HERIOT WATT UNIVERSITY

First Evidence from the Independent Expert Group to the Commission on Scottish Devolution

Part 1: Introduction and some First Principles

Part 2: Current arrangements in the UK

Part 3: Some experiences from around the World

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Introduction

1 I am privileged to convene an independent group of experts whose role is to advise the Commission on Scottish Devolution on how the financial accountability of the Scottish Parliament might be improved. Our initial evidence is in this first report. It does not seek to provide any definitive answers. Rather, it sets out to identify the fundamental considerations the Commission might wish to include in their approach to their task and how these considerations relate to experiences in the UK and overseas.

2 We have divided this report into three broad sections. The first part draws on established economic theory to introduce some of the basic principles of why governments spend money and how tax systems might be designed. This section then draws upon political science to introduce some of the now established, and to some extent conflicting, desired attributes of a funding mechanism for a regional or sub national government. This part concludes with a description and critique of some generic approaches to funding sub national governments. These financing models are all presented in isolation, whereas the reality is that most systems are a mixture of these approaches.

3 The second part focuses on the current circumstances in the United Kingdom, providing a description and critique to parallel those for the generic systems provided in part one. We also introduce some of the relevant contextual circumstances in this section, in particular the Government Expenditure and Revenue data published by the Scottish Government.

4 The third part describes some of the differing international experiences for funding sub national or devolved governments and presents the conclusions to this first report. Although, we have chosen to focus upon Germany, Switzerland, Spain, Canada and Australia, many other countries have some devolved level of administration between governments at national and municipal levels.

5 We shall let the concluding section speak for itself, but it is important to record that in drawing this evidence together, my colleagues and I have drawn upon not just our own knowledge and expertise, but also an immense literature on this subject from across the globe. Whilst the precise circumstances of the Scottish, and UK approach, are unique, many of the issues are replicated in many countries throughout the world.

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1 Public Expenditure, Public Goods and Services

1.1 Introduction

1.1.1 This chapter begins by considering why governments spend money, what they spend it on and how they raise revenue to fund that expenditure. It considers spending at the national or state level, and also spending at the next tier of government, which in the Scottish context, is that of the Scottish Parliament. In common with the international literature from economics and political science, we use terms such as "regional" or "sub national" in describing and analysing government between the national and municipal level. The use of such terms, which are intended to be synonymous, is for convenience only. They describe the tier of government rather than infer judgement on a national identity.

1.1.2 Governments raise revenues (through taxes and levies) in order to finance public expenditure and to redistribute income (by social security or welfare payments) in order to achieve a degree of equity amongst the populations. The balance of taxation, public service provision and income redistribution is determined by the elected government. The choices made by a government reflect that it was elected to express the value judgements of the electoral majority.

1.1.3 It is instructive to consider the nature of public services, which may be divided into *public* goods and *merit* goods.

1.2 Public Goods

1.2.1 Public Goods are goods and services which, once provided, confer the same benefit on everyone. The classic examples are:

- defence,
- legal systems,
- systems of protection of intellectual property;
- fundamental research carried out in universities.[1]

1.2.2 Some of these public goods will be trans-national, prompting debates on the size of contributions a particular country wishes to make to some club of governments providing trans-national services - e.g. contributions to NATO, to CERN etc. However the classic problem of public goods is that these will tend to be under-provided since territories can gain the benefit without having to contribute.[2] This is relevant to countries sub divided into regions where those regions have some degree of autonomy over public spending decisions. In such circumstances, regions may be unwilling to provide such goods, since those in other regions may benefit from them without contributing towards their cost. These are referred to as "spillover" benefits. For example, Region A may under provide lighthouses because it cannot internalise, or receive a revenue contribution that reflects, the benefits that shipping from Region B would obtain from additional lighthouses.

1.3 Merit Goods

1.3.1 Merit Goods are goods and services such as health and education where most of the benefit accrues to the individual receiving the good or service. Merit goods are often described as public services. These are services that are essentially private to an individual but are provided by the public sector for reasons of redistributive equity.

2 Financing Public Expenditure

2.1 Establishing a Tax System

2.1.1 In setting tax rates, a government might consider the four factors discussed below. The arguments associated with these four issues demonstrate that governments face complex trade-offs in designing tax systems at both the national and sub national levels.

2.1.2 In parallel to the issues described below is a reflection that high taxes might cause serious losses of efficiency and may also raise concerns about competitiveness whilst taxing relatively immobile factors such as property is less likely to produce unwanted side-effects on efficiency or competitiveness.

2.2 Efficiency of the Tax System

2.2.1 A primary purpose of taxation is to raise revenue to finance public expenditure. However taxes cause people to change their behaviour and, other things being equal, government should set taxes in such a way as to minimise the extent to which behaviour is driven by taxation rather than the underlying market imperatives. When the influence of taxation on behaviours is minimised, the tax system is considered to be economically efficient. Important exceptions to this rule include environmental/pollution taxation where typically there are no prices on the pollution that people and businesses create and so commercial imperatives drive behaviour in a direction that is not in the public interest. In this case there is a recognised role for governments to use taxes to change behaviour, and in this case taxation can increase economic efficiency rather than reduce it. Similarly, taxation may sometimes be used to change behaviour because society wishes to reduce consumption of a "demerit" good - e.g. cigarettes.

[1] There is of course a debate to be had about just how far these are public goods in the purest sense, but for the purposes of this high-level overview that is not an issue we want to pursue further.

[2] This is the analogue of the argument that countries may set too low levels of taxes on trans-national or global environmental pollutants such as CO2 emissions.

2.2.2 Notwithstanding these exceptions, the efficiency argument typically implies broad tax bases and relatively low and flat taxes. Over the years the UK government has made many changes to taxation that have been designed to improve efficiency - e.g. reforms of capital taxation. A broad tax base also mitigates the revenue risks a government might face. For example, whilst recent high fuel prices will have increased the UK Government's revenue from fuel duties, those higher fuel costs will have caused a reduction in the consumption of other goods and services, thus reducing revenues from other consumption based taxes.

2.2.3 One important implication of the efficiency argument is that on the whole a national government would seek to avoid tax rates that differ by region, since that would introduce tax distortions by potentially incentivising a behavioural response to the differing tax rates across the regions within a state.

2.3 Fairness of the Tax System

2.3.1 A second major aim of systems of taxes and expenditures is to redistribute income from the rich to the poor. Transfers to the poor are largely carried out through the social security system in most countries. Typically, social security benefits are determined at the national level and applied uniformly throughout sub-national jurisdictions. Along with the provision of public and merit goods, they are a key part of a government's capacity to deliver redistribution for equitable purposes. Administration may be local, but levels of support are determined nationally. As with taxation, the case for this approach is of avoiding distortions due to, for example, individuals migrating to areas where social security benefits are relatively high. The tax system also has redistributive effects. For example, goods such as food and children's clothing that are important in the household budgets of poorer people attract lower rates of taxation. And income tax is progressive so that average tax rates rise with income.

2.3.2 Policies often devolved to sub-national government can also have redistributive effects, though these do not involve income transfers, unlike the benefit and tax systems. For example, health and transport policies are frequently allocated to sub-national governments by applying principles of subsidiarity (the principle that decisions are taken as closely as possible to the citizen) or because of differences in regional structures of preferences for these goods. But health policies focussed on deprived areas or transport policies that favour older people implicitly have redistributive effects.

2.3.3 The key issue here is whether equity and fairness means equity and fairness between individuals or between regions. Most discussions of equity focus on questions of fairness between households or individuals. But the degree of autonomy of regions within a nation introduces other dimensions of fairness in respect of sub-national fiscal flows.

2.3.4 Perhaps this is best illustrated by example. Suppose there are two regions, A and B. In Region A, there are three households with incomes 2, 2 and 20. In region B, there are three households with incomes of 6, 6, and 6. If regional economic disparities are a main driver of fiscal flows, then Region B will receive a positive net flow, since its average income is lower. However, if redistribution is concerned solely with households, i.e. is "region blind", then the direction of flow will be to the two relatively poor households, who happen to live in Region A. A benevolent social planner would be likely to agree that this is the better policy. On the other hand, if there were efficiency arguments suggesting that flows to Region A would reduce overall economic efficiency (perhaps because subsidies had an adverse effect on labour supply), then this consideration would have to be balanced against those of fairness.

2.3.5 This may seem an artificial example. But it is relatively easy to find parallels within the UK. For example, although one would expect that any policy designed to promote inter-regional equity in the UK would involve transfers from London to other parts of the country, London has large concentrations of poverty within its boroughs. Transfers out of London would reduce the funds available to support its own poor people.

2.3.6 In general, economists favour the principle that the individual aspects of equity are the more important determinants of overall welfare. This might be reflected in the tendency for most countries to concentrate a main instrument of redistribution, the social security system, at national rather than regional level. This does contrast with the other redistributive instruments, such as the provision of merit goods, being devolved to the sub national level.

2.4 Competitiveness and Tax Competition

2.4.1 In a world of mobile capital and labour, national and sub-national governments must recognise that their tax base may change if they set taxes that are very different from those of other national or regional governments. There are two ways in which tax bases could be affected.

- One is migration - factors actually move taking both their direct earning capacity but also some wider benefits- e.g. knowledge - that they bring to the economy. There is often a concern that if a key company were to move abroad this could cause other companies to follow suit.

- The other is through various tax arrangements whereby factors remain in place but taxable income is shifted through a variety of devices ranging from tax planning through avoidance to evasion.

2.4.2 These give rise to two implications.

- Governments have far less room for manoeuvre on taxes than they would ideally like, and in setting taxes may be constrained by what other governments do. Indeed, on highly mobile factors, they may be constrained to set more or less the same taxes as other governments do. This is further underlined by modern growth theory which stresses the need to attract highly mobile factors (usually capital and skilled labour) to maximise growth potential.
- If governments act in isolation they can end up in a race to the bottom (**tax competition**) with one government under-cutting another to attract mobile factors. Ultimately, this results in tax yields that are insufficient to fund public expenditure. Since everyone loses from this, national governments sometimes choose to enter international treaties on tax setting which constrain their ability to engage in tax competition. To avoid tax competition, a national government may deem it necessary to set legal constraints on the freedom of sub-national governments to set tax rates independently.

2.5 Administration of the Tax System

2.5.1 Taxes (in common with benefits and expenditures) are costly to administer. A major consideration is the information needed - it is necessary to collect and verify information on the circumstances of individuals and companies to ensure that they pay the right amount of tax and receive the right levels of expenditures to which they are entitled. There are also associated costs of detecting and prosecuting those who cheat the system. This points towards having systems which rely on information that is easily and independently verifiable. Indeed taxes such as PAYE that are collected automatically as a **withholding tax** are much cheaper to run and far less subject to abuse than other taxes. Hence, administrative considerations push governments towards systems that are flatter, or less progressive, and less differentiated or targeted than they might ideally want.

2.6 Benefit Rules And Social Security

2.6.1 The social security system is introduced above in the context of equity. But it also has an efficiency implication. Just as with the tax system, design of the social security system involves a trade-off between equity and efficiency. In the UK, there are benefits such as child benefit that are unrelated to income; simple and relatively cheap and easy to administer but not very redistributive since the rich get as much as the poor. On the other hand tax credits are targeted at the poorest people but then withdrawn as people get richer which can create work disincentives and the phenomenon of poverty traps. The reforms introduced by the current government to integrate tax credits with the benefits have been motivated by a desire to reduce these disincentives and encourage more low-wage workers back into work. The benefits of this approach have, however, been somewhat offset by the costs associated with the complexity of the system.

3 Public Services, Taxation and Regional Variations

3.1.1 Regional variations in factor endowments (an economists' term to describe the ingredients for economic activity, such as natural resources, land, labour and capital) and socio- economic circumstances impact upon the revenue raising and public service provision decisions of governments in a number of ways.

(i) The **levels and distribution of tax bases** may differ across regions. For example average earned income and its distribution may differ, thereby affecting the size of income tax receipts. Tax bases can also change if households or firms change their behaviour. For example, some people may move if they think that they will get a more favourable treatment under the tax and expenditure system in one region than another.

(ii) Similarly there may be differences in the **level and distribution of various types of needs** - numbers of pensioners, numbers of children of various ages, morbidity and mortality rates. Again it is important to recognise that these are not fixed and that the incidence of health problems is to some extent linked to poverty and so hence has a correlation to the tax and expenditure system.

(iii) There may be differences in the **costs of providing goods and services** - and in particular government - provided goods and services. The provision of school education in the Scottish islands inevitably involves higher transport costs than education in the Central Belt. In contrast, some costs may be higher in major cities due to higher office rentals and labour costs. The public sector may be able to influence these costs through its human resource, tendering and procurement policies. A major reason why average costs will vary across regions is to do with population sizes and so the ability of publicly provided goods and services to achieve scale economies.

(iv) Finally there could be regional variations in **preferences for goods and services** - both the mixture

of goods and services and the level of provision. These goods would include standard goods that are traded in markets, public goods which may be undersupplied unless government stimulates provision and merit goods which society believes have benefits that are not recognised by the market. Correspondingly, there will be regional variations in the willingness to pay taxes for publicly supplied public and merit goods.

3.1.2 Against this background of variations in preferences, needs, costs and tax capacity, how should taxation systems be designed and spending allocations determined? Irrespective of the political issues, there are economic arguments for decentralising tax and spending decisions. In a classic article on fiscal federalism, Oates argues that to maximise overall welfare

> *"each public service should be provided by the jurisdiction having control over the minimum geographic area that would internalise the benefits and costs of such provision".*

3.1.3 A more contemporary expression of this argument is that lower jurisdictions can deliver those public services that might be described as merit goods more efficiently than the central government because they have better information, including on local preferences, have a more direct management chain, are likely to be more innovative and are likely to be more cost-effective because of yardstick competition or benchmarking with other regions. These circumstances are quite distinct from those relating to public goods, as identified in 1.2.1 above.

3.1.4 The benefits of decentralisation increase if there are wide regional differences in preferences for public goods and services.

3.1.5 These circumstances can create a tension since many of the public services provided by sub-national governments fulfil national redistributive or social insurance objectives. The national government has an interest in how they are delivered, and the standards to which they conform.

4 Comparing Unitary and Devolved Governments

4.1.1 The factors relating to the provision of public services, tax and social security system designs and the potential differences between regions, suggest that there are a number of advantages and disadvantages to decentralising tax and spending from a national to a sub national government. The trade offs facing a regional government, confronting issues in that region only, clearly differ from those confronting a national government acting within the same region.

4.1.2 It is instructive to bring these factors together by contrasting the considerations for a national, unitary, government and a sub national government with complete tax and spending powers, as well as the administrative responsibility for delivery.

4.1.3 Looking firstly at how a unitary government might provide merit goods within the region, there is no reason, in principle, why a unitary government could not produce a pattern of provision that would be finely tailored to local needs, costs and preferences. However there are four factors that might prevent this.

- An important consideration in making expenditure decisions is that a unitary government would want to minimise expenditure-induced migration. This would mean that, other things being equal it would opt for relatively similar levels of provision. This is the analogue of our previous arguments in relation to the difficulties of regionally differentiated taxes and social security.
- Information gathering and administration organised nationally, and not focussed on a particular region, might mean that the adjustment of the pattern of provision to local needs and preferences might be rough and ready;
- In a unitary system where expenditure decisions are determined by democratic processes, the winning party may not take sufficient account of the needs of those in regions which did not support it.
- With regions of different size, the costs of providing a given level of service will vary across regions. If the population were mobile, then a unitary government might provide similar nominal expenditures across regions. This would mean very different levels of real provision due to scale economies. In a highly mobile country where citizens cared particularly about public service provision, this might trigger migration until there were similar economies of scale across regions.

4.1.4 A unified system delivers a high degree of *risk sharing*. Because it shares resources from a number of differing regions, the centralised government has the scope to insure areas that suffer adverse shocks by reallocating funding towards these regions, hence ensuring a parity of public service provision within the regions of the nation.

4.1.5 In the eventuality of a regional adverse shock, some reallocation would happen automatically through the operation of the social security system. A national, unitary, government may treat the social security system as its main instrument for alleviating poverty. Fairness would suggest that all poor people receive the same

level of support in **real terms** - that is adjusted to reflect the differing price levels between regions. In practice, most governments equalise social security payments in nominal terms, with some exceptions. For example, in the UK, housing benefit can be adjusted to local rental costs. In practice equalising all benefits in real terms would impose significant administrative costs depending on the level of spatial disaggregation selected.

4.1.6 The other extreme, whereby a region has complete power to determine its own tax system and its own levels of public expenditure gives rise to alternative perspectives on the issues raised.

- A region would have to recognise the potentially high degree of factor mobility between regions, which could significantly constrain its ability to set markedly different tax rates. Thus, unless it is willing to voluntarily give up some autonomy by entering into a tax agreement with other regions, there would still be tax competition between regions.
- What were internal public goods at the national level (that is shared across the regions within the nation) could become trans-regional public goods at the regional level. Spillover effects would increase and it might be difficult to arrange for sufficient regions to contribute towards the costs of these national public goods e.g. defence.
- Where a region controls its own taxes, spending and social security system, the risk sharing implicit to the unitary government is absent. In these circumstances there is an overwhelming case to allow regions to ***borrow*** to offset the effects of adverse shocks. Borrowing allows the region to smooth out the effects of both positive and negative economic shocks. Allowing regions freedom to borrow would require coordination with the national macroeconomic framework, since the aggregate of regional borrowing may not be consistent with national debt policy. If it is to remain as a unitary state, the national government would likely wish to have constitutional safeguards that allowed it some control over regional borrowing.

Table 4.1: Advantages and Disadvantages of a Unitary System

Advantages	Disadvantages
• The hard budget constraint linking taxes and public service provision delivers accountability at the national level • Incentive to control costs of public service provision • Minimises tax and expenditure induced migration across regions: • Tax rates would typically not vary across regions, thereby the tax system is efficient • Social security rates would tend to be fairly uniform across regions - so similar people would receive similar benefits wherever they lived; • There would be no necessary connection between total expenditures in a region - social security plus merit goods - and the tax raised at a regional level. So equity between regions would be facilitated by the implicit transfers across regions. • There would be administrative efficiency because there would be a single collection agency. • There would tend to be an efficient level of provision of national public goods.	• No accountability at the regional level • For informational reasons, spending on merit goods may not always adequately take account of needs at a local level. • Even if there were no efficiency considerations driving a fairly uniform level of nominal expenditure on merit goods across regions, scale economies and concerns about high tax consequences could limit degree of equalisation of real per capita expenditures. • Both the mix of public expenditures on merit goods and the levels of provision may not reflect local preferences. • Because there is a single government making all the decisions there are lower competitive pressures to force government to innovate and find better ways of providing services. Put differently, there is limited **yardstick competition** or benchmarking with other regions.

Table 4.2: Advantages and Disadvantages of a Region with its own tax, spending and social security systems

Advantages	Disadvantages
• The hard budget constraint linking taxes and public service provision delivers accountability at the regional level • Incentive to control costs of public service provision • Expenditures may be better tailored to local needs because there is better information about these. • The mix and level of expenditures may better reflect local preferences. • There would be more innovation as different regions explore new ways of delivering services and some element of yardstick competition helps regions to learn from one another.	• Competitiveness considerations, and the possibility of inefficient tax induced migration across regions, may limit the extent to which regions can effectively set very different taxes and expenditures. • Unless regions autonomously wish to limit their freedom by entering into agreements to limit tax competition there could be sub-optimally low levels of taxes and hence expenditure might fall below its socially optimal level. • While there will be equality within regions there will no longer be equality between regions since the size of the regional tax base will now affect levels of taxes and/or spending. (This could be perceived as a strength when viewed from a region.) • There may be dynamic effects whereby initial differences between regions are magnified. Regions with low tax bases will have to set high taxes or low spending and could lose high value factors which migrate to regions that already have large tax bases. e.g. the net flow of graduates from the North to the South East in the UK. • Administrative inefficiencies through duplication of the fixed costs of administering tax and expenditure systems. • There may be sub-optimal provision of both national and regional public goods – and correspondingly less willingness to set corrective taxes. • Reduced scope for risk-sharing or pooling between regions.

4.1.7 To further contrast the differences between a unitary government and an autonomous region with its own tax, spending and social security regimes, the advantages and disadvantages of both are drawn together in the tables above.

