ownership of property.” This proposal chimed well with many voters who felt they were paying too much in income tax, and undoubtedly helped her become Prime Minister. Substantial cuts in marginal rates of income tax were then delivered in the new Conservative Government’s Budget of 1979, with the top marginal rate of income tax falling from 83% to 60%. This was not the end of the matter as further cuts in income tax were promised in the general elections of 1983 and 1987, being delivered in subsequent budgets.

Fast-forwarding to the general election of 2005, we see the Labour Party at pains to commit itself for the third time running not to increase the basic or top rate of income tax, why? The Labour party had promised throughout the 1980s to reverse income tax cuts in order to raise levels of expenditure on public services. However, these were successively rejected by the electorate. Moreover, such proposals made the Labour party very easy to portray as anti-effort and anti-aspiration. Following their defeat in 1992, the party then recognised the need to distance itself from such ideas. The Labour party’s near religious attachment to a pledge not to raise the basic or top rate of income tax ever since clearly demonstrates the centrality of the politics of income tax in the UK. More specifically, we see no politician gaining power in the UK whilst also proposing increases in income tax.

The experience of the Liberal Democrats provides even more insight into the politics of income tax in the UK. In both the general elections of 2001 and 2005, they proposed a top marginal rate of income tax (plus national insurance contributions) of 50% for incomes above £100,000. However, this was ditched in 2006 in favour of other redistributive and environmental changes to the tax system (e.g. limiting tax relief on pension contributions to the basic rate and reforms to VED). Of the reasons given for this change, some of the most frequently voiced in the debate were:

- It was hard to justify raising rates whilst other countries like Germany were cutting rates.
- A flagship tax policy of a 50% tax rate sent out the wrong message that the party was a high tax party - against effort and hard work
- It restricted the party's support in Lib-Dem–Conservative marginal seats.
- Redistribution can be conducted through other means such as limiting tax relief on pension contributions to the basic rate and a less generous capital gains tax regime

As seemed to be the case for the Labour party in the 1990s, the argument against proposing high taxes on the rich seems to be maintaining electoral support and the way the party is perceived (i.e. against hard work and effort). However, what is also interesting is that it is implicitly assumed that a party's proposals on the top rate of income tax are an important signal as to the party's attitude towards certain activities. And thus, the suitable strategy is to ditch the negative signal, and use other elements of the tax system (that are not signals) to achieve the similar ends. This seems to be a difficult strategy that might require saying very different things to different groups, but it bears a striking resemblance to the "taxation by stealth" argument frequently levied at Gordon Brown!

One of the most noteworthy features of the major debates on taxation in the UK is that certain elements of the tax system may act as signals. Both Labour and the Liberal Democrats seem to have come round to the opinion that their proposals on the top rate of income tax are an important signal as to their views on effort and aspiration – perhaps also the tax take as a whole. Moreover, the zero-rated VAT status of children's clothing is an important totem for the Labour party, and maybe a signal to voters as to how redistributive their tax system is.

The Choices facing the Median Voter.

Is Britain's experience typical? How does it compare to other countries? The figure below is based on multi-country manifesto data. Parties in all countries were scaled onto a left-right, tax-spend, redistribution dimension by expert analysts over about thirty years. When elections occur, the party shares determine for which party the median voter voted (Pontusson and Rueda 2005). Then assign (for each election in each country) to the "median" voter the ideological location of the party for which she voted, based on the ordering of parties on this dimension. Then, for each year, calculate the average of these "implied expert-party-based positions of median voters" in all OECD-country-elections taking place in that year. That procedure gives the following figure. In Figure 5, higher numbers indicate positions further to the political Right so that (for now), moving "up" in the figure indicates a move to the Right, to a position less in favor of redistribution through taxes and spending.

It is perfectly clear that, provided one accepts that the experts' opinions were sufficiently stable over time, the tax-spend position of the party supported by the median voter shifted appreciably to the Right. It was at its most leftward in the early 1970s. This does not "demonstrate" that the median voter moved Right, since the shifts could all be initiated by strategic parties who recognise that voters have partisan loyalties and will continue to vote for them. And of course there can be new voters, shifts between turnout and abstention, and so on. But at least the "median" voter might have passively followed parties to the Right; possibly the voters also changed their minds about the desirability of trusting Government with their money.

Moreover – we will add a Britain line to the Chart below, to verify that Britain is not exceptional (it isn't) with respect to this trend.

Figure 5 – Ideological Position of the Median Voter (Average for all OECD countries).

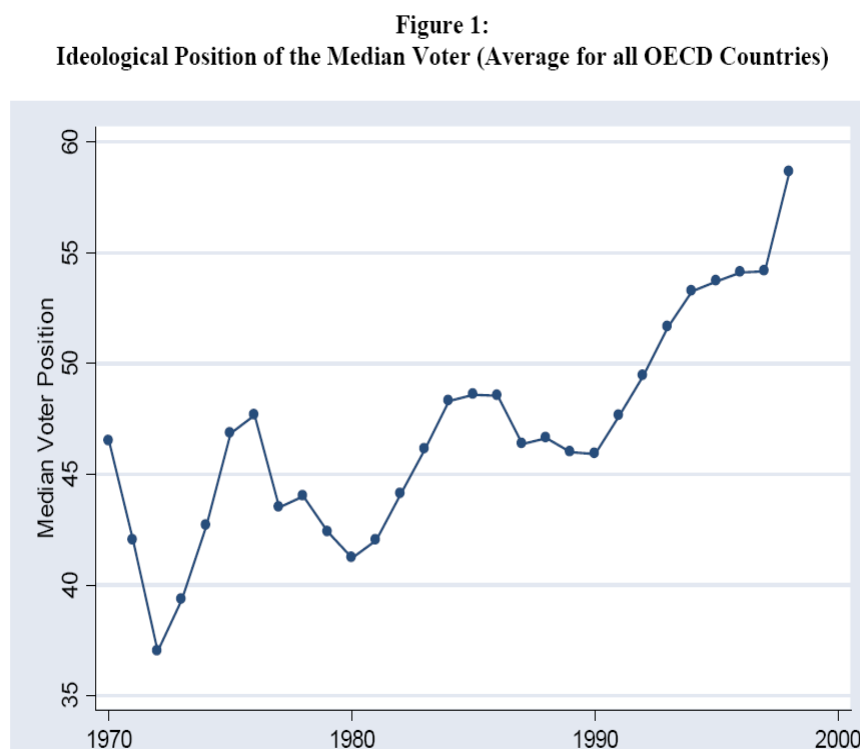


Figure from Kim and Fording data via Pontusson and Rueda.

We have performed a similar analysis specifically in terms of income tax policy for the UK. The below table summarises each of the main parties manifesto proposals on the basis and top rates of income tax between 1979 and 2005. Where parties specify an exact value, we specify it, where they give a direction, we say less than the current value. If we cannot ascertain their preferred tax policy, we give them an NC (No Change).

Based on this, we can say what type of tax policy the median voters voted for, but not necessarily what they preferred. So, for instance, in 1979, Labour proposed no change in the basic rate, but both the Conservative and Liberal parties favoured a cut. More than 50% of voters voted for these parties, so the median voter in the pure tax policy dimension voted for a cut in the basic rate. Alternatively in 1992, the Labour party proposed a top rate of 50%, the Liberal Democrats a higher top rate than the current rate of 40% and the Conservatives. Given that a majority of the population voted for either Labour or the Liberal Democrats, we know that the median voter in the pure tax policy dimension voted for at minimum a rate higher than 40%.

Table 1 – Party Position on Income Tax

	Actual	Labour	Lib Dem	Conservative	Other	Median
1979 Vote Shares		36.9	13.8	43.9	5.4	
Basic Rate	33	NC	<33	<33		<33
Top Rate	83	NC	50	<83		<83

1983 Vote Shares		27.6	25.4	42.4	4.6	
Basic Rate	30	NC	NC	<30		30
Top Rate	60	>60	>60	<60		>60
1987 Vote Shares		30.8	22.6	42.2	4.4	
Basic Rate	29	29	NC	25		27
Top Rate	60	>60	NC	<60		60
1992 Vote Shares		34.4	17.8	41.4	6.4	
Basic Rate	25	25	>25	20		25
Top Rate	40	50	>40	NC		>40
1997 Vote Shares		43.2	16.8	30.7	9.3	
Basic Rate	23	23	24	20		23
Top Rate	40	40	50	40		40
2001 Vote Shares		40.7	18.3	30.7	10.3	
Basic Rate	22	22	23	<22		22
Top Rate	40	40	50	<40		40
2005 Vote Shares		35.3	22.1	32.3	10.3	
Basic Rate	22	22	22	NC		22
Top Rate	40	40	50	NC		40

Source: Various manifestos 1979-2005, Authors' calculations

What do we observe over time? It looks like there has been policy divergence in every election and always (weakly) towards what we think would be the preferences of the core supporters (mainly towards Conservatives supporters in the 1980s). Second, a non-median position has won the election on taxes quite a few times suggesting that taxes have not typically been the most salient electoral issue. Moreover, it could also demonstrate that the median voter is not necessarily the pivotal voter.

Voters, Income, and the tax system

The best source of consistent and reliable data on the evolution of attitudes in the UK is the British Social Attitudes survey. Since 1984 this has provided evidence on social attitudes of nationally representative samples of British residents and questions asked include several pertinent to the level and structure of taxation.

Specifically, one question asked almost every year concerns whether or not the respondent would support an increase in the level of taxes and spending on health, social services and education. Although the types of spending specified are limited, excluding major items of public spending such as defence and public order, this question nonetheless provides the best long term evidence on preferences regarding the size of the public sector and associated level of taxation. Figure 6 below plots the proportion of respondents expressing themselves to be in favour of such a change over the period from 1986 to 2004. Those favouring an increase consistently exceed half of respondents and are at their highest, exceeding sixty per cent, over the 1990s.

Questions on the structure of taxation have not been asked in a consistent fashion over the entire period but an interesting set of questions, enquiring whether tax rates¹² on high medium and low incomes were too high, about right or too low, were asked in several years up to the mid 1990s.

Figure 6

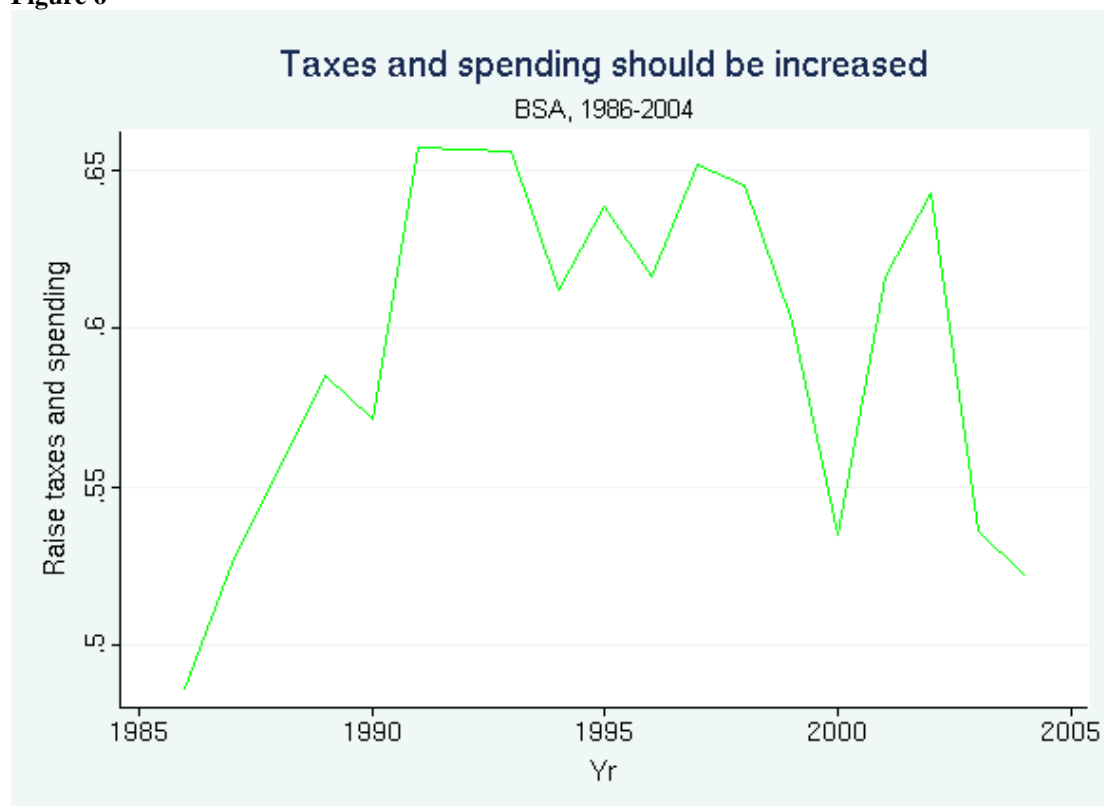
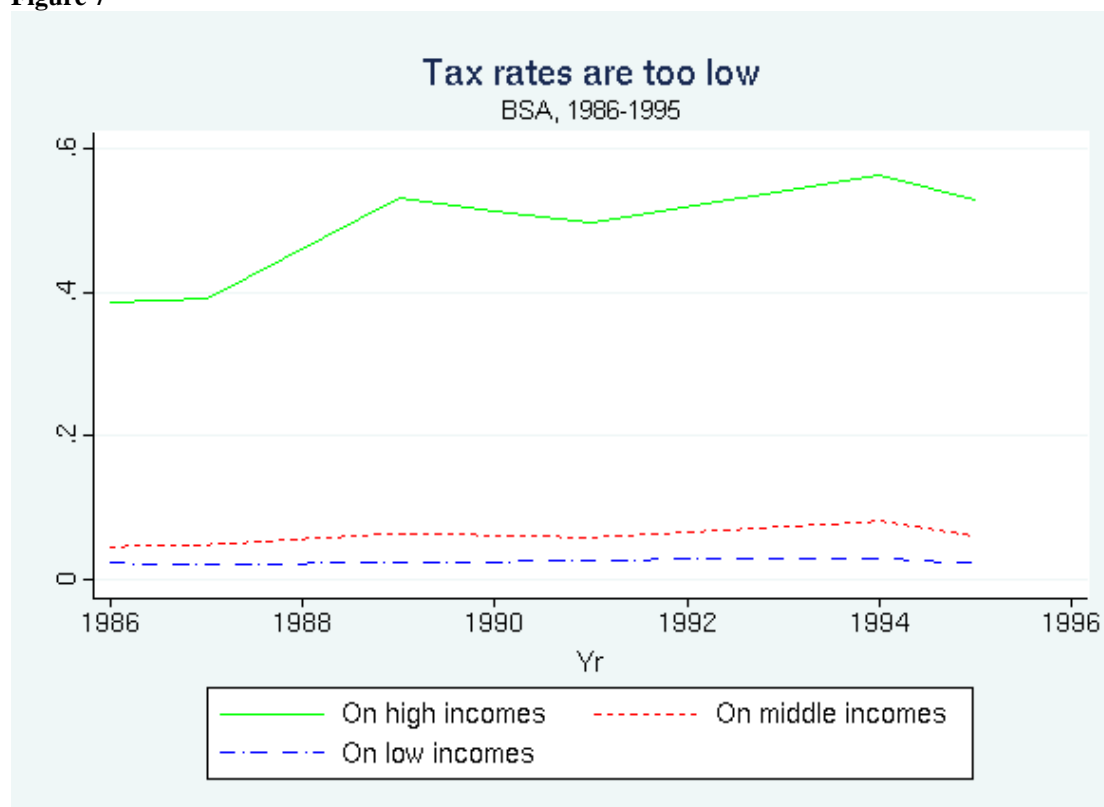


Figure 7 shows that over this period very few believed taxes on low or middling incomes were too low but support for an increase in taxes on high incomes has been consistently widespread. In fact the numbers supporting such an increase began at around 40%, jumped to about half the population after 1987 (when taxes on such incomes were cut) and remained at about that level until the question ceased, regrettably, to be asked in the mid 1990s.

