

Final report

**Fairness and accountability:
a new funding settlement
for Wales**

full text

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Preface



On behalf of my fellow Commissioners, David Miles and Paul Bernd Spahn, I have pleasure in presenting our second and final report.

The themes of the report are fairness and accountability, the two areas where we believe existing arrangements for financing Wales require improvement. Fairness is not simply due to Wales but to all constituent parts of the United Kingdom and we have tried to make proposals that are fair to all parties and not at all special pleading in the Welsh interest. Devolution inevitably brings new elements into the relationship between the state and the citizen but we believe clear responsibilities and the powers to discharge them are necessary

to any arm of government and we conclude that improvements in the accountability of the Welsh Assembly Government are possible that strengthen, not weaken, the coherence of British government as a whole.

In our first report we looked at “the pros and cons of the present formula-based approach to the distribution of public expenditure resources to the Welsh Assembly Government”, as we were charged to do. In this, our final report, we have attempted to “identify possible alternative funding mechanisms including the scope for the Welsh Assembly Government to have tax varying powers as well as greater powers to borrow.”

Identification is one thing, recommendation is another. No area could be more essentially political than taxation. Therefore this report has been more difficult for a technical body like the Commission to write than was its predecessor report. We have found it relatively easy to say, on the basis of constitutional considerations and public finance best practice, that a body like the Welsh Assembly Government should bear the responsibility for raising some of its own revenue through taxation. The devolved government starts from a position where virtually all its resources come from a grant from central government; almost none comes directly from the people who elect it. Enhancing the accountability of the devolved government to the people of Wales by reducing reliance on a grant from the UK Government and increasing reliance on revenue that comes directly from its voters has advantages - both to the people of Wales and to the rest of the UK. But how much revenue, which taxes, levied on whom - those are all political matters that must be settled by democratic decision.

To be sure, economic reality and the integrity of the UK impose constraints on what it is practical or advisable to devolve. We have done our best to examine those constraints and sift the various possibilities for devolving tax powers. Indeed, we have asked whether the constraints rule out any devolution of taxation at all. The sifting process has led us to reject some strategies while identifying others that look more promising. In some cases, we have felt able to recommend a particular course of action. In other cases we have confined ourselves to pointing out the alternatives and some of the implications of following any particular approach. In that way we hope to have guided discussion into fruitful channels without pre-empting any essentially political debates or decisions.

Borrowing is to some extent a subsidiary issue. Once spending responsibilities are set and the arrangements for financing them, including any taxation powers, are established, the consequences for sensible borrowing powers tend to follow. We have attempted to set out the appropriate borrowing arrangements that are consistent with the current devolution settlement and with the one that would follow from the implementation of our other recommendations.

As well as examining taxing and borrowing, we have done further detailed work on a needs-based approach to determining the block grant since that will remain the major part of finance for the Welsh Assembly Government in the foreseeable future. Reform of the block grant system is essential if the financing of devolved government is to be fair and seen to be fair by everyone in the United Kingdom. Demonstrating a practical means of developing needs-based formulae represents a substantive part of this final report.

Once again, the Commission warmly thanks all those people and organisations who have supported our work by submitting evidence and attending meetings. The report would have been immeasurably poorer without their contributions. Fuller acknowledgment is made in Annex 10. We should also thank the many others who have met or corresponded with one or more of the Commissioners and answered our questions on a host of topics, giving freely their time and expertise. Particular thanks are due to the Commission secretariat who have sustained us with great professionalism, competence and good humour throughout a hard-working period of almost two years.

Finally I should like to extend personal thanks to my fellow Commissioners for their acuity and diligence and to the Welsh Ministers and the former First Minister, Rhodri Morgan, for giving me the opportunity to try to be of service to our country.

For all that, the conclusions and recommendations of this report remain the sole responsibility of the Commission itself.



Gerald Holtham

Chair

Independent Commission on Funding and Finance for Wales

Chapter 1: Introduction

Overview

1. This Chapter provides:

- i) a restatement of the Commission's approach to its terms of reference;
- ii) a description of the key features of the current fiscal settlement;
- iii) a summary of the recommendations made in the Commission's first report;
- iv) an account of developments since the publication of the first report; and
- v) an outline of the structure of this report.

Approach to the terms of reference

1.2 The Commission's terms of reference were to:

- i) look at the pros and cons of the present formula-based approach to the distribution of public expenditure resources to the Welsh Assembly Government; and
- ii) identify possible alternative funding mechanisms including the scope for the Welsh Assembly Government to have tax varying powers as well as greater powers to borrow.

1.3 We were asked to address those issues sequentially. Accordingly, our first report focused primarily on the operation of the current funding regime and set out the case for replacing the Barnett Formula with one that is based on needs. In this report, we provide evidence of how a needs-based funding system could be made to work in a way that is fair to all parts of the UK. We also turn our attention to the case for devolution of tax-varying and borrowing powers to Wales.

Summary of the current funding regime

Structures of devolved government in Wales

1.4 Following a referendum in September 1997, the Government of Wales Act 1998 led to the creation of the National Assembly for Wales ("the National Assembly"), which met in plenary session for the first time in May 1999. The National Assembly initially inherited the executive powers of the Secretary of State for Wales, though its powers have since grown incrementally. As a result of the Government of Wales Act 2006, the executive functions were separated from the other functions of the National Assembly, creating the Welsh Assembly Government ("the Assembly Government"), with the executive powers now being exercised by the Welsh Ministers.

The Welsh block grant

1.5 There are several stages in the process by which the Assembly Government receives its funds. Firstly, Parliament votes monies to the Secretary of State for Wales. The amount of this grant is almost entirely determined by the Barnett Formula.¹ The Secretary of State transfers those funds into the Welsh Consolidated Fund after first deducting the running costs of the Wales Office.² In this report, the bulk of those funds are referred to as “the Welsh block grant”. The National Assembly then adopts a budget motion that provides resources to the Assembly Government. Welsh Ministers are free to allocate this grant in line with their priorities, subject to approval from the National Assembly.³ The National Assembly has no tax-varying powers that could alter the overall size of the Welsh Consolidated Fund and Welsh Ministers have only limited borrowing powers.⁴

The Barnett Formula

1.6 For the past thirty years, the Welsh block grant has been carried forward from one period to the next, with the Barnett Formula being used to determine changes to the block. In determining those changes the formula combines three factors, namely:

- i) changes to spending in England on services that are devolved to Wales;
- ii) the extent to which the spending area is wholly or partly devolved (the so-called “comparability factor”); and
- iii) the population of Wales relative to the population of England.

1.7 Under the formula, changes in the funding allocated to Wales are therefore explicitly linked to spending decisions in England. If spending in England on matters that have been devolved to Wales increases or decreases, the block grant allocated to Wales will also increase or decrease. Conversely, if spending in England on areas that have been devolved remains unchanged, then the block grant allocated to Wales also remains unchanged. Spending by the UK Government on wholly non-devolved matters, such as defence, has no impact on the size of the Welsh block.

1.8 Changes in English expenditure on matters that are wholly devolved to Wales will result in changes to the Welsh block that are in line with the Welsh population as a proportion of the English population. In 2008, the population of Wales was 5.82 per cent of the population of England.⁵ This means that Wales receives 5.82 per cent of any change to spending in England on matters that are devolved to Wales.

¹ Strictly speaking, the Barnett Formula is merely the mechanism by which adjustments to the grant are calculated (Heald, 1980). However, in this report, the term is also used more generally as a shorthand way of referring to the overall funding system.

² The Welsh Consolidated Fund acts as a pot where the money voted by Parliament for Wales is held. In addition to the budget provided to the Assembly Government, the expenditures of each of the Assembly Commission, the Auditor General for Wales and the Public Services Ombudsman for Wales also come out of the Welsh Consolidated Fund. The National Assembly is responsible for approving the budget motions and supplementary budget motions proposed by the Welsh Ministers. The Auditor General for Wales authorises payments out of the Welsh Consolidated Fund to the Welsh Ministers if the expenditure has been approved by the National Assembly.

³ In addition to its block grant, the Assembly Government receives very limited income from other sources such as fees and sales of capital assets. It also receives funds for volatile annually managed programmes and for European programmes.

⁴ The Assembly Government’s limited ability to borrow is described at Annex 6.

⁵ Population estimates are generated by the Office for National Statistics (ONS) and the Barnett Formula is adjusted annually to incorporate the most recent estimates.

1.9 In summary, changes to the Welsh block grant equal the change in spending in England, multiplied by the comparability factor for that spending, multiplied by the Welsh population share.

1.10 A significant proportion of public spending in Wales is outside the scope of Barnett and outside the authority of the National Assembly. In 2007-08 the Welsh block grant, at £13.5 billion, was the largest single source of public expenditure, but accounted for only 54 per cent of total public spending on services in Wales (known as Identifiable Expenditure on Services, or IES).⁶ The remaining 46 per cent of public spending on services in Wales was determined outside the Welsh block grant. The UK Government spent around £1.6 billion in Wales on a range of programmes inside the Departmental Expenditure Limits (DEL) of various Whitehall departments, covering non-devolved areas such as policing and justice. The UK Government also spent £8.5 billion in Wales on volatile or demand-led Annually Managed Expenditure (AME) programmes. The bulk of this spending relates to social security benefits and tax credits managed by the Department for Work and Pensions (DWP) and HM Revenue and Customs (HMRC) respectively. There was also an additional £1.6 billion of AME in Wales, which mainly reflects spending financed through revenue raised by local authorities via the council tax.^{7, 8}

1.11 While resources allocated through the Barnett Formula are therefore the largest single component of public spending in Wales, it is important to note that a substantial proportion of Welsh public spending is determined by other means.

Summary of recommendations in the first report

1.12 In our first report, we concluded that the Barnett Formula lacked any objective justification and had survived for 30 years solely for reasons of political and administrative convenience. As a direct result of the formula, the relative funding per capita for devolved activities in Wales has converged markedly towards the average level of funding in England over the past decade for reasons that have nothing to do with the relative needs of Wales. We found that this process of relative decline (the so-called “Barnett squeeze”) has caused the funding of devolved activities in Wales to fall below what Wales would receive were its budget determined by the various formulae that the UK Government uses to allocate resources to comparable functions in England. If the Barnett Formula remains in place, this convergence will continue over the medium term, with the funding of devolved public services in Wales moving ever closer to the average English level of funding per capita, irrespective of higher Welsh relative needs.

1.13 In order to establish a fair and rational basis for determining the size of the Welsh block grant, the Commission recommended that in the medium term the funding arrangements for Wales should be based on relative needs. However, we also acknowledged that this could take time. As an interim measure, we recommended a simple modification to the existing formula that would place a “floor” under the block grant at a level indicated by English needs formulae and would prevent any further convergence, pending wider reform.

⁶ IES is the total public expenditure in Wales that is recognised as being for the benefit of individuals, enterprises or communities in Wales. It excludes certain expenditures incurred in Wales because they are deemed to be for the benefit of the UK as a whole, for example defence. The latest year for which full outturn data are available is 2007-08.

⁷ This amount also includes adjustments to allow for differences in accounting treatment and coverage between DEL and IES.

⁸ In Wales, all local authorities are unitary authorities.

1.14 We also made a number of recommendations regarding operational issues, including the desirability of handing responsibility for technical aspects of the funding regime to a body that is at arm's length from both the UK Government and the devolved administrations. In addition, we recommended that the Assembly Government should be able to draw forward its capital budget across the period of a spending review and that the constraints on the ability of Welsh Ministers to move funds between capital and revenue budgets should be reduced. We proposed giving Welsh Ministers a free hand in accessing accumulated End Year Flexibility (EYF) funds. Finally, we recommended greater transparency in the publication of data of relevance to the operation of the funding regime and suggested that UK Government Ministers should be invited periodically to attend the National Assembly's Finance Committee to discuss the funding of Wales. Annex 2 includes a list of the recommendations made in our first report.

Funding devolved government: the state of the debate across the UK

1.15 After our first report went to press, the House of Lords Select Committee on the Barnett Formula reported, and the final report of the Commission on Scottish Devolution (the "Calman Commission") was published.⁹ The Select Committee recommended that Barnett should be replaced by a simple needs-based mechanism for allocating resources to the devolved administrations that would be implemented by a body that operated at arm's length from the UK Government and the devolved administrations. The Calman Commission agreed that the Scottish block grant should be based on need, and proposed a package of further fiscal reforms for Scotland that included devolution of additional tax-varying powers and limited borrowing powers to fund capital spending. In particular, the Commission recommended that Scotland's current powers over income tax should be substantially enhanced, while powers over landfill tax, aggregates levy, stamp duty land tax and air passenger duty should also be devolved. The Commission also proposed that limited borrowing powers to fund capital expenditure should be devolved to Scotland. The former UK Government published a White Paper in November 2009 that set out how it planned to take forward the Calman Commission's recommendations.¹⁰ Further information on those developments is provided at Annex 3. The UK Government that was formed following the May 2010 general election has stated its intention to implement the proposals of the Calman Commission.

Structure of this report

1.16 In Chapter 2, we consider the broad options for fiscal devolution that face Wales, while Chapter 3 sets out in some detail how the block grant element of a future funding regime could be derived from an impartial assessment of relative needs across the countries of the UK. Chapter 4 compares the tax regime and situation in Wales with that in other countries, especially those with provincial or state governments. Chapter 5 considers the interaction between taxes and the block grant and the main risks associated with tax devolution. The case for devolution of particular tax-varying powers to Wales is reviewed in Chapters 6 and 7. An analysis of the arguments for and against the devolution of borrowing powers is presented in Chapter 8. Finally, in Chapter 9 we summarise our recommendations for the funding of devolved government in Wales.

⁹ House of Lords Select Committee on the Barnett Formula, 2009, and Commission on Scottish Devolution, 2009.

¹⁰ Scotland Office, 2009.

Chapter 2: The options for fiscal devolution in Wales

Overview

2.1 This Chapter considers in broad terms the options for fiscal reform in Wales. It provides:

- i) an outline of the main funding models that could be envisaged for Wales;
- ii) a discussion of the constitutional context in which devolved government in Wales operates; and
- iii) a restatement of the Commission's principles for reform and consideration of their implications for fiscal devolution.

Funding devolved government in Wales: a range of models

2.2 In our first report, we described a spectrum of options for funding devolved government in Wales, ranging from very limited to very extensive fiscal autonomy. Four main models can be envisaged.