4.1.8 In practice, comparative analysis shows that full devolution of all tax, spending and social security systems is rare. Rather, some form of intermediate system is adopted, in an attempt to get the advantages of decentralization without incurring the costs. There are many methods of achieving this and addressing the various trade offs described above

5 Considerations for Funding Sub National Governments

5.1 Basic Principles

5.1.1 In principle, one might want any financing system for a sub national government to have the following characteristics:

a. **Equity:** it is fair to all regions of the country;

b. **Autonomy:** allows the sub national government choice on what and how much to spend, and potentially, would allow the use of fiscal powers as policy instruments;

c. **Accountability:** it is clear to taxpayers the effect of decisions made at the regional level have on their tax bill;

d. **Stability/predictability:** so that public spending can be managed properly;

e. **Simplicity/transparency:** so that it is readily implemented and the justification is evident;

f. **Efficiency:** to avoid creating economic distortions by incentivising movements of people and the factors of production.

5.1.2 However these desired characteristics have mutual tensions. **The most important tension lies between**

autonomy/accountability and equity. Determining spend by the amount of taxable capacity (that is, complete fiscal autonomy) ignores need entirely. But determining spend solely by grant from central government allows for no fiscal accountability, and no autonomy over the total.

5.2 Equity

5.2.1 Equity considerations are premised upon the view that residents of the less wealthy regions are entitled to the same standard of services as those in the more prosperous regions. When this does not happen, it is described as a Horizontal Fiscal Imbalance. Systems of fiscal equalisation (hence, horizontal fiscal equalisation) are usually intended to deliver objectives of inter-regional equity and typically have the effect of redistribution of resources between regions. They can be based on equalisation of public service provision (ensuring each region has roughly the same scope to deliver equal public service provision, as is the case in Germany), needs-based equalisation (which uses indicators to calculate different expenditure needs, as is the case in Belgium), or some mix of the two (the most systematic example of which is that used in Australia).

5.2.2 Equity has been a significant dimension to UK public expenditure decisions for many years: indeed reference to meeting needs equitably has been the main justifying criteria within the centralised public spending system. It was certainly routinely used to justify spending allocations for Scotland before devolution and indeed before the Barnett block and formula system was introduced.

5.2.3 ‘Need’ may be calculated by a wide range of criteria. In the UK debate two of these appear to be especially prominent:

(i) The higher per capita costs of delivering the same set of public services to citizens in sparsely populated areas, as compared with more densely populated areas (as e.g. in the Highlands and Islands of Scotland or mid- and west Wales as compared with the West Midlands)

(ii) The asymmetric take-up of services in areas of structural economic decline and/or concentrated social deprivation (e.g. it is more costly per capita to provide a full set of public services in greater Glasgow than it is in Surrey)

5.2.4 However, within the UK, “need” is more usually determined or measured by the national government using population based calculations, such as used to determine NHS funding, rather than by reference to deprivation or cost measures.

5.2.5 Systems of equalisation may produce problems of incentive structure and accountability. Recipients of equalisation transfers may not have sufficient incentives to strengthen their fiscal capacity and reduce their demands on the equalisation process if shortfalls are made up automatically. And if recipients are not responsible for raising the income they spend, they may lack accountability mechanisms to ensure responsible spending. Contributors to equalisation transfers may also have perverse incentives if their tax revenues from strong economic performance are ‘top-sliced’ into the equalisation pot.

5.2.6 All systems of equalisation are contentious because they redistribute from economically stronger to economically weaker regions; usually the strongest regions complain that the extent of equalisation is too high. This is a parallel to grievances voiced about higher rates of marginal personal taxation which might be justified as seeking redistribution between individuals or households. Because equalisation systems share risk in a large, national or statewide pool, they are generally supported by economically weaker regions. However, income-based systems like that in Germany also run the risk that weaker regions with higher expenditure needs complain that they do not receive enough. All equalisation systems have to strike compromises more or less acceptable to all, and those compromises are generally subject to periodic, and sometimes corrosive renegotiation.

5.2.7 The ability to reach such compromises depends on sufficient agreement among the central and regional governments of a state that the objective of statewide inter-regional equity is a good objective. There are a number of examples where that objective has been put under question (notably in Flanders, northern Italy, the resource rich provinces of Canada and in southern Germany) by a ‘revolt of the rich’ against the notion of a national or statewide ‘solidarity community’.

5.2.8 There are other examples where national solidarity communities are under challenge by preferences for smaller-scale solidarity communities based on sub-state national identity, notably in Quebec, Spain, again in Flanders, and to an extent also in Scotland. There is a possibility in such places that the very notion of a statewide or national system of fiscal equalisation may not be able to maintain or attain sufficient consent (even though citizens in those circumstances would forego the insurance provided by a statewide risk pool).

5.2.9 Equalisation payments from central to regional governments are not the only way to achieve greater inter-regional equity. National systems of social security can have strong territorial effects (and may produce greater inter-regional equity than do systems of inter-regional equalisation), as can territorially asymmetric programmes funded, or co-funded, by central governments outside of equalisation mechanisms (as is the case in eastern Germany). Equally, asymmetric reductions of central

government funding in some places could have the effect of achieving greater overall inter-regional equity. In Chapter 3 of Part 2 of this report, we identify that some of the concern in England about higher per capita spending in Scotland does not appear to be reflected in a reported support for a system of UK-wide fiscal equalisation, but rather to reduce levels of central government transfer to Scotland. In some cases that view is connected with support for a greater degree of fiscal autonomy in Scotland, so that the Scottish government would be responsible for financing its own spending. It would be interesting to understand if these views reflect that a commitment to a statewide solidarity community is eroding also in England. Some commentators suggest that decentralisation itself undermines solidarity and makes equalisation more difficult to sustain.

5.3 Autonomy & Accountability

5.3.1 Whereas the equity characteristic for financing sub national governments relates to delivering some equality of access to public services across the regions in a nation, targeting autonomy and accountability means connecting the spending decisions of the sub national government with the decisions needed to raise the corresponding revenues. Creating this connection means that the link between public service provision and the requisite taxation is evident to the electorate.

5.3.2 The term Vertical Fiscal Imbalance is used to describe the situation whereby a sub national government's spending and revenue raising powers are not matched. Hence the Scottish Parliament could be described as having a vertical fiscal imbalance with the block grant from the UK Government being a vertical fiscal equalisation to enable the Parliament to meet its expenditure needs.

5.3.3 Achieving autonomy in this context therefore means that the regional or sub national government has some tax raising powers, otherwise known as fiscal autonomy. Fiscal autonomy can be marginal (like the current 'tartan tax') or comprehensive (with a regional government levying all taxes on its territory, and making a payment to central government for any central services delivered on that territory, such as appears to be the case in the Basque Country and Navarre in Spain).

5.3.4 The claim that greater degrees of fiscal autonomy provide incentives for better economic management by regional governments is a strong one in economic theory, but problematic in practice. It presumes regional governments do not have those incentives in the absence of fiscal autonomy; yet governments probably do have incentives to improve economic performance given general agreement - in research as in practice ('it's the economy, stupid') - that economic competence is a major determinant of voting behaviour and therefore a prerequisite for re-election. In addition there appears to be no clear pattern from comparative analysis that winning or having greater fiscal autonomy necessarily or systematically is beneficial for economic growth. The empirical evidence on the impact of fiscal autonomy or decentralisation on growth is mixed. At the theoretical level, economists would suggest that there should clearly be incentives to improve economic performance if a regional government would benefit from such growth in terms of additional revenues. However, the evidence in practice both supports and confounds the theory and it is not clear which dominates. There is some positive correlation between revenue-raising autonomy and growth in European transition economies (see Meloche, Vaillancourt and Yilmaz), though not between fiscal decentralisation and growth. This suggests that if any benefits accrue they come from decentralising taxation, not merely expenditures. However, the difficulty with any studies of this type is that they are either based on cross-country regressions which might be picking up spurious correlations, or, as in the case of the work by Meloche and others, they focus on panel data with small samples, with minor regime shifts across time. It would be more interesting to see what impact a major change in fiscal autonomy or decentralisation has had on economic performance. But there are few countries for which such major shifts in regime are observed.

5.3.5 There is widespread agreement that fiscal autonomy increases the accountability of government, though again there is little systematic evidence that confirms voters or other mechanisms of accountability hold governments more effectively to account for their spending decisions under conditions of greater as compared to lesser fiscal autonomy.

5.3.6 For many proponents of greater fiscal autonomy in the Scottish context, the absence of systematic evidence may be immaterial; support for fiscal autonomy is part of a normative claim to greater self-government (either within or outside the UK) reflecting a sense of distinctive political community in Scotland.

5.4 Stability

5.4.1 Stability and predictability are, when viewed from the sub national government perspective, strengths of a funding system based on grants from a central government with centralised revenue collection. This contrasts with the greater revenue risks associated with increasing levels of fiscal autonomy. Raising taxation from the largest entity - the nation as a whole - increases the risk pool compared to fiscally autonomous regions raising the funding from a smaller entity. In other words, fiscal autonomy implies a narrowing of the solidarity community on which citizens

can draw. This effect can be exacerbated as partial fiscal autonomy implies a smaller tax base upon which to spread the revenue risks.

5.5 Simplicity and Transparency

5.5.1 Complete autonomy or complete grant funding is simple and can be made transparent. Any mixed system is less transparent. For example the mixed systems for financing Local Government in both Scotland and elsewhere in the UK, are a complex mixture of grants from central government, locally raised finance (Council Tax) and a redistribution from central government of Business Rates. Such complexity means these systems are not transparent to the electorate, although they are attempts to maintain accountability while controlling total spend.

5.6 Efficiency

5.6.1 Paragraph 2.2.1 noted that tax systems should ideally not create distortions whereby behaviour is driven (with the exception of "demerit" goods such as tobacco) by taxation rather than economic imperatives. The same logic applies to the financing, and indeed behaviours, of sub national governments. Ideally, the financing arrangements should seek to avoid creating economic distortions by incentivising movements of people and the factors of production.

5.7 Constitutional Design and Financing Devolution

5.7.1 This chapter has set out the parameters of the political debate - autonomy and equity - as well as introducing the practical considerations such as stability and transparency surrounding the financing of sub national governments. Because these parameters are to some extent mutually exclusive, systems of financing sub national governments inevitably involve trade offs.

5.7.2 The choices made between these trade offs require the philosophy (if there is one), or at least, the structure (as implied by the division of powers and the extent of their asymmetry) of the state to be established first. Finance is not the first link in a chain of constitutional design, but once the constitutional model is chosen, systems of territorial finance can be considered which are likely to help the state to function in the way it is intended, and their properties can be considered, producing a balance sheet of strengths and weaknesses.

5.7.3 The concepts of equity and autonomy are bluntly presented, but they are central to debates on territorial finance and in doing so articulate more fundamental constitutional choices between: a more tightly integrated UK with a more substantive and overt conception of union and of equity between its parts than currently exists; and, a less integrated UK in which union is more loosely defined, allows more autonomy for its component parts on a more asymmetrical basis, and is less concerned with statewide equity. These are deliberately stark contrasts, and of course endless variations and combinations are possible.

6 Alternative means of Funding Sub National Governments

6.1 Tax Assignment

Description

6.1.1 Tax assignment either allocates taxes raised through economic activity in a devolved territory to the devolved government, or, assigns tax receipts in fixed proportions from the national to the sub national government. If invoked for Scotland, the former would require the revenue collecting agency, in this case HMRC, to accurately determine the revenues from taxes raised in Scotland. Under the latter arrangement, some means of apportioning the taxes raised would be needed.

6.1.2 This model does not allow the sub national government to determine the tax base or tax rates. However, a more autonomous variation allows for a regional government to vary the rates of national taxes in an otherwise harmonised system, with the consequent changes added to or netted off the allocated budget (such as for the Scottish Variable Rate).

Implementation Experiences

6.1.3 Part 3 of this reports examines some international experiences in more detail. But an example of tax assignment by formula exists in Germany where income tax is split with the Lander and the state - each receiving 42.5% of income tax receipts and 50% of Corporation tax. But on top of this, a system - *Finanzausgleich* - of horizontal equalisation exists to harmonise revenues between the richer and poorer Lander. This is further supplemented by a number of federal grants that further transfer money to the fiscally weaker Lander. So although this system of tax assignment is uncomplicated and transparent, it sits within a more complex means of financing public expenditure. Some commentators argue that the equalisation payments and further supplementary federal grants have led to the Lander administrations lacking accountability. Although not necessarily a feature of a tax assignment model, this is an important consideration - the nature of such equalisation payments risk being perceived as a bail out for poor governance by the regions.

6.1.4 One of the most sophisticated examples of tax sharing exists in Canada, whereby the provinces are invited to harmonise their taxes with the federal government. They can set their own rates on a federally determined base, and the federal government acts as tax collector

for them. Both the Federal and Provincial governments generate further revenues from broader, and separate, tax bases. However, the Provincial governments' revenues are supplemented by elaborate equalisation payments from the federal government, two of which are equal per capita transfers based at addressing vertical fiscal imbalances and are hypothecated- the Canadian Health Transfer and the Canadian Social Transfer and the other is an equalisation programme which delivers grants to provinces based on their tax capacity.

Strengths and Weaknesses

6.1.5 The key strength of a tax assignment model is that it provides a sort of accountability to a sub national government in that its revenues depend on, to some degree, the economic performance of the region. In other words, an administration funded by the assignment of taxes has an incentive to grow the tax base. However, tax assignment rather than autonomy means the national government retains control of overall taxation levels and thus macro-economic and fiscal balances remain in the control of central government.

6.1.6 The disadvantages are that the sub national government is not accountable to the electorate for taxation decisions, and indeed its revenues are determined to a large extent by the fiscal policies of the central government. This could be mitigated to a degree if the sub national government can effectively influence the national government's fiscal policy (for example by a means similar to the Steel Commission's proposed Finance Commission for the Nations and Regions). The dilution of accountability might provide an incentive for the national and the sub national government to seek to apportion blame to the other.

6.1.7 A sub national government lacks a degree of autonomy if it lacks powers to use taxation as a policy instrument.

Impact On Equity

6.1.8 Funding public expenditure by tax assignment alone does not deliver equivalent access to public services across a nation- quite the reverse applies as different regions will have different tax capacities. This is addressed in countries that fund sub national governments by tax assignment by equalisation payments from the central to the devolved government, as happens in Canada and in Germany.

Fiscal Consequences

6.1.9 In comparison to a financing model based around a block grant, tax assignment exposes the recipient devolved administration to a degree of revenue volatility. National Governments are able to overcome this by borrowing, whilst the risk of revenue volatility is reduced with a broader tax base. But a sub national government might potentially be able to borrow against its (limited) tax base in order to compensate for revenue volatility. This would serve to make the management of total indebtedness at the national level more complicated.

6.1.10 However, a system of tax assignment or tax sharing with sub national governments either having no borrowing powers, or constrained borrowing powers, does not decentralise the National Government's control over macro economic policy. This is not the case for models that allow sub national governments to vary national tax rates or the tax base, or to borrow without constraints.

Economic Consequences

6.1.11 So long as taxation rates remain the same across a nation, tax assignment is unlikely to create any distortionary effects as businesses and individuals across all regions remain within the same centralised taxation system and no behavioural responses are incentivised.

Further Considerations

6.1.12 A key consideration in the Scottish context would first of all be to determine which taxes the revenue assignment would apply to, and also, the basis for their assignment or apportionment. This has important consequences for the ease, or otherwise, with which this may be implemented. Assigning a fixed percentage, such as that based on populations, might offer benefits for operational simplicity but could serve to dilute the degree of accountability when compared to assigning actual Scottish revenues.

6.1.13 Consideration of a model that would seek to fund the Scottish Parliament by the assignment of a "Scottish share" of some or all national taxation revenues is not complete without consideration of the Government Expenditure and Revenue in Scotland (GERS) data, that seeks to estimate Scotland's overall fiscal balance. This is considered in further detail in Part 2 of this report.

6.1.14 The primary finding of GERS over a number of years is that Scotland has a structural fiscal deficit - the total public expenditure in Scotland exceeds the taxes raised. GERS 2006-2007 shows that in 2006/7, expenditure by the Scottish Parliament was £29.9 billion, identifiable UK Government expenditure was £13.3 billion and non-identifiable expenditure by the UK Government was £6.8 billion. These figures can be compared to the GERS estimate of the revenue from all UK taxes in Scotland, shown in table 6.1 below, although in part 2, we do highlight the uncertainty over these revenue estimates.

6.1.15 The tax base at the foot of this table is that relating to natural resource exploitation in the UK Continental Shelf. Within the UK national accounts, these are

Table 6.1: Taxation revenues, Scotland and UK 2006-07

Taxation revenues, Scotland and UK 2006-07	Scotland	UK
	£ million	£ million
Income tax	10,338	141,142
Corporation tax (excl North Sea)	3,019	37,156
Capital gains tax	308	3,812
Other taxes on income and wealth	248	2,992
National insurance contributions	7,464	90,976
VAT	7,449	87,728
Fuel duties	1,958	23,585
Stamp duties	686	13,393
Tobacco duties	981	8,146
Alcohol duties	768	7,914
Betting and gaming and duties	95	961
Air passenger duty	94	1,112
Insurance premium tax	195	2,305
Landfill tax	75	825
Climate change levy	73	696
Aggregates levy	50	324
Inheritance tax	228	3,618
Vehicle excise duty	400	5,139
Non-domestic rates[1]	1,833	19,904
Council tax	1,812	22,340
Other taxes and royalties[2]	492	5,965
Interest and dividends	628	6,318
Gross operating surplus	2,757	22,452
Rent and other current transfers	403	1,812
Total current revenue (excluding North Sea revenue)	**42,353**	**510,615**
Ex Regio (North Sea Revenue)	7,563	9,075
Total current revenue (including geographical share of North Sea revenue)	**49,915**	**519,690**

[1] Excludes non-domestic rates that local authorities pay themselves.

[2] Although this group includes some 14 separate revenues (see detailed methodology paper on the GERS website) the two largest - TV Licences and National Lottery Distribution Fund - account for 77% (£379 million) of this estimate for Scotland.
Source: Scottish Government GERS 2006-07

considered to be ex regio. There is an accepted rationale for this arrangement, although there are recognised positions that reject this view as well. However, if a geographical share of oil and gas taxation receipts is added to Scotland's fiscal balance, the structural deficit remains but is much diminished.

6.1.16 Both the economic and political consideration for allocating natural resource taxation revenues to either the national or regional level merit further consideration elsewhere. Furthermore, within the Scottish context, the factors that will determine the future of this revenue stream are relevant. These include the impact of the volatility in commodity prices and also the impact of the fiscal regime in relation to decommissioning costs.

6.1.17 A different consideration, but retaining the Scottish context, would be that if the Scottish Government's budget was to become partly funded by assigned taxes, some limited expansion in its existing administrative capacity would be needed. Specifically, it would need to develop the capacity to monitor and forecast revenues whilst the borrowing powers, introduced at paragraph 6.1.9, would necessitate the development of some management and control function. The issue of borrowing is further discussed in Chapter 7.

6.2 Grant Based Systems

Description

6.2.1 Whereas Tax Assignment and Fiscal Autonomy deliver funding for a sub national government based on

taxation revenues, an alternative approach is for a central government to provide funding by means of a grant. Such grants may be used to achieve either Vertical or Horizontal Fiscal Equalisation.

6.2.2 A Vertical Fiscal Imbalance, as set out at 5.3.2 above, describes the situation of a sub national government having spending powers and responsibilities but where revenue raising powers are centralised. Hence, a grant that delivers Vertical Fiscal Equalisation is a financial transfer from the central, revenue raising, government to the regional government so that it can meet its expenditure obligations.

6.2.3 Paragraph 5.2.1 above described a Horizontal Fiscal Equalisation, whereby a central government provides finance for a sub national government in order to facilitate the equitable access to public services across all regions. Horizontal Equalisation describes the reallocation of resources from the more prosperous to the poorer regions. It can be made on the basis of equalising income or on the basis of addressing "need", but either (or in the case of Australia, both) is an expression of solidarity between citizens and regions that comprise the nation as a whole.

Implementation Experiences

6.2.4 The current arrangements in the UK, described in greater detail in Part 2 of this report, whereby the UK Government allocates nearly the entirety of the funding for the devolved administrations in the UK is an example of Vertical Fiscal Equalisation. At face value, the UK devolved administrations' spending is determined by the size of the Vertical Fiscal Equalisation grant itself, rather than the size of the allocations being based on the spending requirements, although such an analysis perhaps neglects both the history and the original derivation of those payments.

6.2.5 The most sophisticated example of Horizontal Fiscal Equalisation is the Australian model (see Part 3 Chapter 1), which formally reconciles need with taxable capacity across the states and territories of Australia. Alternative approaches are adopted in Canada where horizontal fiscal equalisation payments from the federal government to the state governments are based on per capita fiscal capacity. Neither system is without controversy, and the Australian experience in particular emphasises how "need" is extremely difficult to assess.