¹² The question is not specific as to whether it concerns average or marginal rates.

Figure 7



Questions are also asked on many potentially related aspects of attitudes and Figure 8 and Figure 9 illustrate the evolution of some of these.

Trust in government to use public funds appropriately may be linked to preparedness to support increases in taxation. Unfortunately there is no question addressing this issue directly but there is a question on whether the respondent trusts the party in government to put the interests of the country before those of the party. Figure 8 shows a continuing decline in such trust, particularly over the 1980s and early 1990s.

Belief in redistribution as a proper activity for government may also motivate both belief in a large public sector and commitment to high tax rates on the rich. The other line on Figure 8 shows proportions of respondents agreeing to a question whether government should redistribute income. The series shows support approaching fifty percent in the mid 1990s followed by a drop in the late 1990s.

While the evidence suggests support for that aspect of redistribution which involves taking from the relatively rich, that need not mean comparable popularity for the distribution of funds through welfare spending to the relatively poor. The BSA has consistently asked questions on whether welfare recipients are in genuine need and whether respondents support increasing welfare payments. Attitudes in this dimension are presented in Figure 4. Although a good proportion of the population are prepared to support higher spending on welfare, we do see here a clear decline, particularly in the late 1990s, in support for high welfare payments assessed using either question.

Figure 8

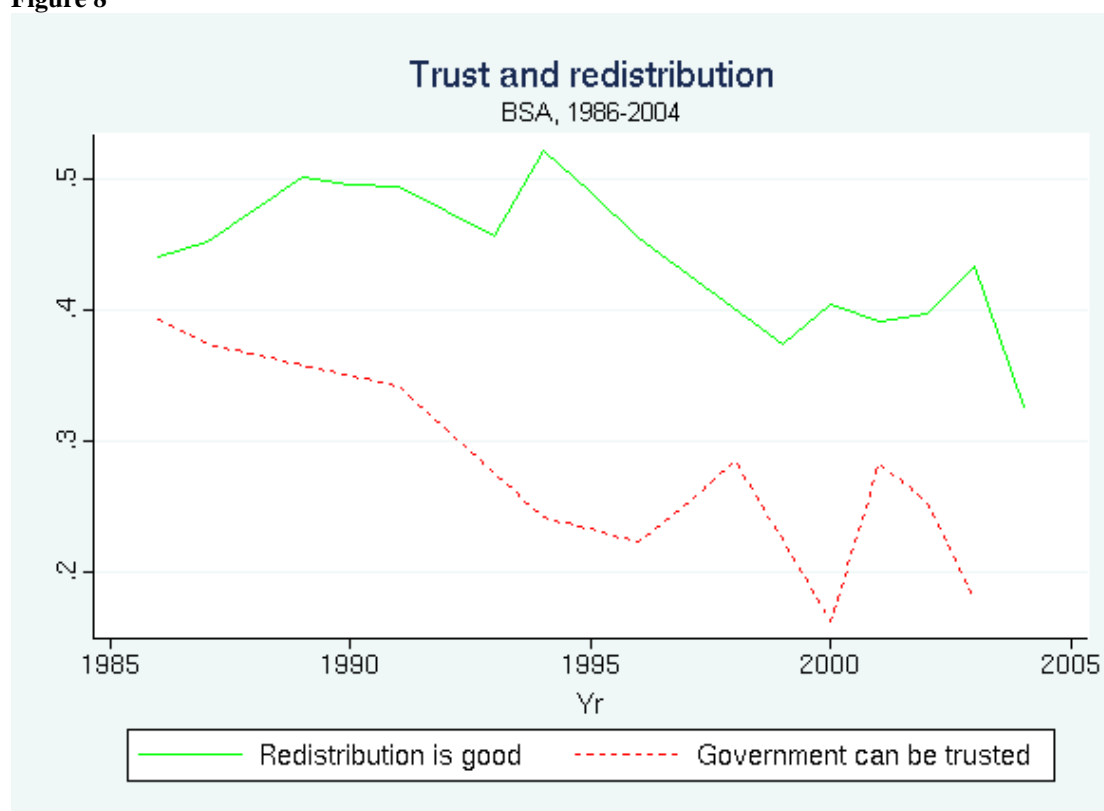
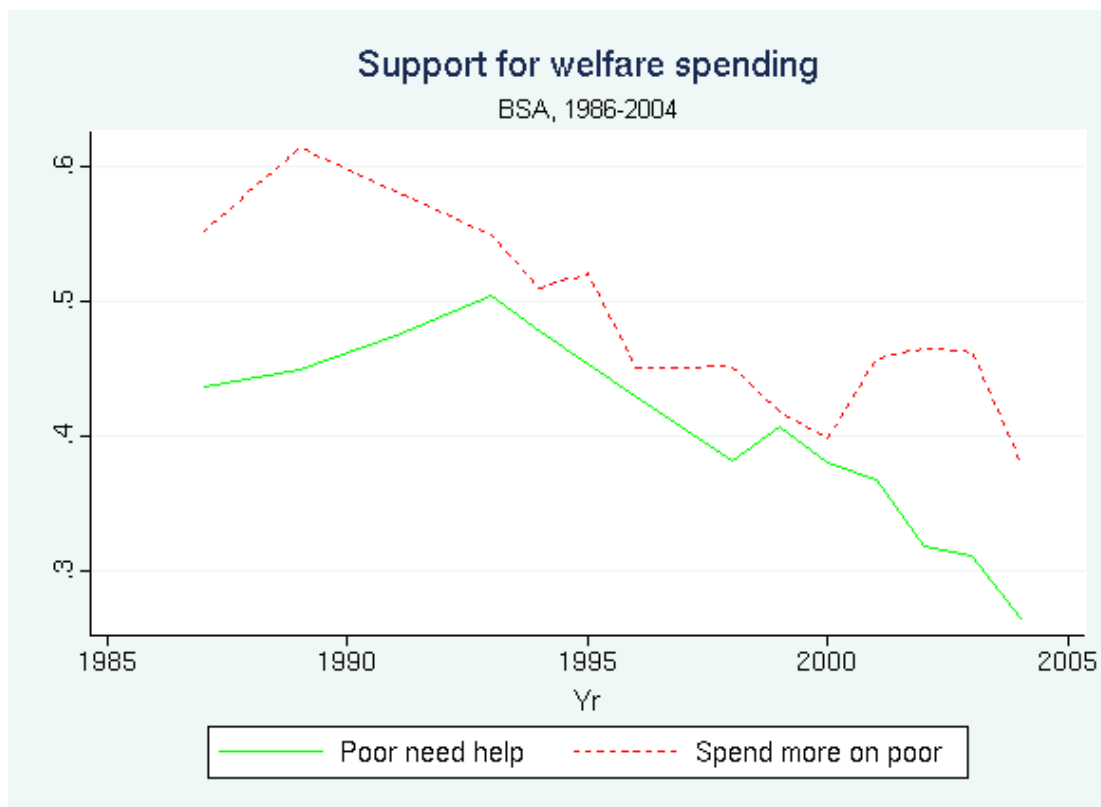


Figure 9



BSA also collects data on socioeconomic and demographic circumstances of respondents, making it possible to investigate how attitudes relate to personal characteristics. Because age is recorded and because the survey covers several years we are able to divide the population into cohorts based on decade of birth and follow them separately as they age. Figure 10 shows that the pattern of support over time for increase in the level of taxes and public spending is common to all cohorts that can be followed for a reasonable length of time. There is also little evidence of age or generational differences¹³.

Support for taxation and redistribution would be expected to be related to position in the income distribution and this is indeed a basic assumption of much modelling of political economy of taxes. To investigate this we focus on the latest year of the BSA since it contains interesting questions not asked previously on perception of position in the income distribution. Specifically, respondents were asked what proportion of the population they believed to be less well off than themselves. It is interesting to compare this to actual position since BSA also asks about actual income, allowing us to place people roughly in the true distribution¹⁴. Figure 11¹⁵ shows that perception is positively related to true position though there is some evidence that those at the top underestimate how well off they are and those at the bottom underestimate how badly off they are.

Figure 12 and Figure 13 relate opinions on tax to both the true and perceived income position. In each case we find, unsurprisingly, that those further up the income distribution are less likely to favour increased taxation or to see redistribution as a legitimate government activity.

¹³ It is of course well known that it is impossible to separate age, time and cohort differences by such pictures.

¹⁴ We can do this only roughly since there are obvious arguments for adjusting for needs as reflected in household size and composition. Our measure of actual position is based crudely on gross household income.

¹⁵ The figure shows a nonparametric regression of perceived position on the truth. Imprecision in measurement of true position means we should not expect a 45 degree line even if individuals knew the truth but the deviation is sufficiently large to think there may well be considerable misperception.