- i) **Block grant funding.** This is the current system. Taxes raised in Wales (excluding council tax and non-domestic rates) are pooled at the UK level, from which the UK Parliament provides a sum of money to the Assembly Government to fund devolved activities. Welsh Ministers have discretion over how those funds are allocated but are not able to alter the overall size of the budget by raising or reducing taxes. Some clarification and enhancement of the Assembly Government's current limited borrowing powers could be consistent with such models, though they would have to operate within a clear framework overseen by the UK Government.
- ii) **Block grant plus tax revenue assignment.** Under this model, the block grant would be reduced and instead part of the budget allocated to Wales would be directly dependent on taxes raised in Wales. There would therefore be a stronger link between what is spent in Wales and the resources provided by Welsh taxpayers than is currently the case. However, under tax revenue assignment models, control of the assigned taxes would be retained at the UK level; Welsh Ministers would not be able to vary the size of their total budget by varying the rates on the assigned taxes. Replacing a portion of the block grant with a stream of assigned tax revenue would introduce an element of volatility into the Welsh budget, and would therefore be likely to require some enhancement of devolved borrowing powers in order to manage this volatility. In our first report, we noted that models of tax revenue assignment appear relatively unattractive for Wales, since they would replace an element of block grant funding with an uncertain stream of tax revenue, without providing Welsh Ministers with the extra powers that would enhance their accountability to the electorate. However, the arrangement would relate funding more directly to the performance of the Welsh economy.

- iii) **Block grant plus tax devolution.** This involves linking part of the funding that is provided to Wales directly to certain taxes that are raised in Wales, as would occur with tax revenue assignment. However, under tax devolution Welsh Ministers would also acquire powers to vary the devolved taxes, making it possible to increase or reduce the total resources available to spend on public services in Wales. Revenue raised in Wales by non-devolved taxes would be pooled at the UK level as at present, and Wales would therefore still receive a block grant from the UK, although the grant would be reduced by an appropriate amount. As with tax assignment models, there would be a case for some enhancement of current borrowing powers in order to offset the budgetary volatility that could result from tax devolution.
- iv) **Towards full fiscal autonomy.** These models would devolve responsibility for all taxes raised in Wales, as well as for devolved expenditures. This system of finance could involve a range of possible transactions between the Assembly Government and the UK. There would be a transfer between Wales and the UK Government, being the net of a payment by Wales for non-devolved government services, like defence and social security, and the payment to Wales of an equalisation grant to bring its per capita tax receipts or public expenditure to an appropriate union-wide level. At the limit, Wales would be wholly reliant on its own resources, with no transfers between the Welsh and UK levels of government (“full fiscal autonomy”).

The constitutional context

Popular consent for fiscal devolution: differences between Wales and Scotland

2.3 While there are similarities between the constitutional positions of the devolved administrations in Wales and Scotland, there are also important differences. Unlike Wales, the Scottish Government already has limited tax-varying powers, through its ability to lower or raise the basic rate of income tax in Scotland by up to three pence relative to the UK rate (although to date it has not exercised this power). This devolved capacity to vary taxes was explicitly endorsed by the people of Scotland in a referendum in 1997.¹¹ This may well set a precedent for Wales, and indeed it is often argued that significant fiscal devolution to Wales would require popular endorsement in a referendum.¹² There again, it could be argued that endorsement of manifesto proposals in an election, coupled with the consent of the National Assembly and the UK Parliament, would be an adequate basis for tax devolution. It is not for the Commission to adjudicate on those matters. However, we are able to appraise whether the devolution of a particular fiscal power would have a large or small impact on the budget of the Assembly Government and on the relationship between the citizen and the devolved administration. In Chapter 9, we review our proposals for fiscal devolution in this context.

¹¹ The 1997 referendum in Scotland presented voters with a choice of “I agree / do not agree that there should be a Scottish Parliament” and also “I agree / do not agree that the Scottish Parliament should have tax-varying powers”. Both were agreed (74 per cent in favour of a Scottish Parliament and 64 per cent in favour of tax-varying powers).

¹² For example, see House of Commons Welsh Affairs Committee, 2009.

The Commission's approach to issues that have a political dimension

2.4 While it is certainly arguable that in a state of over 60 million people some devolution is conducive to political responsiveness and administrative efficiency, choosing the extent and form of devolution is a matter of political preference. The type of political devolution chosen will tend to circumscribe what fiscal devolution is most suitable. The form of fiscal devolution is logically dependent on prior political choices. Yet we recognise that many people view the political and fiscal arguments as intertwined components of a broader debate about the ultimate constitutional position of Wales. In those circumstances, the technical arguments for and against any particular fiscal arrangements may carry less weight than the extent to which they would move Wales closer to or further away from a desired constitutional status. Those who value strong links between Wales and the rest of the UK may be inclined to reject fiscal devolution to Wales as a matter of principle, however much it might make sense within an existing scheme of devolution, while those who favour greater self-government might be more supportive of funding models that would give a higher degree of control over the Welsh tax base to the devolved administrations, irrespective of the economic pros and cons of such an approach.

2.5 As an apolitical Commission, independent from the Assembly Government, it would be inappropriate for us to make recommendations on the funding model for Wales that are grounded in our political preferences. Instead, we take the current constitutional position of Wales as a given.¹³ Our recommendations are intended to be appropriate for devolution as it currently operates in Wales, or as it may operate in the event of a referendum vote in favour of greater law-making powers.¹⁴ If, at some time in the future, Wales were to acquire a significantly different degree of autonomy, our recommendations would need to be reassessed in the light of those new constitutional circumstances.

2.6 For that reason we have not attempted to trace what a consistent scheme for fiscal federalism would look like in Wales. A number of states in Europe have a federal structure, some much smaller than the UK (for example Austria, Belgium and Switzerland) and some larger (for example Germany). The closest parallel to the UK pattern of ad hoc asymmetric devolution within a formally unitary state can be found in Spain. Some people have argued that the patchy nature of British and Spanish devolution is inherently unsatisfactory and must end in a properly worked-out constitutional federalism. Be that as it may, such an outcome is clearly not imminent. Our remit is to make recommendations for the world as it is, rather than the world as it may become in a distant and uncertain future. Our approach is therefore to look at how current funding mechanisms could be improved within current constitutional structures.

2.7 Ever since the Scottish referendum of 1997, when voters gave a larger majority for law-making powers than for taxing powers to the Scottish Parliament, Welsh gradualism has seen legislative powers for the National Assembly as something that would precede powers over taxation. The Commission on the Powers and Electoral Arrangements of the National Assembly for Wales ("the Richard Commission") lent support to that view.¹⁵ From our perspective, while primary

¹³ In this report we use the term "current constitutional settlement" to embrace both the powers of the Assembly at the time of writing, as defined under Part 3 of the Government of Wales Act 2006, and the Assembly's powers should Part 4 be commenced following a referendum.

¹⁴ The Government of Wales Act 2006 provides for a referendum on an extension of legislative powers that would enable the National Assembly to legislate by Act in relation to a much broader range of subjects set out in the Act.

¹⁵ Commission on the Powers and Electoral Arrangements of the National Assembly for Wales, 2004.

legislative powers are an evident development or a step towards greater devolution, one can ask of any devolution settlement, wide or narrow, how it should be financed. Some element of self-financing may well be appropriate at any stage. After all, local authorities have to raise some of their own revenue from council tax and even parish councils can set a precept, although no-one suggests either should have primary legislative powers. It is indeed widely accepted in public finance theory that the divergence between the spending power and the revenue-raising power of any public authority should be limited as far as possible.¹⁶ That is to say, bodies which spend the public's money should at least share the pain of extracting it from them. A situation of legislative powers without taxing powers is unusual internationally; having tax powers without primary legislative powers, on the other hand, is extremely common in this country and abroad.

The dimensions of the union between Wales and the rest of the UK

2.8 While the union with the rest of the UK undoubtedly provides benefits to Wales, it also imposes constraints on the type of powers that could feasibly be devolved. The Calman Commission provided an analysis of the different dimensions of the union that exists between the constituent parts of the UK: the political, economic and social union.

2.9 In the **political union** the UK Parliament is sovereign. Political union, in our view, implies that it is inappropriate to seek advantages for one part of the union that come purely at the expense of another part. However, a UK Government would have no reason to resist changes that would make Wales potentially more prosperous if those changes would not be detrimental to another part of the union. This may seem an obvious point but it is often ignored in practical proposals that are made for fiscal devolution. For example, devolution of a specific tax is sometimes proposed so that a devolved administration can reduce tax rates and attract economic activity to its area. If that economic activity comes from elsewhere in the UK, there may well be no net gain to the UK as a whole and it is understandable that it would be regarded sceptically by the UK Government. At the limit, tax devolution that leads to tax competition may undermine a tax base and lead to too-low levels of tax for the union as a whole.

2.10 A necessary, if not sufficient, condition for avoiding those outcomes is that any proposal for devolving a tax-varying power should be able, at least in principle, to pass a compensation test. If a tax is devolved and altered by the devolved administration, and if that has deleterious spill-over effects elsewhere in the UK, could the devolved administration in theory compensate the rest of the UK for its revenue losses and any other costs and still remain in benefit? If the answer to that question is "yes", the tax is a candidate for devolution. If the answer is "no", the tax is an inappropriate one to devolve within a union state. While we do not propose that the compensation test should be applied in practice (there would be formidable complexities in identifying precisely the gains and losses to various parts of the UK and it could raise issues relating to European law), it is nonetheless a useful conceptual device when identifying appropriate candidates for tax devolution within the current constitutional framework.

2.11 An important reason for not expecting actual compensation arises from distributional issues. Relatively poor areas in a union state frequently receive transfers aimed at mitigating relative poverty, over and above the payment of income benefits to individuals. Transfer of income from one set of citizens to another is accepted in the interests of reducing disparities in economic development.

¹⁶ Oates, 1972 and 1999, argues that there will be externalities so that tax prices diverge from social marginal costs where taxes do not reflect benefits from public spending.

It could therefore make sense to allow some tax autonomy to a disadvantaged region even if it results in negative spillovers on the union budget, so long as those are not greater than the transfers that might otherwise be made to combat relative poverty or to foster economic development.

2.12 The **economic union** has both macroeconomic and microeconomic aspects. It means that at the level of the macroeconomy, there is a legitimate role for the UK Government in determining overall spending and borrowing limits, and that any devolved fiscal powers will have to be embedded in a UK-wide management framework. At the microeconomic level, the union means goods and services are freely traded across the borders of its constituent parts within a framework of a common capital market and uniform labour laws. Just as in the European context restrictions on tax variation are applied in order to underpin the single market, so tax devolution within the UK should not threaten the integrated UK market. Tax changes that would seriously disrupt the economic union of the UK are, in any case, likely to be impractical and impossible to enforce at reasonable cost. For example, it would be very difficult for Wales to impose a substantially different rate of fuel duty from England, given the ease with which vehicles could cross the border to take advantage of price differentials. If Wales were to impose a lower rate of fuel duty than England, the resulting inflow of buyers from England might generate substantial revenues for the Welsh budget, but only at the expense of undermining the English tax base and so harming the interests of the UK. Conversely, imposition of a higher rate of fuel tax in Wales would simply result in large numbers of Welsh residents buying their petrol in England.

2.13 Many people in Wales are interested in fiscal powers as policy instruments to promote economic development, rather than for their contribution to raising revenue. While our brief is principally concerned with financing devolved government in Wales, the economic development aspect is unavoidable in discussing some tax options. For example, a low rate of corporation tax has been actively used by Ireland and other countries as a means of attracting inward investment. While this policy option is available to independent countries, the constraints of economic union mean that Wales could only pursue this route if it were able to do so in a way that did not substantially disadvantage other parts of the UK. We return to this issue in Chapter 7, when we consider the case for devolution of corporation tax.

2.14 The **social union** produces expectations that benefit payments should be available on an equal basis across the UK, and that tax revenues should be allocated in a way that takes account of need. It follows from the social union that the elements of the social security system, including the taxes notionally earmarked for financing it, are not candidates for devolution.

2.15 In sum, we accept the restrictions on fiscal devolution that arise from the political, economic and social dimensions of the union. Since tax revenue assignment is unattractive and fiscal federalism or full autonomy are inconsistent with the current constitutional settlement, we shall focus primarily in this report on block grant funding and block grant funding combined with selective tax devolution as the most plausible funding models for Wales. We view both of those approaches as being broadly consistent with Wales's current constitutional status.

Principles for reform

2.16 Our first report endorsed the ideal characteristics of a funding system for sub-national governments that were originally proposed by the Calman Commission, namely:

- i) **stability / predictability:** so that public spending can be managed properly;
- ii) **simplicity / transparency:** so that it is readily implemented and the justification is evident;
- iii) **autonomy:** so that the sub-national government can decide how to allocate its resources;
- iv) **efficiency:** so that economic distortions created by incentivising movements of people and the factors of production simply to avoid taxes are avoided;
- v) **equity:** so that resources are allocated in a way that takes account of relative need, making it possible to provide a standard level of service in all parts of the UK; and
- vi) **accountability:** so that the link between decisions made at the regional level and the tax paid by voters is clear. In addition, the tax take within a region should impact on the budget available to the sub-national government, thus ensuring that the utility of public expenditure at the margin is balanced against the cost to taxpayers.

2.17 No real funding system wholly achieves those objectives. The current block grant regime that is applied in Wales and the other devolved administrations scores relatively highly on stability and simplicity. It also provides a high degree of autonomy to Welsh Ministers in deciding their own spending priorities, although there is no scope to influence the overall size of the budget.

2.18 Efficiency has a number of different aspects. Uniform tax rates and structures might appear efficient in that there are no differences that could induce people to take action that would otherwise be inferior simply to avoid taxation. Nevertheless, there may sometimes be efficiency arguments for having different rates of tax in different localities. If preferences differ, for example between public and private goods or between saving and spending, then the optimal tax structure will differ too. Devolution of tax-varying powers creates the possibility that tax rates might be set in a way more appropriate to local conditions than the rates that represent the best compromise for a larger geographical entity. However, it also creates the possibility that different taxes might create more distortions than efficiency gains. In considering whether a given tax is suitable for devolution, one must make a judgment on the scope for efficiency gains and losses. Uniformity undoubtedly reduces the administrative cost of levying and raising taxes, which is another aspect of efficiency. Devolving the power to alter tax rates does not necessarily mean altering the agencies or methods of tax collection but administrative efficiency is a factor to be borne in mind.

2.19 The Barnett Formula performs very poorly on equity, since there is no link between the relative funding allocated to Wales and the relative need to spend on devolved services. Our proposal to replace Barnett with a needs-based funding regime would address this fundamental weakness, and our recommendation that a floor should be introduced to prevent Welsh relative funding falling further behind its needs-based level would serve as an interim solution to this problem.

2.20 That leaves accountability as the main weakness of the current funding regime. As things stand, the size of the block grant is set by the UK Government using the Barnett Formula, leaving politicians in Wales unable to offer voters any choice over tax and spending trade-offs. Moreover, the relative performance of the Welsh economy has no impact on the budget, with the result that the Welsh public sector is, in some ways, detached from the economic circumstances of the citizens

it serves. The absence of clear linkages between Welsh taxpayers, the Welsh economy and the resources available to the Assembly Government is a major weakness of the current funding regime, and is highly anomalous from an international perspective. Devolution of tax-varying powers would rectify those problems. Politicians would surely have a more careful and considered view of public expenditure at the margin if they knew it had a bearing on the taxes their electors would pay. It is possible too that Welsh discussion about issues of priority in public services would be more developed if everyone knew that there was a choice about paying more or less tax for more or less service, rather than simply blaming Westminster for inadequate resources. In principle, therefore, we favour some tax devolution to Wales.