Strengths and Weaknesses

6.2.6 Vertical Fiscal Equalisation Payments, such as those made from the UK Government to the devolved administrations in Scotland, Wales and Northern Ireland, can be operationally simple. This contrasts with Horizontal Fiscal Equalisation payments calculated by reference to need, which is difficult and contentious to quantify, although horizontal fiscal equalisation based on tax capacity is easier to determine. Estimating need is controversial, with donor regions resenting payments - or burdens - they consider too high and recipient regions feeling they do not get enough. This situation can - and in the UK's case does - further arise where grants are made without the firm evidence of "need".

Impact on Equity and Accountability

6.2.7 Horizontal Fiscal Equalisation specifically addresses the objective of attaining equity across regions. Vertical fiscal equalisation can also be seen as achieving equity, depending on the basis on which grants are made. Equity is not necessarily synonymous with need, and in the UK's case, "need" is not a formal part of the calculation of the block grants provided to the devolved administrations.

6.2.8 Common to both is that financing a sub national government by a grant from central government does not deliver full accountability - spending decisions are not connected to taxation decisions.

Fiscal Consequences

6.2.9 Grant based systems that do not require the decentralisation of a national tax system are without fiscal impacts.

Economic Consequences

6.2.10 Economic theory suggests that a more accountable administration, responsible for raising its own revenues rather than receiving them by a grant, should be more incentivised to deliver policies aimed at increasing economic growth (in order to expand its tax revenue potential) and also be more able to shape policies to meet the needs of their jurisdictions. However, the empirical evidence to support this link is mixed.

6.3 Fiscal Autonomy & Fiscal Federalism

Description

6.3.1 A system of **full** fiscal autonomy is where sub national governments have responsibility for raising the entirety of their own revenue. The region would therefore have tax raising, as well as borrowing, powers in order to achieve this. This is distinct from lesser degrees of fiscal autonomy- the word "full" is important in this description, - a devolved administration with **full** fiscal autonomy would control **all** taxes. "**Some**" fiscal autonomy implies the control of "**some**" elements of the tax base.

6.3.2 **Fiscal federalism** is a term with many meanings, but usually it relates to a situation whereby some degree of fiscal autonomy is present but in the context of a federal, rather than unitary, state, implying a very different constitutional design than the one currently existing in the UK.

Implementation Experiences

6.3.3 At first scrutiny, one of the regions that comes closest to "full" fiscal autonomy is the Basque region of Spain. The 1978 Spanish Constitution facilitates a system of asymmetric devolution whereby the autonomous communities effectively choose which matters they wish to be responsible for. Although the Central Government is assigned exclusive authority for coordination of the economy, the Constitution confers taxation powers upon the Autonomous Communities. The national government however has legal powers to limit taxes established by the Autonomous Communities, so in practice, the state's authority substantively reduces the fiscal autonomy of the Autonomous Communities.

6.3.4 But the Basque Autonomous Community, reflecting its history and identity, has the highest levels of economic and institutional autonomy within Spain and possibly all of the EU. Such is the degree of autonomy held by the Basque Country that an Economic Agreement exists between it and the Spanish Central Government. This confers the right for the Basque country to have its own tax systems, which include most of the powers to regulate and administer the main taxes, including corporate and personal income taxes but excluding VAT. This Economic Agreement also includes provisions aimed at guaranteeing harmonisation between the regional and national system. So whilst the Basque Country might appear to have a very high level of fiscal autonomy, its powers are still very much constrained by the National Government.

6.3.5 An alternative illustration relates to the Finnish Äland Islands, situated in the Baltic between Sweden and Finland. The archipelago consists of more than 6,500 islands, of which around 60 are inhabited by a total of around 26,500 people. Äland is Swedish speaking, making it a distinctive minority within Finland, and prosperous with GDP/Capita over 50% above the EU average and over 30% above the Finland average. Äland's historic degree of autonomy means it now has its own legislative assembly, enshrined in Finnish Law in 1990. The powers of the Äland assembly mean that it has autonomy over spending and limited additional income, trade and amusement/entertainment taxes above those levied by the Finnish State, but not full competence for income and indirect taxation. This limited fiscal autonomy is legitimised by derogations given at the time of Finland's accession to the EU which exclude Äland from the territorial application of tax harmonization provisions. This was primarily aimed at ensuring tax free sales on ferry traffic to and from Äland, seen at the time as the most effective means of ensuring the economic welfare of a region whose value chain consists of shipping, tourism and related financial services. It means that there is a virtual tax border between Äland and the EU which has since been considered to have disadvantaged other sectors of the Äland economy.

6.3.6 Neither Finland nor Äland has reached a definitive view on whether the community is a net contributor or recipient to the Finnish State finances. Äland receives an annual contribution to cover the costs of autonomy, based on the application of an index to the overall State budget revenue, supported by various extraordinary grant mechanisms and a tax retribution mechanism, reflecting the community's wealth relative to the Finnish average. The prevailing opinion in Äland is that the State taxation regime is not suited to their needs (Äland is increasingly seeking to attract revenues from mobile tax bases in financial services and shipping) and the degree of fiscal autonomy remains contentious.

Strengths and Weaknesses

6.3.7 The key strength of full fiscal autonomy is that it creates an absolute link between revenue raising and spending decisions - there is no vertical fiscal imbalance. This in turn incentivises the sub national government to increase economic growth in order to increase the tax capacity of the region.

6.3.8 Proponents of full fiscal autonomy in the Scottish context also make a number of further points. They argue that a fiscally autonomous Scottish Parliament would be incentivised to save where possible, in contrast to current arrangements that provide little incentive to spend less than the budget provided by the block grant system. Some also assert that the current arrangements that divorce revenue raising and spending powers compromise the allocative efficiency of spending and do not adequately incentivise innovation in the provision of public goods and services.

6.3.9 Expressed differently, full fiscal autonomy should incentivise efficient government by delivering a greater accountability for spending policies and also, by creating a hard budget constraint without the possibility of a bail out from central government.

6.3.10 There are a number of recognised weaknesses of full fiscal autonomy, some of which relate to the equity and economic consequences identified below. Full fiscal autonomy may also create different tax levels within nations which can contravene EU State Aid rules, considered in chapter 7 below.

6.3.11 A key consideration is whether a region with **full** fiscal autonomy, thus having different fiscal and economic policies as well as its own tax (and possibly benefits) system, is to all intents and purposes, independent. If this is the case, **full** fiscal autonomy would not be compatible with continuance of the union that is the United Kingdom.

Impact on Equity

6.3.12 Allowing a sub national government complete fiscal autonomy does not provide for an equitable provision of public goods and services within the nation state. This same argument also applies to sub national governments funded solely by the assignment of taxes. Jurisdictions with different levels of income and wealth, such as the countries and regions of the United Kingdom, will have very different tax resources at their disposal, and the achievement of a roughly equal level of public services across the nation therefore implies some degree of redistribution between sub-central governments.

Fiscal Consequences

6.3.13 Under complete fiscal autonomy, a sub national government is wholly exposed to revenue risk and variation. It would therefore need to be able to borrow against its tax base in order to mitigate these effects, but this, and the creation of a separate taxation system, create obstacles to the management of national economic aggregates.

6.3.14 In the Scottish context, full fiscal autonomy, and the associated fiscal decentralisation, would require the creation of a central Scottish treasury function to manage and forecast the raising of revenues and any loan finance. It may also require separate collection arrangements if the current national tax collection structures within HMRC were not able to adapt to the chosen regional tax regimes.

Economic consequences

6.3.15 As stated above, the empirical evidence linking increased devolution of fiscal and economic powers with the economic performance of devolved regions is mixed and theories are marshalled for both the negative and positive impact.

6.3.16 The closer accountability and scrutiny that applies under circumstances of full fiscal autonomy alone might provide an incentive for "better" government that allocates resources more efficiently, whilst the ability of decentralised governments with fiscal and economic powers to better shape policies for their jurisdiction can create the conditions for improved economic growth.

6.3.17 Some proponents of full fiscal autonomy in the Scottish context suggest that the current arrangements, which they consider lead to a degree of over provision in Scotland's budget, result in the public sector crowding out private sector activity. This is not necessarily an argument for full fiscal autonomy, and if it were proven that Scotland's public sector was damagingly large, it is more an argument for a reduced level of public spending in Scotland than a change to the means of funding that public spending.

6.3.18 But countering this are a number of potentially negative effects. One economic consequence of full fiscal autonomy can be tax exportation. This can lead to the sub-optimal provision of public services, for example where non-residents benefit from public service provision funded by the autonomous region (as sometimes happens in large metropolitan areas and satellite towns). A specifically Scottish example of this might be how the funding of improved transport infrastructure would benefit the English and Northern Irish economies by making goods easier to transport from England to Northern Ireland using the Stranraer and Cairnryan ferry services.

6.3.19 Another consequence is that different levels of taxation can lead to tax competition. Tax competition is not necessarily economically damaging, indeed, tax competition can have positive effects. It may however lead to the potential migration of factors of production - as exemplified by the considerations in assessing if corporation tax in Northern Ireland should be reduced to the Irish Republic's levels. Tax competition is a fact of life in most federal systems, and the mobility of capital and labour imposes natural limits on fiscal autonomy. Hence, many local taxation systems focus on fixed factors of production such as property and user charges for local services.

6.3.20 There may be economic consequences from the creation of an additional taxation regime- were it possible- for Scotland. The UK economy is at present highly integrated- indeed an argument put by the strongest advocates of retaining the union is that the United Kingdom is the oldest free trade area in the world. Behind this rhetoric is the reality that goods, capital and services are traded incessantly across the borders within the United Kingdom, and the creation of a different fiscal regime within a part of that area could disrupt that trade by creating an administrative burden to those operating on both sides of the border.

Further considerations

6.3.21 Consideration of fiscal autonomy in the Scottish context must acknowledge Scotland's fiscal balance, introduced at paragraph 6.1.13. The GERS results show that Scotland has a structural fiscal deficit, even with a share of North Sea Oil Revenues. This carries an implication at least for the starting point for a Scottish Parliament responsible for raising all of its own revenues, especially given the further significant expenditure identified in GERS by the UK Government in respect of Scotland.

6.3.22 Whilst we believe it is difficult to visualise how full fiscal autonomy for the Scottish Parliament might be consistent with the maintenance of the union, an alternative is to consider a lesser degree of fiscal autonomy.

6.3.23 Many sub national governments do depend on some level of autonomously defined taxes for a proportion of their funding, but nearly all of these are also funded by further subventions from the national government - often to achieve a degree of equality of provision of public services between regions. Similar concerns relate to the nature of these payments as might apply to equalisation grants supplementing assigned tax revenues. Specifically, there is a need to ensure these represent a real budget constraint and do not end up as bail out payments with Central government financing an overspent devolved government.

7 Other Considerations

7.1 Devolved Administrations And Borrowing

7.1.1 If a region in a devolved system is financed through any method except the block grant, which provides it with complete certainty of funding, it is likely that borrowing will need to be allowed at sub-national level to smooth financing requirements. Borrowing allows a region to smooth out the effects of both positive and negative economic shocks which impact on taxation revenues.

7.1.2 Borrowing might also be desirable to allow greater flexibility at sub-national level to undertake capital expenditure.

7.1.3 Allowing regions freedom to borrow can undermine national macroeconomic policy, since the aggregate of regional borrowing may not be consistent with national debt/fiscal policy. It is likely that if borrowing is introduced at sub-national level, the national government would wish to have constitutional safeguards that allowed it some control over regional borrowing, or a system of inter-governmental negotiations on the limits to borrowing.

7.1.4 The exposure to revenue risk and the consequent borrowing requirements would impact upon the administration of a sub national government in that it would need to develop the capacity to forecast and manage revenues and also control the borrowing function.

7.1.5 Domestic fiscal stability pacts are commonplace in countries which allow sub-national government borrowing, but some countries also rely solely on market discipline to regulate borrowing, or use balanced-budget rules in the medium-term to regulate sub-national governments.

7.2 EU Law: State Aid Rules

7.2.1 Within the EU, the scope for differing tax levels operating within a member state is constrained by the EU State Aid Rules. That is to say, the range of financial arrangements possible in Scotland is constrained by EU law in general (for example, compliance with the freedoms of movement and the VAT Directive), but in particular the prohibition against "state aid" has to be considered. Recent decisions of the ECJ have made it clear that, in principle, a preferential rate or tax system applying to a particular region of a state may constitute state aid. In order for a tax measure potentially to come within the state aid rules, it must be selective in the sense that it does not apply across the whole "reference area". If the reference area is the whole of the UK, a measure applying only to Scotland would be selective. However, if the reference area is restricted to Scotland, then the same provision in question could not constitute state aid. Case law has provided some assistance in circumstances of asymmetric devolution in determining whether one looks to the region or the whole state in testing tax differentials, with the answer depending on the degree of autonomy of the region gaining the benefit of the special tax regime. According to the European Court of Justice (ECJ), if the region has sufficient institutional, procedural and economic autonomy, it is the region, and not the whole member state, which will be the area by which selectivity is judged.

7.2.2 Judged against present constitutional arrangements, it would be unexpected if Scotland's democratically elected government did not satisfy the requirement of institutional autonomy. Clearly complete autonomy is not required (in this case one would have separate states rather than regions within a state). There would have to be a very different relationship between Scotland and the UK for this condition to present a realistic hurdle.

7.2.3 Procedural autonomy is achieved where the tax rules may be operated "without the central government being able to directly intervene as regards its content". Arrangements surrounding the current SVR would clearly appear to satisfy procedural autonomy, as would any permanent tax freedoms granted to the Scottish Government which could be operated without authorisation or veto from Westminster. This is distinct from the UK Government applying a differential tax rate to Scotland.

7.2.4 Finally, turning to economic autonomy, it is clear that the most important aspect of this is that the fiscal effects of any special tax rules introduced by the Scottish Parliament must be borne by Scotland alone. Autonomy implies responsibility for policy choices and Westminster must not be able to share in any increase in revenue, nor

liable to reimburse any shortfall. This in turn requires that any transfer from Westminster to Scotland must be predetermined and independent of the exercise of any Scottish tax powers. Hence a system of fiscal autonomy allied to equalisation payments would need careful scrutiny to determine its legality in EU Law. The same principle would apply under a system whereby Scotland reimbursed Westminster for centrally financed services.

7.2.5 In summary, the restrictions imposed by the state aid rules are unlikely to impact significantly on at least some, if not most, of the types of tax freedoms which would be exercised by Scotland, although care must be taken to ensure first, that they are genuine freedoms and, second, that there are no compensatory transfers.

7.3 Double Taxation Agreements

7.3.1 Double taxation agreements (DTAs), as international agreements implemented through statutory instrument in the UK, would continue to affect taxpayers in a fiscally autonomous Scotland, so some thought must be given to the impact on these should Scotland operate different tax arrangements from the rest of the UK. The UK is presently a signatory to over one hundred DTAs.

7.3.2 Typically, DTAs are bilateral agreements which operate by allocating the right to tax to one jurisdiction or the other in a cross border situation (either the state of residence of the taxpayer or the state where the income arises). Alternatively, and frequently in practice, taxing rights are given to both states concurrently in which case the DTA will provide that one state (usually the state of residence) will give credit for the other state's tax on a particular source of income.

7.3.3 If Scotland is given power to vary rates of tax only, the problems are largely administrative in nature. The non-UK tax jurisdiction will have to distinguish between income arising to their residents from a Scottish source and from a source elsewhere in the UK for the purposes of ensuring the correct amount of credit is given. The UK tax authorities (if such a thing continues to exist for these purposes) will similarly have to bear the differential tax rates in mind when operating the treaty in relation to UK residents with income arising abroad.

7.3.4 However, if rather wider powers are given, the treaty arrangements might potentially run into difficulties which are not just administrative in nature. It is impossible to deal with the impact of every potential tax change, so just a couple of examples are given here.

7.3.5 Relief under treaty is usually restricted to income and corporation taxes so, should Scotland decide to replace its corporation tax with a combination of local property tax and payroll tax (as suggested in Gibraltar), non-UK companies operating in Scotland would be unlikely to be eligible for a tax credit in their home country for these taxes, because these taxes will not be specifically mentioned in the treaty. This would discourage non-resident enterprises from operating in Scotland unless and until treaties could be renegotiated.

7.3.6 Tax credits might also cause an issue should, for example the Scottish Government offer a different tax credit on company dividends than that available in the rest of the UK. Several of the UK's treaties offer a whole or partial refund of such credits, and a different Scottish rate would have an impact both on taxpayers within our treaty partners and the Treasury (or its Scottish equivalent).

Part 2: Current arrangements in the UK

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1 Current Financing arrangements for the Scottish Parliament

1.1 A Description of the Barnett Formula and Some History

1.1.1 The Devolved Administration in Scotland is funded - with the exception of council taxes and business rates - by a block grant from the UK Government. Changes to this block grant are calculated by the Barnett formula.

1.1.2 This arrangement has been in place since 1979 - 20 years before the creation of the Scottish Parliament. The "Scottish Block" was introduced in 1978, although the concept goes back to the 1888 Chancellor, Lord Goschen, who derived a formula to determine the budgets for the administrations in Scotland and Ireland. However, the 1979 arrangements confirmed the Secretary of State for Scotland's freedom to allocate funds within this overall funding envelope, without having to consult with HM Treasury on the specific allocation. Barnett was introduced for Wales and Northern Ireland two years later.

1.1.3 In 1979, the block budget for Scotland (and the equivalent for Wales and Northern Ireland) was not deemed to need constraints on expenditure as the territorial Secretary of State was bound by UK Cabinet Collective responsibility. The budgetary freedom was intended to allow them scope to adjust priorities within that. This freedom has continued after devolution - the UK devolved administrations have near total autonomy over spending.

1.1.4 The Barnett Formula operates by taking the amount the Scottish Parliament received the previous year and then adding (or subtracting) a population based share of changes to UK Government spending for England or England and Wales on matters devolved to Scotland. It is an incremental rather than a zero based system - the spend in one year is based on the spend the year before.

1.2 The Scottish Parliament's Tax Varying Power

1.2.1 Beyond its scope to determine local taxation (which accrues around £4billion compared to a block grant now worth towards £30billion), the Scottish Parliament is presently entirely funded by this block grant from the UK Government. The 1998 Scotland Act provides the Scottish Parliament with a modest tax varying power (up to 3 pence in the pound on the basic rate of income tax, compared to a basic income tax rate of 20 pence in the pound). The Scottish Parliament does not have the power to raise or vary any other taxes - these are reserved to the UK Government and collected nationally by HMRC.

1.2.2 This tax varying power is sometimes called the Scottish Variable Rate or SVR. If it were invoked, the Scotland Act determines that corresponding increases or decreases be made to the block grant. In the 2008 budget, HM treasury estimated that the marginal yield of each 1 penny of SVR would be £380million. Hence the maximum that could be raised would be £1.1billion in one year, around 4% of the Scottish Parliament's total budget.

1.2.3 Provision is also made in the Scotland Act for the Devolved Administration to reimburse the UK Government with the associated costs of administering the SVR.

1.2.4 The SVR has not been used since the creation of the Scottish Parliament and whilst HMRC clearly has a well established mechanism for the collection of income tax on a national basis, arrangements for implementing the SVR are not in place. Some of the operational detail required to implement the SVR therefore remains unresolved - for example the treatment of tax reliefs associated with certain investments.

1.2.5 Overall, the SVR might also be seen as a very simple example of tax sharing, whereby the national and sub national jurisdictions have access to the same tax base.

1.3 Relative Levels of Public Spending in the UK

1.3.1 Scotland's budget is often perceived by observers in the rest of the UK as over allocating resources to Scotland, usually at the expense of the regions of England. Viewed from Scotland, the current SNP led administration portrayed the allocation from the most recent spending review in 2007 as "the worst settlement since devolution". Both of these positions merit some exploration.

1.3.2 Public spending per head in Scotland has exceeded that in England since around 1900, long predating devolution. The arrangements that preceded Barnett - the Goschen Proportion - derived from the 19th century and assigned Scotland £11 for every £80 assigned to England and Wales on particular programmes. This 11/80 derived from the relative populations when this arrangement was introduced in 1888, but by 1901, the Scottish population had dropped to below 11/80th of that of England and Wales. This decline continued through the 20th century - by 1976 the Scottish population was nearer 8/80th of that of England and Wales, although by the 1970's there were different political imperatives for maintaining high levels of public expenditure in Scotland. And by the 1970s, public spending per head in Scotland was over 20 per cent above that in England.