Figure 10

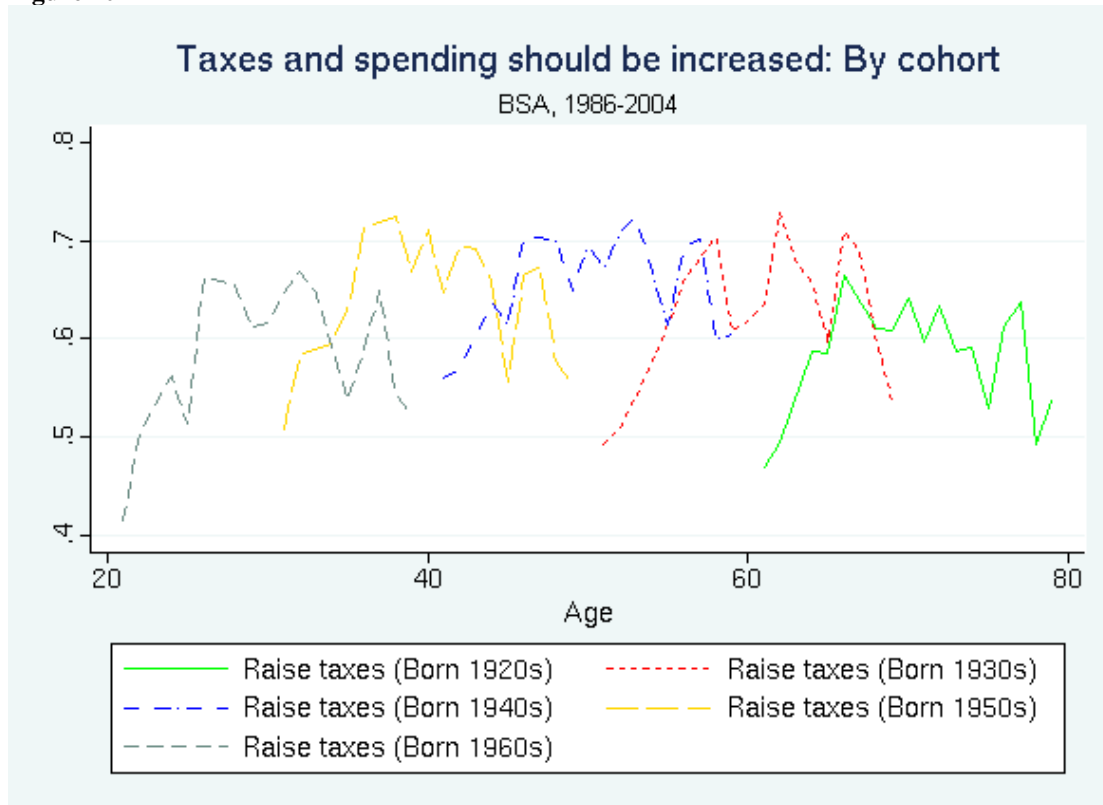


Figure 11

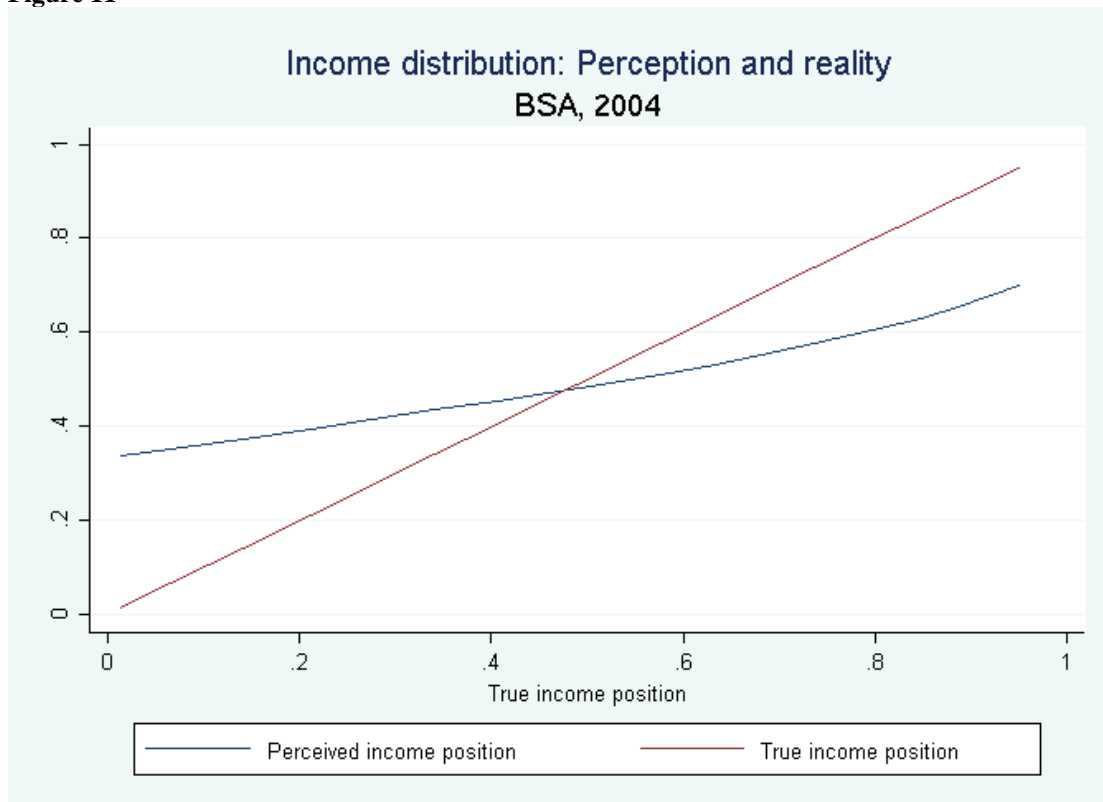


Figure 12

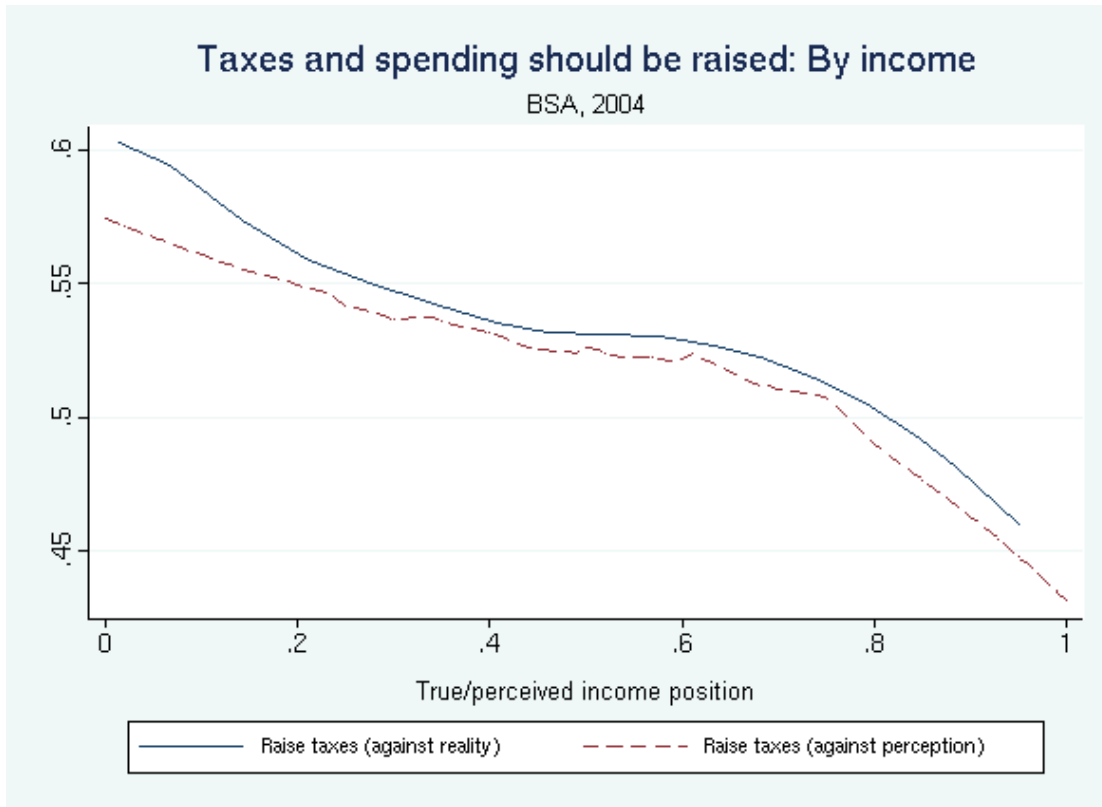
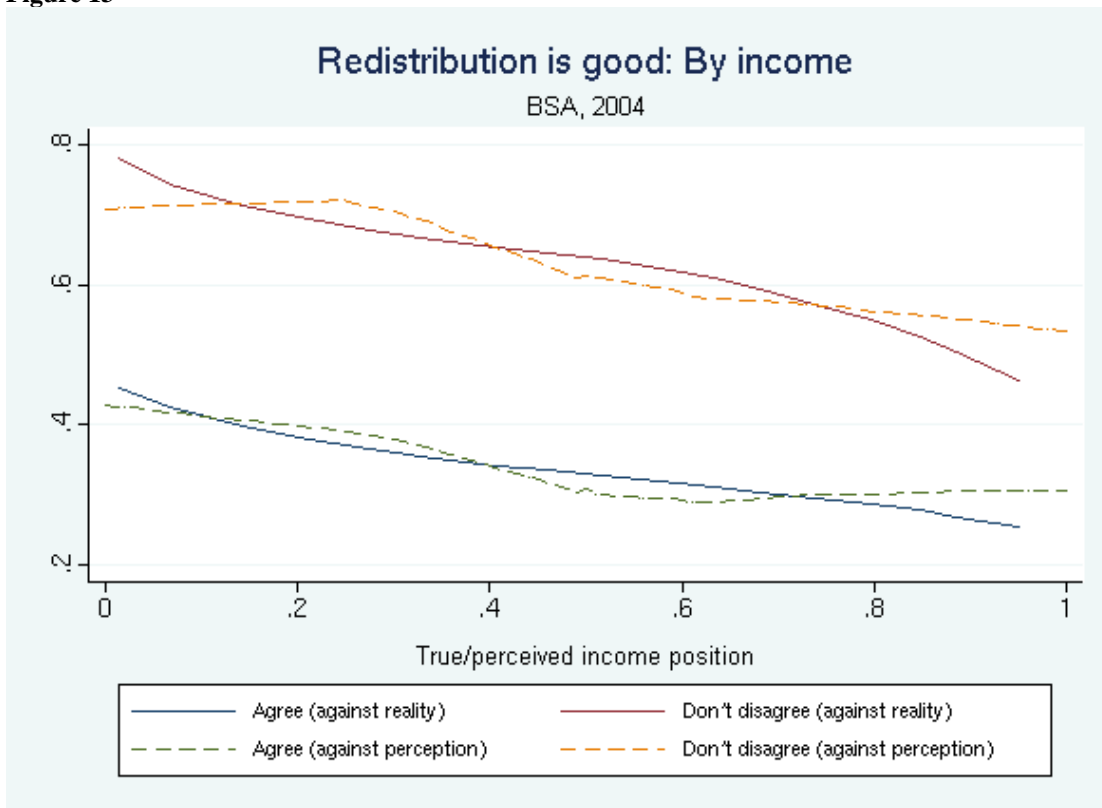


Figure 13



BSA also collects data on party identification. Models of political economy often focus attention on the importance of attitudes among those uncommitted to particular parties – so called swing voters – so it makes sense to separate these out and focus on their attitudes. Figure 14 shows that the proportion of such voters has grown slightly over the period observed.

Generally speaking attitudes of swing voters on most questions lie between Labour and Conservative identifiers in predictable ways. (The one exception, interestingly, is trust in government which is weakest among swing voters and Liberal Democrats). Nonetheless trends in attitudes over time among both swing voters and party identifiers tend to move in very similar directions, as can be seen in Figure 15-Figure 20.