2.21 The Calman Commission based its argument for greater fiscal discretion for Scotland very largely on the argument for accountability. It was inappropriate, the Commission maintained, for the Scottish Government to be spending large sums of public money with no responsibility for raising it or ability to do so. Scotland and Wales differ in many ways but none of the differences is relevant to this point. The Assembly Government, like the Scottish Government, is charged with spending large sums of public money. The Calman Commission's argument is not geographically limited. If it applies in Scotland it applies with equal force in Wales.

2.22 A funding regime that combined a needs-based block grant with a degree of tax devolution would have several appealing elements. By ensuring that the block grant was aligned with relative needs, governments across the UK would have the ability, but not the obligation, to provide a standard level of public services to all their citizens. However citizens would be able, through their governments, to make trade-offs at the margin between taxes and spending and so to have an influence over the size of the devolved budget, as well as the ways in which it was spent. That would lead to a diversity of provision across the country but one that reflected democratic preferences. A different constellation of tax rates in a devolved administration might enhance economic efficiency, given local conditions and preferences. In any event the accountability of the devolved administration would be greatly enhanced. Moreover, by making the devolved budget at least partially dependent on the tax base of its own territory, it would strengthen the incentives for a devolved administration to act in a way that enhanced economic development. Tax devolution could also create laboratory conditions for improving a tax as a pilot for the UK as a whole.

2.23 Despite accepting the principle of tax devolution, we are sharply aware that the practical challenges of implementing it in the Welsh context are substantial. The highly integrated nature of the Welsh and English economies (discussed in Chapter 4) and our acceptance of the constraints imposed by membership of the UK and EU greatly limits the range of taxes that could plausibly be devolved to Wales. Our objective is to identify taxes that would, if devolved, have a beneficial impact on the accountability of the Assembly Government to its citizens, while having either a net gain in efficiency or only a small potential to create economic distortions.

2.24 For any devolution of tax varying powers to be meaningful, it is essential that it is undertaken in such a way as to ensure that tax decisions taken by Welsh Ministers have a real impact on the

resources available for devolved activities. For example, a decision to raise taxes in Wales, relative to England, should not result in an offsetting reduction in the block grant element of the Welsh budget, nor should a relative cut in Welsh tax lead to an increase in the grant. While this principle may seem uncontroversial, it will require any new devolved tax powers to be embedded in a robust fiscal framework that ensures that divergence in tax and spending patterns in the devolved administrations are protected from the risk of being arbitrarily overridden by the actions of the UK Government through its control of the block grant. It will be easier to ensure that if a needs-based grant formula is in place because then regional variations in taxes or spending would be seen clearly to be the result of regional preferences and not of unfair levels of funding.

2.25 Tax devolution can provide an important element of accountability at the margin but a block grant, combined with substantial sharing of tax revenue at the UK level, will remain central to the funding regime in Wales under all the options that we shall consider in this report. In the next Chapter, we set out our proposals for how best to ensure that the block grant element of a future funding regime is calculated in such a way as to align relative funding with relative needs, and we discuss how a needs-based system could be made to work in practice.¹⁷

Summary

2.26 There are four broad models that could be applied to fund devolved government in Wales:

- i) Firstly, Welsh taxes could be pooled at the UK level, and the Assembly Government's budget could be almost entirely comprised of a block grant from the UK Government - this is the current system.
- ii) Alternatively, under models of tax assignment the block grant could be partly replaced by revenues raised by certain assigned taxes in Wales
- iii) A third option - tax devolution - is similar to tax assignment, except that powers to vary the rates of the devolved taxes would also be given to Welsh Ministers.
- iv) Finally, under models that move towards fiscal autonomy, Wales would be given extended taxing powers, in addition to support from the UK budget through grants. At the limit, Wales would be wholly reliant on its own resources, with no transfers between the Welsh and UK levels of government.

2.27 The Commission has no political representation. We have taken the current devolution settlement as a given and have developed recommendations that are appropriate to devolution as it currently operates or as it would operate in the event of a referendum vote in favour of enhanced legislative powers. Models of fiscal federalism or full autonomy are therefore outside our remit.

¹⁷ "Relative funding" means spending per head on devolved activities in Wales, relative to the amount spent on comparable activities in England.

2.28 The union of the countries of the UK has political, economic and social dimensions. While the union undoubtedly brings benefits for Wales, it also imposes constraints on the options for fiscal devolution.

2.29 The major weaknesses of the current funding system are its lack of equity and accountability. Our recommendation to replace Barnett with a needs-based funding system (discussed in our first report and further developed in the next Chapter) would ensure an equitable funding system. Some devolution of powers over taxes would greatly enhance the accountability of the current settlement. In principle, we therefore support some tax devolution, although the practical difficulties are substantial.

2.30 No system of devolved taxation that is consistent with the principles of union membership would raise as much revenue as a needs-based block grant. Tax devolution can provide accountability at the margin but a block grant, combined with substantial sharing of tax revenue at the UK level, will remain central to the funding regime in Wales under all the options that we shall consider in this report.

Chapter 3: Replacing Barnett with a needs-based formula

Overview

3.1 This Chapter builds on the recommendation made in the Commission's first report that Barnett should be replaced by a needs-based formula. Drawing on a working paper published by the Commission in December 2009,¹⁸ it:

- i) provides evidence that a replacement formula could be relatively simple;
- ii) gives an example of the type of formula that could be used in place of Barnett, which has been derived in an impartial way;
- iii) assesses the implications of the formula for the funding of devolved governments in the UK; and
- iv) discusses practical issues that would need to be addressed when implementing a needs-based formula.

Rationale for this analysis

3.2 Our first report emphasised that the process of allocating funds on the basis of need is inherently political - it is for Ministers to decide how needs should be taken into account when setting budgets. This remains our position. Any new funding arrangement must be implemented on the basis of mutual agreement by the governments of the UK and the devolved administrations, and a conference of politicians and experts may be necessary to achieve agreement.

3.3 However, we are aware that in order to move the debate forward it is necessary to go beyond a discussion of general principles and to produce a proposal that would work in practice and could form the starting point for a debate between governments. In order to do this, we employ a methodology for developing a needs-based formula where the weighting given to different types of need is derived from spending decisions made by Ministers in England, Scotland and Wales. We set out how this formula could be used to determine budgets across the nations of the UK, and we consider what the implications of this new funding system would be for the devolved administrations. Annex 4 provides a detailed description of our methodology. We have kept the imposition of our own judgment to a minimum in the interests of deriving a formula which encodes the "revealed preference" of current governments. The estimates of relative need that our model provides for Scotland and Northern Ireland should be seen as only broadly indicative, given issues of coverage, but we have greater confidence in the accuracy of the estimate for Wales given its consistency with the findings of our first report.

¹⁸ Independent Commission on Funding and finance for Wales, 2009b.

3.4 This Chapter is therefore not intended to be the final word on how a needs-based formula would operate; rather, its purpose is:

- i) to demonstrate that a needs-based funding regime is eminently and imminently achievable given the political will;
- ii) to show that such a formula need not be prohibitively complicated; and
- iii) to provide a starting point for discussion about how a needs-based replacement for Barnett could be put into practice.

3.5 In the remainder of this Chapter, we set out our proposal for aligning relative funding with relative needs in a way which we believe is workable, simple to operate and fair to all parts of the UK.

Towards a new formula: trade-offs between simplicity and completeness

3.6 In our first report, we discussed the two main characteristics of an ideal needs-based funding formula, namely:

- i) **simplicity:** a formula should be simple to operate and understand; and
- ii) **completeness:** a formula should take account of all relevant dimensions of relative need.

3.7 The objectives of simplicity and completeness are in competition with each other to a certain extent - a simple formula will tend to be incomplete, while a complete formula is likely to be complex.

3.8 The appropriate balance between simplicity and completeness will vary depending on the purpose of the funding and the powers of the body to which funding is being provided. The budgets of the UK's devolved administrations are provided as unhypothecated block grants, and Ministers in the devolved governments have a very high degree of discretion in deciding where to allocate resources. There is little point in trying to define specific needs too precisely in those circumstances, and therefore our strong preference is that the successor to Barnett should be a relatively simple formula that provides a broad brush assessment of the main components of relative need. A simple formula focuses attention on relatively few indicators of need, promoting transparency and facilitating political debate of distributional preferences and priorities. If a single variable, population, has been considered adequate to drive changes in devolved expenditure for decades, it seems a reasonable inference that a refinement using a handful of variables is to be preferred to a greater refinement employing hundreds.

How simple could a needs-based formula be?

3.9 In order to assess whether it could be possible to develop a simple funding formula that retained a high degree of completeness, we commissioned an econometric study that attempted to mimic the outcomes of complex funding formulae that are being employed at present in the UK using only a few needs variables.¹⁹ This analysis aggregated the actual funding allocations for health, local government and schools expenditure in England (each of which is determined by a complex

¹⁹ LE Wales, 2009.

needs-based funding formula), and attempted to replicate their outcomes at a sub-regional level across England using as few needs indicators as possible.²⁰ Since those public services account for the bulk of devolved spending in Wales, in aggregate the budgets provide a reasonable proxy for the activities that are funded from the Welsh block grant.²¹

3.10 The study demonstrated that it is possible to replicate to a surprisingly high degree of accuracy the funding allocations of very complicated needs-based formulae using only a few key needs indicators. Over 90 per cent of the variation in funding for those public services across English sub-regions could be captured using a single equation with just two needs proxies. Adding another four took the explanatory power of the equation well above 95 per cent and ensured that all observations in an out-of-sample test were predicted within a five per cent error band. The implication of this finding is that it should be possible to generate a simple needs-based formula to replace Barnett that also retains a high degree of completeness.

Needs indicators: selection criteria

3.11 Our first report considered the various competing definitions of equity that could be adopted when allocating public resources. While this debate is a political one that we cannot resolve, there is a broad consensus that, at a minimum, funds should be allocated in a way that makes it possible to provide a standard level of public services in all parts of the UK.²² There is, however, no universally accepted way of assessing how relative need varies from place to place, and there is therefore no agreed set of needs indicators waiting to be taken off the shelf and plugged into a formula.

3.12 It is nonetheless possible to identify in broad terms the type of needs that are relevant to the provision of devolved services and to find objective proxies for them. Population size is one obvious such driver - the more people that live in a locality, the greater the need for public services. In addition, our first report argued that the three factors most relevant to the financing of devolved activities in the UK are:

- i) **Demographics:** a higher prevalence of school age and retired people in the population will tend to increase the need for public services. Similarly, certain minority ethnic groups are disproportionately likely to experience disadvantage, so greater ethnic diversity will also be likely, other things being equal, to generate a higher need for public services.
- ii) **Deprivation:** individuals who are disadvantaged in various ways will have a greater need to access public services. For instance, a high prevalence of ill health will generate increased pressure for health-related services, while people who are not in employment or who are claiming income-related benefits are also likely to have a relatively high need for devolved public services such as personal social services and early years support.

²⁰ Schools expenditure in England was determined by a needs-based formula until 2006-07. Since that date, school budgets have been based largely on historic spend. In effect therefore, the relative allocations continue to reflect the outcomes of the pre-2006-07 needs-based formula.

²¹ The scope of devolved responsibilities is not identical in Wales, Scotland and Northern Ireland. The implications of this for our proposed approach are discussed in paragraphs 3.25-3.26 and in Annex 4.

²² For example, this definition was adopted by HM Treasury in its 1979 needs analysis (HM Treasury, 1979). Alternative definitions of need and equity are discussed in detail in Chapter 3 of our first report.

- iii) **Costs:** the cost of delivering public services tends to be greater in areas where the population is relatively sparse. In addition, labour costs are generally higher in London than in other parts of the UK. This increases the relative cost of delivering public services in London.

3.13 The Barnett Formula takes some account of population at the margin, but ignores all the other factors. Barnett is therefore extremely simple to operate (at least in principle), though it is incomplete to the point of being nugatory in its assessment of needs. In developing an alternative to Barnett, the goal should be to capture the variations in relative need that are driven by demographics, deprivation and costs in the simplest formula possible.

3.14 For any formula to be of practical use, it must be based on data that are available on a consistent basis across the UK. Moreover, the needs indicators selected should not be under the direct influence of any devolved administration, in order to avoid incentives for “gaming” the funding system. The indicators should also be simple to understand, measured to a high degree of accuracy and subject to periodic review. For those reasons, we have a preference for using census data where possible.

3.15 Table 3.1 summarises our proposed needs indicators, which in each case are defined relative to the average value for England.²³ Three of the indicators (ethnicity, ill health and sparsity) can be captured using census data. A further two indicators (the number of children and the number of retired persons) are estimated annually by the ONS, but those estimates are benchmarked to census data. The census does not include a question on earnings or wealth. A robust indicator of low income can be derived from statistics on social security and tax credit claimants. Those are based on records of all claimants and are available on a consistent basis throughout the UK. We have therefore used this data source for our measure of income poverty.

3.16 While the set of indicators shown in Table 3.1 is both intuitively plausible and consistent with our selection criteria (set out in further detail in Annex 4), we do not claim that it is the only basket of proxies that could be developed for the purpose of measuring relative need across the nations of the UK. That said, it is the best small set we have found in explaining actual expenditure variations while being intuitively comprehensible. We do not believe that any alternative set of proxies that complied with our selection criteria would produce radically different results from those presented in this Chapter.

²³ The total population of a country is obviously the single most important factor in determining its budgetary allocation. Our analysis is conducted on a “per head” basis so it implicitly takes account of population.

Table 3.1: Summary of indicators included in our assessment of relative needs (measured relative to the English average)

	Need indicator	Description of variable	Source
Demographics: indicator 1	Number of children	Under 16 dependency ratio.	Mid-year estimates
Demographics: indicator 2	Number of older people	Retired persons dependency ratio	Mid-year estimates
Demographics: indicator 3	Ethnicity	Percentage of the population that is from a minority ethnic group	Census
Deprivation: indicator 1	Income poverty	Percentage of the population claiming income-related benefits	DWP benefits database
Deprivation: indicator 2	Ill health	Percentage of the population with a long-term limiting illness	Census
Cost: indicator 1	Sparsity	Proportion of people living outside settlements of 10,000 people or more; in addition, our equation contains a variable to take account of the remoteness of the population of the Scottish islands	Census
Cost: indicator 2	London weighting	A variable that identifies inner London areas	N/A

Developing a needs-based formula: an impartial approach

3.17 In order to use the needs indicators in Table 3.1 to calculate funding allocations for the different countries of the UK, it is necessary to decide how much importance should be attributed to each indicator. While we could as a Commission select weights that reflected our own views as to how much importance should be placed on a region's sparsity, how much on its prevalence of ill health and so on, we would quite reasonably be accused of making judgments that lack any empirical justification or political legitimacy.

3.18 Instead, we have taken as our starting point the actual budgetary allocations that are made to fund devolved activities across the countries of Great Britain.^{24, 25} Those real funding decisions are based on assessments of need that have been thrashed out over years and reflect decisions that are the responsibility of elected officials. We therefore take them as representing the "revealed preference" of governments.