1.3.3 This history is important, for although the Barnett formula only applies to changes to the budget, the way the formula and inflation were treated through much of the 1980's and 1990's to some degree locked in the historical budget baseline from the 1970's, which in turn was perceived as being overgenerous. Indeed, in

1979, a needs assessment exercise undertaken by the Government of the day, determined that Scotland's public spending needs per capita for a range of services then managed by the Scottish Office, were around 16% higher than for England, whilst actual spending levels were around 22% higher.

1.4 Convergence of Public Expenditure Levels

1.4.1 Other things being equal, and in particular the relative populations, Barnett will lead to convergence of public spending per head between the constituent parts of the UK. Convergence should occur as the sum of the incremental changes becomes greater over time in comparison to the initial block grant of year zero (in fact 1979-80). Hence, the per capita spending on devolved policies will asymptotically equalise. So one would expect that the block grant to the former Scottish Office in 1979/80 which gave Scotland a 22% advantage over England would, through the passage of successive population based incremental increases, now lead to a block grant corresponding to per head spending on devolved issues to be nearer that in England.

1.4.2 There is no published data to support an exact analysis of convergence. There is no data published for public expenditure over time that identifies spending in England, or spending elsewhere in the UK, on those matters that are devolved to Scotland. The identification of UK Government spending on matters devolved to Scotland is further complicated by the asymmetry of devolution in the UK. Additionally, over time, new matters are devolved, most recently railways, which resulted in a transfer from the DfT budget to Scotland.

1.4.3 Further frustrating such analysis is that what published data there is relates to actual spending rather than allocations. Barnett convergence should apply to allocated budgets, but analysis over short timescales will mean the real world differences between allocations and actual spending (for example by planning enquiries halting infrastructure projects) necessarily exist. These will result in actual spending data potentially providing a distorted picture. Expenditure control rules implemented since 1997 mean that Government Departments can allow for these real world situations under the End Year Flexibility (EYF) arrangements. The significance of this is highlighted by the Scottish Executive having accrued £1.5billion in EYF by 2007, compared to a Departmental Expenditure Limit of around £25billion for that year.

1.4.4 But putting these difficulties aside, the best data there is (see chart 1.1 below) does not show the sort of convergence of public spending levels that one might have expected, especially given the high growth of public expenditure at the beginning of this decade.

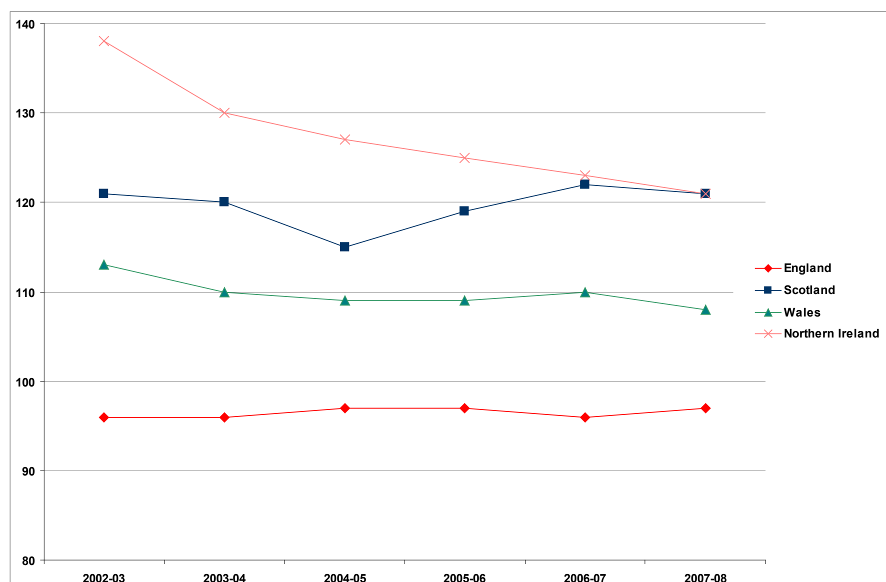

Chart 1.1: Index of identifiable public expenditure per head in the UK, excluding social protection and agriculture. UK = 100

1.4.5 Convergence has not happened for two reasons. Firstly, population factors were not updated very frequently until 1997, so Scotland's population decline relative to England would cause a degree of over allocation that will serve to work against convergence. Furthermore, the funding baseline of 1979, or the one created in each subsequent review, has not been adjusted downwards to reflect the relative reductions in Scotland's population. This will be significant, as Scotland's population has fallen by over 1% since 1979 whilst that of England has grown by around 8%. The second factor that has impeded convergence is that prior to 1992/3, inflation was allowed for in rolling forward the baselines of government departments, hence the Barnett convergence effect applied only to the real term expenditure growth (which was not substantial during this period). Since then, Barnett has been operated on a nominal cash basis - no separate addition is made for inflation and the overall change is determined by the formula.

1.4.6 Overall, it is not possible to conclusively rebut the grievance that Scotland continues to receive unduly high levels of public expenditure compared to the other countries and regions of the UK. There has been no new assessment of needs, and indeed assessing what constitutes need would be a controversial exercise in itself. For example, lower levels of life expectancy in Scotland might suggest a continuing need for higher levels of healthcare spending in Scotland than in England. However, what data there is does not show the sustained convergence in public spending one might expect to have occurred since Barnett began to be rigorously applied after 1997, which in turn suggests that some attributes of the original 1979 baseline may persist.

1.5 Barnett Squeeze

1.5.1 But as stated above, some consider the exact opposite of this to be the case, and that Scotland is somehow hard done by Barnett. This prompts two observations.

1.5.2 Firstly, the term Barnett Squeeze is sometimes used to describe the arithmetical result of identical per head increases to public spending representing a greater percentage increase in per head spending in England than in Scotland. This arises because the English spending is from a lower per head base. The term "Barnett Squeeze" is therefore a presentational device to describe an intrinsic part of the operation of the formula.

1.6 When Should Barnett Apply?

1.6.1 A second criticism relates to the apparent uncertainty and sometimes, it is alleged, arbitrary nature of when spending has Barnett consequentials and when it does not. This has recently created tensions between the Devolved Administrations and the UK Government.

1.6.2 An example of this relates to the £1.2 billion increase in spending on prisons in England and Wales in response to the Carter Review and pressure on prison places. This extra spending was taken from the UK reserve, outside of the Comprehensive Spending Review, meaning there was no Barnett consequential for Scotland. Further examples have been when spending has been deemed to be for the benefit of the UK as a whole, such as for the Channel Tunnel or for the 2012 London Olympics.

1.6.3 This criticism aside, one of the key attributes of the Barnett formula as currently applied is the ease with which it operates. It requires no complicated assessment of indicators, or even selection of indicators. Negotiations and disputes between the Devolved Administrations and the UK Government relate to the margins of the allocated budget rather than the greater part of its substance.

1.7 Strengths and Weaknesses

1.7.1 The key strengths of the Barnett formula are its operational simplicity, the stability of funding it provides to the Devolved Administrations and the clear reservation of managing economic and fiscal aggregates to the UK Government.

1.7.2 Starting with the baseline and using a population based formula to determine the changes to the budgets of the devolved administrations provides a streamlined process. Nearly any alternative is bound to be more complex and is likely to lead to protracted negotiations and/or incur additional administrative effort.

1.7.3 Barnett, allied to the UK Government's 3 year time horizon for spending plans, results in the Devolved Administrations having near total certainty over their assigned budget from year to year. They bear no revenue risk - that is borne by the UK Government.

1.7.4 Decisions over fiscal aggregates and stabilisation policy are entirely in the hands of central government, making policy coherence more readily achievable.

1.7.5 Perhaps the principal weakness of Barnett is that it creates a vertical fiscal imbalance: - the Scottish Parliament lacks financial accountability. This weakness also manifests itself in the Parliament having almost no control over the size of its budget. At present, the financial powers of the parliament relate almost entirely to spending decisions only. It has no powers to borrow for any purpose, nor does it have a tax base to borrow against. Furthermore, the absence of fiscal autonomy means that it is not able to exploit fiscal measures as policy instruments.

1.7.6 Part 1 of this report describes how a sub national government's revenue raising powers relate to its financial accountability with the links between spending and

taxation more evident to the region's electorate. In other words, there is greater transparency of the trade-offs between the marginal benefit from extra services versus the extra costs of provision. At present the Scottish Parliament, SVR and local taxes aside, does not have such accountability. A different articulation of this argument is to note there is little political incentive to invoke policies to increase economic growth in Scotland because any increase in taxation revenue accrues to the UK Government.

1.7.7 Some commentators also assert that a vertical fiscal imbalance creates an incentive for governments to shift blame to one another and to shirk doing things that may be economically efficient but politically unpopular.

1.7.8 A related weakness of the current Barnett based system for financing the Devolved Administrations is that it is not enshrined in statute. Rather it is an accepted agreement between the Devolved Administrations and HM Treasury as set out in HM Treasury's "Statement of Funding Policy for the Devolved Administrations". So although this means that the operation of Barnett is very transparent and publically accessible, changes do not require UK Parliamentary approval or the agreement of the Devolved Administrations. This means that formula by-pass, parameter changes, and even changes in departmental baselines before applying the formula could be applied unilaterally by HM Treasury.

1.8 Impact On Equity

1.8.1 The Scottish Parliament's budgetary allocation has no bearing on measured needs- therefore potentially creating a horizontal fiscal imbalance. The size of the original Barnett baseline in 1979 provided Scotland with a greater per capita expenditure than that in England. But Scotland now outperforms many areas of England - for example GVA/head in Scotland exceeds all the English regions outside of London, the East and the South East. This alone is not necessarily a good indicator of "need", but it does result in an increasing number of challenges to Scotland's budgetary allocation.

1.8.2 Although by its very nature, devolution means differing provision of public services will emerge in the longer run, these challenges are based on the assertion that some parts of the UK lose out, and it is therefore not possible to deliver similar levels of public services across the UK.

1.9 Fiscal consequences

1.9.1 As noted earlier, the Scottish Parliament - SVR and local taxation aside - has no tax raising powers. Nor can it increase its budget by borrowing as it has no tax base against which to borrow. But equally, as its revenues take the form of a block grant, it bears no revenue risk, so any need to borrow to compensate for lower than anticipated revenue streams is non existent.

1.9.2 This arrangement also means that the UK government is able to control fiscal and economic aggregates, with government debt centrally controlled. It also means that (again notwithstanding local taxation) that the tax base and rates are harmonised across the UK- there is no scope for tax competition between regions.

1.9.3 Although not a consequence of the formula based means of allocating the Scottish Parliament's budget, the Government Expenditure and Revenue in Scotland (GERS) data suggests that Scotland has operated at a fiscal deficit over many years. GERS attempts to estimate the size of tax revenues raised in Scotland, and compares this to the totality of Government spending, which includes the readily identifiable sums of the block grant to the Devolved Administration and expenditure by the UK Government in Scotland as well as "non-identifiable" expenditure by the UK Government on behalf of Scotland. A further analysis of the GERS data and its methodology is provided in the next chapter.

1.9.4 The GERS data excludes taxation revenues from the UK Continental Shelf which are considered ex regio in the UK National Accounts. Including an approximate Scottish share of these oil and gas tax revenues to Scotland's fiscal balance diminishes but does not eliminate this fiscal deficit through time, although the volatile nature of oil taxation revenues means this balance itself becomes volatile. The issue of natural resource taxation has proven important in the financing of sub national governments across the world.

1.10 Economic Consequences

1.10.1 In part 1 of this report, we identified that national governments may have a comparative advantage in revenue raising and lower level governments may have a comparative advantage in delivering services tailored to their population's needs. There are also theories that suggest the most efficient government is one that has no vertical fiscal imbalance, and where taxation powers match the duty to spend. This is sustained by the presumption that central governments can be too uniform and inflexible in the face of potentially diverse regional preferences and needs. Allocating expenditure decisions close to the citizen should lead to a more efficient outcome, with local electorates being able to determine the allocation of public spending on different services in a way that best suits the local electorate. The economic theory articulates this more formally, but it is rooted in the assumption that different regions will have differing marginal costs and benefits of providing public goods, which give rise to differing preferences between public goods.

1.10.2 Whilst the economic theory supporting decentralisation has intellectual force, it is also hard to identify evidence that actually demonstrates a sub optimal allocation

of resources in the UK and Scottish contexts. Part 1 noted that the evidence to suggest that devolving tax authority (or any other economy-influencing powers) to a devolved tier of government will, in and of itself, result in improved economic performance on the part of that devolved territory as a whole is mixed. But perhaps the position can be best summed up by the World Bank:

> *"We know very little about the relationship between decentralization and growth. Empirical evidence for the way in which decentralization affects growth has been contradictory and is plagued by measurement, specification, and analytical problems. There is stronger evidence for a relationship in the other direction --from growth to decentralization-- but the interpretations of this correlation between high income and decentralization have varied."*

2 Government Expenditure and Revenue in Scotland

2.1 History

2.1.1 Scotland is the only part of the UK for which complete fiscal flows are calculated on a regular basis. The first data were compiled in 1992 for the then Conservative Secretary of State for Scotland. There was a strong suspicion that the intention was to use this information to counteract nationalist claims that Scotland was "supporting" the UK economy through its oil wealth. The exercise has been repeated regularly since then. The most recent publication, providing data up to 2006-07 - was in June 2008, the first time that the data were published when a nationalist administration was in power in Scotland. Nevertheless, the "National Statistics" classification of the data means that these data have not been subject to political interference.

2.1.2 The Government Expenditure and Revenue in Scotland (GERS) data have always been controversial - in addition to the question of what to do with the oil revenues, there are questions of how spending and revenue is allocated between Scotland and the rest of the UK and some of the underlying assumptions and methodologies have also been criticised[1]. In addition, it has been highlighted that the underlying data is often incomplete.

2.1.3 The Scottish Parliament Finance Committee session of 16 January 2007 initiated a review which was carried out by Scottish Government officials, drawing on meetings with a number of key expert users of GERS to discuss various aspects of the report. The review covered the quality of data sources, key assumptions and methodologies, format, presentation and timing of publication. A number of revisions were made to GERS before the publication of GERS 2006-07 and many of the criticisms have been addressed. While further improvements are still possible, even some of GERS' longer term critics have acknowledged that the revisions have been a real improvement[2]. And whilst GERS continues to attract some criticism, it is widely considered as the most authoritative and accurate estimate of Scotland's fiscal position.

2.2 Methodology

2.2.1 The GERS data have always been collated by Scottish civil servants rather than by the Office for National Statistics. Nevertheless, the data are now consistent with HM Treasury's Public Expenditure Statistical Analysis (PESA) on the expenditure side and with the Office for National Statistics Public Sector Finance Statistics on the revenue side as well as being consistent with the 1995 European System of Accounts. Thus, although Scotland is the only part of the UK for which inter-regional fiscal flows are estimated, the data on which these are based are consistent with relevant UK aggregates. Improvements in the quality of these data have almost certainly been a response to past criticisms by academics and politicians. Thus, although there is a single agency responsible for data collection, it has shown itself willing to respond to criticism.

2.2.2 The public expenditure side of GERS, like PESA, uses the "benefit" principle. PESA relates only to the "identifiable" components of public expenditure. To construct a complete expenditure account, GERS must allocate a portion of UK "non-identifiable" expenditure to Scotland. For example, an allocation of debt interest is made on the assumption that all UK residents bear an equal burden of UK tax liabilities. This assumption would be strongly contested by nationalists, who argue that North Sea Oil made a very significant contribution to reducing the UK's indebtedness, particularly during the 1980s and 1990s. Defence expenditure is also allocated on a per capita basis, although on a "cash-flow" basis, its distribution would be skewed towards the South of England. In 1996-97, Scotland only accounted for 2.3% of defence related employment (House of Commons 1999). Together, debt interest and defence account for 76 per cent of non-identifiable expenditure.

[1] See for example 'A Critique of GERS: Government Expenditure and Revenue in Scotland'; Cuthbert, J.R. & Cuthbert, M.; Fraser of Allander Institute Quarterly Economic Commentary, vol 24, no.1 (1998) or An Open Letter on GERS, Cuthbert, J.R., Cuthbert, M.: open letter to Wendy Alexander, M.S.P., dated 24 March 2007.

[2] 'Opening up the books on the true state of Scottish finances'; Cuthbert, M. & Cuthbert, J.R.: Sunday Herald, 22nd June, 2008.

2.2.3 The revenue side of the accounts reflects where tax burdens are imposed on Scottish residents and businesses. No analysis is undertaken of tax shifting (a term used to describe those directly paying a tax passing the burden on to other individuals and companies). The most recent GERS revenue data is shown in Table 2.1. It shows the yield from each source of taxation and its share of the relevant UK tax revenue (Scotland's population comprised 8.44 per cent of the UK in 2006).

2.2.4 Income tax receipts, which are the major source of revenue comprising 24 per cent of the total, are residence-based rather than workplace-based. Corporation tax is problematic: it is based on profits generated in Scotland rather than on the location of company headquarters. These use the ONS Regional Accounts methodology (which in turn is considered to represent best practice), which allocates profits to regions on the basis of wage and salary bills except for the manufacturing sector, where the Annual Business Inquiry is used. Because the corporation tax estimates therefore rely on strong assumptions regarding the relationship between wages and profits, these estimates have to be treated with considerable caution. Other taxes are allocated by applying shares to relevant UK Public Sector Finance Statistics. These shares derive from a number of sources such as the Expenditure and Food Survey, Driver and Vehicle Licensing Agency etc. While there will be significant margins of error associated with the estimates, it is difficult to see how they can easily be improved, since only the local property tax, which is known as the council tax, is collected within Scotland.

Table 2.1: Tax Revenues Including and Excluding North Sea Oil: Scotland 2006-07

Tax	Yield (£m)	Share of UK	Tax	Yield (£m)	Share of UK
Income tax	10338	7.32%	Inheritance tax	228	6.30%
Corporation tax (excl North Sea)	3019	8.13%	Vehicle excise duty	400	7.78%
Capital gains tax	308	8.08%	Non-domestic rates	1833	9.21%
Other taxes on income and wealth	248	8.29%	Council tax	1812	8.11%
National insurance contributions	7464	8.20%	Other taxes and royalties	492	8.25%
VAT	7449	8.49%	Interest and dividends	628	9.94%
Fuel duties	1958	8.30%	Gross operating surplus	2757	12.28%
Stamp duties	686	5.12%	Rent and other current transfers	403	22.24%
Tobacco duties	981	12.04%			
Alcohol duties	768	9.70%	Total current revenue (excluding North Sea revenue)	42353	8.29%
Betting and gaming and duties	95	9.89%			
Air passenger duty	94	8.45%	North Sea revenue		
Insurance premium tax	195	8.46%	(Geographical share)	7563	83.34%
Landfill tax	75	9.09%			
Climate change levy	73	10.49%	Total current revenue (including Geographical share of North Sea revenue)	49915	9.60%
Aggregates levy	50	15.43%			

Source: Government Expenditure and Revenue in Scotland 2006-07

2.3 Oil Taxation Revenues

2.3.1 The most controversial aspect of the revenue side relates to tax receipts from North Sea Oil and Gas operations. Companies operating in the North Sea must pay an effective corporation tax of 50 per cent, a petroleum revenue tax of 50 per cent on profits from mature fields and historically, a royalty charge of 12.5 per cent. Total revenue was £9.1bn in 2006-07, driven upward by a rising oil price. In the UK regional accounts, oil and gas revenues have been allocated to a "notional" region - "extra-regio" - and not to specific regions on the UK mainland. This has widely been seen as a device to avoid inflating Scotland's GDP relative to the rest of the UK.

2.3.2 In contrast to the UK Regional Accounts, GERS now allocates oil revenues to Scotland in its revenue account. Two methodologies are offered, one based on a population share, which would deliver around 8 per cent of the total yield. The other is based on an "illustrative geographic share", which follows the "median line" principle to allocate the sea bed of the North Sea between Scotland and the Rest of the UK. Its application results in around 75 per cent of oil and gas production and 83 per cent of revenues being allocated to Scotland. This latter figure is included in Table 2.1 above.

2.3.3 One issue not previously discussed in relation to North Sea Oil revenues is whether these "taxes" are "shifted". This must be at least partly true. Oil and gas are traded internationally and demand for these products is relatively inelastic. Producers can therefore relatively easily shift the tax burden to consumers who are implicitly paying a form of excise tax. Ruggieri (2008) argues that if one takes tax-shifting into account, any excess of the domestic royalty over the world royalty should be allocated to the region of consumption rather than to the region of production. Whilst this somewhat esoteric economic theory need not change the interpretation of the GERS results, it does serve to emphasise the complex nature of the issues surrounding the allocation of natural resource taxation revenues.