Figure 14

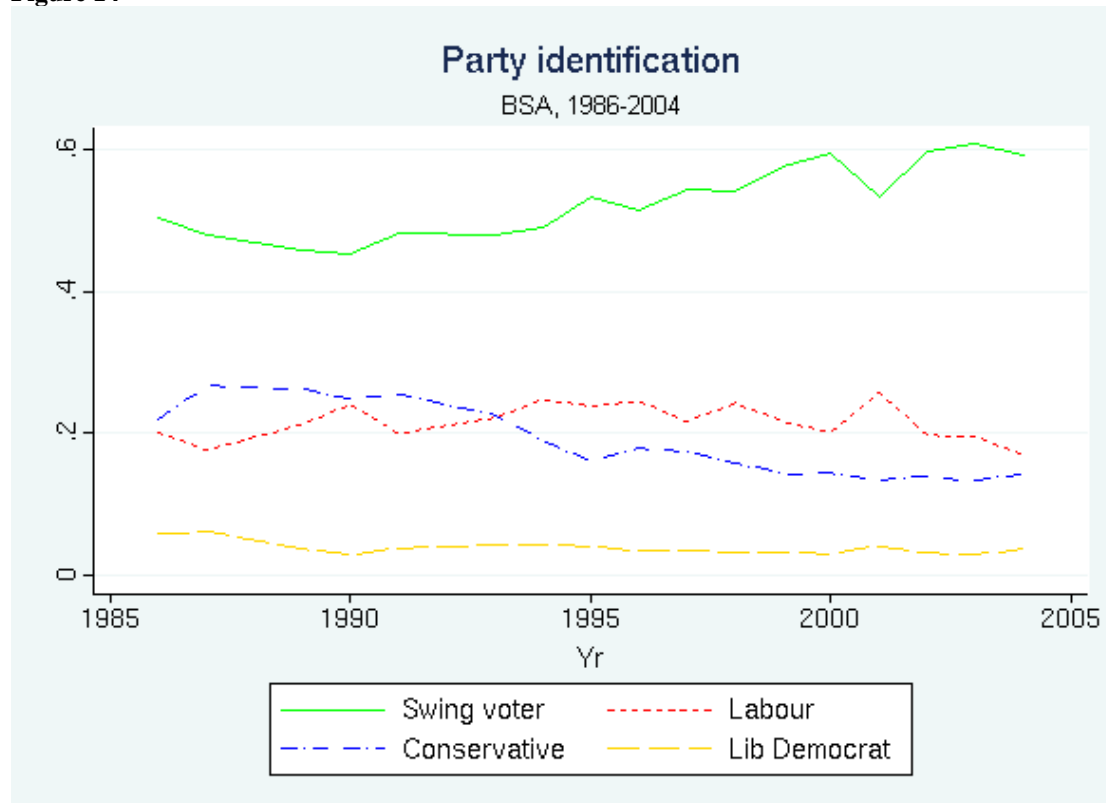


Figure 15

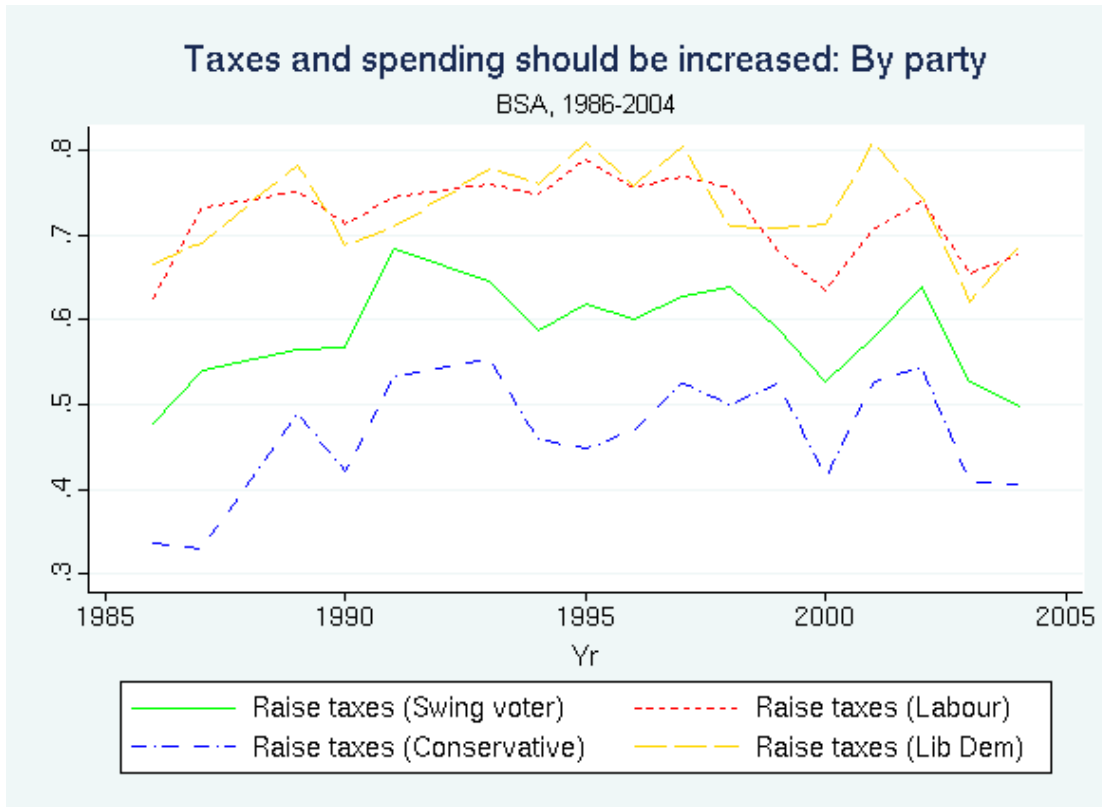


Figure 16

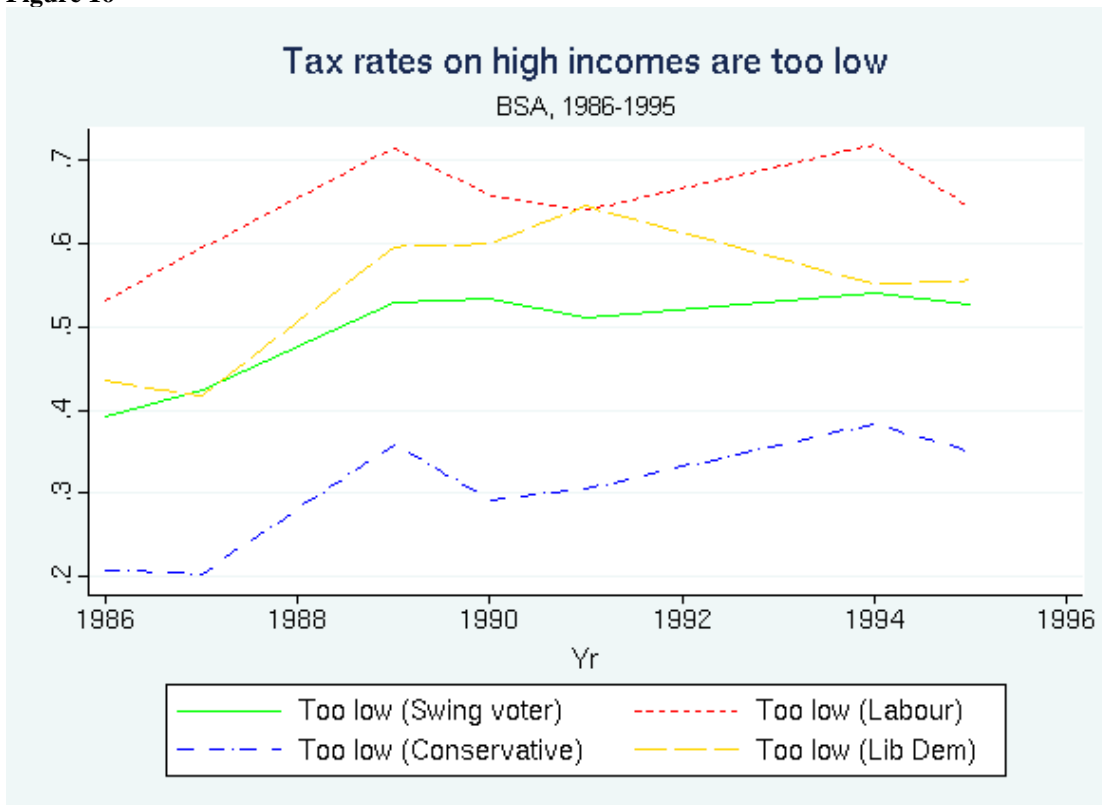


Figure 17

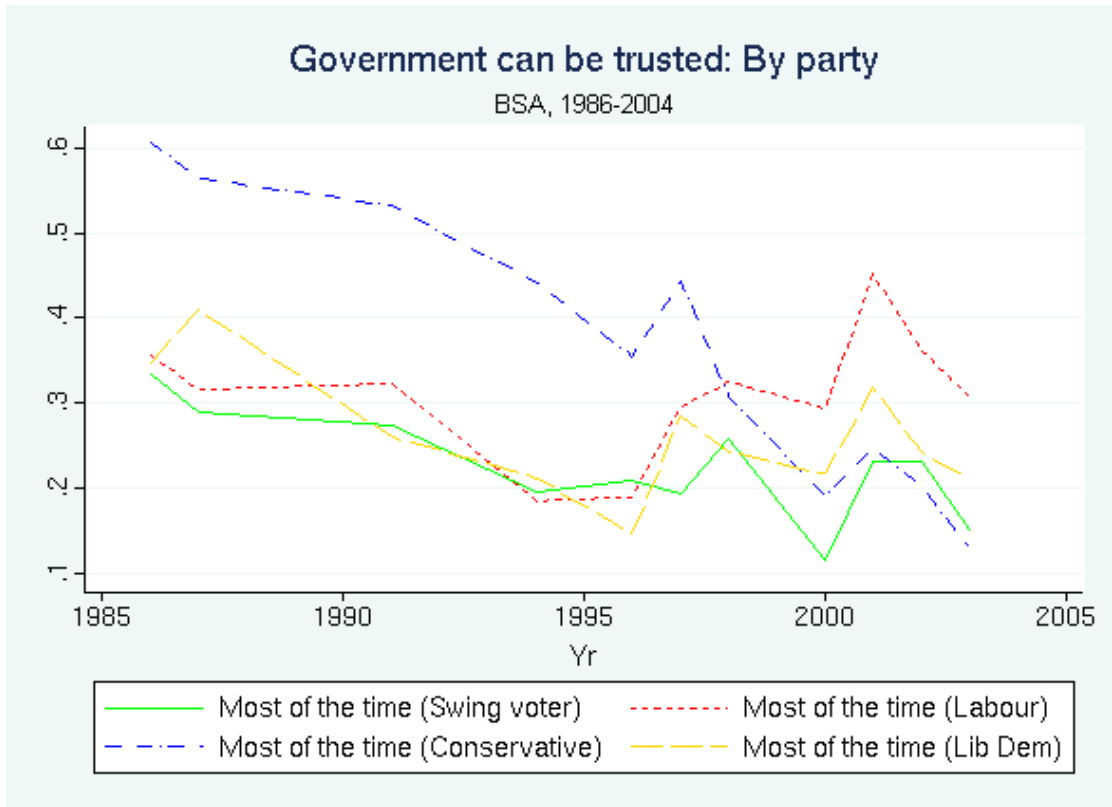


Figure 18

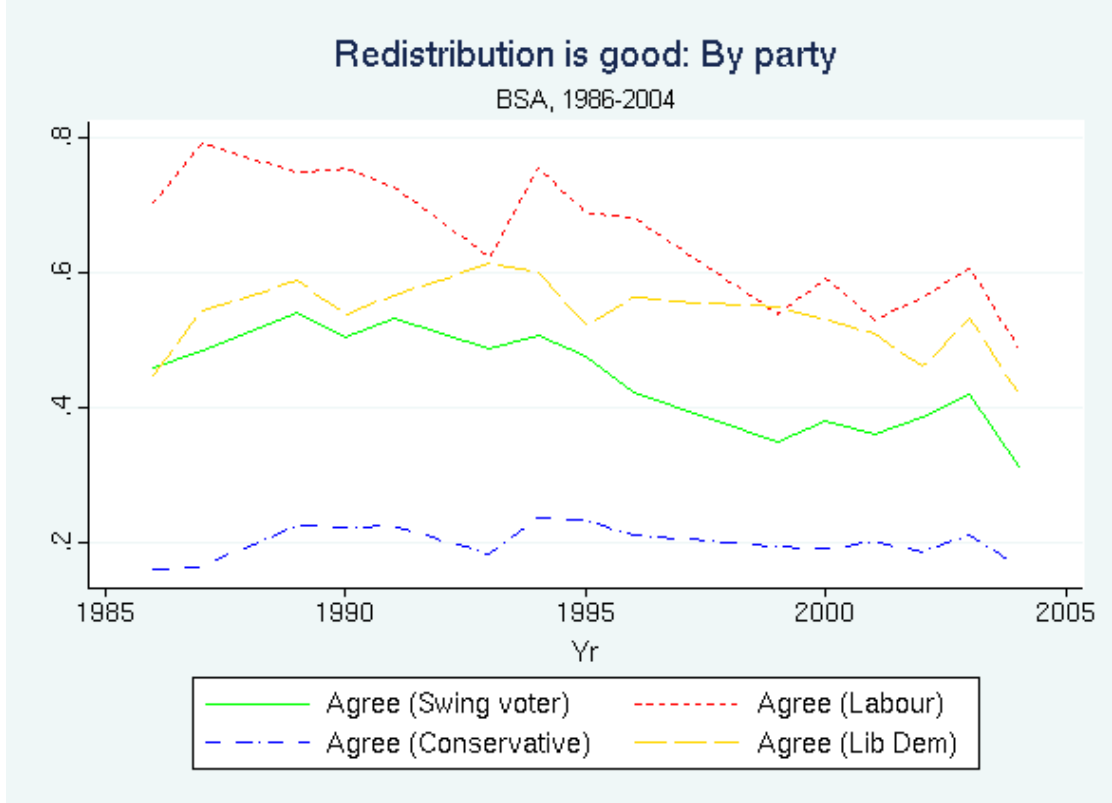


Figure 19

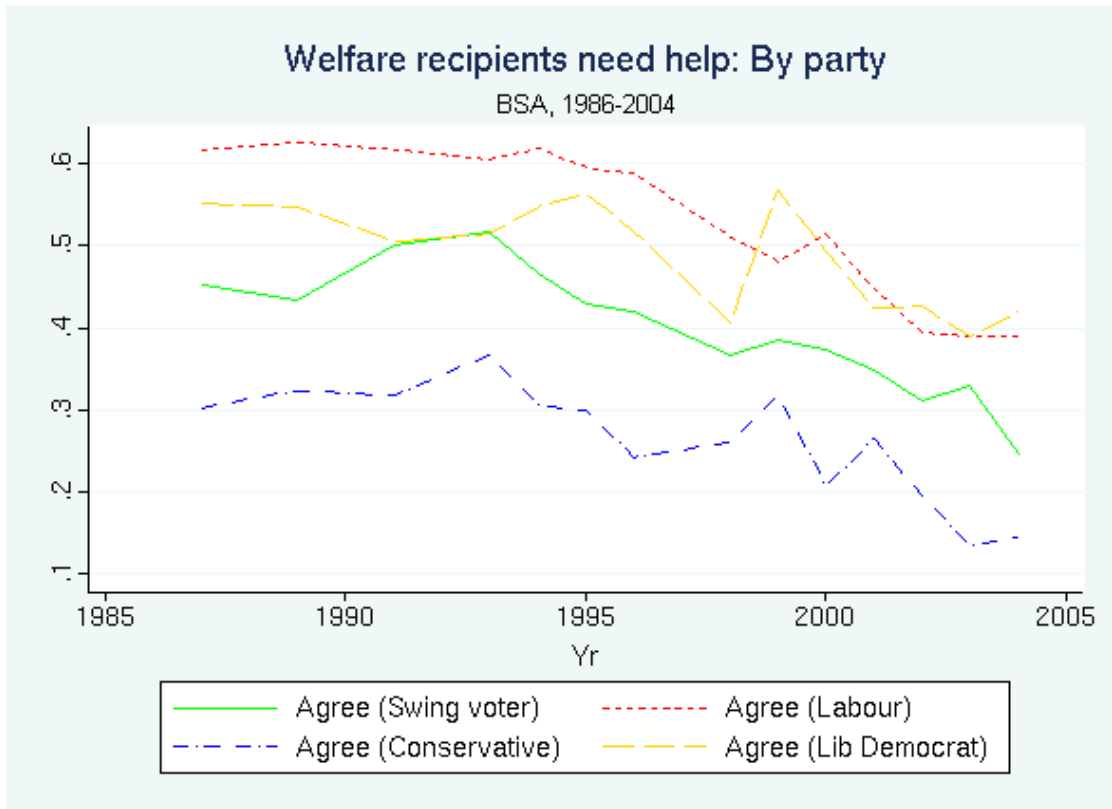
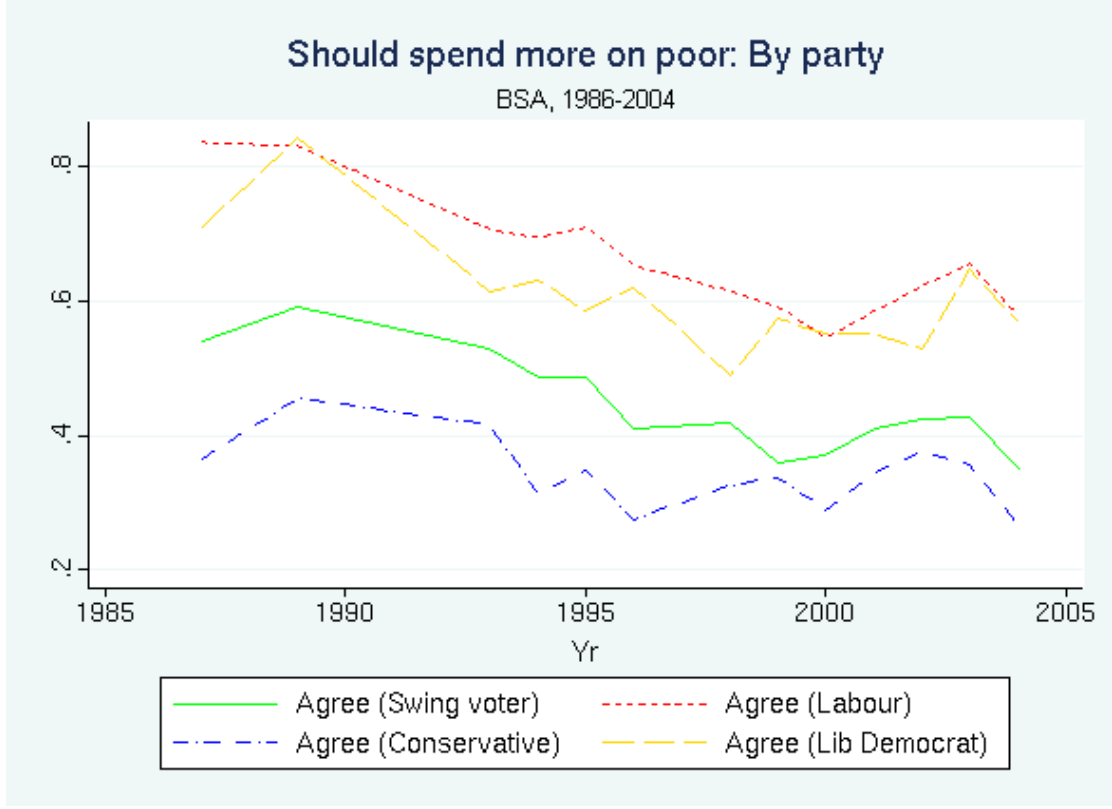


Figure 20



Summing up electoral interests and the representation problem

It seems to be the case that parties have come to power in the UK who do not favour the majority position on taxation, with a rightward policy divergence between the views of the electorate and tax policies pursued. This might be expected in the UK electoral system, which implicitly puts a greater focus on accountability rather than representation. However, if one were to recommend a more representative electoral system, such as PR, one would need to trade this off against the lower levels of accountability that might come with this, as pointed out by Persson and Tabellini (2003).