²⁴ The analysis covers the combined budgets for health, education, local government, Sure Start and Supporting People. In aggregate, these activities account for approximately 80 per cent of the budget that is devolved to Wales.

²⁵ While our analysis of expenditure covers Wales, England and Scotland, the methods could also be extended to Northern Ireland.

3.19 Where possible, we have used funding allocations before the application of smoothing or damping procedures. This is because we are trying to identify budgetary decisions made on the assessment of need, rather than the practical reconciliation of such assessments with historical allocations.

3.20 Using regression analysis, we are able to calculate how important each of the indicators in Table 3.1 is in determining the budgetary allocations. This technique generates a weight for each needs indicator that is based on its importance in explaining spending decisions made by the UK Government in England and by the devolved administrations in Wales and Scotland.²⁶

3.21 In reality the formulae used to allocate resources across Great Britain are varied and complex. However, our regression analysis has found that the simple need proxies in Table 3.1 are extremely effective at modelling real funding allocations: the proxies are able to explain over 95 per cent of the variation in funding across sub-regions of Wales, England and Scotland. This inspires confidence that they are effective in modelling government and implicitly societal preferences and therefore provide a reasonable basis for determining the funding needs of the devolved administrations.

3.22 The regression approach has enabled us to derive an equation to calculate the relative needs of the nations of the UK that requires us to make minimal independent judgments and is derived from actual spending allocations in the three countries. The formula we have developed is both simple (it contains only the need factors set out in Table 3.1) and also has a high degree of completeness (its strong explanatory power when applied to sub-regional funding allocations implies that it captures the relevant aspects of need). A more detailed explanation of how our needs formula was calculated is provided in Annex 4.

Implications of the formula for the funding of the devolved administrations

3.23 The needs formula introduced above combines the needs indicators set out in Table 3.1, weights each one in proportion to its importance in determining spending decisions in Wales, England and Scotland, and generates an overall relative need value for the countries of the UK. If applied to Wales, the formula produces an overall estimate of Welsh relative need of some 115 per capita, where the value for England is 100. This suggests, based on the relative needs of Wales and the importance attached to those needs by the UK Government and the devolved administrations, that Wales should receive £115 per person to spend on devolved activities for every £100 per person spent on comparable activities in England.

²⁶ To the extent that governments in different countries disagree in their assessment of the relative importance of the various aspects of need when allocating resources, this is taken into account. In effect the weight given to each country's preferences is proportional to its population.

3.24 In our first report, we calculated the funding that Wales would receive from the UK Government were it treated as a region of England. We concluded that Wales would receive at least £114 per person for every £100 of comparable English spending. The fact that both of the approaches we have adopted have arrived at very similar estimates of Welsh relative need provides confidence in the robustness of our methods. In producing the estimate in our first report, we deliberately adopted methods that were “certain to produce a conservative overall estimate, and likely to generate an underestimate of Welsh relative needs”.²⁷ It is therefore unsurprising that the estimate of Welsh relative needs generated by our formula is a little higher than the estimate that was provided in our first report.

3.25 Scottish areas were included in the calculations to derive the needs formula and, if applied to Scotland, the formula generates an estimated need to spend of £105 in Scotland for every £100 spent per person in England for the same “basket” of devolved government functions. However, it should be noted that the functions devolved to Scotland are different from those devolved to Wales. Most importantly, law and order and justice are devolved in Scotland, but not in Wales, as are the proceeds from the non-domestic rating system. As a result, the programme areas covered by the allocations used to derive our needs formula are not as closely aligned with the block grant for Scotland as they are for Wales. The relative needs estimate for Scotland would therefore require adjustments, but as they stand are broadly indicative.²⁸

3.26 Although expenditure data from Northern Ireland were not included in the process of estimating weights for each needs indicator, the indicators are available on a consistent basis and applying the same formula to Northern Ireland generates an estimated need to spend of £121 for every £100 spent per person in England on devolved activities. For similar reasons as those set out above in relation to Scotland, this result should be seen as only broadly indicative for Northern Ireland.²⁹

3.27 Chart 3.1 shows in graphical form that five of the six need factors contained in the needs assessment formula are higher in Wales than in either England or Scotland.³⁰ Ethnicity is the only need factor that is higher in England than in Wales. Four of the six need factors are higher in Northern Ireland than in the other three nations, the exceptions being the number of pensioners and ethnicity.

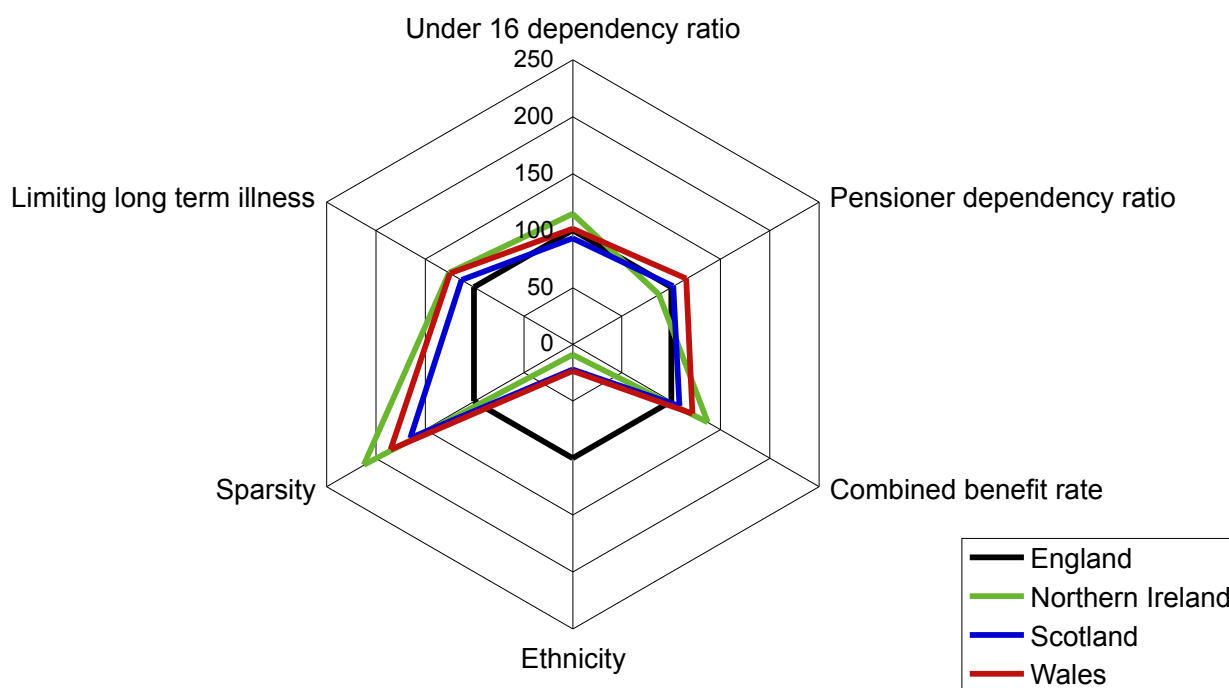
²⁷ Independent Commission on Funding and Finance for Wales, 2009 p.47.

²⁸ The Scottish household crime rate was 2,791 per 10,000 households in 2008-09, which is similar to the rate in England and Wales over the same period (2,831 per 10,000 households). The prison population in Scotland (1.44 per 1,000 population in 2007-08) was slightly lower than the comparable England and Wales figure (1.48 per 1,000 population). While not conclusive, this suggests that the costs associated with devolved policing and justice are unlikely to result in a major upward revision of the estimated relative needs of Scotland. Source: Scottish Crime and Justice Survey, British Crime Survey and ONS Regional Trends.

²⁹ Policing and justice were devolved to Northern Ireland in April 2010.

³⁰ Chart 3.1 replicates an approach to graphically illustrating a range of needs indicators that was presented in the House of Lords Select Committee on the Barnett Formula, 2009.

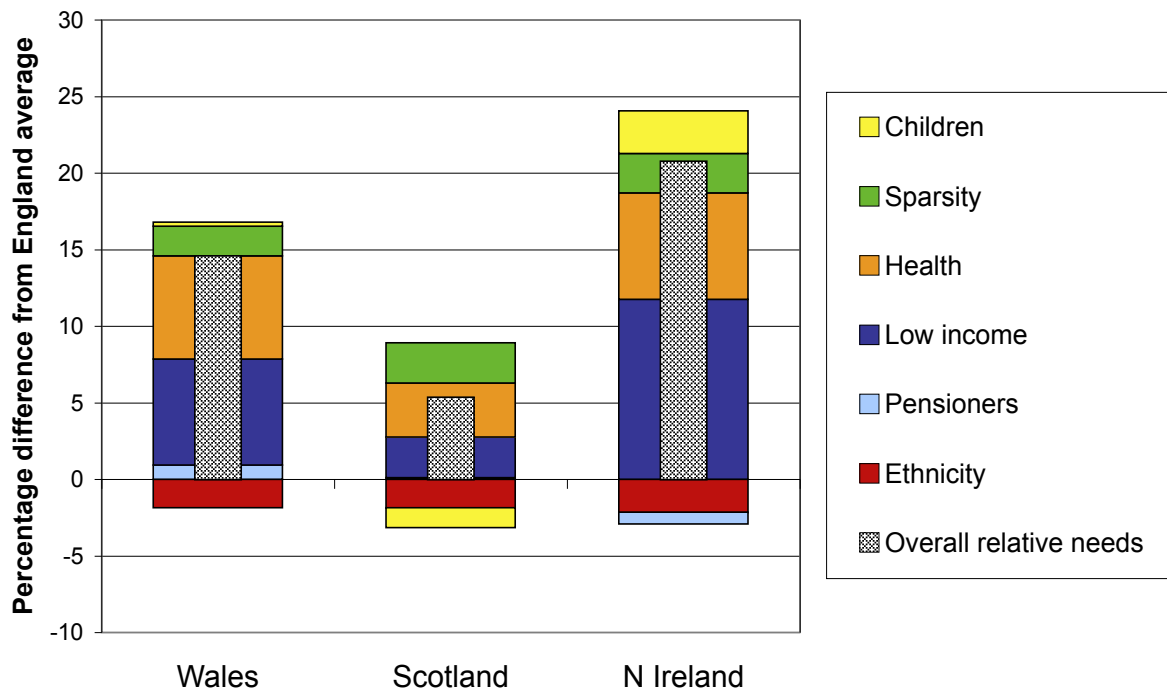
Chart 3.1: Distribution of needs across Wales, England and Scotland (England = 100)



Source: Commission calculations

3.28 Chart 3.2 shows how important each of those needs indicators is in deriving the overall needs value for Wales and the other countries of the UK. Although all three of the devolved administrations are considerably more sparse than England (as shown in Chart 3.1), this is a relatively minor factor in determining spending allocations and therefore carries a relatively small weight in the overall calculation of needs as illustrated in Chart 3.2. Ill health (proxied by limiting long term illness) and income poverty (proxied by the combined benefit rate) are the indicators that contribute most to the high estimate of relative needs in Wales. Box 3.1 provides a summary of how we developed our needs formula.

Chart 3.2: Weighted expenditure need per head by need factor (difference from England average)



Source: Commission calculations

Box 3.1: Developing a simple assessment of relative needs across the UK: a summary of our approach

Our commissioned research³¹ examined the funding allocations made to sub-regions of England to support health, education and local government activities. Although those allocations are generated by very complicated needs-based formulae, the research found that it is possible to explain a very high proportion of the variation in those real world funding decisions using only a handful of needs indicators.

We extended this analysis to include funding allocations made to sub-regions of Wales and Scotland, as well as England. Those countries also use needs-based formulae for the allocations though they differ from those in England. Once again, we found that it is possible to capture a very high proportion of the variation in funding across Great Britain using only a few needs indicators (listed in Table 3.1, and chosen in line with the selection criteria in paragraphs 3.12-3.16). Our analysis demonstrates how important each need indicator is in determining the distribution of funding; in other words, it provides a weighting for each element of need, based on real world funding allocations in Wales, England and Scotland.

The needs indicators were aggregated using the weights derived from our analysis in order to determine an overall value of relative need for each country. We found that for Wales relative need per capita is 115 (where relative need in England is 100). In Scotland, the formula generated an estimate of relative need of 105, while in Northern Ireland it was estimated to be 121. The estimates for Scotland and Northern Ireland should be viewed as broadly indicative.

³¹ LE Wales, 2009.

Possible modifications to the formula

3.29 We have attempted to minimise any introduction of our own judgment into the analysis but there are a couple of points where an alternative procedure would have been defensible and which would alter model allocations. In each country the local government funding regime is devolved and takes account of the ability of local authorities to raise their own resources via the council tax. However, this is not done on a consistent basis across countries, and the defined tax base in different areas bears no relation to the taxable capacity as indicated by house prices. We believe that a needs-based funding regime for the devolved administrations would have to take some account of variations in taxable capacity across countries, although a number of possible mechanisms for doing this can be envisaged, none of which is self evidently “correct”. In order to preserve the simplicity of our approach we have therefore made no adjustment to local government funding allocations to account for differing taxable capacities, beyond that which is incorporated in the allocation formulae of each nation. In Annex 4, we discuss one way of modifying our methodology to account for variations in taxable capacity, and show that adoption of this approach would generate a somewhat higher estimate of relative needs in Wales and the other devolved administrations than is obtained from the unadjusted data. The modification entails an adjustment to the local government formula allocations so that each local authority is assumed to make an equal tax effort relative to current property prices. This adjustment leads to an estimate of relative need per head in Wales of 116.

3.30 The Welsh Language Act 1993 requires public services in Wales to be provided in both Welsh and English “on a basis of equality”. This generates an additional need to spend on certain public services in Wales, notably education, which is analogous to the impact of ethnic diversity. A modification could be introduced to the formula to make some allowance for this need to spend - for example, an estimate of the number of people speaking Welsh as a first language could be added into the ethnic minority variable in the formula. An alternative approach could be to replace the ethnic minority variable with a language-needs indicator. A census-based indicator is available which identifies people who were born, or whose parents were born, outside the UK in non-English speaking countries. Again, this could be combined with an estimate of first-language Welsh speakers. Both of those modifications would increase the estimate of relative need per head in Wales to 116 (with England=100). Combining either of those with the local tax capacity adjustment described in paragraph 3.29 would produce a relative need estimate of 117 for Wales.

3.31 Adjusting the grant for parity of tax effort and to meet the requirements of bilingualism seems perfectly reasonable so it may well be that Wales should receive 117 per cent of average English expenditure per head. Those are matters for political decision, however, on which we express no final view and in the remainder of the Chapter we continue to use 115 in illustrations of how the revised system would operate.

Putting a new formula into practice

3.32 The process described above leads us to conclude that the formula we have developed could underpin a needs-based funding system for the devolved administrations. In this section, we set out the main practical steps that would be required to put such a system in place.