Table 2.2: Estimated Current and Capital Fiscal Balances for Scotland

Current Budget	2002-03	2003-04	2004-05	2005-06	2006-07
Current revenue					
Excluding North Sea revenue	32,664	34,760	37,263	39,854	42,353
Including North Sea revenue (geographical share)	36,896	38,282	41,591	47,985	49,915
Current expenditure	36,036	39,062	40,587	43,046	45,317
Current expenditure accounting adjustment	1,662	1,593	2,063	2,222	2,367
Capital consumption	1,117	1,174	1,202	1,298	1,395
Balance on current budget					
(surplus is positive, deficit is negative)					
Excluding North Sea revenue	-6,150	-7,069	-6,589	-6,711	-6,726
Including North Sea revenue (geographical share)	-1,918	-3,547	-2,261	1,420	837
Capital Budget					
Capital expenditure	2,877	2,870	3,486	3,910	4,579
Capital expenditure accounting adjustment	136	121	177	297	305
Capital consumption	-1,117	-1,174	-1,202	-1,298	-1,395
Net Investment	1,895	1,817	2,461	2,910	3,489
Net Fiscal Balance (surplus is positive, deficit is negative)					
Excluding North Sea revenue	-8,046	-8,886	-9,050	-9,620	-10,215
Including North Sea revenue (geographical share)	-3,813	-5,364	-4,722	-1,490	-2,652

Source: Government Expenditure and Revenue in Scotland 2006-07

Table 2.3: Current and Capital Budgets 2006-07 UK and Scotland

per cent of GDP	Scotland with oil (%)	Scotland without oil (%)	UK (%)
Current Budget			
Current receipts	39.2	40.2	39.2
Current expenditure	37.5	45.2	38.3
Depreciation	1.1	1.3	1.3
Surplus on current budget	0.6	-6.4	0.4
Capital budget			
Gross investment	3.8	4.6	3.3
Less depreciation	-1.1	-1.3	-1.3
Net investment	2.7	3.3	2.0
Net Fiscal Balance	-2.1	-9.7	-2.3

Sources: Government Expenditure and Revenue in Scotland 2006-07 and HM Treasury, Comprehensive Spending Review 2007

2.4 Scotland's Net Fiscal Position

2.4.1 After the expenditure and revenue sides have been estimated, the net fiscal balance is calculated. Following UK practice, GERS now breaks these down into current and capital components. Estimates for the period 2002-03 to 2006-07 are shown in Table 2.2. This shows that, excluding North Sea Oil, Scotland had a deficit of £6.7bn on its current budget in 2006-07. This nominal deficit has been reasonably stable since 2004-05. Including a geographical share of North Sea Oil revenues transforms this deficit into a surplus of £0.8bn, implying that the aggregate revenue streams more than covered public services consumed. However, debt interest payments, which are included in the expenditure account, actually relate to past public consumption. In addition, the expenditure account includes a payment for depreciation to cover capital consumption.

2.4.2 The capital account provides estimates of net investment, the benefits of which will accrue to future generations. Gross investment less depreciation in 2006-07 was £3.5bn in 2006-07 and has almost doubled since 2002-03. This leaves Scotland's overall (current plus capital) net fiscal position in deficit of £2.7bn. If North Sea Oil is excluded from the calculation, the deficit would rise to £10.2bn.

2.4.3 Table 2.3 above expresses the aggregates shown in Table 2.2 for 2006-07 as shares of GDP alongside the equivalent shares for the UK as a whole: it thus makes a comparison of the fiscal stance of a state with full macroeconomic powers and a component nation with limited powers to manage its economy. If oil revenues are included in the calculations of both government receipts and GDP in Scotland, then the overall public sector accounts for Scotland and the UK as a whole are broadly similar. However, if oil is excluded, the Scottish account is much less healthy, with current expenditure accounting for more than 45 per cent of GDP and a net fiscal deficit of 9.7 per cent of GDP. North Sea Oil makes a substantial, but very volatile, difference to Scotland's fiscal stance.

2.5 Why Does This Matter?

2.5.1 If Scotland were an independent country with the same tax and expenditure policies as at present, these estimates of the fiscal deficit would correspond to Scotland's net borrowing requirement.

2.5.2 The current fiscal balance is intrinsically linked to UK economic systems and the economic performance of the UK through, for example, UK growth and tax revenue growth, interest rates, tax and social security contribution levels. The likelihood of policy invariance across constitutional arrangements is very low. It is therefore difficult to infer an independent Scotland's future fiscal balance from a balance estimated with Scotland as part of the UK. Supporters of separation assert that independence would have a positive economic effect, thus rendering the 'static' picture in GERS redundant. The current situation can thus only be an imperfect guide to what the situation would be like under higher degrees of devolved economic powers such as fiscal autonomy or independence. But the GERS data can provide a clear pointer on whether there is an underlying issue which needs to be addressed and, excluding oil, there seems to be a long-standing imbalance. North Sea revenues change this situation to a certain degree, even though a deficit remains for now.

2.5.3 Notwithstanding the caveats regarding the GERS results, it is clear that a better understanding of the politics and economics of the allocation of natural resource taxation receipts would be valuable. Many factors are relevant, ranging from first principles of risk sharing between the regions to the anticipated revenue streams from the basin. The latter is especially important if the future budget of Scotland's Parliament was to become

somehow directly dependent on North Sea revenues. The volatility of oil prices has resulted in total North Sea revenues varying from £1 billion in 1991/2 to over £12 billion in 1984/5 and this volatility can be expected to continue. A further factor to consider in the Scottish context is that estimates show production from the North Sea has peaked. And looking to the future, it will be necessary to address decommissioning costs, most of which are allowable for tax purposes, and how these might be reconciled with tax receipts from North Sea oil and gas exploitation in the past that have accrued to the UK Treasury. We therefore propose that this group researches this topic and submits further evidence to the Commission on this subject.

3 What the public thinks

3.1.1 Thus far, we have considered the funding choices using economic theory and political science, and have set out the current funding mechanism for the Scottish Parliament as well as providing a taxonomy of alternative models. But public opinion is a further important consideration. Though public attitudes on constitutional matters are often of low political salience (people think health, education or employment are more important), a survey of public attitudes may help to establish the extent to which the current or alternative systems of territorial finance are held to be legitimate (and where current or alternative policies may run the risk of losing public consent). This chapter draws on the results of the British and Scottish Social Attitudes Surveys to provide an indication of what the public thinks on both sides of the border.

3.1.2 There appear to be remarkably few differences between the Scots, Welsh, Northern Irish and English on questions on basic values about the role of the state or on more specific policy preferences. Table 3.1 gives one example from a question which taps values on social solidarity. A recent, detailed analysis of public views of the NHS in Scotland and England by the Scottish Centre for Social Research came to a similar conclusion about healthcare: notwithstanding policy differences on waiting times and healthcare choice that have opened up in the English and Scottish variants of the NHS, 'what matters to the public is much the same in Scotland as it is in England'.

3.1.3 In other words: people in all parts of the UK appear to want the state to do much the same things on their behalves. When asked about their attitude to the possibility of divergences of policy from one part of Britain to another, most people in Scotland, Wales and England prefer uniform provision (Table 3.2). There appears to be little active demand across Britain for territorial policy variation. The public appears to continue, despite devolution, to favour statewide uniformity of policy outcomes. These views might appear to support a system of territorial finance (and an underlying constitutional structure) designed to produce inter-regional equity.

3.1.4 Unsurprisingly, then, some of the perceived inequities of the current devolution arrangements have prompted criticism, mainly in England. The English editions of some of the main conservative newspapers - the *Daily Mail* and the *Daily Telegraph* in particular - have begun to articulate a sense of English territorial interest defined against the 'other' of post-devolution Scotland. The key issues have been threefold:

(i) The perceived injustice of the 'West Lothian Question' (Scottish MPs continuing to vote on English domestic matters, when English MPs cannot on equivalent Scottish matter now devolved to the Scottish Parliament)

(ii) The pattern of territorial public spending under which Scotland (and Wales and Northern Ireland) receive more spending per head than England

(iii) The view that higher public spending enables Scotland in particular to fund more generous social policies than those available to the English

Table 3.1: 'Ordinary people do not get their fair share of the nation's wealth' (% agree/agree strongly)

	1999	2000	2001	2002	2003	2005
Scotland	58	71	61	64	54	57
England	60	61	58	61	60	55
Wales	61	-	61	60	59	-
NI	62	60	55	62	59	52

Sources: British Social Attitudes, Scottish Social Attitudes, Welsh Life and Times Survey, Northern Ireland Life and Times Survey, Devolved Election Studies

Table 3.2: Attitudes towards territorial policy variation in Britain 2003 (%)

	Should be the same in every part of Britain	**Should be allowed to vary**
England		
Standards for services such as health, schools, roads and police	66	33
Scotland		
Standards for services such as health, schools, roads and police	59	40
Level of unemployment benefit	56	42
University tuition fees	56	40
Wales		
Standards for services such as health, schools, roads and police	55	44
Level of unemployment benefit	57	41
University tuition fees	58	40
Cost of NHS Prescriptions	63	37

Sources: Data collated by John Curtice from British and Scottish Social Attitudes survey 2003; Wales Life and Times survey 2003

3.1.5 There appears to be a significant resonance in English public opinion with themes that articulate, and could be used to mobilise, Anglo-Scottish cleavage. Very clear majorities of the English - consistently around 60 per cent since 2000 - agree that Scottish MPs should not vote on English business at Westminster. There are quite distinct patterns of opinion between England and Scotland about the territorial distribution of public spending (Table 3.3), with twice as many English as Scots agreeing that the Scots get 'more than their fair share' of public spending, and around five times as many Scots as English thinking the Scots get less then their fair share.

3.1.6 There is a similarly divergent pattern of opinion on the question of whose economy - England's or Scotland's - benefits most from the UK union. 40 per cent or more of the English consistently thought Scotland's economy benefited over 2000-2007. In 2000 a similar amount of Scots felt that England had the most benefit, though that figure has now fallen to under 30 per cent. The English perception that Scots get too much spending and more economic benefit from the union is underlined by the very high levels of agreement with the proposition that 'now Scotland has its own Parliament, it should pay for its services out of taxes collected in Scotland': consistently around three-quarters of English respondents agree with that proposition.

3.1.7 These data suggest that there is, at least in outline, some kind of conception among the English that they have a set of interests which are different to those of the Scots, that they are currently disadvantaged relative to the Scots, and that changes in how Westminster is organised and/or how public spending is financed might rebalance territorial interests in England's favour. There appears to be openness to compartmentalising the government of England and Scotland more fully and disentangling Anglo-Scottish interdependencies as a means of securing English territorial interests better.

Table 3.3: Scotland's Share of Government Spending

	England				**Scotland**			
Is Scotland's Share …	2000	2001	2003	2007	2000	2001	2003	2007
More than fair	20	24	22	32	10	10	11	16
Pretty much fair	42	44	45	38	27	36	35	37
Less than fair	12	9	9	7	58	47	48	37

Source: British Social Attitudes Survey; Scottish Social Attitudes Survey

3.1.8 There are two caveats to add to this analysis. The first is that it does not appear that these concerns are especially salient; though attitudes appear to be held in some cases by very large majorities, they are not necessarily priority issues. There is though a reserve of opinion in England that resonates with territorial themes in conservative media opinion; a potential for territorial mobilisation is there, even if currently it is latent.

3.1.9 The second caveat is that on two of the issues discussed above majorities of Scots agree with majorities of the English, albeit rather smaller ones: 57 per cent of Scots and 75 per cent of the English agree that the Scottish Parliament should raise its own taxes; and 50 per cent of Scots and 60 per cent of the English that Scottish MPs should not vote on English business at Westminster (Table 3.4). Despite shared values, and despite an apparent dislike of policy variation between jurisdictions, Table Four points to a shared concern among the English and the Scots to disentangle the ways in which they are governed. Public opinion appears to endorse the further compartmentalisation of the different territorial politics of the two nations, and - of particular significance for the expert group - to favour greater Scottish fiscal autonomy.

Table 3.4: Shared concerns across the Anglo-Scottish border

2007	England	Scotland
Scottish services paid out of Scottish taxes		
Agree strongly	28	8
Agree	47	49
Neither agree nor disagree	14	16
Disagree	5	20
Disagree strongly	1	2
Scottish MPs not to vote on English laws		
Agree strongly	23	14
Agree	37	36
Neither agree nor disagree	16	26
Disagree	10	18
Disagree strongly	1	4

Source: British Social Attitudes Survey, Scottish Social Attitudes Survey

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1 Australia

1.1 Description

1.1.1 The Commonwealth of Australia came into existence in 1901 when the existing six colonies became the States. There are also two Territories (Northern Territory and Australian Capital Territory). These eight units vary hugely by population and land area, but not by GDP per head. The population of Australia is 21.3 million; the states' populations range from 0.2m (NT) to 6.9m (NSW). The poorest state in GDP per head is Tasmania (85% of the national average); the richest is actually Northern Territory (136% of the national average) - a territory with very rich resources and very poor people.

1.1.2 Australia displays high vertical fiscal imbalance (VFI): that is to say the Commonwealth government does most of the taxing, but the States and Territories do most of the spending. This does not displease State Premiers, who can spend more than they tax. Australia also attempts to achieve substantial horizontal fiscal equalisation (HFE): i.e., transferring resources from rich areas to poor ones. The Commonwealth Grants Commission (CGC), a non-partisan body at arms' length from politicians, oversees the regime. This is the main mechanism for fiscal equalisation in Australia.

1.1.3 The Commonwealth decided in 1999 to introduce a goods and services tax (GST, i.e., VAT). Australia was thus one of the last mature democracies to introduce a broad-based expenditure tax. The whole proceeds of GST, net of the cost of collection, are remitted to the States, as are grants for health care. GST is a more robust tax base than those it replaced, and its real yield grows as GDP grows.

1.1.4 For many years Australia had divided government, with a Liberal-National Commonwealth government and Labor in power in all eight States. But the dynamics of the system seem to be no different in the post-2007 world with a Labor Commonwealth government.

1.1.5 The Grants Commission equalises both revenue capacity and expenditure disabilities. In other words, it transfers more to states with weak tax bases than to those with strong tax bases; and it transfers more to those with high spending needs than to those with low spending needs. Figures 1.1 and 1.2 show its latest calculations.

1.1.6 Accordingly, the CGC weights its per capita distribution of the total Australia-wide pool of GST and Health Care Grants revenues to the States. The latest weights ('relativities') are in Table 1.1.

Figure 1.1 Relative revenue raising capacities, average, 2002-03 to 2006-07 (Source: (CGC)

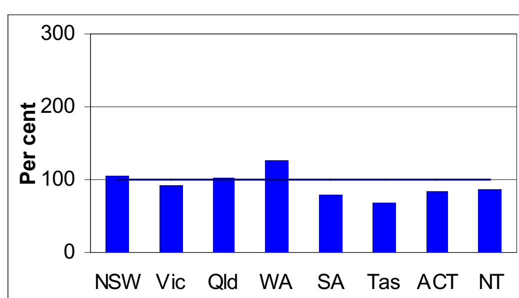

Figure 1.2 Relative costs of providing services, average, 2002-03 to 2006-07 (Source: (CGC)

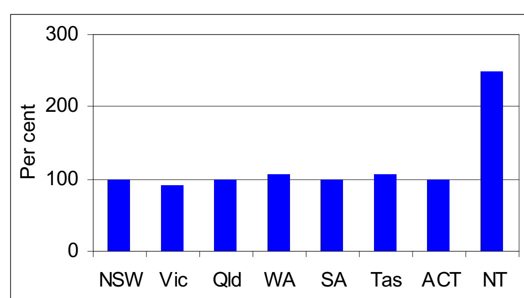

Table 1.1 Weighting of per capita grants to Australian States and Territories, 2007 and 2008

	2007 Update	2008 Update
New South Wales	0.89079	0.91060
Victoria	0.90096	0.92540
Queensland	1.00607	0.96508
Western Australia	0.94747	0.88288
South Australia	1.20791	1.20856
Tasmania	1.54465	1.52994
Australian Capital Territory	1.16293	1.17205
Northern Territory	4.36824	4.51835

Source: CGC (2008), Table 1.

1.2 Implementation Experiences

1.2.1 The first Commonwealth party labels were Protection and Free Trade. The free-trading outliers were Western Australia and Tasmania. As remote primary producers with little domestic industry, they had different economic interests to the other States. The Great Depression exacerbated WA's position, and in a 1933 referendum its voters voted by 2 to 1 to secede from the Commonwealth. This induced Prime Minister Joseph Lyons (to date the only Tasmanian to hold that post) to create the CGC.

1.2.2 In recent years, Commonwealth Governments have taken the view that to carry out its functions it must examine conditions in all states, not just poor ones. A report commissioned in 2001 by the then donor states (Victoria and New South Wales) has not led to policy changes, but it gave rise to some economic analysis and argument about the properties of the regime.

1.2.3 The relative GDP, and assessed relative 'needs' of the States, change slowly. The main change in recent years is that States with a buoyant tax base in minerals (especially Western Australia and Queensland) have received less of the net transfers. WA now has the most robust tax base of any State; the tax bases of NSW and Victoria have grown less rapidly, due to relative declines in the property market, and hence in the property tax base.

1.2.4 For the 2008 distribution there are four gainers (ACT, NT, Tas, and SA) and four losers (NSW, Qld, Vic, and WA). The gainers are all thinly populated. Their combined population is only 2.7 million - 1/8 of Australia's total. The burden of transfers to the economically and fiscally weak units is widely shared: the cost per head in the donor states is low.

1.2.5 In all states the quality of public services enjoyed by remote rural dwellers is below that enjoyed by city dwellers. The comparability exercise is designed to ensure that a rural citizen of NT has comparable outcomes to a rural citizen of NSW, and an urban citizen of NT to an urban citizen of NSW. The outcome is not well aligned with GDP per head, but it is not designed to be. Critics object to the high net grant per head to the high income ACT. The CGC retorts that the grant reflects what actually affects the financial capacities of State governments, given the services States in general provide and the revenues they raise. GDP or household income per head do not themselves affect State budgets.

1.3 Strengths and Weaknesses

1.3.1 The strengths of the Australian regime include equity; non-manipulability; and political entrenchment. Its weaknesses include possible disincentives to State tax effort; lack of political accountability whilst its complexity results in limited transparency.

1.3.2 Equity is discussed below. The system is non-manipulable by any State or coalition of States for two reasons. First, a change in the rules would require unanimous action among all eight States and Territories. But their material interests will always differ, so unanimous manipulation is unlikely. A State may try to manipulate the system alone but is unlikely to succeed. For instance, public sector wage rates are not used to calculate costs of delivering services - only private-sector wages are used for this purpose. This is designed to prevent contamination of the calculations. The system is politically entrenched, not only because alteration would require unanimous State consent, but also because the CGC is (in UK terminology) a non-departmental public body, not reporting to any Commonwealth (or state) department or minister. A standing Royal Commission (such as have existed in UK but are more common in Australia) is the most exact analogy. It is therefore immune to 'capture' by Commonwealth or State interests.

1.3.3 Disincentives to State tax effort are discussed below. Lack of political accountability is a consequence of the CGC's embeddedness. Its five part-time Commissioners are appointed by the Governor-General on the advice of Federal Cabinet and after close consultation with the States. They are appointed for their expertise in economics or public services. The Commission's Terms of Reference for its annual inquiries are decided by the Australian Government in consultation with the States and Territories. Neither procedure gives it political accountability. The elaborate calculations required to evaluate relative costs of delivering services are inevitably opaque, although all current CGC documents are available on the Web.

1.4 Equity

1.4.1 The primary test of equity is the vertical distribution of income. A government's policies are equitable to the extent that income per head is more equal after government intervention than before it. Therefore, in any democracy including Australia, the primary engines of equity are the personal taxation and social security systems. A secondary test is horizontal equity; but should that be equity among States or equity among individuals? There has been a dispute within Australia as to whether equity between States is a relevant policy target or not. However, as in the UK, it may be *politically* relevant for two overlapping reasons:

- political stakeholders think it is relevant, and therefore it becomes relevant at elections;
- States have veto threats against one another and against the Commonwealth; for instance, WA, with its distinct economic interests, refused to join the Commonwealth unless granted constitutional concessions; and threatened to secede in 1933.