4. Special Interest Politics

“To the outsider, the most obvious contrast is in the degree of consultation in the formation of tax policy. In the United States, major tax policy initiatives are developed, marketed, analyzed, and negotiated In the United Kingdom, they are commonly announced One [consequence] is the apparently greater vulnerability of tax policymaking in America to lobbying by special interest groups evident in the notoriously wide range of provisions favoring special groups that have typically characterized the US Tax Code But British tax policy is not immune to special pleading; the 1997 Budget brought special tax breaks for the film industry.” Michael Keen, “A British Perspective on Tax Policy in the United States,” in Joel Slemrod (ed.), *Tax Policy in the Real World*, Cambridge UP, pp. 505-6

Standard accounts of interest group politics point to the advantage of concentrated, organized groups over unorganized interests (Olson, 1965). Such groups have a disproportionate advantage in seeking policies whose benefits are concentrated and costs widely dispersed (Wilson, 198x) because it is unlikely that those bearing the costs will find it worthwhile or possible to organize collectively to oppose the policy. This is the usual explanation for the success of special interests in seeking trade protection and subsidies as well as favourable regulation, in Britain as well as elsewhere.¹⁶

However, there is more to say about interest groups than that. First, mass “cause” groups are becoming increasingly prominent as a form of participation in British politics. Tax politics is not an exception, and understanding the political role of protest helps explain policies like the evolution of fuel tax duties. Second, in some circumstances the interests of unorganized groups are anticipated and represented by parties even without the galvanizing effect of mass protests. Zero-rating VAT on children’s clothing and food is such a case. These two cases deserve a brief comment. However, while it may well be that in British tax politics, in comparison with at least some other countries like the U.S., special interest politics like are less important, they may be growing in importance, and with consequences that a political economy analysis helps explain. For that reason, we devote more of this part to analyzing another case, Labour’s R&D tax credit.

4.1 Interest groups and the electoral connection

First, mass “cause” groups have become increasingly prominent as a form of participation in British special interest politics. When the costs of a policy, though small, are easy enough to

¹⁶ For instance, Person F (interview) gave this example of lobbying for a shipping and tonnage tax to encourage shipping firms in UK. “[quote to be cleared].”

observe, then mixing such cause groups with extensive media coverage can result in mobilizing the otherwise unorganized. This gives the issue increased potential electoral salience, as the case of fuel tax protests shows.

Between 1993 and 1999 excise duties on petrol were increased by a fixed proportion above inflation year on year by both Labour and Conservative Governments in the name of reducing congestion and pollution. However, in September 2000, with unleaded pump prices at about 80p per litre and fuel duty at about 49p per litre¹⁷, protestors who objected to this historic high in fuel duty blockaded petrol refineries. This caused nationwide petrol shortages, with many petrol stations running out, partly as a result of panic-buying. Eventually, the blockades ended with greater police protection for lorries leaving refineries, as the costs and inconvenience of shortages became more evident. Even though the fuel duty escalator had been halted before the protests, the Government bore the brunt: this was the only time during Labour's first term that they fell behind the Conservatives in the polls.

Observing that this was an issue that appeared to change voting intentions quite strongly, the Government reduced fuel duty in its Budget of 2001, just before the general election of that year. Since then it has been increased in nominal terms only twice. As a result it is much lower in real terms compared to the level in 2000. Presumably it is not the economics of the issue that are much different: the price elasticity of petrol and the externality resulting from consuming a litre of petrol have both changed little since 2000. Why then has fuel duty fallen in real terms? The likely answer is almost certainly that more voters are aware of the fuel duty, that it is easier to mobilize such voter preconceptions than to mobilize them in the first place, so the reaction of "swing" voters to higher levels of fuel would be strong, and it would be highly costly in terms of public support.

Sometimes too, the interests of unorganized groups get represented by parties even without the galvanizing effect of mass protests. This can happen when the immediate effects of a possible policy change are obvious enough, even if there is a clear connection between the change and a party's ideology. For instance, maintaining VAT exemptions for food and children's clothing have been a part of the Labour Party's manifestos for at least 30 years. The commitment is usually justified on redistributive grounds. Because poorer families with children spent large fractions of their household budgets on these, they are usually argued to be the chief beneficiaries.

However, VAT is an ad valorem tax, so the main beneficiaries in absolute terms are those with higher absolute spending on these goods. That is, in terms of money, more of the subsidy goes to richer families with children. If one really wanted to address redistributive concerns, it would make sense to end zero-rating of these goods and at the same time put the money "saved" (the extra revenue collected) into increasing child benefits. This would benefit all families with the same number of children equally in absolute terms, but would benefit poorer household more in proportionate terms. From a purely economic viewpoint, why this does not happen is unclear.

However, looked at from a political economy viewpoint, this is less puzzling. Despite the net effect of the entire tax system, for the public, for a specific area (in this case inequality), an element of the tax system viewed in isolation can act as an important signal. First, the net effect of the whole system is hard to observe. Second, eliminating zero-rating would bring an immediate cost to the attention of a lot of people, even if the increase in child benefit were

¹⁷ <http://www.dtistats.net/energystats/qep411.xls>

enacted simultaneously.¹⁸ Finally, the policy is genuinely redistributive in relative terms when viewed in isolation. Perception of this prevents more redistributive reforms from being enacted. Voters are unwilling to get rid of this, despite what could be achieved with the money.

But the R&D tax credit is not like either fuel duties or VAT relief. It purports to support a socially desirable goal (increasing aggregate innovation or investment) whose benefits are imperceptible to voters but large to those firms actively involved in research and development and whose impact on investment behaviour is far from clear. The credit has frequently been changed and its tax cost has grown rapidly in the years since it was introduced. Moreover, its principal beneficiaries were not active proponents of the credit before it began, and are among the first to tell you that it doesn't make a significant difference to their investment decisions, though they continue happy to suggest extensions to the credit that they would find beneficial.

4.1 Interest groups and the electoral connection

The standard interest-group explanation of policy is that groups representing net beneficiaries of a policy form to advocate and/or defend it. Noll and Cohen (198x) pointed out two decades ago that firms affected by a regulation frequently adjust to become its greatest defenders, even if they were not originally advocates. Coate and Morris(199x) build on this, pointing out that if an interest group had the capacity and incentives to lobby to maintain a subsidy, for instance, they presumably would have the capacity and incentives to introduce such subsidies, so the existence of such subsidies cannot be used to explain their persistence. Asking how policy introduction alters incentives in the political process for maintaining the new status quo, they write:

Conventional wisdom in political economy warns that once an economic policy is introduced, it is likely to persist. Even when its original rationale is no longer applicable or has been proven invalid, a policy will prove hard to remove.... Why do policies tend to persist in this way?¹⁹ [T]he mechanism by which the introduction of the policy alters incentives in the political process in favor of the new status quo[is that when] an economic policy is introduced, agents will often respond by undertaking actions in order to benefit from it ... increas[ing] their willingness to pay for the policy in the future.

This extra willingness to pay will be translated into political pressure to retain the policy and this means it is more likely to be operative in the future. We present a simple dynamic model which ... combines an agency style model of political competition of the type pioneered by Robert Barro (1973) and John Ferejohn (1986), with a lobbying model of the form made popular by the recent work of Gene M. Grossman and Elhanan Helpman (1994) ... to point out that policy persistence ... can be Pareto dominated ... because voters forego support for policies which provide temporary efficiency benefits, anticipating that they will persist once they have been implemented. (Coate and Morris, 1997, p.)

¹⁸ If the changes are separated, questions about policy commitment could arise.

¹⁹ Here Coate and Morris note that the standard explanation, which they regard as inadequate, is that "interest groups representing net beneficiaries form to defend policies" [footnote added to quotation]

The model is intricate, but the combination of agency and lobbying make its political intuitions powerful.²⁰ Politicians value re-election to a point, but firms' contributions can persuade politicians to do other than carry out voters' most-preferred policy. In equilibrium, policies are either never implemented, or, if implemented, they persist, even if dominated by sequences (in the public, or voters', interest) in which a policy is implemented and then removed. However, the latter does not arise in equilibrium as long as voters have partial control, because firms, even if they did not contribute to creating the policy, adjust their behaviour so as to become willing to contribute enough to persuade politicians to maintain policy. That is how some policies that favor a sector but are costly to citizens at large persist, indeed, even grow.

4.2 The R&D Tax Credit

First and foremost, the fact that Britain now has an R&D tax credit today is not particularly surprising. Many governments offer R&D tax incentives to firms in research-intensive industries as part of a strategy to promote domestic innovation and competitiveness. As of 2006, R&D tax incentives are available in 18 of the 30 OECD countries, up from 12 countries in 1996.²¹ These R&D incentives usually take the form of a tax relief, with the amount provided being determined by the extent of R&D activity undertaken. The idea is that R&D tax incentives provide tax relief to research-intensive companies for undertaking R&D, defined for tax purposes as projects that “[seek] to achieve an advance in overall knowledge or capability in a field of science or technology, not a company’s own state of knowledge or capability.”²²

Moreover, there was observable evidence of an “innovation deficit” in the UK. To take one example,

“the US was the site of nearly half (45%) of the patents filed with the European Patent Office between 1987 and 1996 by the UK-based firms ranking among the world’s top 30 pharmaceutical companies. In contrast, for all other countries with major pharmaceutical industries ... the large majority of patents came from the home country.”(Gambardella et al 42 cited in Xu 2007 p. 8.)

Furthermore, the New Labour Government came to power in 1997 with a Chancellor who believed that tax is a tool of social and economic policy.²³ His 1998 Budget Speech announced that since “[e]ncouraging greater R&D investment is ... crucial to higher productivity” the Government would begin the consultations that by 1999 resulted in a small company credit, seen as a measure “to facilitate and directly influence the demand to innovate and undertake R&D” [p. 15]. This measure, with an initial cost estimated at £50 million per year²⁴, was introduced in the 2000 Budget.

In 2000, EU countries established the Lisbon Agenda to make the EU “the most competitive and dynamic knowledge-driven economy by 2010.”²⁵ The Treasury’s consultation paper, “Increasing Innovation,” came out shortly after in 2001, committed to

²⁰ In particular it lacks parties as well as the uncertainty about the results of elections that might make the implementation of post-election policy unpredictable *ex ante*.

²¹ Sedgley “state giveth and the state taketh away” 2006 p.42.

²² As defined by HM Revenue and Customs in reference to DTI Guidelines.

²³ Person C interview citing RedBook 7/97 sections 1.66-1.72 (HMT archive).

²⁴ Recollection of Person F (interview) confirmed by Person A (interview) and other decision participants.

²⁵ <http://www.euractive.com/en/agenda2004/lisbon-agenda/article -117510>

“Encouraging innovation... a vital component of the Government’s strategy for improving the UK’s productivity performance and competitiveness ... The Government can help by ... giving business the platform from which to innovate.” [p. x]

It proposed to extend the credit to larger firms, believing that of several available options, this one was “the most appropriate instrument for helping boost the demand of businesses to innovate and undertake R&D” [p. 2] hoping to “bring about a step change in the level of R&D and innovation.” [p. 24]

It also was (and in some quarters continues to be) widely accepted that research supported the government’s belief in the effectiveness of R&D tax credits (see Hall and van Reenen 1999), at least in the case of smaller firms that may be financially constrained and thus unable to capture the externalities that their research activities produce. Berger (1983) and Hall (1993) estimated that tax credits reducing the after-tax cost of R&D by 10% could increase R&D by 10-15%. Bloom, Griffith, and Van Reenen (2002) placed the long run increase in R&D at 10% from a 10% reduction in costs, based on a study of several countries from 1979-97. Griffith, Redding, and Van Reenen (2001) provided further support, and Bloom, Griffith, and Van Reenen noted that the benefits of such a tax credit increase from the short to the long run. In any case, firms do not perceive financing, high costs or appropriability problems to be more significant barriers to innovation in the UK than the US (Abramovsky, Griffith, Harrison 11/2005).²⁶

Increasing Innovation, the Budget 2001 consultation, specifically gave the economic analysis of “the difficulties that smaller companies have in accessing capital for R&D investment” (p. 19).²⁷ Even so, while the case can be made for small firms, it is less clear for big. Nevertheless, big firms do most of the R&D. The 1999 BERD Survey (IFS, Green Budget, January 2002 p. 87) shows that of the £8+ billion in current, private R&D expenditure undertaken in the UK in 1999, SMEs²⁸ did maybe 10 per cent. The other 90 per cent, done by non-SMEs was an attractive target for a government determined to do something to encourage innovation. If R&D was to be substantially increased (and later a 40 per cent increase came to be the public target, so a fourfold increase in SME R&D is unimaginable), it would have to be done by large firms.