3.33 Our first report argued that an arm’s length body should be established to operate the new funding formula and to calculate annual budgets. This remains our view. It is highly desirable that the technical aspects of the funding regime should be, and be seen to be, managed independently of the parties that provide or receive funding.

3.34 The new funding formula should ensure that each area receives an allocation reflecting its needs relative to other areas. Then it has to fulfil two criteria, namely:

- i) it should ensure that changes in relative funding are aligned with relative needs; and
- ii) it should provide a mechanism to redress any over- or under- funding.

i) Aligning funding changes with relative needs

3.35 At present, the devolved administrations receive an unhypothecated block grant that is carried over from one year to the next. Changes to the grant (known as “consequentials”) are determined by the Barnett Formula, which is given in Equation 3.1 below:

$$\begin{aligned}
 \text{Change in block grant} &= \text{change in English spend} \\
 &\times \text{Welsh population share} \\
 &\times \text{comparability factor}
 \end{aligned}
 \tag{3.1}$$

3.36 We have sought to develop a mechanism that aligns relative funding with relative needs while also retaining the simplicity of Barnett. A subsidiary requirement may be to minimise changes to current procedures. With those objectives in mind, we propose that the current approach should be maintained for the calculation of increments, with the inclusion of a needs adjustment term in Equation 3.1 to ensure that funding consequentials are set at a level appropriate to the relative needs of each nation. The **needs adjustment term** would simply be equivalent to the relative needs of each devolved administration as calculated by a relative need formula with variables like those set out in Table 3.1. In the case of Wales therefore the needs adjustment term would initially be set to 115 per cent.

3.37 Since our proposed approach for assessing relative needs is straightforward, it would in principle be possible to update the value of the needs adjustment term annually. However, in the interests of maintaining a regime that provides for stable and predictable budgets we propose that the needs adjustment terms for each country should be fixed for the duration of each spending review period (i.e. for three forward years).³² Within each spending review period, the new formula for calculating changes to the block grant would be:³³

$$\begin{aligned}
 \text{Change in block grant} &= \text{change in English spend} \\
 &\times \text{Welsh population share} \\
 &\times \text{comparability factor} \\
 &\times \text{needs adjustment term}
 \end{aligned}
 \tag{3.2}$$

³² Census variables change only every ten years anyway; new income variables are available annually with a lag.

³³ Under the current funding system, changes to the Welsh and other block grants are driven by changes in comparable English programmes. It could be argued that this approach is inappropriate for a devolved body with its own priorities and democratic mandate. An alternative procedure could be envisaged that would end the detailed use of comparability factors and would instead link changes in the block grants to a broader metric such as the growth in overall UK public spending. This may have some merit on the grounds of simplicity (since detailed comparability factors for each budget would no longer be required), although it would be a significant change to the current funding system. We are not persuaded that there is a clear case for moving away from the current approach at present, but we propose that the arm’s length body should review this matter to assess whether a simpler alternative system could be introduced.

ii) Closing the funding gap

3.38 As previously stated, our proposed needs formula estimates that Wales should receive £115 of funding per head for every £100 per head spent on devolved activities in England. If the overall level of funding for devolved functions in Wales happened to be at this level when the new funding regime was introduced (and assuming no change in relative populations), then Equation 3.2 would provide increments to Wales that were in line with Welsh relative needs and would maintain the overall funding position for Wales in its correct place. No further change to the funding formula would be required; Wales would receive its normal Barnett-style consequentials, multiplied by 115 per cent.

3.39 In practice, when the formula is introduced there will be a gap between the needs target derived from the needs assessment formula and actual level of funding received by each country. For example, in our first report we estimated that in 2010-11 Wales would receive around £112 for every £100 spent on devolved activities in England. On this basis the needs formula described above implies that Wales is under-funded by around £3 for every £100 spent in England.³⁴ This amounts to around £400 million of under funding in 2010-11. We would expect such a **funding gap** to be eliminated over a period of time rather than all at once and the overall formula would therefore include a transition mechanism to ensure that relative funding approached the needs target in a predictable way over a reasonable time period.

3.40 A simple approach to devising a transition mechanism would be to add a set proportion of the funding gap to the overall settlement each year, in addition to the budgetary changes that result from Equation 3.2. In the case of Wales, where current funding falls below relative need, this transition mechanism would result in an additional sum being added to the Welsh block grant each year until relative funding and relative needs were equivalent. If a country's relative funding were above its relative needs at the start of the new funding regime, the transition mechanism would subtract resources from the block grant until parity between needs and funding were achieved.

3.41 Our proposed funding formula, combining needs-based increments with a transition mechanism to close any funding gap, can therefore be expressed as follows:

$$\begin{aligned}
 \text{Change in block grant} &= (\text{change in English spend} \\
 &\quad \times \text{Welsh population share} \\
 &\quad \times \text{comparability factor} \\
 &\quad \times \text{needs adjustment term}) \\
 &\quad + \text{transition mechanism to account} \\
 &\quad \text{for any discrepancy between the} \\
 &\quad \text{needs-based assessment and the} \\
 &\quad \text{last block grant}
 \end{aligned}
 \tag{3.3}$$

3.42 The transition mechanism should ideally be the same for all the devolved administrations but should be sufficiently flexible in form to allow adjustment to occur at speeds appropriate to each. Since the funding gap for Wales is relatively modest in the context of total UK public expenditure, it should be feasible to align relative funding and relative needs over a fairly short period of time. The situation could be different in other devolved administrations - a country with a large funding gap might require a rule that prevented impractically large year on year reductions. In Annex 4 we consider the design of the transition mechanism along with a discussion of other technical issues.

³⁴ This estimate was based on the outcome of the 2007 Spending Review and will be affected by more recent budget revisions and updated population estimates. More fundamentally, there are substantial uncertainties at the time of writing about the scale of in-year budgetary changes, both in England and Wales, for 2010-11.

3.43 While this system could operate effectively over several spending review periods, it would need to be subject to periodic review to ensure that the process of assessing relative needs continues to provide a fair reflection of needs across each devolved administration. We propose that once per decade the needs assessment formula set out in Table 3.1 should therefore be reviewed, with any amendments being subject to agreement of the UK Government and the devolved administrations. Since many of the variables in our needs assessment formula are derived from the census, it would make sense for the review to occur shortly after the publication of the latest census data.

3.44 We do not claim that the approach set out above provides a definitive solution to the problem of how best to design a needs-based funding system for the devolved administrations. It is possible to dispute our choice of needs indicators, and the weights attributed to them by our methodology. The details of how funding formulae should be amended to incorporate a needs element, and the design of the transition mechanism to address funding gaps, could also be challenged. And of course, it is ultimately for politicians to decide on the way in which needs should be reflected in budgetary allocations. That said, we believe that the approach we have proposed has much to recommend it as a starting point for discussion - it is impartial, objective and consistent in its treatment of citizens across the UK. Box 3.2 summarises our proposal.

Box 3.2: Implementing a needs-based replacement for Barnett: key steps

- i) Calculate the relative need for each of the devolved administrations of the UK, using the formula described in Table 3.1. Our analysis has shown that, for Wales, the formula generates a relative need of 115 compared to an English average of 100. This provides a needs adjustment factor for Wales of 115 per cent; the factor is fixed for the three year period covered by each spending review.
- ii) Calculate changes to the block grant over the period of the spending review by applying the needs adjustment factor as set out in Equation 3.2. This process ensures that increments to the Welsh block grant are aligned with relative needs and provides the basis of the Welsh budget for the next three years.
- iii) Compare the estimated relative needs with overall relative funding at the start of the spending review period to calculate the funding gap for each devolved administration. In our first report we estimated that in 2010-11 Wales would receive around £112 for every £100 spent on devolved activities in England. Since the needs assessment formula estimates that Wales should receive £115 per head for those activities, on that basis Wales is under funded by around £3 per head for every £100 spent in England, which is equivalent to around £400 million in cash terms. The funding gap is therefore £400 million. This would be closed in a phased way by increments over an agreed number of years.
- iv) At the start of the next spending review period, the needs formula is updated with latest values. This provides a new needs adjustment factor for each devolved administration. Once per decade, the needs assessment formula itself should be reappraised jointly by the UK Government and the devolved administrations.
- v) Other devolved administrations would have their budgets determined in the same way, through a combination of (i) needs-based increments and (ii) a transition mechanism to redress under or over funding in a phased way. In the event that a country faced a very large funding gap, we propose a rule that would limit the scale of budgetary reductions in the absence of growth in overall spending in order to avoid excessive budgetary shocks.

Recommendation - needs-based formula

The Assembly Government should pursue the introduction of a simple needs-based formula as the means of determining the Welsh block grant.

Summary

3.45 In our first report, we recommended that Barnett should be replaced by a needs-based formula. In this Chapter, we set out how this could be done, and employ a methodology for developing a needs-based formula that is derived from funding decisions of the UK Government and the devolved administrations.

3.46 An ideal needs-based formula would be simple both to operate and understand as well as being complete, i.e. it would capture most relevant aspects of need. Our analysis has demonstrated that it is possible to replicate to a surprisingly high degree of accuracy the funding allocations of very complicated needs-based formulae using only a few key needs proxies.

3.47 A formula for calculating relative needs across the devolved administrations that combines simplicity with a high degree of completeness and is based on real world funding allocations by the UK Government and the devolved administrations finds that Wales should receive some £115 for every £100 of funding spent on comparable activities in England. Incorporation of some reasonable adjustments in the formula to reflect variations in taxable capacity and the costs associated with bilingualism cause this figure to rise to £117. For Scotland and Northern Ireland, the figures generated by the unadjusted formula are £105 and £121 respectively, although those estimates would need refinement to take account of different devolved responsibilities.

3.48 We propose a straightforward way of aligning relative funding with relative need in the devolved administrations over time. An assessment of the relative needs of each devolved administration would be undertaken at the beginning of each spending review period, using the simple formula. Changes to the block grant would be calculated as at present, with two key amendments:

- i) firstly, a multiplicative needs adjustment term would be added to the current funding formula that would align changes in relative funding with relative need;
- ii) in addition, a transition mechanism would be applied to close the funding gap between current relative funding and current relative need in a phased manner. We set out a straightforward mechanism that would achieve this objective.

Chapter 4: Tax devolution - evidence and constraints

Overview

4.1 This Chapter reviews the international evidence on tax devolution and sets out the criteria for selecting taxes that could be devolved to Wales. It provides:

- i) an overview of the feasibility of tax devolution to sub-national governments, including international evidence and a discussion of behavioural and migration responses to tax devolution;
- ii) a review of the specific socio-economic constraints on fiscal devolution to Wales;
- iii) estimates of tax revenues raised in Wales; and
- iv) a set of criteria for assessing the suitability of devolving individual taxes to Wales.

The feasibility of tax devolution

International comparisons

4.2 Although the extent and nature of tax devolution varies widely across countries, most sub-national governments are funded to some degree by tax revenues from within their regions or localities. As Chart 4.1 shows, sub-national tax revenues tend to be highest in federal states and in countries with highly decentralised systems of public services (for example Denmark, Sweden and Spain). The UK has a strikingly low proportion of tax revenue collected at the sub-national level, even by the standards of unitary states.

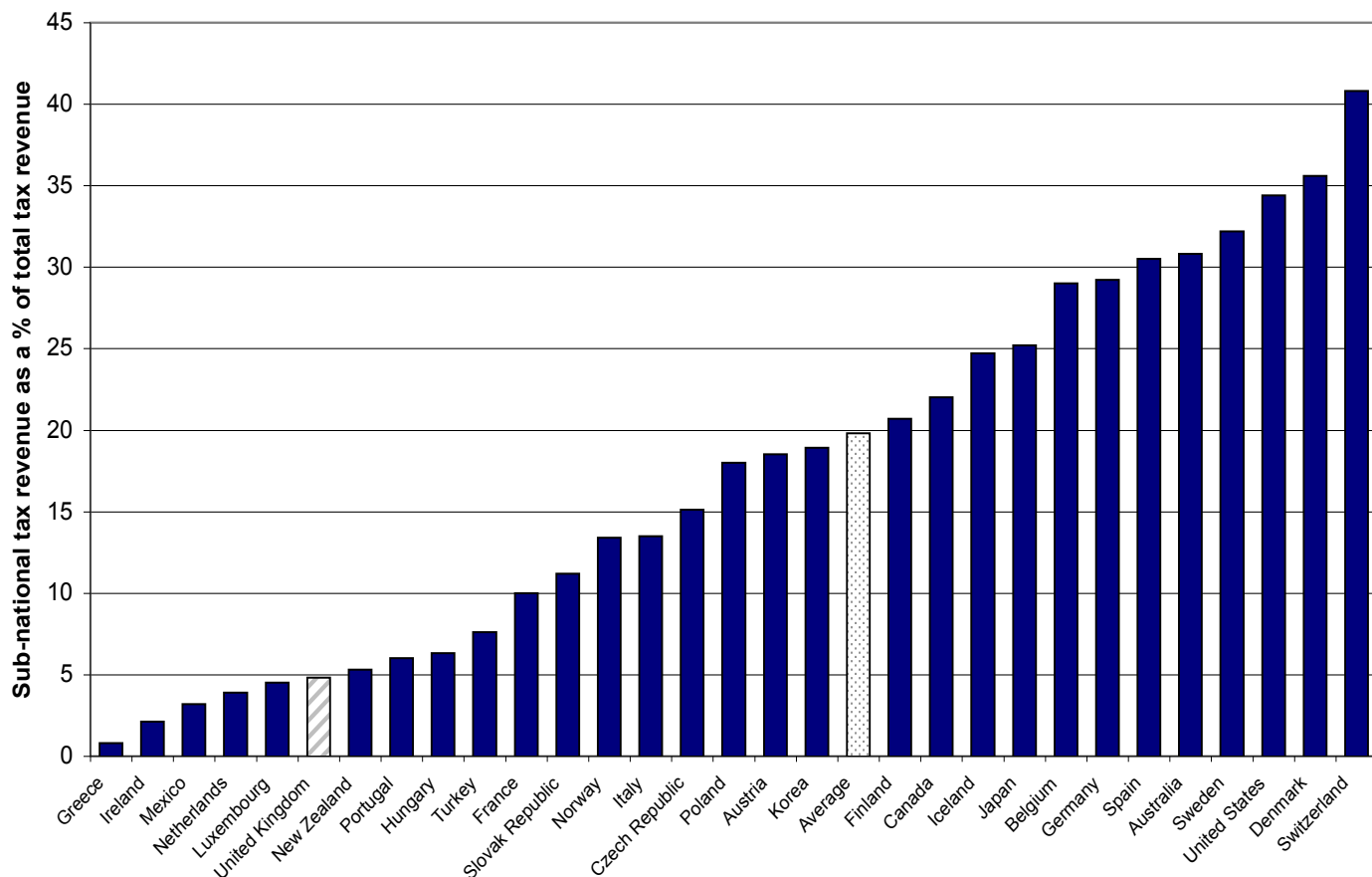
4.3 Chart 4.2 shows that across the OECD sub-national tax revenues are most likely to be sourced from income, profits and capital gains, the majority of which are levied on individuals rather than businesses. Three European Union (EU) member states levy sub-national taxes on corporate income, while six do so on personal income. Canada and the USA allow both personal and corporate income taxes to vary sub-nationally.