1.4.2 An econometric study (Harding et al. 2002) attempted to isolate the "CGC effect" in achieving post-tax-and-transfer equity in Australia. It used a standard statistical measure of inequality called the Gini coefficient. This ranges from 1 (perfect inequality) to 0 (perfect equality). The pre-tax-and-transfer Gini coefficient for Australia was estimated at 0.520. Post-tax and transfers other than CGC transfers, the coefficient declined to 0.271. Adding the CGC's operations reduced it again to 0.252. This confirms that progressive taxation and social protection transfers do most of the work of reducing pre-tax inequalities in Australia (as everywhere else). However, the study, commissioned by the critical donor states, also noted that the effect on the Gini coefficient would be unaltered if GST revenue was returned to the states on either an equal per capita (EPC) or a 'state of origin' basis. In the former case, GST revenue would be pooled and divided among all Australians on an EPC basis. In the latter case the GST raised in each state would be assigned to that state. Either procedure would make the CGC redundant but, according to its critics, have no effect on inequality in Australia.

1.4.3 However, this begged the question. The gaining states are small in population and three of the four have high-cost services. The Gini coefficient measures inequality over all pairs of Australians. The 'tax' per head paid by each Australian in a donor state to support each Australian in a recipient state was small, although the transfer per head received by the latter was obviously larger. The CGC's operations may have little equity effect between individuals, while still playing a defensible role in increasing equity between states.

1.5 Fiscal Consequences

1.5.1 A regime such as the CGC's might:

- discourage efficiency-seeking agents in the States who realise that State gains from efficiency will be taxed or equalised away from them;
- impose deadweight administrative costs in managing the system of fiscal transfers;
- encourage an excessively large public sector in recipient states - known in the literature as the 'flypaper effect'.
- encourage factors of production to stay in, or move to, expensive areas, when it would be more efficient if they moved to, or stayed in, cheaper areas (Scott 1952);

1.5.2 These are a mixture of fiscal and economic consequences. We consider the first three here and the final one in the next section of this chapter.

1.5.3 The regime might inhibit States from promoting economic development (or, more generally, growth-friendly policies), if State governments rationally anticipate that the proceeds of such development will be equalised away from them at a high marginal rate. However, these effects, while possibly real, are mitigated by two things:

- the five-year moving average of input data used by the CGC. Five years always exceeds the interval before both the next State election and the next Commonwealth election. Therefore elected politicians retain an incentive to improve efficiency and/or tax effort in their State. The use of national data sets (wherever possible) to measure disabilities reduces capability for rent seeking.
- the regime is opaque to non-specialists, despite the CGC's efforts at transparency.

1.5.4 The CGC itself is a small bureau, occupying a modest 2-storey office in Canberra. Its annual operating costs are of the order of AUD 6.3 million. The deadweight administrative costs of include the resources spent by State governments; these are likely to be of the same magnitude as the CGC's own operating expenses in each State. As a proportion of State public expenditure, this is trivial.

1.5.5 It is true that the heavily subsidised States have high per capita expenditures on State government services. But this does not prove that a flypaper effect is at work. The median voter in a poor State may rationally vote for a larger State government than the median voter in a rich State.

1.6 Economic Consequences

1.6.1 Australian federalism, of which the CGC regime is a key component, may encourage inefficient location decisions. A unitary state might encourage economic agents to move away from unviable locations; a federal regime is less likely to. It is dubious, for instance, whether a unitary country would have built the recently completed 1400-kilometre railway from Alice Springs to Darwin, NT at a total cost of AUD 1.4 billion. However, such decisions are a consequence of federalism, rather than of the particular HFE regime. An egalitarian regime such as the CGC's may encourage inefficient location decisions more than a less egalitarian system, but in view of the Gini coefficients quoted above, the effect is likely to be marginal.

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2 Germany

2.1 Context

2.1.1. Germany has an elaborate set of arrangements for sharing and allocating resources between governments at central and regional levels. Those arrangements have been the subject of intense and growing dispute since the 1980s, but especially since German unification in 1990. The reason why is straightforward enough. Germany's system of territorial financial arrangements was established in 1969. Its fundamentals are unchanged since then, but Germany is not. Germany is now bigger by 17 million people and five regions, or Länder, after absorbing the old German Democratic Republic. Most significantly, it is economically much more disparate, with the (now not so) 'new' east German Länder lagging behind their western counterparts on all the main economic indicators. But even the generally 'richer' western Länder have experienced a widening of economic disparities since the 1980s, with a southern grouping - Bavaria, Baden-Württemberg and Hesse - enjoying a period of sustained economic success not shared by the rest.

2.1.2. Germany's federal system was not set up in order to accommodate territorial social diversity, as most federal systems tend to be. It was instead part of a wider package of constitutional engineering designed to separate powers and, for good historical reasons, help check and balance central government. Federalism's contribution to the separation of powers consisted in a division of labour between federal legislation and Länder implementation of federal laws. The Länder have few (in UK terminology) 'primary' legislative powers of their own. The form of federalism that has resulted - often described as 'cooperative federalism' - is one in which the federal level sets uniform, nationwide legislative standards in most policy fields, with the Länder having most of the responsibility for putting those nationwide standards into effect. It has been justified by a commitment in the German constitution to the 'maintenance of a uniformity of living conditions'[1] across Germany as a whole.

2.1.3. There are two sets of financial implications which flow from this system of cooperative federalism. The first is one of vertical fiscal imbalance. The federal level defines what has to be done, but does not typically make provision for all the associated implementation costs. There is therefore a general funding gap at the level of the Länder that needs to be addressed. Second, although regional economic disparities were more modest before 1990, some Länder have always had stronger budgetary situations than others, and been better equipped to finance their implementation roles. The doctrine of uniformity of living conditions requires, though, that all Länder should be in the position to provide more or less the same standards of public services. Adjustments to support fiscally weaker Länder - in other words, a form of horizontal fiscal equalisation - have therefore been a central (and the most contested) part of Germany's territorial financial arrangements.

2.1.4. A number of ad hoc measures to address these problems were overhauled in a package of reforms in 1969 which established a framework of territorial financial arrangements which (with modifications) is still intact today.

2.2 Description of System

2.2.1. The allocation of tax revenues between the federal level and the Länder occurs in a number of stages. The first addresses *vertical fiscal imbalance*. The 1969 reforms created a 'tax union' (*Steuerverbund*) under which shares of the revenues from personal income tax, corporation tax and VAT (which together yield most of Germany's tax revenues) are assigned to the federal level and the Länder. The first two are regulated in the constitution. Of the total income tax pot, 15 per cent is assigned to local government, with the rest split 50:50 between federation and Länder. All corporation tax revenues are split 50:50 between federation and Länder. Their respective shares of VAT revenues are adjusted periodically. A number of initial allocations are made to the federal level and local governments.[2] Of the remainder (the vast bulk) certain proportions are allocated to federation and Länder. In 2005 the ratio was 50.4 : 49.6. There has been a very significant shift in these proportions since unification. At the time of unification the ratio was 63:37. The (staged) shift of 12.6 points in favour of the Länder was made in order to inject the resources needed for the new Länder in the east to fulfil their implementation responsibilities. In other words, assignment of VAT revenues has proved to be a powerful instrument for addressing vertical fiscal imbalance.

2.2.2. The individual Länder receive their shares of the Länder pot of personal income tax and corporation tax revenues according, respectively, to the place of residence of the individual taxpayer and the location of the firm. 75 per cent of the VAT revenues due to the Länder are allocated on a per capita basis. This has an implicit equalisation effect, since per capita VAT yields are typically higher in

[1] In Article 72 of the German Basic Law. In a 1994 constitutional amendment the term 'uniformity' was replaced by 'equivalence'. This was supposed to facilitate a rebalancing of legislative activity in favour of the Länder, though has yet to have significant effect.

[2] Of the initial pot of VAT revenues, 5.63 per cent is awarded to the federation. Of the remaining revenues, 2.2 per cent is awarded to local government. The remainder is then divided between federation and Länder.

economically stronger Länder and lower in economically weaker ones. Allocation as a per capita average therefore redistributes in favour of economically weaker Länder.

2.2.3. The remaining 25 per cent of Länder VAT revenues is used explicitly as an equalisation tool in a stage known as *'anticipatory' equalisation* (*Vorwegausgleich*). A measure of fiscal capacity for each Land is made, which incorporates yields from personal income tax, corporation tax and the few taxes levied at Länder level (none of any great significance). Any Länder measured at less than 97 per cent of the average receive payments to bring them closer to the average.

2.2.4. The next stage is unique, consisting of direct, horizontal redistribution from richer to poorer Länder. Where other federal systems provide for horizontal equalisation, redistribution is carried out by the federal level. The effect is the same, shifting revenues from areas with higher tax yields to areas with lower tax yields. The use of the federal budget as the mechanism for transfer however makes the redistribution an indirect one and, generally, less politically sensitive. If however one region has to transfer part of its revenues directly to another region, then political sensitivity is inevitably high. It is not surprise therefore that this *horizontal equalisation 'in the narrower sense'* is the arena for greatest controversy and conflict in German territorial finance.

2.2.5. The process is complex. A different measure of fiscal capacity is taken for each Land which includes around two-thirds of local government tax revenues in that Land, plus all revenues from Länder taxes and from personal income tax, corporation tax and VAT. The fiscal capacity of the three city-states (Berlin, Bremen and Hamburg) is artificially deflated by a notional over-weighting of their actual population (at 135 per cent rather than 100 per cent). This adjustment is meant as compensation for the use of city-state services by citizens from neighbouring Länder who pay their taxes elsewhere.

2.2.6. Following these adjustments, notional fiscal capacities can be compared. Those Länder that fall under a Germany-wide per capita average are entitled to receive equalisation payments; those over the average are obliged to make equalisation payments. Recipient Länder receive payments on a graded scale: 75 per cent of shortfalls below 80 per cent of average fiscal capacity; 70 per cent of shortfalls from 80-93 per cent of the average; and 44 per cent of shortfalls from 93-100 per cent. Payer Länder contribute according to a similarly graded scale (which peaks at transfers of 75 per cent of any surplus over 120 per cent of average fiscal capacity).

2.2.7. Finally, there is a stage of more orthodox horizontal equalisation funded from the federal budget, effected through *'federal supplementary allocations' (Bundesergänzungszuweisungen - BEZ*). These are of two types. The first are 'deficit' BEZ, which use the same measurement of fiscal capacity as set out in 2.2.5. They are used where, after the earlier stages of horizontal equalisation, Länder still have less than 99.5 per cent of average fiscal capacity. 77.5 per cent of any such remaining shortfall is compensated. Second, a number of special purpose BEZ are awarded, which are intended as compensation for specific needs faced by different groups of Länder. Together with the adjustments to notional fiscal capacity made in 'narrower sense' equalisation, they add components of needs-based equalisation to a system mainly driven by income criteria. They are:

- BEZ for 'administrative costs' in Länder with population sizes less than four million. Nine out of sixteen Länder receive these BEZ, which are awarded on the assumption that per capita costs of providing public services are higher the lower the population size.
- BEZ for 'special burdens of the new Länder caused by Germany's division'. These payments to the eastern Länder - part of a decades-long reconstruction process - will transfer to the east around €100 billion from 2005-19, with amounts tapering down towards the end of the period.

2.3 Implementation Experiences

The sums of money re-allocated through these various arrangements are very significant. Inevitably there is conflict, in particular between recipient and payer Länder. The latter complain that they pay too much. The former - reflecting the relatively marginal role of indicators of need in the system - complain they do not receive enough to cover their obligations. Although a number of cases were brought to the German Constitutional Court on both these grounds in the 1980s (when transfers grew as a result of structural decline of heavy industry in northern Germany) problems have become especially acute since German unification. On three occasions since 1990 set-piece negotiations have been conducted on the reform of the system, though at each stage with relatively modest change. The general pattern has been for recipient and payer Länder to bridge their differences by coercing the federal government to inject more funding into the system. Strains on the federal budget may put this modus operandi into doubt for the future.

2.4 Strengths and Weaknesses

2.4.1. Germany's system of territorial finance is robust enough to have accommodated a system shock such as German unification; however the after-effects of that shock - the enduring divide between rich and poor - place the long-term future of the system in doubt. Payer Länder find the scope of equalisation (which extends to a marginal 'tax' of 75 per cent on income raised over a certain level) to be punitive. Recipient Länder bemoan the absence of systematic needs criteria.

2.4.2. Yet because of the high level of interdependence between the two levels of government, and the high consensus requirements these produce, it is difficult to achieve anything more than incremental adaptation.

2.4.3. The system is extremely complex and lacks transparency (a very much simplified version was presented above). The multiple re-allocations of tax revenues, often through complex formulas, compromise the accountability of decision-making on tax-raising and budget-setting. Nonetheless, public attitudes surveys suggest the core principles of the system - transfers from richer to poorer parts of the state - are endorsed by clear majorities of the public everywhere (though these majorities appear to be declining generally, and are significantly smaller in the 'rich south' than the 'poor east').

2.5 Impact on Equity

Germany has far fewer significant differences in public services delivered to citizens than most other federal or devolved states and, indeed, some unitary states. The doctrine of uniformity of living conditions is powerful both among the political elites and the general public.

2.6 Fiscal Consequences

2.6.1. Decision-making on taxation is concentrated at the federal level (though requiring the consent of the German second chamber, which is comprised of members of the Länder governments). The fiscal autonomy of the Länder is restricted to a number of taxes with relatively modest yields. Combined with the lack of transparency of the wider system of territorial financial arrangements, this means that Länder governments are not accountable to voters for significant taxation decisions. It has been argued that the absence of accountability encourages indiscipline in public spending, including 'budgetary emergencies' (i.e. de facto bankruptcies requiring federal bailouts) in a number of the Länder.

2.6.2. Debates on fuller fiscal autonomy at the Länder level have been at best muted; only the richest three Länder have shown any appetite for debate. Others, especially in the east, have been sceptical about their capacity to finance their obligations through regional-level taxation.

2.7 Economic Consequences

There is a very active debate about the skewed incentive effects implied by the German system of territorial finance. There is a very high level of income equalisation so that, in the final stage (BEZ) any Land with a fiscal capacity less than 99.5 per cent (!) of the average has over three-quarters of the shortfall compensated. Doubts are frequently expressed that the recipient Länder have real incentives to promote economic growth. Similarly, as payer Länder face a marginal tax rate of 75 per cent when their fiscal capacity exceeds 120 per cent of the average, their incentives for economic growth may also be compromised. Though these incentive effects are intuitively plausible, there is an absence of data which sufficiently isolates incentive effects from other variables impacting on economic growth in any particular Land.

2.8 Further Considerations

Debates about the reform of territorial finance are a subset of wider debates about reform of the federal system. There appears to be consensus that the relationships of the federal level and the Länder are too interdependent, and that they should be disentangled. There is no consensus on what direction of change should be pursued, with one group (in the south) keen to establish a more decentralised federalism with a fuller set of primary legislative powers in the Länder, another (in the east) ready to accept an enduring, asymmetric financial dependence on the federal level, and the rest cleaving to the status quo. Until and unless a consensus for a particular direction of change appears, the current system of territorial financial arrangements - however divisive, opaque and disincentivising - is likely to persist.

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3 Canada

3.1 Context

3.1.1 Canada is a federation, comprising 10 provinces and three territories, having originally been formed as a confederation of four provinces. There is substantial geographic, economic and social diversity between the provinces, perhaps the most differentiated province being the largely French speaking Quebec. Overall, Canada is a prosperous country, with GDP per capita greater than the UK.

3.1.2 The provinces are responsible for most of Canada's social programs (such as health care, education, and welfare) and together collect more revenue than the federal government, an almost unique structure among federations in the world. The powers available to federal and provincial government are defined by the Constitution which imposes limits on the legislation that governments can set. Federal powers include defence, international trade, criminal justice, money and banking, international waterways, unemployment insurance, bankruptcy and divorce. These broadly comprise national public goods.

3.1.3 The Federal government can use any form of taxation that it chooses, and it can borrow and lend. Responsibility for immigration, agriculture and pensions is shared between federal and provincial governments. Provinces have the residual (or "non-reserved") powers and exclusive legislative authority for health education, social services, civil and property rights, administration of justice, highways. Residual powers which are not defined in the Constitution reside with the federal government. Although provinces are supposedly restricted to "direct taxes" to raise revenue, the definition of "direct" has been interpreted by the courts very liberally and includes sales taxes levied on consumption. Provinces own natural resources within their boundaries and can manage and tax them as they see fit. Provinces control their own budgets and can also borrow and lend. Provinces can tax corporate income and capital; they also have the right to regulate the securities and labour markets.

3.1.4 Municipal governments are responsible to provincial governments. They are responsible for local matters such as police, water and sanitation, what are local roads and recreation. They also administer the education system under rules set by the province. They are funded through property taxes and user charges and can set these as they see fit. They can borrow and lend, with some restrictions.

3.2 Description

3.2.1 The federal Government provides significant financial support to provincial and territorial governments. There are four main transfer programs: The Canada Health Transfer (CHT), the Canada Social Transfer (CST), Equalization and Territorial Formula Financing (TFF) and some smaller shared cost transfers covering, for example, highways.

3.2.2 The CHT and CST are federal transfers which support specific policy areas such as health care, post-secondary education, social assistance and social services. These are bloc transfers with some general conditions attached designed to achieve some minimum national standards. They are calculated on a per capita basis so deliver equal per capita transfers to all provinces. Some tax bases are shared between federal and provincial Governments by a process known as tax transfer. A tax transfer involves the federal government transferring some of its "tax room" to provincial and territorial governments. Specifically, a tax transfer occurs when, upon agreement, the federal government reduces its tax rates and provincial and territorial governments simultaneously raise their tax rates by an equivalent amount. The CHT and CST cash payments are supplemented by tax transfers.

3.2.3 The Equalization and Territorial Formula Financing programs provide unconditional transfers to the provinces and territories, intended to allow provincial governments to provide their residents with public services that are reasonably comparable to those in other provinces, at reasonably comparable levels of taxation. TFF provides territorial governments with funding to support public services, in recognition of the higher cost of providing programs and services in the north of Canada. Many provinces also have equalisation programmes for their municipalities.

3.2.4 The equalization payments, revised substantially in 2007, are of particular interest. A province's equalization entitlement is equal to the difference between its fiscal capacity and the average fiscal capacity of all provinces - known as the "10 province standard". Provinces whose fiscal capacity is above the standard do not receive equalization payments. Hence, equalization is not based on need but on revenue capacity.

3.2.5 Provincial fiscal capacity is measured using five tax bases - personal income tax, business income tax, consumption tax, property tax and a share of natural resources. Reflecting that the equalization formula was substantively revised in 2007, there are a number of sophistications applied that cushion the impact of transition from the old to the new system as the federal government brokered deals with provincial governments to foster support. There is also a sunset clause to the new arrangements- they are legislated only until 2013/14.

3.2.6 Another main component of federal-provincial fiscal relations is the set of tax collection agreements negotiated

bilaterally but according to a common template. In the case of the personal and corporate income taxes, the federal government sets the base, and both it and the provinces choose their own rate structures (within some limits in the case of the provinces). A federal agency then collects the tax for both levels. All provinces except Quebec harmonize personal taxes, while all except Quebec, Alberta and Ontario harmonize corporate income taxes. In the case of the federal GST (a value added tax), Quebec and three of the small Atlantic provinces harmonize their sales taxes. The others (except Alberta) run their own retail sales taxes. The existence of these harmonized income tax systems make the equalization system much easier to implement, since it is based on comparisons of a common tax base.

3.3 Implementation Experiences

3.3.1 Canada has operated some system of equalization payments since confederation, but a formal system was first put in place in 1957. Since its inception, there has been a debate on precisely how equalization payments should be calculated. Two issues are central to this debate: calculation of the national standard and calculation of individual provincial fiscal capacities.

3.3.2 Since 1957, the number of provinces making up the national standard has changed several times. In 1957, a province's fiscal capacity was measured against the average taxing capacity of Ontario and British Columbia, which, at the time, were Canada's two richest provinces. In the 1960s, the federal government changed the calculation to include all 10 provinces. Including oil-rich Alberta in the calculation created problems in the 1970s when international oil prices skyrocketed. Alberta's tax revenues raised the average to the point where even Ontario would have received equalization.

3.3.3 In 1982, the federal government removed both Alberta and the poorer provinces from the calculation. The national standard was based on the average taxing capacity of five middle-income provinces - British Columbia, Ontario, Saskatchewan, Manitoba and Quebec. Several provinces argued that the five-province standard unfairly lowers their entitlements, and sought a return to the ten-province standard.