Nevertheless, a number of puzzles persist. Why is this credit still here in spite of the fact that there is no convincing evidence that it has changed behavior or significantly increased Business Enterprise R&D? Why is the projected impact of policy on BERD so far beyond what any estimates of the elasticity of response suggest is possible? Why did this credit (already three years ago, before more recent enhancements) cost at least 12 times what people we interviewed who were part of the initial consultations recall as the original expected costing? Moreover, a seeming puzzle is that large firms did not lobby for the original R&D tax credit, though there is some evidence of their involvement in the evolution of the original policy. Once the policy was there, however, they are and continue to be much more active in lobbying and consultation, in ways we will describe below that re-shape policy in the direction of their interests and preferences.

²⁶ See also comments in *Supporting Growth in Innovation*

²⁷ It also noted that the UK goes further and allows companies to write off immediately all R&D capital expenditure, including plant and machinery and commercial buildings but excluding land and dwelling houses.

²⁸ Throughout this discussion, as in eligibility for the credit itself, the definition of SMEs as having less than 250 employees follows EU concepts.

We can resolve these puzzles with a political economy perspective, particularly the Coate-Morris model's equilibrium sequence in which policy is first created without the support of the affected interest (in our case, the large firms did not lobby for the creation of the R&D tax credit), but once the policy exists, affected interests lobby and politicians respond by maintaining the policy in every period, even long after the rationale for the original policy has disappeared. We use a blend of quantitative, documentary, and interview evidence that focuses particularly on two key points in the model: the behavior of large firms and the transition of the R&D credit (initially aimed at, and economically justified for, small firms) from an SME credit to a large company policy. How it happened, why it happened, what the politics of various decisions were is the substance.

Origins

Tax incentives can potentially increase innovation in different ways. They can try to attract investment by new firms, either by convincing large MNEs looking to expand globally to invest R&D resources or by helping small firms to emerge and establish themselves as business entities. Alternatively, tax incentives can fuel greater innovation by leading existing investors to increase their level of spending.

Choices 1: Volume versus incremental credits

Everyone seems to agree that the R&D tax credit was “not something industry was lobbying for.”²⁹ Originally the intent was to introduce the credit in incremental form: this had the strong support of the DTI and John Kingman and probably Lord Sainsbury, among others. The tax side only originated anti-avoidance legislation.³⁰ The incremental form was modelled on the US tax credit, first introduced in July 1981 as part of the Economic Recovery Tax Act and later renewed in the Tax Reform Act of 1986.³¹ The US tax credit is administered on the incremental basis, rewarding relative increases in, rather than absolute levels of, R&D spending.³²

The incremental system has been argued to pervert incentives, however, because companies have to invest more and more in R&D each year just to receive the same, or less, credit. They thus have less incentive to invest in large quantities in R&D, because doing so will simply raise the base off which the incremental credit is calculated in subsequent years. It appears to have been clear already (see Griffith, Redding, and van Reenen 2001 commenting on the 1999 consultations) that it was doubtful that the credit (which was announced in incremental form) would be cost-effective in the short run, though it always

²⁹ Person F interview

³⁰ Person C interview

³¹ TRA86 made the significant change of incorporating it into the General Business Credit and removing it as a separate statistical line item. See Bronwyn Hall, “Effectiveness of Research and Experimentation Tax Credits: Critical Literature Review and Research Design,” Report prepared for the Office of Technology Assessment, Congress of the United States. June 15, 1995, p. 4. Over the next ten years, it continued to be renewed on a short-term basis, mostly through yearly Omnibus Budget Reconciliation Acts. See Hall 1999, 4.

³² Although the US is not the only country to use this system – France, Japan, and Korea have also implemented incremental schemes—it is nevertheless noteworthy as a contrast to the volume-based systems of other countries, including the UK. Because of their incremental nature, tax credits bear only a fraction of their face value. This is because each time they increase their spending, the base that they must spend to earn the same amount of credit increases. Based on some simple calculations, Kenneth Brown concludes that “the incentive is not the \$25 face value of the credit, but just the value of getting \$25 now rather than later. Assuming an interest rate of 10 percent, the discounted value of the credit is not \$25, but only \$4.29.” (Brown 3)

was in the long run.³³ The volume-based system is intended to reward companies that have long shown a commitment to R&D and innovation.

Participants have similar recollections of the process, though they frequently described the context differently. From Person D's point of view the R&D Tax Credit was born out of a broader agenda of putting the intellectual property tax regime right:

[We] heard Gordon Brown say “Innovations are key to a knowledge-based economy, therefore, we need to incentivize the creation of knowledge”, so they decided to introduce the R&D tax credit. In June 1998 came the Budget 98 document *Innovating for the Future*. The Government consulted the Intellectual Property Institute and business to discuss the position regarding all types of protected intellectual property: copyright, patents trademarks, , know how etc., in order to understand the tax treatment in each case. They found that the tax treatment was inconsistent, , incomplete, and ambiguous and the cause of many disouted between taxpayers and the authorities. Company A was involved in the very thorough consultation, and favoured reform of the tax treatment of all intellectual property as well as a volume based R&D tax credit.

In 1999 Company A, among many others, wrote to HMT, in response to a Revenue Technical Note. The submission describes research expenditures and the associated tax treatment including SRAs.³⁴ The letter covered issues relating to defining income derived from intellectual property as well as problems caused by fruitless arguments of capital expenditure and income boundaries.

From the Government side here is how Person A described the origins of the R&D tax credit:

[quote to be cleared]³⁵

Choices 2: SMEs first, then adding large companies

In 2000, nearly two decades after Congress first introduced an R&D tax credit in the US, the Finance Bill created a tax credit for small and medium enterprises (SMEs) or emerging firms. This credit provided a 150% allowance against corporation tax for admissible expenditures and included a payable ‘cash’ element of up to 24 % of R&D spending for companies failing to make a profit.³⁶ The large company credit was not fully anticipated at this point, but the largest SMEs were still multi-unit (250 employees), and there were some restrictions, like no credit for grant-funded work.³⁷

Very soon the discussion moved on to large companies. Recalling a meeting in June 2001 attended by representatives of ICI, BT, Reuters (for their IT- proprietary software), Logica, and Laporte, among others, Person D comments:

³³ This was echoed by firm comments to us (Person D).

³⁴ Scientific Research Allowances gave a write-off (and still do) for capital expenses connected to research. The R&D tax credit extended the benefit to current expenditure.

³⁵ Person A interview

³⁶ That is, if the firm's R&D expenditures exceeded its corporation tax payments, the balance could be written off against national insurance contributions or other tax obligations.

³⁷ Person C interview

[I] think the Government was determined to bring in RDTC to large companies. If I were to ask the head of research about location decisions, he'd say: "where are the best people located who can provide innovative products?" Is it not about labour or consumables costs but about intellectual power." Would the R&D tax credit drive the investment location decision? Candidly, no. There are many drivers of R&D investment decisions that come before tax efficiency. This was communicated to the Government at the time and I suggested they could take the money available for the credit and invest it in science education instead for similar or greater impact.

I suggested to the Government that securing contracts for UK based researchers would be more valuable as we were losing researchers to the US because of poor pay. Science-based research contracts would probably have been a more powerful factor for increasing UK innovation compared to the RDTC. In addition, I suggested that the R&D credit go against costs above the line so companies could build it into the operating margin. For example, if it could be used to cut the NI bill on R&D employees (considered in other countries), that may influence the investment decision more compared to a tax credit."

While there can be no doubt that the Government attempted to tie any proposed broad-based tax credits to receiving assurances from industry that new incentives would be matched by new activity, it is not obvious that this goal was achieved.

In June 2001 Company A submitted that a volume based system would be better. The firm's cooperation became linked with participation in a scheme to provide affordable drugs in the poorest countries for which a broader credit was received. Noting that this "was a passion to two ministers," Person D remarks:

A key aim for any Government is to generate and conserve UK jobs, however, the vaccine credit can be obtained from qualifying investment located anywhere. . To focus on a disease, companies need to access locations and people with the disease. The vaccine credit is highly politicized because it is tied to access issues for developing nations. The other complicating factor in the pharma industry is security in pricing in developed markets and the effects of parallel trading .³⁸

In 2002, the tax incentive was expanded to include a credit for large firms; this provided a 125% allowance but did not offer a cash repayment option. The allowance provides deductions from taxable income based on the actual expenditure amount. The large company scheme also allowed otherwise ineligible SMEs to claim under the large company scheme for qualifying expenditure where they act as subcontractor to a large company.

This did represent, in the eyes of people responsible for framing policy, a fundamental shift:

[quote to be cleared].³⁹

Firm responses

³⁸ Person D interview. Documents in the file indicate that Company B also welcomed the Vaccine Credit, believing it should be more than 50% deductible against UK tax.

³⁹ Person C interview

Securing information about company operations was always a problem, though not to the extent that information was not being shared. People involved suggested that the greater problem was having to make heroic assumptions about behavioural change, needing information on bedrock R&D within companies, but finding it very difficult to get a sense of the ratio of deadweight to RDTC.

[quote to be cleared].⁴⁰

Almost before the credit out the door, the Government was thinking about altering it, and solicited firms' comments on its operations. As HMIR, "R&D Tax Credits: responses to 'Defining Innovation'", 12/2003, p. 1 put it, the respondents (virtually all larger firms or associations of firms) "gave strong support for the R&D tax credit schemes and provided valuable insight into ... how it might be improved."

As Person A described the process of getting information from the companies,

[quote to be cleared].⁴¹

Only large firms consult

UK government commissioned two consultation documents on the R&D tax credit, collecting feedback from firms and associations in order to assess the experiences of companies currently claiming the tax credit. Only large firms consult in this way, because small firms cannot afford someone on the payroll to look after lobbying. The firms that do send in materials try to tailor policy to their needs, even while sometimes arguing that policy as designed makes no difference to their behaviour. Thus, the overall message that emerged from the corporate responses was that the tax credit had not substantively affected on their R&D investment decisions, due to a combination of unsatisfactory content and poor implementation. Worse, the problem was not lack of familiarity: claimants were no more likely to feel that the credits were an incentive to invest more in R&D (57 per cent) than non-claimants (58 per cent).⁴²

Why was this so? Partly, as a variety of firm responses pointed out, the actual rate of the UK tax credit was not high enough to substantially weigh into a pharmaceutical company's investment decisions. The large firm credit, designed to provide a 7.5% reduction, in practice only covers 60% of R&D expenditures. This really represents a 5% rate of relief which, according to the Confederation of British Industry, falls within the range of insignificant "background noise."

Pfizer and GlaxoSmithKline (GSK), the world's leaders of pharmaceutical R&D, were skeptical that the tax credit offered any real incentive. GSK remarked:

If the goal of the credit is to increase UK-based R&D expenditure, rather than maintain it, *the government should consider increasing the rate of relief*. This would then place the UK in a more competitive situation ...⁴³ [Emphasis added.]

Pfizer stated:

⁴⁰ Person C interview

⁴¹ Person A interview

⁴² report prepared by the British Market Research Bureau for HMRC [in 200X]

⁴³ Get this quote from the consultations

If the Government wishes the UK's tax credit system is to act as a headline incentive for greater R&D investment in the UK, it needs to become more prominent in management's planning. *The current rate of the R&D tax credit is only at the margins of significance for our decisions on new investment and maintenance.* To become more prominent, significant increases in the current rate—doubling or tripling – would be required⁴⁴ [Emphasis added.]

The Chemical Industries Association (CIA) further contends that the lack of a clear financial support and credit structure is symptomatic of a larger lack of clearly defined purpose and scope that plagues the UK government's actions with regard to innovation incentives:

[A]re the tax credits meant to promote a 'new' culture within UK companies to invest more in R&D activities? If so, the current level of R&D tax credit that a company can gain is not seen as a real incentive to do more R&D. A rate of return greater than 5% is required if the credits are to have any meaningful impact within commercial enterprises.⁴⁵

Then there was the “tax credit gap” between SMEs and large firms: SMEs could get a writeoff equal to 150% of spending even without a profit, while large firms could only get a 125% allowance claimable against corporation tax. What happens to companies that expand beyond 250 employees but are not (yet) profitable? Such firms are, ironically, left without tax credit relief at a critical period of growth, a time when in the case of pharmaceuticals is when they “approach clinical trials but have not yet reached a position of profitability” and are thus especially in need of support. To the extent continuous support is critical, growing companies are less inclined to invest in the first place.

Virtually every company surveyed argued that subjective and arbitrary application of policies resulted in a highly restrictive interpretation of the tax credit policy, contrary to the policy's original intent. AstraZeneca, for example, pointed out that the ambiguous use of the term “consumable stores” resulted in over-restriction of the definition of qualifying expenditures and the exclusion of expenditures that were clearly relevant to R&D.⁴⁶ This was particularly damaging because it led to “inconsistencies in the detail of qualifying spend between AstraZeneca and our competitors,” threatening the firm's competitiveness and undermining the credit's effectiveness. In the same vein, the Bio Industry Association (BIA) complained about the credit's reliance on subjective terms like “novelty” and “innovation” to define the scope of qualifying material, introducing semantic debates over terms such as “substantial,” “appreciable,” and “incremental.” Moreover, attempts to break costs down led them to be narrowly defined at a ‘micro’ level instead of considering whether at a ‘macro’ level it contributes to R&D. According to the BIA, the UK tax credit's exclusion of overhead and other indirect or ancillary costs did not follow the widely recognized Frascati definition of research.