4.4 Property taxes are the next most prevalent source of sub-national government tax revenues. Chart 4.3 compares property taxes as a percentage of GDP for a range of countries and suggests that in the UK those taxes raise a relatively large amount of revenue by international standards. However, this does not mean that residential property is highly taxed.³⁵ The data in Chart 4.3 include taxes on business property, and the International Monetary Fund (IMF) has classified the UK as no more than medium in its ranking of countries for residential property taxes. A useful measure of the effective tax rate on residential property is the ratio of total taxes paid as a result of home ownership to the value of the services rendered by the property over a typical ownership period. The IMF has

³⁵ Comparisons with other countries are complicated in the UK's case by the fact that the council tax is both a property tax and also a charge for specific local services such as waste collection and street cleaning.

calculated a comprehensive measure of residential property taxes along those lines. Their calculations show that the UK has a relatively low effective rate of residential property tax.³⁶ In the UK taxation of the ongoing benefits generated by home ownership is also not high relative to other commodities.³⁷

Chart 4.1: Sub-national taxes as a share of total tax revenue³⁸



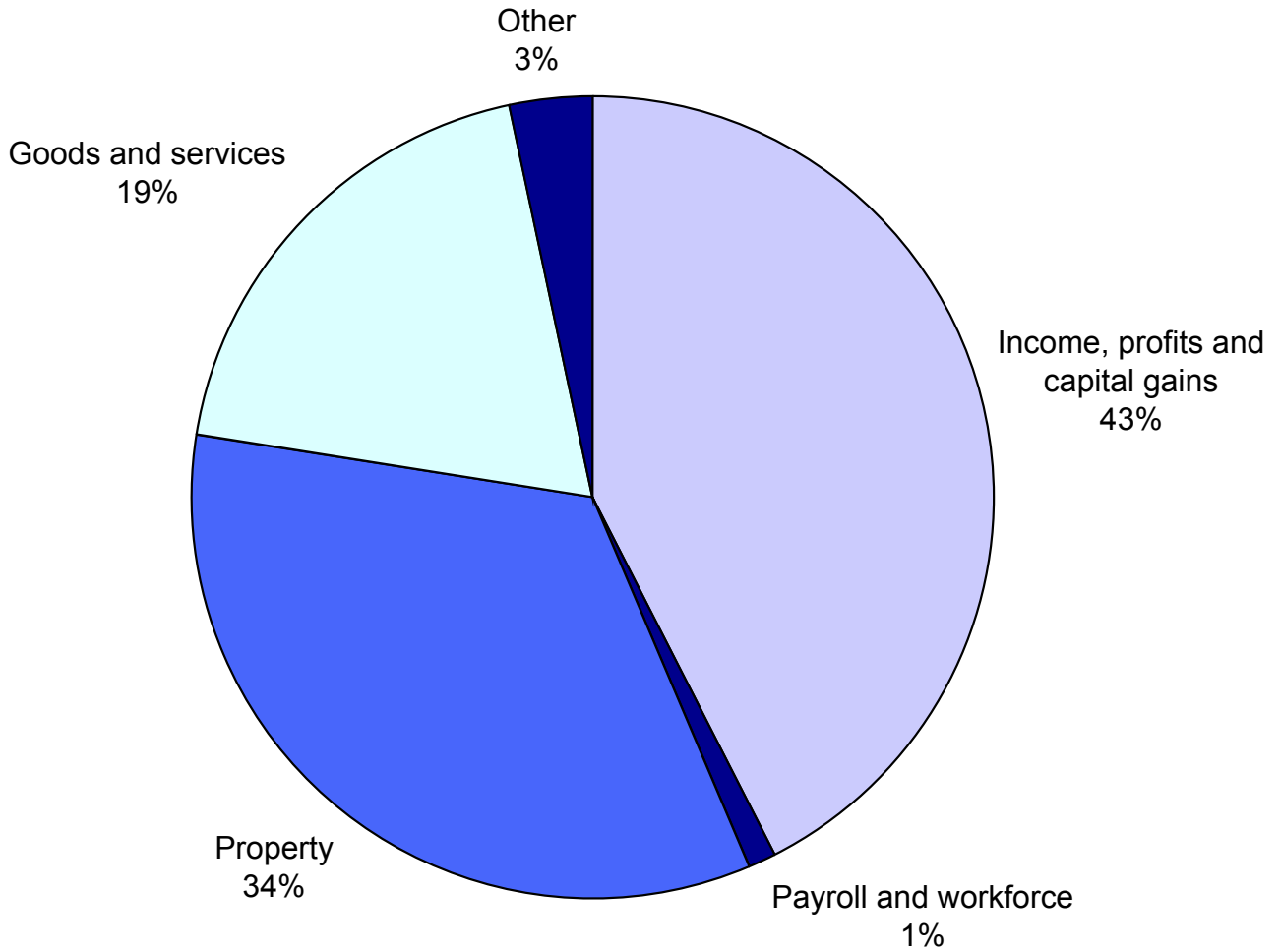
Source: OECD Revenue Statistics 1965-2007

³⁶ International Monetary Fund, 2009.

³⁷ The standard rate of VAT in the UK is 17.5 per cent. The value of the consumption benefits of home ownership as a ratio of house value can be estimated by the potential rental yield of the property - a figure that has averaged about six per cent over several decades. Applying the standard VAT rate to that (implicit) consumption would suggest a neutral level for the annual tax on the property value of around one per cent (i.e. 17.5 per cent x six per cent). The average council tax rate as a share of property value - the closest there is to a tax on property value - is around 0.7 per cent in Wales on average. This suggests that the benefits generated by home ownership are currently not taxed as much as many other commodities or services.

³⁸ The UK value excludes non-domestic rates (NDR).

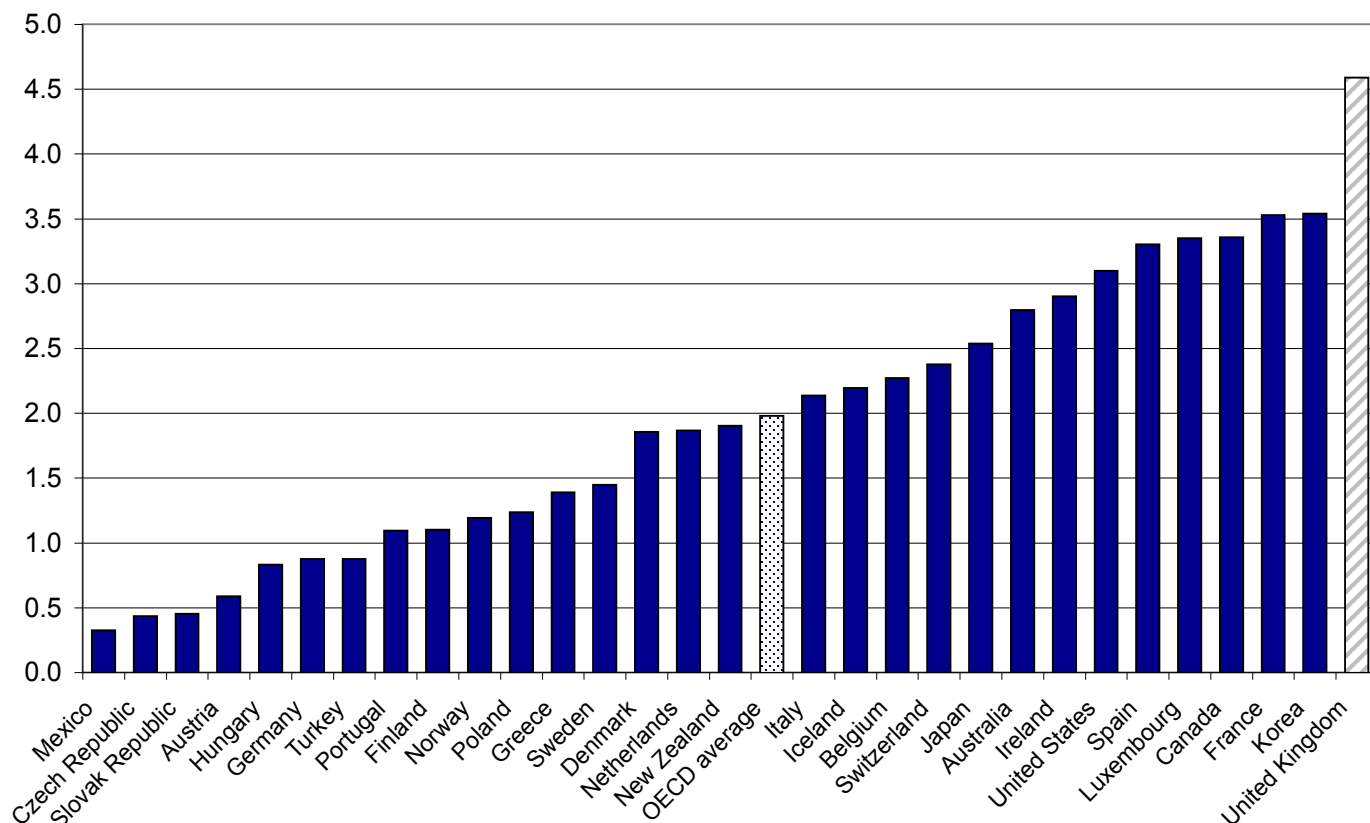
Chart 4.2: Tax autonomy of sub-central governments by type of tax, share of sub-national tax revenues³⁹



Source: OECD Revenue Statistics 1965-2007

³⁹ The term tax autonomy refers to circumstances where the sub-national government has discretion over the rates and reliefs of the tax and also includes tax sharing arrangements with the central government.

Chart 4.3: Property taxes as a percentage of GDP



Source: OECD Revenue Statistics 1965-2007

4.5 To date, the UK has generally applied uniform rates of tax in all its constituent parts, and therefore no empirical UK data exist that would enable us to tell how Welsh or English citizens would behave in a world where tax rates differed between them. However, it is possible to draw some lessons about the likely impact of tax devolution in the Welsh context from the experiences of other countries. An interesting case study is provided by the USA, where despite having a highly integrated economy, there is no harmonisation of income taxes, property taxes, corporation taxes, sales or excise taxes between the different states.⁴⁰ A report published by HM Treasury as part of its analysis of the case for the UK joining the euro found that the effective tax burden varies quite considerably among states in the USA.⁴¹ Moreover, it was noted that there were several instances of states with relatively high tax burdens bordering states with relatively low tax burdens (such as Vermont and New Hampshire - see Chart 4.4).⁴² The HM Treasury study tentatively concluded that "this suggests that even with a high degree of factor mobility, there is still some freedom for states to vary tax rates relative to their neighbours".⁴³

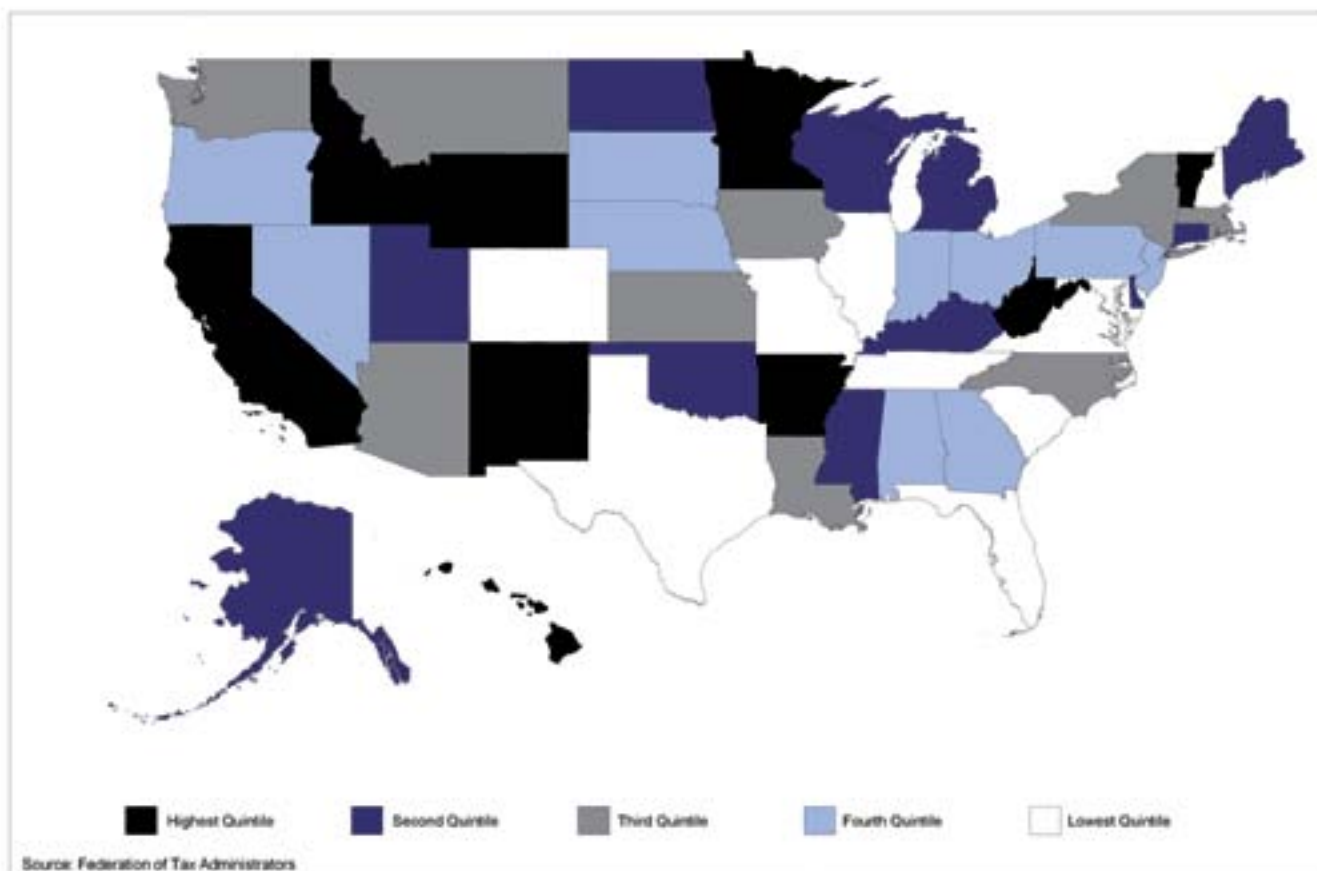
⁴⁰ The large number of taxes that are levied at the state level makes empirical analysis of the impact of changes to a specific tax difficult to undertake using data from the USA.

⁴¹ HM Treasury, 2003

⁴² More recent analysis (using 2005 data - US Census Bureau, 2009) shows that the differences in the effective tax burden between states can be very large. The state with the highest tax burden (Vermont) has a tax burden three times above that of the lowest state (South Dakota). The 2005 data shows that some neighbouring states continue to maintain very different tax burdens. In that year the tax burden in Vermont was more than twice as high as in the adjoining state of New Hampshire (\$3,600 per capita for Vermont compared to \$1,500 for New Hampshire).