3.3.4 In 2007, the Conservative federal government introduced significant reforms to the Equalization Program to address some of these issues. The new system reverts back to a national standard based on the average fiscal capacities of all 10 provinces (instead of just the five middle-income provinces). In order to deal with problems stemming from including oil-rich Alberta, the new system includes only 50 percent of provincial resource revenues in calculations of the national standard. This qualification is meant to mitigate a rise of the national standard to an inflated level. Nevertheless, the result has been a substantial increase in equalization payments to eligible provinces.

3.3.5 In regard to the calculation of individual provincial fiscal capacities, some experts had argued that the equalization formula was, in the past, too complicated. Since its inception, the number of items used to determine each province's fiscal capacity had risen from the three items contained in the original tax rental agreements (corporate income tax, personal income tax and succession duties) to thirty-three. Critics argued this made the program more difficult to understand, and increased the possibility of error.

3.3.6 The new equalization system introduced in 2007 significantly reduced the number of items used to determine a province's fiscal capacity. Instead of taking into account thirty-three different types of provincial revenues, the new system is now based on only five types: personal income tax, business income tax, consumption tax, property tax and natural resources.

3.3.7 The recent evolution of the 4 federal transfer payments, including the effect of tax transfers, is identified in table 3.1 below.

3.4 Strengths and Weaknesses

3.4.1 The history of fiscal transfers in Canada help to identify a number of key issues, although the major revisions effected in the 2007 budget mean that any strengths and weaknesses of current arrangements will not have emerged yet.

3.4.2 But a broad overview of the arrangements implemented since 1957 prompts some important observations. One relates to the operability of the system. The Health and Social transfers represent payments to address a vertical fiscal imbalance, and their simplicity - they are simple to calculate by being made on a per head basis - is an important strength. The conditionality of these payments - that they promote equity is also seen by some commentators as being part of the "glue" binding disparate provinces together. Also, besides addressing vertical imbalance issues, these equal per capita transfers are also implicitly equalizing, so complement the equalization system.

3.4.3 The equalization payments seek to address a horizontal fiscal imbalance, and their recent evolution again suggests that simplicity is a key consideration in their acceptability. Equalizing against fiscal capacity is more readily achievable and empirically supportable than equalizing against need, whose determination can be subjective.

Table 3.1 Federal Government Transfers in Canada (2005-06 to 2008-09)

($ millions)		2005-06	2006-07	2007-08	2008-09
Health and Social Transfers					
Canada Health Transfer	Cash	20,310	20,140	21,474	22,629
	Tax	11,969	12,666	13,406	13,867
	Total	32,279	32,806	34,881	36,497
Canada Social Transfer	Cash	8,415	8,500	9,590	10,565
	Tax	7,336	7,763	8,217	8,499
	Total	15,751	16,263	17,807	19,065
Total Health and Social Cash Transfers		28,725	28,640	31,065	33,195
Equalization		10,907	11,535	12,925	13,620
Offshore Accords		219	386	563	848
Territorial Formula Financing		2,058	2,118	2,279	2,313
Total Cash Transfers		41,909	42,680	46,831	49,975
Total Transfers		59,847	61,740	66,870	70,827

Source: Canada Department of Finance

3.4.4 The role of natural resource tax revenues has consistently been a key - and contested - component of the calculation of equalization payments. Canada had no say in the unequal endowment of natural resources, nor had it control over external shocks such as fluctuations in the oil price. But these led to abrupt and dramatic differentiation in provinces' relative wealth which the equalization systems struggle to address.

3.5 Impact on Equity

3.5.1 Whilst need is not assessed, transfers from federal to provincial governments in Canada are specifically addressed in the 1982 Constitution at delivering equity. The new scheme seems to enjoy greater legitimacy amongst provincial governments than its predecessor, and it necessarily includes a number of deals to ensure support given that it involved a degree of reallocation between provinces. It has not completely delivered a horizontal balance, but it is seen as representing a principled, formula based equalization process.

3.6 Fiscal Consequences

3.6.1 Table 3.2 below shows how taxes are assigned to different levels of government within Canada. It also shows how the tax base, tax rates and collection arrangements are allocated between the different levels of government.

3.6.2 This demonstrates that there is scope for tax competition between provinces, although voluntary bilateral Federal-provincial tax harmonisation agreements exist.

3.6.3 A consequence of the tax sharing system is that contention arises with Provinces arguing they have insufficient tax "room" to deliver the required finances; hence they become dependant on transfers whilst the Federal government in turn needs to ensure it has adequate revenues to deliver the transfer payments.

3.7 Economic Consequences

3.7.1 Increasing natural resource exploitation and prices had resulted in oil rich Alberta having a GDP per capita two thirds higher than Ontario and double that of the poorest province, Prince Edward Island. These differences are greater than in most other federations. In Germany, for example, fiscal capacity per capita amongst the poorest Lander (in the East) approaches 85% of those in the West.

3.7.2 This disparity of wealth - and factor endowment - within the federation gives rise to tensions seen in other countries having some devolved or sub national layer of government. In short, the richer provinces — in particular, those provinces ineligible to receive equalization payments from the federal government - see the federal government taking "their" tax dollars and redistributing those monies elsewhere in the country.

3.8 Other Considerations

3.8.1 Some key observations of the Canadian experience relate to the status of Quebec, the role of natural resources and the federal structure of the country.

Table 3.2: Tax Assignment to Different Levels of Government in Canada

	Base	Rate	Tax collection and administration	Federal	Province	Local
Federal						
Income tax	Federal	Federal	Federal	64.7	35.3	Zero
Consumption tax	Federal	Federal	Federal	45.3	54.7	Zero
Payroll tax	Federal	Federal	Federal	68.6	31.4	Zero
User fees	Federal	Federal	Federal	24.4	23.3	52.3
State or provincial						
Income tax	Federal	Provincial	Federal	64.7	35.3	Zero
Consumption tax	Provincial	Provincial	Federal and provincial	45.3	54.7	Zero
Payroll tax	Federal	Provincial	Federal	68.6	31.4	Zero
Resource tax	Provincial	Provincial	Provincial	Zero	100	Zero
Health premium	Provincial	provincial	provincial	Zero	100	Zero
Property tax	Provincial	Provincial	Provincial	Zero	2.2	97.8
User fees	Provincial	Provincial	Provincial	24.4	23.3	52.3
Local						
Property tax	Provincial	Local	Provincial	Zero	2.2	97.8
User fees	Local	Local	Local	24.4	23.2	52.3

Source: Boadway in Shah, A. (ed) (2007), "The Practice of Fiscal Federalism: Comparative Perspectives", McGill-Queens University Press

3.8.2 Asymmetric differences arise in the treatment of Quebec and other provinces because Quebec has chosen to exercise options that the others provinces have available to them, but have not exercised. These include:

- Opting out of some federal transfers in exchange for additional tax room (increased fiscal autonomy)
- The operation of its own public pension scheme
- Operating its own personal and corporate income tax systems
- Administering its own VAT system on behalf of itself and the federal government
- Operating its own immigration arrangements.

3.8.3 The ownership of natural resources has already been mentioned above, but the ownership and taxation receipts have been a constant factor in the history of fiscal equalisation in Canada. As natural resource taxation receipts have grown in importance, so have the strains between the resource rich provinces (e.g. Alberta, Saskatchewan and British Columbia) and the others.

3.8.4 The final observation touches upon a point made in Part 1 of this report - that the structure of the state should inform the means of financing sub national governments rather than the reverse. The 2007 changes introduced by the Federal Government have been observed as being "a principled political philosophy of federalism". They has been welcomed by provincial governments who had grown dissatisfied with the previous arrangements because of earlier cutbacks to the CHT/CST system, the system by passes with one-on-one discretionary deals cut by the federal government with particular provinces (e.g. Newfoundland with respect to offshore oil) and arbitrary caps on the equalization system. The new arrangements move away from such discretionary changes by the federal government and reinstate a transparent and more formula-based approach.

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4 Switzerland

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4.1 Context

4.1.1 Switzerland is a small country in population terms, with a population of about 7,500,000, and 26 constituent units (known as cantons)[3]. Geography means that the population tends to live in peripheral parts of the country, away from the high mountains in the centre. Many cantons have small populations, and are even smaller than local government districts in the UK. Switzerland is a very varied country, in which wide departures from 'national' norms are routine. For example, in 2005 the average per capita national income was 54,031 Swiss Francs, but it ranged from 115,178 SFr (in Basle-Town) to 38,070 (in Jura). Cantons vary hugely in other characteristics including population, size and area. Most other economic indicators are similarly varied across the country. Within Switzerland, there are deep social cleavages, including language (there are four official languages: German, French, Italian and Raeto-Romansch) and religion, with around 42 per cent Catholics and 35 per cent Protestants). However, the issues of dealing with 'national minorities' found in other systems (such as Canada or Spain) do not arise. No language, religious or regional group aspires to a different constitutional relationship with the state as whole.

4.1.2 Federalism is only one of two constitutional foundations of Swiss government; the other is the strong tradition of direct democracy, exercised through referendums at both federal and cantonal layers. The referendum, and the need to be able to secure popular support for very many initiatives of government, means both that local differences in policy preferences can be realised, and that elected policy-makers are unlikely to propose policies that will spur such opposition. A further consequence is that, particularly at the federal layer, policy-making is highly consensual. Federal governments consist of representatives of the four major political parties (Social Democrats, Christian Democrats, Liberals and the Swiss People's Party), and broad-based support is a *sine qua* non for the practice of government generally.

4.2 Description of system

4.2.1 The present financial system only came into effect in January 2008, finally endorsed by a referendum in 2004 after first being proposed in 1994. Not surprisingly, the proposals had changed during that time, although there remains a strong resemblance between what was proposed and what has been enacted. The new system alters the way that equalisation payments are calculated, however, not their overall size. It also follows an extensive revision (in 1999) of the Federal Constitution, and itself involved a re-allocation of functions between the federal and cantonal tiers.

4.2.2 Public spending is heavily concentrated in the hands of the cantons (which include local government). Total public spending accounted for 37.4 per cent of GDP in 2005, of which the federal government was responsible for 11.3 per cent, and cantons and communes for 24.9 per cent.[4] Public spending varies widely between cantons: the Swiss average in 2005 was SFr 9,370, with a high of 20,055 (Basle-Town) and a low of 6,305 (Schwyz). However, cantons also vary widely in their fiscal capacity; on an indexed basis (Swiss average = 100), the strongest canton at 227 is Zug, and the weakest at 30 is Valais. Similarly, the tax burden varies widely, from an indexed high of 149 (Uri) to a low of 53 (Zug).

4.2.3 The Swiss system is based on the very extensive fiscal autonomy of the cantons (and the limited autonomy of the federal layer). Direct corporate taxes are exclusively cantonal, and personal income taxes are predominantly cantonal. The federal government relies largely on indirect taxes and personal income tax which, although small (the maximum marginal rate is 13.5 per cent, and its progressive nature means it focuses heavily on the highest earners). Nonetheless it accounts for 29 per cent of federal revenues (Kirchgassner 2007, p. 329.) Yet the extensive variations between cantons mean that federal funding still accounts for a significant amount of their resources - on a national average, for 22.5 per cent of cantonal spending. (The range is large: from 9.5 per cent in Basle-Town to 47.5 in Uri.) (See Dafflon 2008, table 2.)

4.2.4 The new equalisation system is a complex construct. To enable it to take place, a certain degree of constitutional reform took place, to re-allocate constitutional functions, for which the principle of subsidiarity was used. In a number of areas (mainly related to physical infrastructure and the environment) there are 'joint tasks' in which the federal government sets out the 'strategic direction' and the cantons are responsible for operational management. Others remain (or are made) purely cantonal, with provision for encouraging (and even in some cases requiring) inter-cantonal co-operation. This reduces the extent to which policy overlaps lead to fiscal dependence

[3] Six of the cantons are 'half-cantons', which does not affect their internal autonomy but does affect their representation in federal institutions.

[4] Communes (local government) are treated as the 'third layer' in Swiss government, both constitutionally and politically, and their political autonomy is extensive and respected. But their powers and spending are subject to control by the cantons, so are included here in that category.

(and minimises the scope for conditional grants). The joint tasks are to be funded by block grants based on outcomes, and otherwise specific grants play no part in financing the Swiss system. (Historically, there have been problems with ensuring consistent application of federal standards - a so-called 'implementation deficit'.)

4.2.5 The equalisation system addresses disparities in both revenue (arising from differences in fiscal capacity) and costs (by taking into account socio-demographic factors, and geography and topography). The emphasis is heavily on the resource side, which accounts for about 73 per cent of total payments to the cantons. The system addresses both horizontal and vertical imbalances - both the federal government and the richer cantons contribute to the funds that are distributed on the resource side (contributions to the cost side are exclusively from the federal government). On the resource side, the federal government contributes about 59 per cent of total resources, and richer cantons about 41 per cent. (Dafflon 2008)

4.2.6 Some details of the new allocations of funding to the cantons remain to be worked out, so details of the actual transfers are not yet available. In any even, there is a transition fund to compensate cantons that will receive less under the new arrangements, for a maximum of 25 years (but re-assessed every 4 years); this means no canton should lose out.

4.3 Implementation experiences

4.3.1 It is too early to judge the 2008 system. This system was introduced to remedy the perceived shortcomings of its predecessor which had failed adequately to address the economic and financial differences that existed between cantons. There are reasons to think that the new system will do so more effectively, largely because of the extent to which the reform was designed by technical experts to achieve the (political) goals they were asked to achieve, and in the design and execution phases were subject to little direct political involvement.

4.4 Strengths and weaknesses

4.4.1 The Swiss system emphasises, apparently effectively, the autonomy of cantons. It uses both a vertical fiscal imbalance (itself limited by the limited taxing powers of the federal government, however) and horizontal disparities to increase the resources available to the more needy or fiscally less strong cantons. In order to do this, it creates a system of some complexity (though that is limited by comparative standards), and fails to eliminate or even minimise disparities in the resources - at best, it reduces them to a level that is compatible with a sense of belonging to the same national community.

4.4.2 The system relies heavily on extensive co-operation between the two layers of government - to achieve the present agreement, to make 'joint tasks' work, and for further areas of inter-cantonal co-operation that also form part of the reform. Despite this, it also generates serious inter-cantonal tax competition, discussed further below.

4.5 Impact on equity

4.5.1 The consequence of emphasising cantonal autonomy is that nation-wide equity is not strongly safeguarded, nor is the idea of all citizens having similar life chances. The resources available to governments and the public services that citizens receive consequently vary very considerably.

4.6 Fiscal consequences

4.6.1 A serious factor in Swiss federal finance is tax competition between cantons. This is notable on the level of personal taxes (people choosing where to live to incur the lowest tax liability), and is much more marked for corporate taxes (which are exclusively cantonal). The problems are aggravated by rules that vary from canton to canton to determine what counts as 'profit' (some do not tax profits made by holding companies in other cantons, only by trading companies), as well as rates of tax. The canton of Zug appears to be a particular beneficiary of this, with many holding companies registered there but carrying on their trading activities elsewhere. There is very limited harmonisation at federal level or through the federal government. The effect is to drive down tax rates, but also to limit the overall amount of tax revenue that can be obtained to pay for public services.

4.7 Economic consequences

4.7.1 Swiss economists regularly lament economic flaws in their system of fiscal federalism and federal finance. However, by comparative standards these seem comparatively limited, with a smaller vertical fiscal imbalance than in many systems and fewer economic or fiscal dysfunctions. Nonetheless, it results in widespread inequalities and variations in both resources and public services.

4.8 Further considerations

4.8.1 The effectiveness of the Swiss system depends on a number of factors. One is the general prosperity of the country. A second is its political stability, both in composition of the federal and many cantonal governments and in the sense that no part has ambitions to secede or secure special status. A third is constitutional flexibility - the fact that (unlike many federal systems) constitutional change to ensure that the state works in a more effective or rational way is practicable. A fourth is the ability of technical experts to play a prominent part in designing the new financial system. But most important is the acceptance as part of a federal system of very considerable disparities

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5 Spain

5.1 Context

5.1.1 After the death of Franco in 1975 Spain embarked on a political transition to democracy. The first democratic election for 40 years was held in 1977. In 1978 the new Spanish Constitution was approved by referendum, and repealed many of the laws of the Franco era.

5.1.2 The Spanish Constitution recognises historic entities ("regions and nationalities", carefully chosen words in order to avoid the more politically charged "nations"), within the context of the "indissoluble unity" of the Spanish nation and established the "optional autonomy system" (principio dispositivo). The idea being that regions with some self government experience should be given the opportunity to follow a fast track to autonomy, while the rest would take a slower approach (Article 143).

5.1.3 The Constitution did not assign explicit authority to regions but left them the possibility of (progressively) taking authority over a group of listed matters. The central government retained the responsibility for 'regulating basic conditions to ensure equality over all nationals in the exercise of their rights and fulfilment of their obligations', and remained exclusively responsible for the 'coordination of the economy' (Articles 148, 149).

5.1.4 By 1983 Spain had been organised into 17 Autonomous Communities (ACs or comunidades autónomas), and 2 autonomous cities (ciudades autónomas) were subsequently added in 1995[5]. The basic political institutions of each community are similar to those of the country as a whole.

5.1.5 The details of the decentralization process are set out in laws named "Ley Orgánica de Financiación de las Comunidades Autónomas" (LOFCA) originally passed in 1980. Each AC then developed and approved its own Statute of Autonomy, in accordance with the general principles of the Constitution and the LOFCA.

5.1.6 Although the Spanish government submitted an application to join the EC in 1977, the negotiations that followed were protracted. Importantly, by the time Spain joined the EC in 1986, considerable fiscal decentralisation was already in place.

5.2 Description

5.2.1 Spain's asymmetric model of progressive decentralisation reflects a history of regional and cultural diversity, as well as complex political negotiation and approval processes, rather than the search for an economically efficient system. It also reflects the central government's fear of loosing political and economic control. Demands for greater autonomy from several regions, at least some of which have had aspirations for independence, have long been a source of political tension.

5.2.2 For centuries Navarra and the Basque Country had special fiscal arrangements, "fueros", that persisted despite the centralising attempts of previous regimes, including Franco. Other regions including Catalonia, Galacia and Andalusia had histories of shorter lived attempts at autonomy and/or could point to demonstrations of public support for autonomy. Furthermore, since 1977 Spain has had an almost uninterrupted history of minority governments in which the governing party has needed support from the small nationalist parties in Catalonia, the Basque country and elsewhere, so these parties have historically had a strong bargaining position.

5.2.3 The main asymmetry in the Spanish model is between foral regime and the common regime. The foral regime applies to the Basque Country and Navarra and is characterised by almost complete revenue autonomy and considerable devolution of spending responsibilities; the common regime applies to the other 15 ACs. Within the common regime the ACs have progressively acquired important spending responsibilities and they have slowly gained elements of influence over revenues but, at least until 2002, the central government kept almost all revenue authority.

5.2.4 Within the common regime it's necessary to further divide the ACs into a fast track, high responsibility group and a slow track, initially low responsibility group, to understand how the decentralisation process evolved. These groupings reflected past history and prior support for autonomy and/or independence. Within the slow track group different levels of spending responsibility can be identified, but changes occurred almost continuously over a 20 year period making attempts to track the position overtime complex to say the least.

The foral regime

5.2.5 In practice, income, wealth, inheritance and corporate taxes are fully administered by the regional governments within the Basque Country and Navarra so taxes are paid and stay in the region. VAT is also collected and administered by the regional governments, but the rate and base for VAT are defined by the central government[6]. However, laws stipulate that these regions shall maintain an overall tax burden equivalent to that in the rest of Spain. Alongside this these ACs have considerable devolution of spending responsibilities.

[5] The 17 autonomous communities are Basque Country, Catalonia, Galicia, Andalusia, Asturias, Aragon, Balearic Islands, Canary Islands, Cantabria, Castile and León, Castile-La Mancha, Extremadura, Navarra, La Rioja, and the regions of Madrid, Murcia, and Valencia, and the 2 autonomous cities are Ceuta and Melilla.

[6] Increased emphasis on harmonization of indirect taxation at the EU level has recently conditioned the jurisdictional powers over some indirect taxes including VAT.

5.2.6 The regional governments in the Basque Country and Navarra each make a contribution (referred to as a "cupo" and "aportaciòn" respectively) to the Spanish central government for the general expenses that the central government makes on their behalf[7] and they additionally make a contribution to the central government's "solidarity fund" which is used for equalisation purposes in a manner based upon the EU Structural Funds system.