Another problem was limited accessibility: a combination of low awareness, ignorance of various benefits of submitting claims (few firms, for instance, knew that foreign extensions could qualify for the tax credit), complicated eligibility requirements, the possibility that

⁴⁴ Get this quote from the consultations

⁴⁵ Get this quote from the consultations

⁴⁶ AstraZeneca alleged that this occurred because Inland Revenue only accepted expenses listed under a “consumable stores” accounting code, even though many other similar expenses listed under different codes were in investment terms just as qualified for the credit.

credits would be temporary,⁴⁷ and the difficulty of the application process. Speaking for many others, BAE argued that the “costs associated with claiming the relief (time, resources, other opportunity costs, professional fees etc) are not clearly outweighed by the benefits available under the current provisions of the relief.”⁴⁸

Policy refinements

By and large, the firms got nearly all of what they wanted, and they still want more. The most significant subsequent changes⁴⁹ to the credit since inception include:

- (in April 2003) included various revisions to the definition of staffing costs (certain benefits includable, able to claim expenditure on externally provided workers);
 - extension to SMEs of relief under the large company scheme where they were barred from a claim under the SME scheme only by reason of being in receipt of subsidised expenditure
 - revision of minimal claimable spending in an accounting period for large companies down to £10,000.
 - SMEs got some of the large company extensions 6 months later.
- It broadened the definition of qualifying expenditures to include water and fuel and materials consumed or transformed in the R&D process while promising discussion of the suggestion to include “all costs directly attributable to the R&D activity”.
- New guidelines on the meaning of R&D were issued in March 2004 and in April consumable items and computer software were introduced as qualifying expenditures.
- Various changes loosening the timing of relief where expenditure was not written off immediately and extending the time limit for claims, followed in 2005 and 2006.
- In 12/2005 Supporting Growth in Innovation: next Steps announced that the Government would like to see wider take-up of the scheme and intended to engage in further promotion of the tax credit to raise businesses’ awareness of it. (p. 3). As a result, large pharmaceutical firms got the ability to write off the costs of clinical trials.
- In April 2006 the large pharmaceutical companies were allowed as qualifying their expenditure incurred on subjects of clinical trials. That November saw specialist R&D units set up in HMRC.⁵⁰

Here is how Person D described the evolution of allowances from mid-2001 on:

It’s an activity -based credit; if somebody else does the work then in theory you could contract with service providers at a better price but actually that rarely happens. The credit is for consumables and labour but over time there has needed to be discussion regarding the definition of both. . Pharma are trying to get to the point where the credit applies to all costs that relate to R&D.⁵¹

Takeup

⁴⁷ “A research director who suspects that the tax credit might be eliminated halfway through his project would likely discount the value of such a credit quite significantly.”

⁴⁸ Get this quote from the consultations

⁴⁹ Source: HMRC’s CIR98900 - R&D tax relief: legislative structure and time line: time line for changes

⁵⁰ They got this largely in return for agreeing to support and participate in the Government’s vaccine credit program.

⁵¹ Person D interview

Britain established a relatively generous credit by international standards. Billings and Paschke 2003⁵² confirm that the US provides one of the lowest incentives in the world for R&D. However, in a series of interviews, senior managers at leading pharmaceutical firms confirmed that from an investment perspective, the US continues to be the most attractive location; when asked to name potential future challenges to US leadership, not a single interviewee mentioned tax incentives as a significant consideration (Xu 2007). Sedgley (2006) presents data that reveals that several countries that disputes any simple correlation between a country's share of OECD R&D spending and the generosity of its tax incentives (France and Germany, for instance, have less generous R&D tax incentives but higher shares of R&D than the UK).

The Cox Review (Ch. 5: Providing Support and Incentive, p. 7) cites the 16,000 claims for the R&D Tax Credit 2000/1 – 2004/5 as “above the original projection made by the Inland Revenue ... but the UK continues to lag in international terms.” Cox also felt that an incremental scheme would provide more incentive. Taking very much a position frequently argued to us by firm spokespersons, he suggested that “Tax inspectors need to recognize that this is an incentive scheme to be encouraged, not an avoidance scheme to be policed.”

In any case, sources converge in suggesting that at least 3/4ths of the credit goes to large firms, and that this share is growing. *Defining Innovation*, the July 2003 consultative document (Table 2.1, p. 6) appears to forecast about £600 million a year recurring cost for the credit, with £400 million going to large firms, and another £50 million going to small firms that subcontract from large firms and others. This estimate precedes the last round of refinements which may put the price up further, but it is already a dozen times the size that participants recall being discussed when the first consultations were held. Echoing this, the July 2005 HMT/DTI/HMRC consultative document *Supporting Growth in Innovation* mentions that in 2003-4 over 4500 SME companies and almost 1000 large companies claimed the credit, at just under £550 million in all (p. 13).

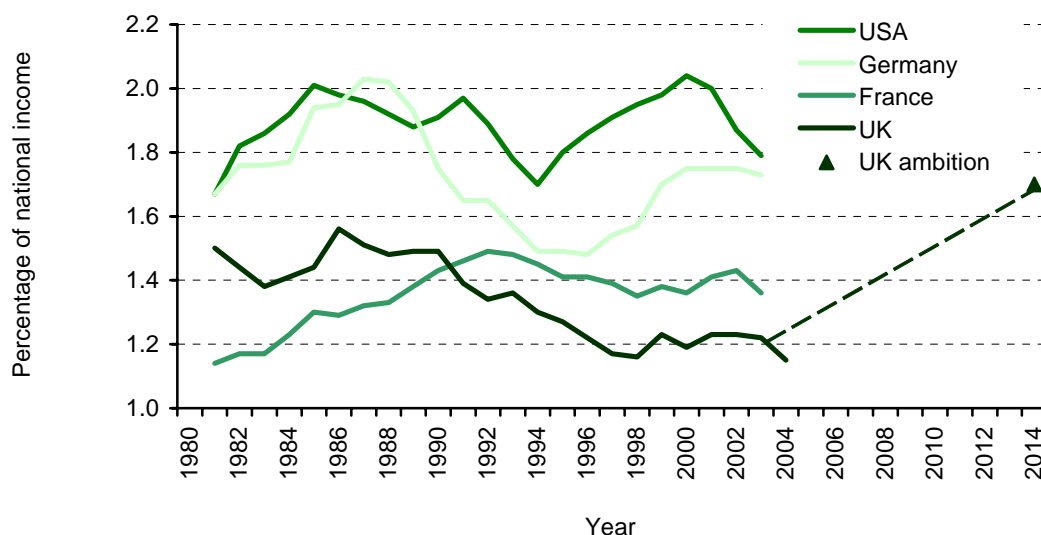
Evaluation

The Government are on record as hoping that the R&D tax credit would raise Business Enterprise R&D by at least 40-50 per cent. It is hard to find the original location of this policy goal, or to determine where it came from. No such quantitative goal appears in early documents nor is one recalled by our interviewees in the earliest discussions of policy. The July 2005 consultative document *Supporting Growth in Innovation* cited “Science and Innovation Investment Framework 2004-2014” (HMT, DTI, DfES 7/2004) as having the ambition to raise R&D from 1.9 to 2.5% of GDP (p. 9), which by some estimates would necessitate raising BERD from about 1.2% to 1.8 per cent. This ambition is reflected in the accompanying chart from Abramovsky et al. 2005⁵³:

Figure 21. Business enterprise R&D spending, 1981–2004, and the government’s ambition for 2014

⁵² Calculation methods are published in a paper in *Tax Notes International* in 2003.

⁵³ Abramovsky, Bond, Harrison, Simpson, Figure 2 from *Productivity Policy, Election Briefing 2005*.



Notes: The ambition for 2014 was introduced prior to the publication of the 2004 figures for the UK, so the dotted line indicating the required trend path starts in 2003; the dotted line is an indication of the trend path BERD would need to follow to reach the ambition, but should not be read as suggesting that the ambition needs to be met each year. Sources: OECD Main Science and Technology Indicators, 2004, updated for UK using ONS Business Enterprise Research and Development, 2004; authors' calculations.

To what extent does the favorability of a location's tax incentive scheme influence a firm's decision of whether to locate its R&D efforts there? Once a firm has made the decision to invest, to what extent do tax incentives affect the level of the investment? There is mixed evidence: the Cox Review on innovation was still a firm believer in the efficacy of the credits. Others certainly refer to taxes in describing firms location decisions. For instance, Person F, formerly Tax Director at Company B did mention that he put actual R&D in low tax jurisdictions like Puerto Rico, Singapore, and Ireland (then cheap), and that his decision is to locate in the cheap locations cut across his tax planning. However, Peter Corr of Pfizer also mentioned Puerto Rico, Singapore and Ireland as well, saying that they had the most favorable tax policies (on exports) but that it was only important for manufacturing, not for R&D (Xu 2007).

On the magnitude of investment the picture is very clear. Xu (p.47) writes

When I asked senior executives at some of the world's leading pharmaceutical firms –Pfizer, Merck, Novartis, and AstraZeneca – how R&D tax credits had affected their firms decisions of how much R&D to undertake, all were consistent and unequivocal in their responses: the tax credit had had little, if any, effect.(p. 47)

We still get 100% SRA. Essentially it is not for any tax department to persuade the R&D function to locate in one place rather than another. [The credit is] worth £30m a year, which is useful as we can plough it back into R&D . Clearly the credit helps the tax charge , but generally has little effect on investment location decision making. We ask for the broadest definitions, because so much activity is co-ordinated on a global basis and we want to capture entire investment made anywhere in the world.⁵⁴

⁵⁴ Person D interview.

The existence of a tax credit as an incidental benefit of pursuing an existing portfolio of activities is quite different from changing the location of the activity relating to that portfolio. Person D said that the large-firm credit

... was welcomed in the pharma community at large. . For small firms [the SME credit] may be a competitive necessity. It's also a good for levelling the playing field, and the UK is recognized as very competitive in this regard. But generally large firms will spend where they perceive they can gain in productivity and in high quality, innovative outputs and the tax incentive may or may not fit with that. (Xu 2007)

Firms may claim the credit, but that does not necessarily show they are being influenced by it. For some small firms the tax credit may be essential to survival. This is strongly suggested by the fact that more than 90% of credit paid through small firm tax credit claims in the UK go toward cash repayment. But as above, this is a small part of the actual credit. As Xu (2007) puts it,

For firms with greater financial stability and independence, and certainly for MNEs with ample resources, the tax credit is more of an after-dinner mint than a main course: firms gladly take it when offered, but just as they cannot expect to become full from it, nor should they be expected to choose a dining location based on it.

5. Government Institutions:

Accountability

Unlike redistributive taxation, it is harder to isolate a canonical model to represent the conflict of interest between citizens and voters. A related tradition in political economy that puts direct emphasis on elections is due to Barro (1973). He considers a world in which the promise of re-election can lead politicians to implement policies favoured by citizens. Thus, the problem of excessive taxation is held in check by the fact that political office is contestable. In effect political parties and/or politicians develop reputations that they lose if they do not fulfill them. Politicians who renege on their tax promises risk being voted out of office in this kind of framework. The models have found some empirical support in evidence that some fraction of voters does appear to vote retrospectively, i.e. looking at the records of incumbents on taxation and spending – see Paldam (xxxx) for a review of the literature. There is also evidence, consistent with these models that politicians that are in the last period in office and hence cannot be re-elected behave differently in setting tax and spending policies compared to those who can run again – see, for example, Besley and Case (1995b).

Accountability models focus for the main part on debates about what drives the size of government rather than the composition of taxation. In fact, the models are consistent with an optimal tax approach to the overall pattern of taxation.

However, one key feature of the approach which does have implications for tax structures takes the information foundations of agency models more directly to heart. One of the reasons why politicians are able to run their own agendas which may not be in line with what voters want is based on the idea that voters are imperfectly informed. This builds on the quite reasonable fact that few voters are expert economists and, even if they were, they would lack the information needed to assess the incidence of many tax policies.

At a very basic level, some taxes are more visible than others. For example, most indirect taxes are included directly in prices and their level may not be directly perceived by most consumers. However, pay slips are typically quite explicit about deductions for taxes and national insurance. Things are more complicated still when the ultimate incidence of a tax is unclear. Consider for example, employers' national insurance contributions. In a competitive labour market, these will be borne by workers. However, few workers observe directly what is being paid by their employer and are likely to set aside the possibility that it is actually coming out of their pay packet since this requires an economic analysis of the market equilibrium.

It seems like a reasonable conjecture that politicians that view voters as averse to increased taxation will tend to pick forms of taxation that are less visible to the decisive voters whose votes they care about. In the U.K., this chimes with discussions about "stealth taxation" the idea being that there has been a tendency in the last two administrations to pick low visibility forms of tax increase. Unfortunately, it is quite hard to assess the empirical validity of this proposition. However, it would be quite difficult to make an intellectually respectable case for designing tax policy with a specific aim to make things as opaque as possible.

Legislative Politics

Tax policy may be responsive to electoral concerns. However, policy is made in legislatures. The political economy literature has created a wide variety of tools for thinking through the workings of legislatures and how these have an impact on how policy is made.

Contributions in the public choice tradition beginning with Buchanan and Tullock (1963) emphasised how legislatures government by simple majorities could lead to log-rolling in which different coalitions within a legislature support one another's policies. They observe that such legislative processes will tend to lead to a government that is too large relative to the wishes of the median voter. Their idea, was formalized in Weingast, Shepsle and Johnsen (1983) is that legislatures build coalitions which can lead to log-rolling in which many groups are given policy favours funded at the tax payers expense. Each group sees the direct benefit that it receives from a policy while viewing itself as sharing the cost of that policy with all tax payers in the economy. Applied to tax policy, these kinds of models might explain why specific geographically concentrated interests might be able to negotiate special tax provisions. The way to deal with these issues to find some way of having broader based coalitions to formulate policy.

These models were mainly developed for the looser coalitions which characterize U.S. politics with a large degree of local accountability rather than the tighter coalitions that we see in the U.K.. For the U.K., the party leadership forms the executive and has proposal power within the legislature. It is unclear how far the party rank and file has a say on specific issues. This depends on how large is the majority and heterogeneous are the views that make up the party. Also relevant is the set of electoral promises that have been made and how far different groups of MPs fear the consequences of not fulfilling these promises.

Local versus National Taxation

A further set of important issues concerns whether taxes are set locally or nationally. There are a number of reasons to expect that this will yield some differences in policy. The first is due to the fact that populations differ in different locations and if policies reflect the policy

preferences of populations, then this will lead to heterogeneous policy outcomes. This is at the heart of Oates' (xxxx) work on decentralization. More decentralization is desirable in this world if it allows for policy to reflect local preferences. The tax-varying powers of the Scottish National Assembly could be interpreted in this way allowing the citizens of Scotland to exercise their tax policy preferences separately from the other parts of the U.K..