⁴³ HM Treasury, 2003, Box 3.4, p.42.

Chart 4.4: Variations in tax burdens across the USA



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The behavioural and migration response to sub-national tax variation

4.6 Economic theory suggests that individuals may choose to move their residence in response to differing sub-national tax rates. The “Tiebout hypothesis” envisages a world in which municipalities within a region offer differing levels of public services, which are accompanied by differing tax rates.⁴⁴ Tiebout proposed that since individuals will value public services differently, and will vary in their ability or requirement to pay taxes, individuals will move to the locality which offers the combination of services and taxes that is best for them.

4.7 The limited international evidence on the migration response to sub-national tax variations presents conflicting conclusions. One Swiss study finds no migration response to income tax variations, while the same authors using a different data set find that income tax differentials between cantons can generate significant migration out of high tax areas and into low tax areas.^{45, 46} Evidence from Denmark suggests that quite significant income tax differentials can be maintained without inducing a migration response. In the Danish case it was concluded that “differences in [income] tax rates of nearly ten percentage points are found among the authorities in the same metropolitan region. There is no evidence that this has induced people to move to low-tax authorities.”⁴⁷

⁴⁴ Tiebout, 1956.

⁴⁵ Liebig and Sousa-Poza, 2006.

⁴⁶ Liebig et al, 2007.

⁴⁷ Lotz, 1997 p.190.

4.8 Studies that do detect a migration response suggest that younger and more highly-skilled individuals are more likely to move in response to differential tax burdens than the population as a whole.^{48, 49}

4.9 One important feedback mechanism that may limit the extent of migration is the movement of relative house prices in response to tax changes. If the burden of taxation increases in one area and results in a desire to migrate to an area with relatively lower taxes, then this would normally lead to an increase in demand for housing in the low tax area.⁵⁰ The rise in the demand for housing would put upward pressure on house prices (assuming supply is fixed in the short term) in the low tax area. As a consequence, the income benefits of relatively lower tax rates would be reduced (or, at the limit, completely offset) by higher relative house prices in the low tax jurisdiction. The converse is true for the high tax area where housing demand, and hence property prices, would fall.

4.10 The empirical literature on the extent to which tax variations are capitalised in house prices contains a broad range of possibilities, but “best bet” estimates are that between ten and 35 per cent of the difference in relative tax rates between jurisdictions are offset by house price variations.⁵¹ However, some sensitivity testing on the assumptions applied in deriving those estimates suggests that, by varying the discount rate used, all of the tax variation may be capitalised in house prices.⁵² While the evidence is uncertain, it therefore seems likely that variations in relative house prices will act to reduce the migration response from a change in relative tax rates. The adjustment in house prices may well be sufficient to enable a locality to maintain a somewhat higher tax burden than its neighbour without experiencing large migratory flows.

4.11 In addition to house price adjustments, migration may also be hindered by the significant costs that are likely to be incurred in moving to another jurisdiction. There are usually substantial removal costs, as well as commuting costs or the costs of finding new jobs in the low-tax region, which could eliminate the tax advantages of migration. Moreover individuals may face non-financial costs from leaving family, friends and social networks behind. Those include familiar childcare or schooling facilities, sporting clubs, recreation facilities and the like. While migration costs may retain, within limits, the residents of a region despite higher taxes, sub-national tax variations may still act as a deterrent to new movers who will shun high-tax regions unless compensated by better public services to balance the additional tax burden.

4.12 While the evidence that significant numbers of people will move between regions in response to sub-national tax policy is limited, there is reason to believe that a change in the tax burden will alter the behaviour of those who remain in the region. Economic theory suggests that a higher income tax rate will induce two behavioural responses. Firstly, there is an income effect, whereby individuals may work harder in order to restore their post-tax income to some target level. Secondly, higher marginal tax rates will lead to a substitution effect, as people choose to work less and take more leisure, since the return to working has been reduced by the higher tax rate. The two effects are conflicting in their impact - the income effect tends to lead to more work, while the substitution effect leads to less. The issue of which effect is the dominant one is contentious but evidence suggests that wealthier individuals are more likely to substitute between work and leisure than the population

⁴⁸ Liebig et al, 2007, and Egger and Radulescu, 2008.

⁴⁹ Schaltegger et al, 2009, and Cebula, 2009.

⁵⁰ See Oates, 1969, for a summary of the interaction between tax variation and property prices.

⁵¹ Rosenthal, 1999.

⁵² We are grateful to Professor James Forman-Peck for a submission detailing the evidence of house price changes in response to tax variations.

as a whole.⁵³ Wealthy individuals are also more likely to have opportunities to avoid paying higher sub-national taxes (for example through access to specialist tax advice or by redefining their primary residence) and also face greater incentives to avoid the tax, since the value of their tax saving is likely to be greater.⁵⁴ Of course, many people are unable to switch between work and leisure in response to a tax cut if, for instance, their hours of work are set in a contract of employment. However, those who do have this flexibility, such as the self employed, may respond to an increase in the marginal tax rate, while others on the margins of the labour force may choose to leave employment altogether.

4.13 Overall, the empirical evidence does not provide conclusive guidance on the optimal degree of tax devolution for Wales. However, it appears possible for relatively small sub-national states or regions to operate somewhat different tax policies from their neighbouring regions within an integrated economy. That said, such tax differences are likely to induce migration flows between regions, as well as behavioural responses in those who remain. Although their magnitudes are uncertain, both the migration and the behavioural response are disproportionately likely among the affluent, while out-migration is also more likely to be the response of the young and highly skilled to a relatively high sub-national tax burden.

Tax devolution: socio-economic constraints specific to Wales

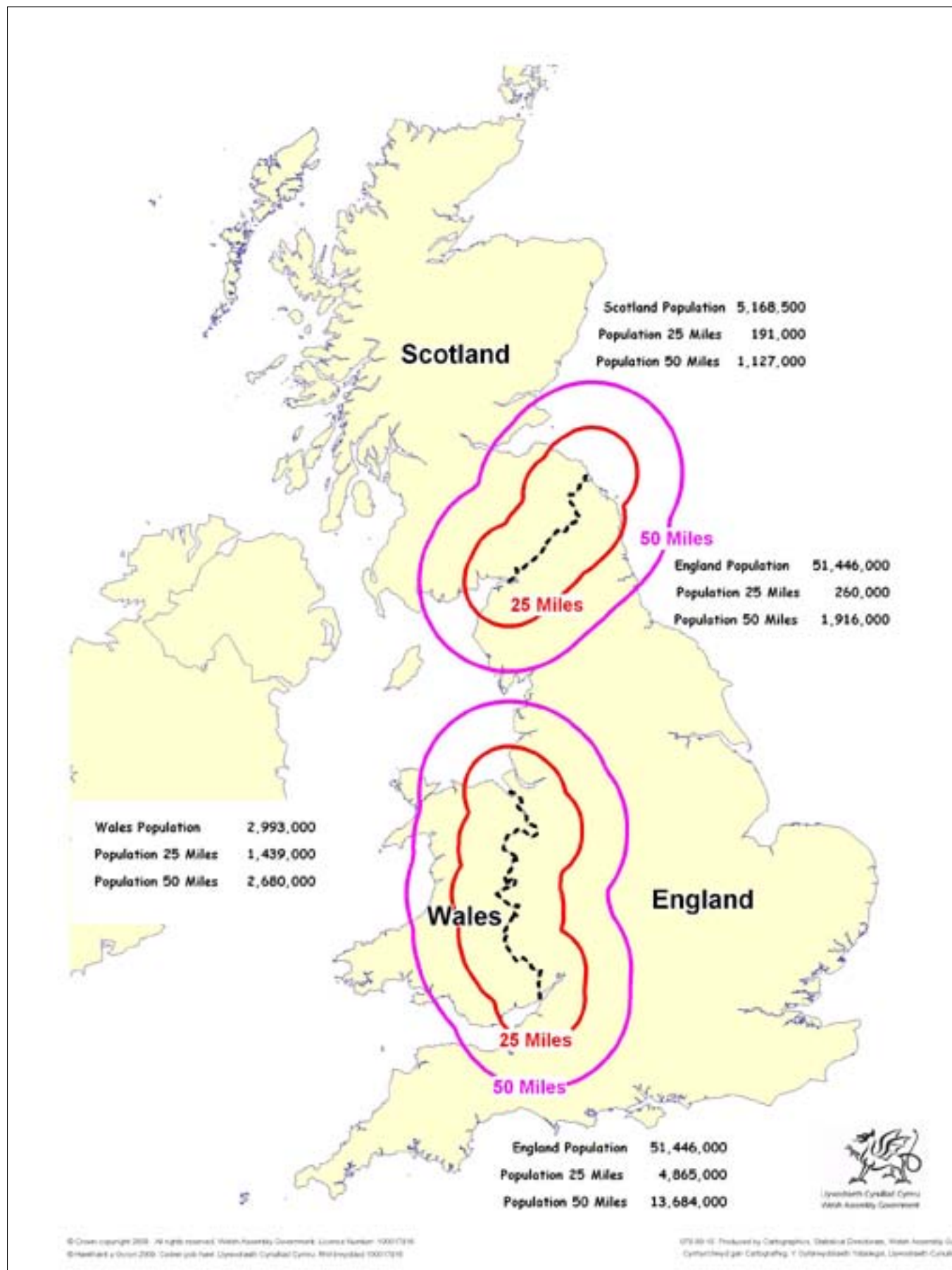
4.14 The economy in Wales is very highly integrated with England, more so than is the Scottish economy, for example. Chart 4.5 shows that over 1.4 million people in Wales (48 per cent of the total) live within 25 miles of the border with England, and 2.7 million people (90 per cent of the total) live within 50 miles of the border. The number of people living close to Wales on the English side of the border is even larger - almost 4.9 million and 13.7 million people in England live within 25 and 50 miles of the border with Wales respectively. In aggregate, 30 per cent of the population of Wales and England, or over 16 million people, live within 50 miles of the border between the two countries. In contrast, the number of people living close to the Scotland - England border is much smaller. Only five per cent of the combined population of Scotland and England, around three million people, lives within 50 miles of the border between those countries.

4.15 Unsurprisingly, traffic flows across the Wales-England border are very substantial. Chart 4.6 shows that journeys in Wales are largely East-West, with relatively little North-South movement. North East Wales is highly integrated into the economy of Merseyside and North West England, while in South Wales the bulk of traffic movement is focused along the M4 corridor. There is a substantial amount of cross-border commuting; Chart 4.7 shows that every day around 100,000 people travel between Wales and England for work. A little over half of this cross-border traffic is accounted for by people commuting in and out of North Wales. The number of commuters crossing the Scottish border is roughly a third of the number commuting in and out of Wales.

⁵³ Brewer et al, 2008.

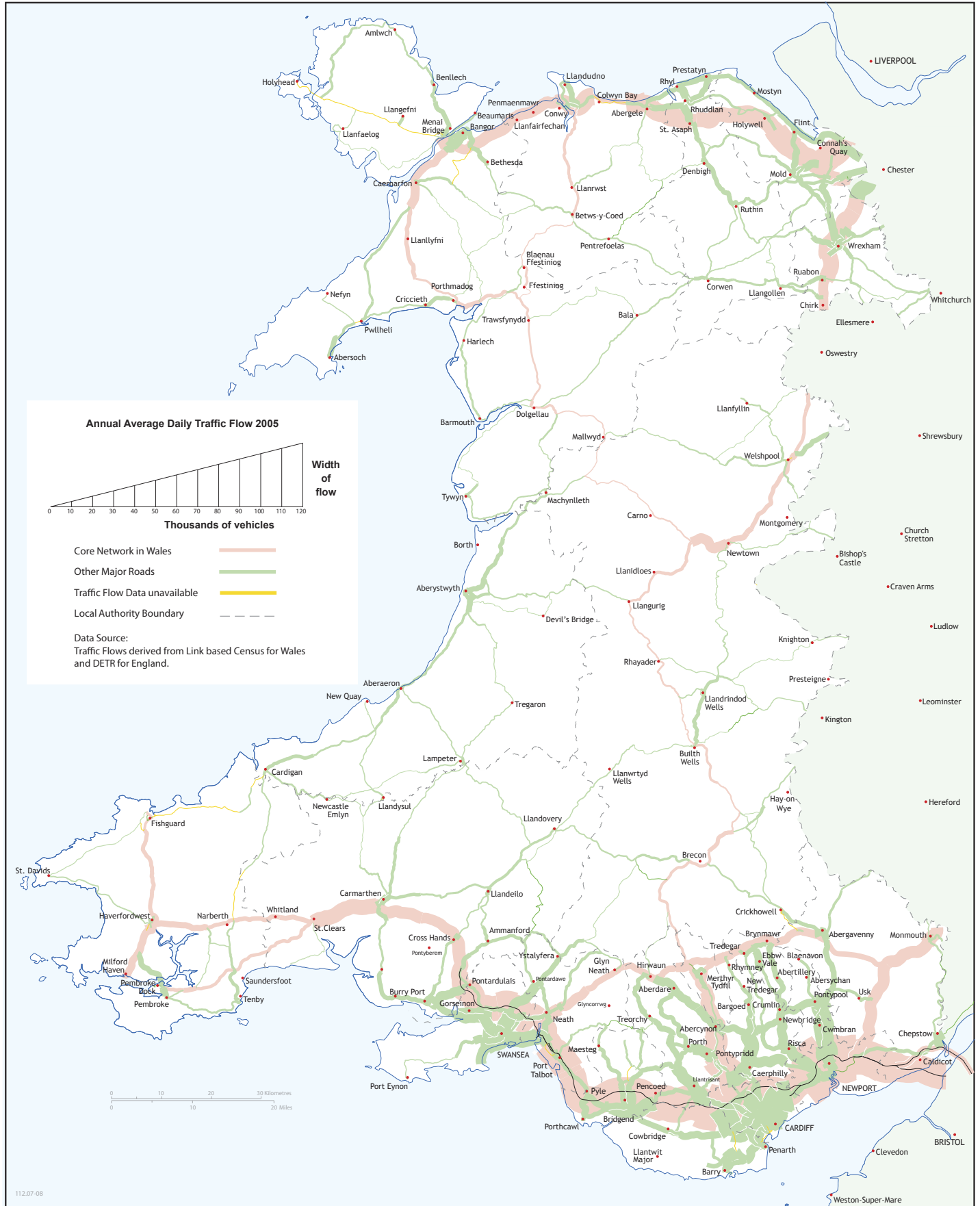
⁵⁴ Brewer et al, 2008.