The common regime

5.2.7 Within the common regime the difference between fast and slow track ACs was crucially important during the progressive decentralisation process, but by 2002 (as explained below) a degree of uniformity in spending responsibilities and revenue assignment had been achieved in throughout the common regime ACs.

5.2.8 The five fast track, high responsibility ACs (Adalusia, the Canary Islands, Catalonia, Galicia and Valencia) had prior histories of support for greater autonomy and initially attained the same levels of expenditure devolution as the regions under the foral regime though less revenue autonomy. The remaining ACs attained autonomy via the slow route and initially assumed only limited spending responsibilities but, on the basis of re-negotiation and revision every five years, they were progressively able to move toward 'full autonomy'.

5.2.9 After revisions to the Autonomous Communities Financing Act (LOCFA) in 2001, effective in January 2002, the spending responsibilities of the fast and slow track ACs were finally aligned. The last element was the transfer of responsibility for health to 10 ACs. Overall, the share of the regions in total public spending rose from 14% in 1985 to 31% in 2002, see OECD(2005). At this point the central government had expected 5-yearly negotiations to end. However, instead attention has shifted to renegotiations of financing arrangements and demands for other elements of autonomy.

Progressive shift from equalisation grants and toward tax sharing

5.2.10 From the start, within the common regime there was a considerable vertical imbalance between the substantial spending responsibilities of the ACs and the high dependence on central government grants (transfers) to finance them. There have been a number of changes in grant allocation mechanisms and a slow but progressive shift toward tax assignment with some powers to change tax rates and bases.

5.2.11 Initially grants from the Spanish CG to the ACs were based on the historic costs of the provision of the devolved services (before decentralisation) having subtracted revenues from assigned taxes. The intention was to replace this system with an allocation mechanism based on need and in 1986 a distribution formula was adopted that used regional indicators of relative population, insularity, administrative units, relative wealth and fiscal effort.

5.2.12 Between 1986 and 2002 reforms successively moved the ACs toward a financing system with more autonomy. The 2002 reforms were the more extensive, by 2003 own taxes accounted for 53% of ACs total revenues and the governments within each AC have the power to set the base and rates for over half these taxes. The contrasting pre- and post-2002 positions are summarised in a useful table (see Annex) taken from Joumard and Giorno (2005).

5.3 Implementation experiences

5.3.1 The vague wording of the Spanish legislation has given rise to uncertainty. In particular, the Spanish central government and the foral territories have tried to interpret "equivalent tax burden" in a very different ways and there have been numerous challenges in the Constitutional Court. The rulings have often taken a broad interpretation, making it almost impossible for the ACs to introduce new taxes, so effective autonomy has continued to be limited. However in practice the tax burden is lower in these regions - in part because of various allowances and tax credits.

5.3.2 The initial grant allocations to the common regime regions, and the distribution formulae adopted perpetuated the regional allocations of spending made by the central government before decentralisation. (The weights attached to the needs indicators were not set according to economic principles but rather were set to reproduce as close as possible the allocations that had previously existed.) The outcome was that any initial misallocation was perpetuated.

5.3.3 Although there was a progressive move away from grants to tax sharing, this certainly didn't keep pace with the transfer of spending responsibilities. Garcia-Milà (2004) describes the process as "slow, limited and very complicated" and points out that by the mid 1990s, "regions' own taxes accounted for less than ¼ of their financial resources and the ability to set the tax rate or base was virtually non-existent".

5.3.4 As noted above, the central government's intention had been to end the 5-yearly bilateral negotiations with each AC in the common regime, once convergence in spending responsibilities had been achieved. However a further round of discussions is on-going[8] and began with negotiations on a new but controversial Catalan

[7] This contribution is calculated using complex formulae that basically aims to apportion the cost of services according to the each region's share of Spanish GDP.

Statute of Autonomy. A modified version of the original proposal was passed by referendum in June 2006 (by a large majority, but with an unprecedented low turnout). The statute further enhanced the degree of autonomy of the region through a sizable shift toward more tax sharing and away from State transfers.

5.3.5 The Catalan Statute is now being contested by the surrounding Autonomous Communities of Aragon, the Balearic Islands and Valencia, as well as by the Popular Party (the main opposition at the Spanish Parliament). The objections are various, but include alleged breaches of the "solidarity between regions" principle enshrined by the Constitution in fiscal and educational matters. The Constitutional Court of Spain is assessing these challenges and is expected to give a ruling during 2008 see Economist (2008) (I'm assuming this is still pending as I've not been able to find any further details to confirm otherwise). Meanwhile, the Catalan left-wing separatists still consider that the statute doesn't give Catalonia enough self government.

5.4 Strengths and Weaknesses

5.4.1 The strengths are perceived as

- Quick and extensive devolution of powers through a process that responded to regional preferences;
- Allowed greater fiscal autonomy without losing macroeconomic control;
- Despite a poor start, improved incentives and efficiency have evolved over time;
- Revenue raising powers have progressively been brought more in line with spending responsibilities, reducing moral hazard problems and enhancing accountability;
- Allowed tax sharing without tax competition leading to a race to the bottom (excluding the Basque Country and Navarra);
- Improved efficiency of restrictions on borrowing as well as monitoring of borrowing;
- Offers clearer incentives to innovate in public service provision and to cooperate across ACs on service provision.

5.4.2 The weaknesses might be considered to be

- Economic efficiency was not a primary motivation of devolution - politics rather than economics has driven the majority of the reforms and continues to be important in determining the evolving position.
- From an economic perspective it is hard to argue that the revenue advantages held by the Basque Country and Navarre are justifiable. This had led to charges of unfair tax competition in the European court.
- The relatively rich foral regions make very little contribution to equalisation scheme, despite having wages and GDP per capita well above the overall Spanish averages. They are able to afford higher government expenditure per capital on health and education than other regions (apart from the Canaries).
- The common regime regions received insufficient revenues to meet their increased spending responsibilities, at least during the first stages of devolution, and for some years borrowing was the way out. The ACs haven't fully born costs of irresponsible borrowing, so this had other negative impacts.
- The complexity of the evolving system, particularly in terms of the different levels of spending responsibilities within the groups identified, different costs of delivery and almost continuous changes in responsibilities, had made it difficult to work out the efficient and fair means to allocate revenues to ACs.
- There are only weak incentives for cooperation & sharing of best practice among ACs.
- Given the constraints imposed by legislation, tax competition has been limited, but competition on allowances, tax breaks, tax credits less so. This lacks transparency and is hard to monitor. Given the complexity of such arrangements it is difficult to compare efficiency across ACs.
- Within both the foral and common regimes, progress toward higher regional responsibility for revenues results has increased regions' sensitivity to cyclical shocks.
- Vague wording of laws has given rise to numerous costly court challenges, resulting in uncertainty and unnecessary complexity. For example:
  - the meaning of 'full autonomy' was not clearly defined in the Constitution; as a result negotiations between the individual communities and the central government have given rise to repeated disputes and, for long periods, complex differences in responsibilities by region
  - The Spanish government and the foral territories continue to interpret the term "equivalent tax burden" in a very different way, leading to numerous challenges in the Constitutional Court.

[8] Several revised autonomy statutes have recently come into force starting with Valencia and Catalonia during 2006, and the Balearic Islands, Andalusia and Aragon in 2007, with the Canary Islands, Castile-La Mancha and Castile and Leónand in process.

- The Constitutional Court has often taken a broad interpretation 'equivalent tax burden', making it almost impossible for the ACs to introduce new taxes. So despite constitutional provisions giving the power to establish taxes and financial autonomy, the limits established by the central government have still limited effective autonomy.
- The process of revision of the responsibilities for the slow track common regime regions every five years has resulted in protracted re-negotiations. Several of the ACs, especially Catalonia and Andalusia, have argued that the central government has dragged its feet in ceding powers and in clarifying financial arrangements

5.5 Impact on Equity

5.5.1 Spain has not yet been successful in designing and implementing an equalisation mechanism that is transparent and effective in helping ACs with lower income per capita to reach the national average.

5.5.2 As noted above, the Basque country and Navarre contribute very little to the equalisation scheme, despite having high relative wages and having consistently achieved GDP per capita some 30% above the overall Spanish averages. These regions are able to afford higher government expenditure per capital on health and education than other regions (apart from the Canaries).

5.5.3 For those regions in the common regime, solidarity measures apply and are intended to protect the level of funding and provide equalisation. However, to do this while respecting autonomy is contentious, and disagreements on appropriate weights (population, GDP, investment rate of return) persist. Separate provisions are made for an adequacy fund, specific funds for health provision, an allocation for minimum levels of service provision, and for redistribution. Only Madrid and the Balearics are consistently net contributors to the solidarity mechanism, so even relatively rich regions receive assistance that should not be required (Cataluña, La Rioja and Aragón also have also persistently achieved GDP per capita GDP well in excess of the Spanish average, while a number of the ACs spanning some 35% of the population, have consistently recorded GDP per capital of between 65 and 85% of the national average according to Eurostat figures).

5.5.4 Although there have been changes over time, little has been done to discuss equalisation mechanisms openly and to establish transparent criteria. Throughout Spain the rich regions continue to believe they contribute too much while poor regions believe they receive too little.

5.5.5 The OECD suggest that further reform of the equalisation mechanism is needed particularly in view of the challenges to sustainability in the face of both immigration and population ageing.

5.6 Fiscal Consequences

5.6.1 Regional debt as a percentage of GDP increased fast during the period to 1992 (but from a low starting point). Some authors believe that "regions may have had incentives to borrow in excess since they did not bear all the costs of such decisions" (Garcia-Mila 2004 p10). The European integration process helped the Spanish government introduce limits on the debt paths of ACs in the early 1990s, both by limiting long term borrowing to funds used to finance investment and by requiring central government approval to issue public debt. However, the restrictions were not binding; in practice regions were simply given extensions to their limits.

5.6.2 At the end of 2001, the Spanish central government passed a law know as the Ley General de Estabilidad Presupuestaria which imposed a balanced budget rule on all levels of government, effective from 2003. Although this approach is simple and easy to convey it was quickly acknowledged to be too rigid and likely to result in pro-cyclical fiscal policy. This law underwent revisions effective in 2007 to incentivise sustainability over the cycle, allow deficits when activity slows, to protect investment spending, and to enhance monitoring of 3 year plans and outturns. These changes have been welcomed by the OECD, although there is some concern that they may still induce a degree of pro-cyclical bias.

5.7 Economic Consequences

5.7.1 Politics rather than economics has driven the majority of the reforms and continues to be important in determining the evolving position. (Currently, following his re-election in March 2007, Prime Minister Jose Luis Roderiguez Zapatero heads a minority government that is seven seats short of an absolute parliamentary majority. The small nationalist parties from Catalonia, the Basque country and elsewhere have a strong bargaining position and have been willing to offer some support to the government not least because the main opposition People's Party is aggressively centralist).

5.7.2 As noted above, there are only weak incentives for cooperation & sharing of best practice among ACs. For example, following the transfer of health provision and faced with inequitable position on regional distribution of hospitals, the funding mechanisms initially incentivised building more hospitals rather than collaborating across regions to use existing capacity and this undermined cost effectiveness.

5.7.3 Regional governments have been opposed to the publication of information allowing clear comparison across regions, for example on waiting lists in hospitals. Public access to such information would probably increase public pressure to improve service through clearer accountability.

5.7.4 The OECD argue that inefficiencies have emerged from fragmentation and loss of information; the AC's don't appear to share information on innovative policy options and outcomes so there is limited diffusion of best practice and lack of co-ordination between regions or between the regions and the centre.

Annex from Joumard and Giorno (2005),

Table 3. Regional governments' main tax resources before and after 2002

Before 2002	After 2002
Personal income tax	
Regional governments were allowed to set tax rates and introduce tax credits over 15% of the personal income tax base with some limitations. In particular, the rates had to be maintained within a +/- 20% range of those set by the central government. They received a further 15% of personal income tax revenue collected within their jurisdiction but had no discretionary power over this share.	Regional governments are allowed to set tax rates (the +/- 20% limit was removed but regional governments have to maintain a progressive schedule and the same number of brackets as the central government) over 33% of the personal income tax base. They can also set tax credits and modify central government tax credit for the acquisition of a residence though with some limitations.
Value added tax	
Regional governments had no share and no discretionary power over the VAT.	Regional governments receive 35% of the revenues collected within their jurisdiction but have no discretionary power to set either the base or the rate.
Wealth tax	
Regional governments received all the revenues and were allowed to set the exemption threshold, rates and to introduce specific tax reliefs, though with some limitations.	Same as before 2002 except that restrictions on the level and progressivity of tax rates were removed.
Inheritance and gift tax	
Regional governments could introduce tax allowances and credits. They could also set rates but with some limitations as regards their level and progressivity.	Same as before except that restrictions on the level and progressivity of rates were abolished.
Tax on wealth transfers and legal acts	
Regional governments received all the revenues and were allowed to set the rates and introduce tax credits, with some limitations.	Same as before 2002 except that limits on the setting of rates were softened.
Tax on gambling	
Regional governments received all the revenues and were allowed to set the taxable base and rates.	Same as before 2002.
Excise taxes on tobacco, alcohol and mineral oil	
Regional governments had no share in, and no discretionary power over, excise taxes.	Regional governments receive 40% of revenues collected within their jurisdiction but have no discretionary powers on the base or rates.
Tax on retail sales of oil products	
This tax did not exist.	Regional governments are allowed to piggyback on the central government excise tax, within certain limits.
Tax on electricity	
Regional governments had no share in, and no discretionary power over this tax.	Regional governments receive 100% of the revenues collected within their jurisdiction but have no discretion over the base or rates.
Tax on certain means of transport	
Regional governments had no share in, and no discretionary power over this tax.	Regional governments receive 100% of the revenues and can set the tax rates, with some limitations.

Source: National authorities.

6 Conclusions

6.1.1 In reviewing the evidence relevant to how the Scottish Parliament might be funded, we start with some observations on the present system. Barnett is internationally unique: no other country operates anything remotely like it for funding a sub national government. It provides stability and predictability of funding and near total autonomy of spending decisions for the devolved administrations in the United Kingdom. At the same time, the current funding arrangements facilitate the centralised management of economic aggregates. It is a pragmatic solution to the funding question and is near costless to implement. It represents continuity with pre-devolution arrangements, but as a result, some of the relativities of the previous system have been perpetuated.

6.1.2 But whilst Barnett offers real strengths, its disadvantages are clear. With no substantive tax raising power, the Scottish Parliament is funded by a block grant, needed to address a near total vertical fiscal imbalance. Voters are not exposed to tax and spending decisions at the margin, meaning that a degree of political accountability for the taxation which supports spending decisions is missing. The disconnection between revenues and economic performance also means that the incentives to develop growth are secondary rather than immediate.

6.1.3 The current arrangements also mean that the Scottish Parliament lacks a degree of autonomy - its scope to influence the size of its budget is limited whilst it is not able to use fiscal measures to influence behaviours.

6.1.4 The lack of autonomy and accountability issues both resonate in Scotland, even though the linkage between these properties and efficient government or economic growth are not proven.

6.1.5 At the same time, the funding allocated to the Scottish Parliament is causing increasing levels of discontent in other parts of the UK where the equity of the existing arrangements is now challenged. Equity has been a significant dimension to UK public expenditure decisions for many years: indeed reference to meeting needs equitably has been the main justifying criteria within the centralised public spending system. It was certainly routinely used to justify spending allocations for Scotland before devolution and indeed before Barnett was introduced. But the Scotland of 2008 is a very different place to the Scotland of the mid 1970's when a needs assessment concluded that public expenditure per head in Scotland needed to be 16% over the UK average to maintain parity of service provision. This report does not attempt to provide any assessment of the relative needs of the constituent parts of the United Kingdom. Indeed, a needs assessment now, given the policy divergences brought on by devolution, would be a difficult and controversial exercise. The equity issue is important however, as the continuance of the substantively higher level of public expenditure in Scotland compared to England will become increasingly difficult to defend unless empirically justified. The relative decline in Scotland's population compared to England means that convergence which might be expected under the Barnett formula for Scotland will be deferred.

6.1.6 The combination of pressures for change, both from within Scotland and from the rest of the UK, has resulted in serious doubts being cast over the long term continuation of the Barnett formula in its current form. This view is confirmed to a degree by the Welsh Assembly Government decision to review the Barnett funding arrangements for Wales, although this is motivated by a different sentiment.

6.1.7 But as the analysis of experiences from around Europe and the rest of the world demonstrate, none of the alternatives necessarily meet the conflicting desiderata of autonomy, accountability and equity. All the implemented systems we describe are in fact some mix of the possible mechanisms available. Some, such as Germany and Canada use a system of tax sharing or assignment "topped up" by grants to ensure equal access to public services. Furthermore, neither system is without controversy. The Australian model of an independent body - the Commonwealth Grants Commission - is seen by many as a paradigm of best practice, although it does result in the Australian States lacking some accountability. It is noteworthy that the Commission itself is necessarily a significant administrative body, although any departure from Barnett will almost certainly require greater administrative effort as new systems are put in place. This is especially the case for any arrangement that would incur the decentralisation of the UK's currently highly centralised tax system.

6.1.8 In considering alternatives, Scotland's fiscal position, as expressed in the Scottish Government's "Government Expenditure and Revenue in Scotland" (GERS) publication, is obviously relevant. So is the existing operational framework which is simply not conceived to support a system of collecting taxes at a devolved level. The GERS data suggests that a self financing Scotland within the Union would see a substantive reduction in the budget available to both the Scottish Parliament and to UK Government expenditure in or on behalf of Scotland, or a prevailing need for fiscal transfers to Scotland from the UK Government. Even if a proportion of natural resource taxation revenues were to be allocated to Scotland - and it is not clear on what basis this would be justified - the volatility of oil prices means this would not deliver a stable revenue stream.

6.1.9 However, we strongly recommend that the economics and politics of natural resource taxation are given further detailed consideration. This is not a straightforward proposition for many reasons. For example, any devolution of oil and gas exploitation tax revenues would need to address the issue of decommissioning costs, most of which are allowable for tax purposes. This would require some settlement at UK level as decommissioning costs will be for fields which have yielded tax revenues from North Sea oil and gas exploitation in the past that have accrued to the UK Treasury. In view of this recommendation, the Independent Expert Group will provide further evidence on natural resource taxation in due course.

6.1.10 It is also the case that whilst one might wish to develop alternative means of financing the Scottish Parliament, Barnett applies elsewhere in the United Kingdom. This could potentially restrict the policy options that might be brought forward for financing the Scottish Parliament.

6.1.11 Commensurate with our brief, this report does not recommend a particular ideal solution. Indeed, this first evidence demonstrates that one probably does not exist. Our intention has been, however, to demonstrate that each option is associated with certain trade-offs. Barnett alone has substantial deficiencies. A sophisticated system of needs based equalisation grants has attractions, perhaps when complementing a degree of autonomy or tax sharing or assignment, but it necessarily becomes controversial and resource intensive.

6.1.12 Systems based on tax assignment do have attractions, both in terms of delivering (in principle) an incentive to deliver policies promoting economic growth and a relative operational simplicity. In Scotland's case, financing by tax assignment would clearly need to be supplemented by some further payment from the UK Government.

6.1.13 Tax decentralisation certainly addresses the accountability concerns, although the scope of its application in Scotland might be constrained by EU Law. It could also lead to businesses and individuals facing additional compliance burdens and as well as a number of undesirable second order effects such as tax shifting and exportation. We have concerns that full fiscal autonomy may not be readily compatible with the maintenance of the United Kingdom and as noted above, it is difficult to find examples of full fiscal autonomy which do not involve regulation by the national government, as in the case of the Basque countries and Spain.

6.1.14 Any system of devolved finance not solely based on a certain block grant, such as Barnett, creates the need for some degree of borrowing (whether from markets or the national government) by the devolved authorities to smooth fluctuations in tax revenues. As in countries where borrowing is currently allowed at sub-national government level (particularly in Eurozone countries where sub-national versions of the 'stability pact' have been introduced), an intergovernmental system of co-ordination would need to be introduced between HM Treasury and the devolved administrations to ensure the coordination of overall UK fiscal policy and the management of economic aggregates.

6.1.15 Overall, we believe that the selection of an alternative means of financing the Scottish Parliament that will deliver increased financial accountability has to be a judgement based on the trade offs we have sought to identify. This judgement is dependant on the choices made by the Commission regarding the appropriate constitutional structure. In other words, it is necessary to first have a clear view on the very nature of the union with the rest of the United Kingdom prior to working through the trade-offs of different approaches to territorial finance.

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