National and local tax policy differences are also important since different tax instruments are levied. For local taxation, the main instrument is council taxation where local authorities have the power to vary the overall rate of taxation across bands that are laid down by central government. The outcome is a very heterogeneous set of council tax rates. These partly reflect preferences for taxation and spending. However, they also affect the extent to which central grants are awarded to different local authorities. In some ways the political economy of council taxation is simpler than for national taxation because revenues are mainly derived from a single salient political dimension. The conflict of interest depends on the preferences for taxation among those whose property is located in a particular tax band. At the national level, the political economy has to resolve potential conflicts over a much wider array of policy instruments.

Looking forward, it is clear that efforts to change the tax instruments that local authorities have to allocate through allowing local sales or income taxes would broaden the conflicts of interest that electoral politics would have to resolve. Governments would have to announce the mix as well as the level of taxation. It is hard to reach any kind of conclusion a priori on what kinds of taxes would arise. However, this would create some interest relations between local and national party policy. This already arises to some degree although the sources of these conflicts is more limited. On the whole, as shown in Besley and Preston (2007), there is tendency for local parties to adopt stances on local taxation that are similar to those that party espouse in national policy with local Labour councils taxing most and Conservative councils taxing least.

It is often argued that the political economy of local taxation is also different due to the different ways in which accountability works. One idealized view of the world sees a much bigger role for mobility (sometimes referred to as "voice") in determining policy. This efforts by government to increases taxes may in the extreme lead to citizens leaving a jurisdiction. However, the consensus for the U.K. is that there is little evidence of this mechanism being at work for local taxation in the U.K.. Perhaps more plausible is the view that citizens have better information to assess government performance at the local level. There is no good evidence on whether this is true in the U.K.. On the one hand, local press tends to have declined in importance in the U.K. relative to national newspapers suggesting that information flows may not be as effective at the local level.

One view that has been studied extensively is whether local governments also compete through yardstick competition. If citizens are poorly informed then one way to assess whether the tax rise in their jurisdiction is "reasonable" is to compare this with what is going on elsewhere. This idea was first studied for the U.S. by Besley and Case (1995) who observed that the chances that a Governor was re-elected was an increasing function of the tax increases implemented in neighbouring jurisdictions. This results in tax increases being positively correlated across jurisdictions. This phenomenon and has been studied elsewhere including for U.K. local governments by Revelli (xxxx).

Yardstick competition will end to imply that tax increases are "safer in groups". While such yardstick competition has been studied extensively at the level of local governments, the idea

can have resonance in an international context with national governments where voters are making international comparisons. We have already observed the tendency of tax reform around the world to move together. While this could reflect some common changes such as increases in capital mobility, it may also reflect the way in which democratic processes shape policy choices.

If local elections are to work effectively in achieving fiscal accountability then voters should primarily be motivated to vote on local performance in such elections. There is a fair amount of evidence that national election swings and local election swings move together. This is not particularly consistent with local elections dealing primarily with government performance on these issues. Another issue at the local level highlighted in Besley and Preston (2007) is that policies chosen by governments appear to depend on the extent to which elections are competitive. The history of local elections in the U.K. suggests that many local governments are effectively one-party systems and have not changed hands even though there has been turnover at the national level.

The Poll Tax

“Three concerted attempts have been made to levy a flat-rate poll tax in England in the last six hundred years. Two were introduced in a short period of time in the fourteenth century; the third was levied by Mrs Thatcher’s Government in the late twentieth. All were abject failures, collapsing amid widespread evasion and near universal discontent. The Peasants’ Revolt of 1381 produced the largest absolute level of civil disobedience. But relative to the standards of the day, the backlash in 1990 was not far behind.”

David Butler, Andrew Adonis and Tony Travers, *Failure in British Government: The Politics of the Poll Tax I* (1994)

Prior to 1990, Local Government expenditure had been financed by a combination of grants from Central Government and a system of domestic and non-domestic rates (essentially property taxes on individuals and firms). The poll tax (officially known as the community charge) was introduced in 1990 as a replacement for domestic rates. It was essentially structured as a flat-rate amount for each adult in a household (with a few exemptions and rebates). Why did Mrs Thatcher introduce the poll tax and why was it an “abject failure”?

Explaining why the poll tax was an “abject failure” is not that hard to explain. Most people felt its level and structure were deeply unfair, with many people being worse off by vast sums. Many middle-class voters, such as social and economic groups C1 and C2, expected to be worst hit by the new poll tax (according to a poll conducted by NOP for the *Local Government Chronicle*). In a model of probabilistic voting, these are the very people who would almost certainly be classed as swing-voters (i.e. non-aligned voters responsive to small changes in economic welfare). Therefore it is not surprising that many Conservative MPs felt their seats threatened by a rally in Trafalgar Square, attended by many middle-class voters. This fear almost certainly motivated many of them to vote for Michael Heseltine (who promised to get rid of the poll tax) against Mrs Thatcher in a leadership election in November 1990, resulting in the downfall of Mrs Thatcher.

What is surprising is how such a disastrous policy was even contemplated, let alone proposed and implemented. According to Butler, Adonis and Travers (1994), it was a natural result of the set-up of British political institutions and nothing has changed to prevent such a blunder from happening again.

The electoral system still guarantees large legislative majorities, especially when the opposition seems completely incapable of forming a Government. Governing parties are still able to come up with policies without consulting outside the party or cabinet. Frequent cabinet shuffles still prevent most ministers from looking at policies from a holistic point of view. The civil service still largely provides technical advice relating to policy implementation rather than potential political effects. Governing parties are still largely able to force legislation through the Commons, even if their own backbenchers oppose it, through the promise of patronage. The House of Lords is still unable to block money bills.

Relevance to Tax Reform in the U.K.

As we have already seen, election pledges on taxation are common place in manifestos in British elections. For the purposes of tax policy in the U.K.

A general message from the discussion above is that we expect tax policy to be rooted in institutional factors. It seems reasonable to take the basic institutional structure in U.K. government as given. Although the past ten years of government has seen considerable constitutional change in terms of devolved government. However, the basic first-past-the-post Parliamentary democracy is not at issue.

It is worth outlining scenarios in which we could imagine institutional variations that could have significant implications for determination of tax policy.

6. Implications and Reflections

Fiscal Rules

Scholars of political economy have put a lot of store by fiscal rules for governing the public finances. Among Public Choice scholars, like Brennan and Buchanan (1980), these are based on a belief that electoral mechanisms are insufficient by themselves to restrain government's power to tax. They advocate adopting a "fiscal constitution" where governments are explicitly constrained.

The U.K. public finances are governed by the Chancellor's self-imposed "golden rule" which demands that the government current budget be balanced over an economic cycle. There is also a limit on the net debt to GDP ratio to 40%. However, there are self-proclaimed rules with no legal force.

However, rules of a more binding variety could be entertained. These could be explicit rules such as those that have been adopted in a number of U.S. states. For example, some states have adopted balanced budget rules that restrict the extent to which states can run budget deficits.

In practice, there has been a good deal of scepticism about how fiscal rules operate in practice. Government accounting procedures can lead to quite a bit of flexibility in the reporting of taxes and expenditures.

In a broad sense, the need for explicit fiscal rules can be thought of as responding to explicit failures in governmental decision making. In thinking through these issues, it is therefore necessary to be precise about the exact form of government failure.

Rules that govern macro-economic aspects are usually motivated by two different possibilities: (i) that voters are poorly informed about the true state of public finances or (ii) that, even if informed, there are credibility problems in government behaviour. We discuss each in turn.

In principle, fiscal rules could also encompass specific tax measures – such as the tax base or the rate of income tax. However, while these often the subject of electoral pledges, they are rarely embodied in rules. However, the legal framework in which tax policy is set may constraint options and this increasingly apparent in the evolving role of the European Court of Justice.

Credibility issues are most associated with capital taxation. The problem first highlighted by Kydland and Prescott (1977) arises even where a government is benevolent. The government may be tempted to offer one tax policy – such as low taxes on investment – but subsequently to announce a different higher tax policy. The problem arises in the tax sphere because there are no long term commitments to tax policy. In the U.K. the government is able to alter tax policy on a year-to-year basis. One example of this in the U.K. is in tax relief on pension savings. Before 1997, pension funds did not have to pay advanced corporation tax (ACT). This relief was withdrawn in 1997 and affected the tax reliefs available on the stock of assets that had been built up.

Information and Transparency

One other feature of the trends in taxation that has not been mentioned is transparency. How much we each pay is less obvious for some taxes than it is for others, as are the effects of certain elements of the tax structures. For instance, how much you pay in income tax is less observable than how much you pay in VAT. Moreover, the effect of changes to the base rate of income tax might be immediately observable than the effects of changes (or lack of them) to the income tax thresholds.

With this in mind, we see that UK Governments over the past 25 years have relied on the growth in revenues associated with taxes (or elements of them) whose effects are not that transparent. Namely, rising rates of VAT and fiscal drag.

Transparency is now part of the motherhood and apple pie of government policy making. Moreover greater freedom of information and public discussion of these issues has certainly resulted in significant moves in this direction in recent years.

We take it as a goal of transparent tax policy to put the analysis and data that is provided for debates about tax reform even more available to citizens. The U.K. tradition is to have budgetary measures announced in the Spring budget with occasional “leaks”. The pre-budget report in Autumn now seems to have become firmly fixed in place and pre-announces some measures and occasionally implements some reforms ahead of the budget. This certainly adds to the scrutiny of the public finances.

How and whether this leads to a fully informed debate about tax policy in the U.K. is moot.

Direct Democracy

Constitutional arrangements in the U.K. allow for direct democracy on an ad hoc basis. However, in practice their use is extremely limited. Whether polities should use some element of direct democracy as part of their political institutions is widely debated. The two most famous examples are U.S. States and Swiss Cantons that both display considerable variation in their reliance on initiatives and referenda. From a theoretical point of view, issues of accountability and representation are important in thinking through these issues.

Some commentators (for example, Denzau, Mackay and Weaver (1981)) emphasize the role of initiatives in reducing rent-seeking by government and hence enhancing accountability in the political process. Others emphasize the fact that initiatives can change the representation of policy preferences. Gerber (1999) considers how, given a set of policy preferences in a legislature, the availability of the initiative could change the equilibrium policy bargain. Moreover, the legislature may make such a change preemptively, i.e., it is sufficient for legislators to anticipate the possibility of an initiative at a later date. Hence, the possibility of initiatives forces greater agreement between voter preferences and policy outcomes, assuming that representatives elected to the legislature have views that are out of step with the citizens as large. Similar conclusions follow from the theoretical analysis of Besley and Coate (2000) but for quite different reasons. They develop a model in which initiatives affect electoral outcomes. They argue initiatives have an impact via issue unbundling. In general elections, many issues are decided at once, which may result in non-salient issues being distorted away from the preference of a majority.

7. Summary and Conclusions

So what have we learnt about the political economy of taxation from a systematic analysis of the practical experience, elections and voters, and the role of special interest politics? Well, we can group our thoughts into three areas that are hard to separate: *institutions*; *information and transparency*; and, *the co-ordination of interests*.

Looking at the political institutions of tax policy, we see that the UK is fairly unusual in the degree of central power over tax policy, with almost all power residing with HM Treasury. The UK institutional set-up also guarantees minimal scrutiny of tax legislation, with individual MPs being poorly informed about tax policy, they must instead rely on outside support. One must wonder if policy “mistakes” such as the poll tax or the more recent 0% starting rate of corporation tax would have happened in an institutional set-up that guaranteed a greater degree of formal scrutiny⁵⁵. External scrutiny clearly helps, but it is hard to imagine that greater formal transparency and scrutiny could worsen policy outcomes.

The tax system is clearly not that well understood by citizens either. Politicians of all stripes seem unwilling to extend VAT to children’s clothing or food, despite both of these being sub-optimal vehicles for redistribution, for fear of the public’s reactions. Moreover, there is some evidence to suggest that parties believe that voters see elements of the tax system as signals for parties’ attitudes to effort and aspiration. Voters also appear to over-estimate the importance of some taxes such as council tax and inheritance tax.

⁵⁵ Note that these examples could be termed “mistakes” for very different reasons. The poll tax was a mistake since it was so unpopular and perceived to be grossly unfair. The 0% starting rate of corporation tax since it is likely to have eroded tax revenues.

It is hard to miss the appearance of divergence between average public opinion and tax policy, which partially result from the first-past-the-post electoral system. Cuts in statutory rates do not appear to have come at the behest of a swell of public support for tax cuts. This is not to say that public opinion or attitudes have not mattered, it is just to say that the median voter on tax policy does not appear to have been the pivotal or decisive voter in elections in the UK. Cuts in statutory rates might though have mattered for the decisive voters, i.e. those that decide elections in marginal constituencies, people often referred to as “middle England.” Although it is clear that tax policy does not appear to be representative of public opinion, whether we prefer tax policy to be representative, as opposed to accountable, is another question.

From our analysis of interest groups, we see that apparently very disparate interest groups can become very organised and vocal indeed when money is at stake. We saw this for families with children, motorists and small businesses – hardly uniform groups. The invisible hand is clearly alive and well in the politics of taxation. The other lesson that we can learn from our study of the evolution of the R&D tax credit is that granting favourable tax treatment to groups can create constituencies for expanding that favourable treatment.

In overall terms, one gets the impression that the relationship between politicians and voters is one of “the blind leading the blind”, the only time when people react is when reforms start to bite financially. This creates an uncomfortable environment for those intent on holistic and optimal tax reform. So, undoubtedly, the more informed voters and politicians of all stripes can become about tax policy, the greater chance there would be of beneficial reform, especially if there are costs to bear. How to do this, though, is the big question. One wonders if simplistic tax reform is a good in itself.

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