Chart 4.5: Populations close to the Wales - England and Scotland - England borders, 2008



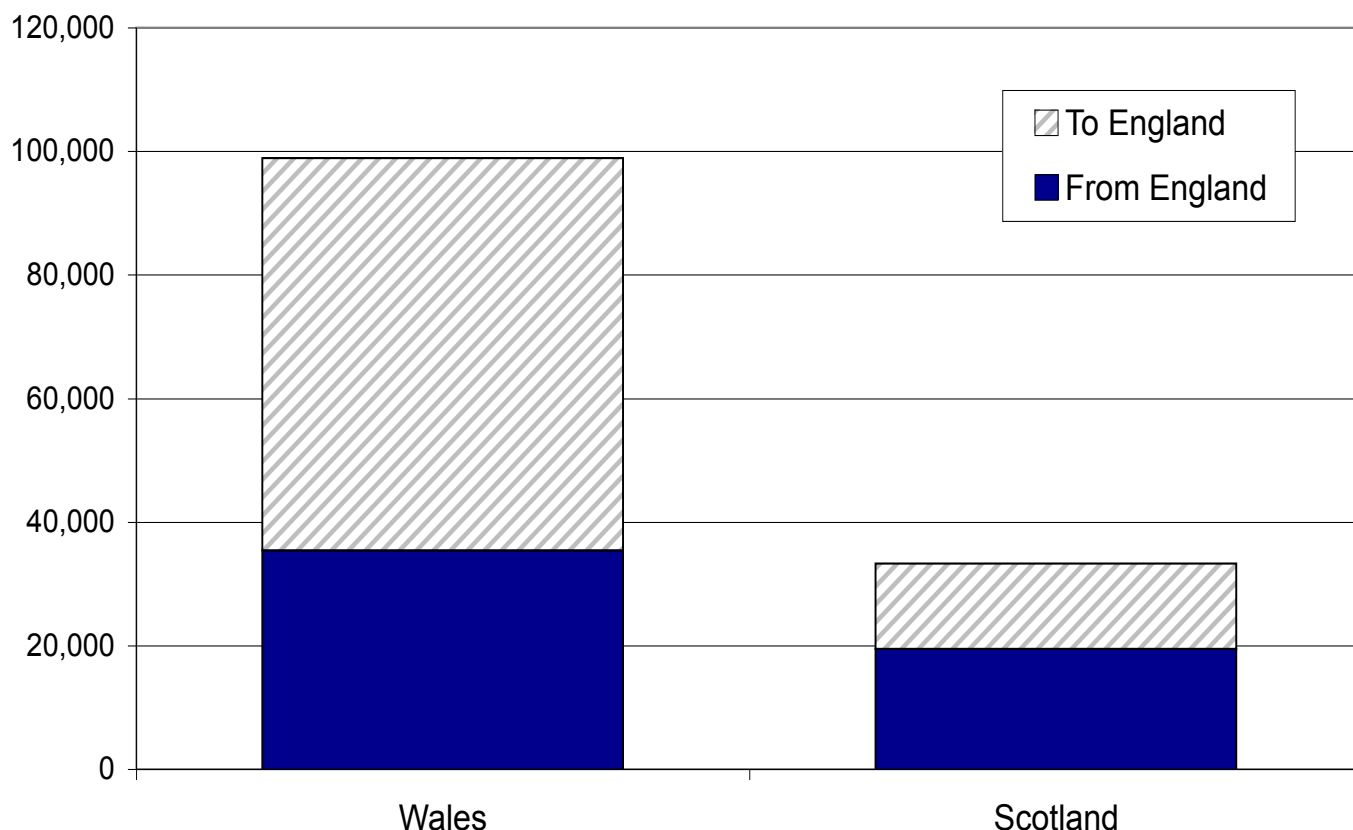
Source: ONS LSOA and SNS Data Zone

Chart 4.6: Traffic flows in Wales, 2005



4.16 Given that the economy in Wales is much more closely bound into the economy of England than is the Scottish economy, the potential for economic distortions and tax avoidance as a result of tax devolution is therefore of greater concern in the case of Wales than Scotland.

Chart 4.7: Daily commuting flows between Wales and England, 2001



Source: Welsh Assembly Government

Revenue raised by UK-wide taxes in Wales

4.17 Table 4.1 provides an estimate of the revenues raised in Wales by each of the taxes that are collected for the UK exchequer, while Chart 4.8 presents the same information in a pie chart (see Annex 5 for further information on how those values were estimated). In aggregate, around £17 billion was raised in Wales in 2007-08, the most recent year for which robust data are available. This is clearly a substantial sum, amounting in total to more than the entire Welsh block grant in the same year (around £13 billion).

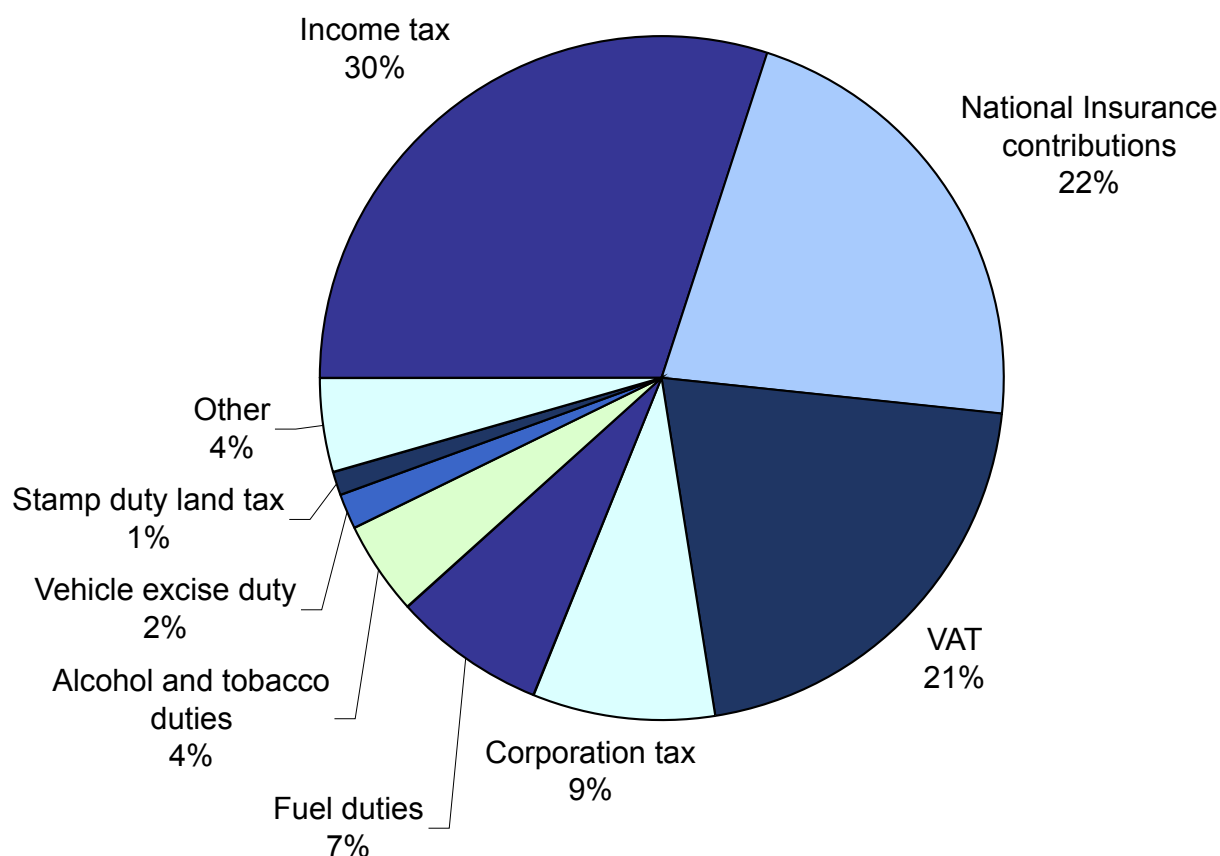
4.18 In addition to the taxes listed in Table 4.1, council tax and non-domestic rates (NDR) are paid by Welsh citizens and businesses to fund part of the services that are provided by local authorities. In 2007-08, council tax raised £0.9 billion in Wales (net of council tax benefit), while NDR raised £0.8 billion. In aggregate, therefore, the total amount of taxes raised in Wales in 2007-08 was a little under £19 billion.

Table 4.1: Revenues raised in Wales by UK-wide taxes, 2007-08

Tax	Summary description	Approx value (£ billion)
Income tax	A tax on most forms of income.	5.2
National insurance contributions	A tax on income from employment, levied on employers, employees and the self-employed.	3.7
Value added tax	A tax on most goods and services.	3.6
Corporation tax	A tax on the profits of limited companies and other organisations.	1.5
Fuel duty	Levied on manufacturers and importers of oil products.	1.2
Alcohol and tobacco excise duties	Levied on alcohol and tobacco products before release to the UK market	0.8
Vehicle excise duty	Payable by either the registered or actual keepers of vehicles.	0.3
Stamp duty	Payable on the purchase or transfer of property or land, and on shares.	Land tax: 0.2 Other: 0.1
Capital gains tax	A tax on the gain or profit from selling or otherwise disposing of a possession, such as shares or property.	0.1
Betting and gaming duties	Duty charged on net stake receipts and gross gaming yields.	0.1
Inheritance tax	Paid on the estate of deceased persons and sometimes on trusts or gifts made by individuals during their lifetime.	0.1
Insurance premium tax	A tax on general insurance premiums, paid by companies and intermediaries.	0.1
Landfill tax	Charged on disposal of waste at licensed landfill sites, and paid by the site operators.	0.04
Climate change levy	Chargeable on the industrial and commercial supply of taxable commodities for lighting, heating and power by business consumers.	0.04
Aggregates levy	A tax on the commercial exploitation of sand, gravel and rock.	0.03
Air passenger duty	Charged on the carriage of passengers from UK airports.	0.01
TOTAL		17.1

4.19 The Welsh block grant accounts for only slightly more than half of total identifiable spending on public services in Wales. Most of the rest is accounted for by social security, tax credit and public sector pension payments. In aggregate total identifiable expenditure in Wales in 2007-08 was £25 billion, around £6 billion more than tax receipts. This is commonplace given Wales's relatively high needs. Out of the devolved countries and the nine English regions, only London and the East and South East of England have fiscal surpluses.⁵⁵

Chart 4.8: UK-wide tax revenues raised in Wales by tax type, 2007-08 (percentage of total)



Source: HMRC, Driver and Vehicle Licensing Agency and Commission calculations

⁵⁵ See Oxford Economics, 2008

Which taxes are the best candidates for devolution?

4.20 In this section, we review the taxes that are collected across the UK and consider their suitability for devolution to Wales. We have assessed each tax against the following criteria.

- i) **Accountability.** In Chapter 2, we argued that the case for devolution of tax-varying powers to Wales is based on the need to enhance the accountability of the Assembly Government to citizens in Wales. Tax devolution should enable Welsh Ministers, at the margin, to increase or reduce the overall size of the Assembly Government's budget, and to do so in a manner that is apparent to Welsh citizens. An ideal tax that enhanced accountability would therefore be one that:
 - a) is paid by a high proportion of Welsh residents;
 - b) raises substantial revenue;
 - c) is "visible" to most citizens; and
 - d) is well understood by the general population.
- ii) **Economic efficiency.** Tax devolution has the potential to introduce distortions into economic behaviour. As shown above, Wales is highly integrated into the economy of the wider UK, and therefore it is important that tax devolution should not significantly reduce economic efficiency, that is it should not provide individuals or firms with strong incentives to alter their behaviour solely in order to reduce their tax burden.
- iii) **Administrative efficiency.** At present HMRC applies a uniform set of rules and administrative processes in all parts of the UK. The devolution of a particular tax should not impose substantial additional administrative burdens on citizens or firms, and should not increase the cost of collection unreasonably.
- iv) **Policy relevance.** Certain taxes may be useful as policy levers in areas of devolved responsibility, providing a tool that helps Welsh Ministers achieve their policy goals;
- v) **Legal constraints.** Devolution of a tax has to be consistent with European law.
- vi) **Impact on the UK tax base.** In handing control over a specific tax to the Welsh authorities, it is important to limit the risks to the UK tax base.

4.21 Of course, no tax wholly meets all of those criteria. We therefore have to judge the extent to which each tax possesses some of the characteristics that make it a candidate for devolution, and to weigh those factors against the extent to which it also has features that make it less suitable for devolution. Assessed against those criteria, we see no case for devolving the following taxes to Wales:

- income tax on savings and dividend income;
- national insurance contributions;
- value added tax
- fuel duty;
- alcohol and tobacco excise duties;
- vehicle excise duty;
- stamp duty on shares

- capital gains tax (other than capital gains tax on property and land, which is discussed in Chapter 7);
- betting and gaming duties;
- inheritance tax;
- insurance premium tax; and
- climate change levy.

4.22 Table 4.2 sets out our thinking in ruling out those taxes. For the most part they could either create unacceptable distortions or the cost of devolving and monitoring them would be excessive. That leaves the following taxes for more detailed consideration:

- income tax (excluding tax on savings and dividend income);
- corporation tax;
- taxes on property and land;
- minor taxes with a relatively immobile base and which may be of value as policy levers (landfill tax, aggregates levy and air passenger duty); and
- new taxes, which could be levied by the Assembly Government on goods or activities that are currently untaxed at the UK level.

4.23 Income tax is by far the strongest candidate on this shortlist that could, if devolved, have a major impact on the accountability of the Assembly Government to Welsh citizens. It is highly visible, raises substantial sums and is paid by almost everyone at some point in their lives. If income tax could be partially or wholly devolved to Wales, the accountability deficit in the current funding settlement would be largely resolved.

4.24 In theory, property taxes could also have a significant impact on accountability. However, property taxation in the form of council tax already provides accountability for local government. Devolution of the remaining taxes on our shortlist would have only a limited impact on accountability. They raise much less revenue than income tax, and they are paid either by firms (corporation tax, aggregates levy, landfill tax) or intermittently by sub-groups of the population (air passenger duty, stamp duty land tax). Apart from making a small contribution to accountability, a secondary rationale for their devolution would be to provide policy levers in areas of existing devolved competence.

4.25 It is also possible to conceive of a number of new taxes that could be introduced in Wales in areas such as tourism, natural resource depletion or alcohol consumption. Those taxes would also be tools for achieving policy objectives in areas that are already largely the responsibility of Welsh Ministers; their impact on accountability would be limited by their modest revenue potential.

4.26 In the next Chapter, we discuss how any tax devolution should affect the block grant and consider the main risks to the Welsh budget that would arise. In Chapter 6, we consider in detail the case for income tax devolution to Wales as a means of tackling the accountability deficit. We then discuss in Chapter 7 whether devolution of the remaining taxes on our shortlist would be advisable, and we consider how a mechanism enabling the introduction of new taxes might be developed.

Table 4.2: National taxes that are not suitable for devolution to Wales

Tax	Summary description
Income tax on savings and dividend income	<ul style="list-style-type: none"> • Potential for extensive tax avoidance. • Administratively costly to devolve.
Value added tax	<ul style="list-style-type: none"> • Variation of value added tax rates within a member state may be prohibited by EU law. • Risk of economic distortions.
National insurance contributions	<ul style="list-style-type: none"> • Linked to out-of-work, disability, and state retirement pension benefit entitlements and used to fund the payment of benefits, which is a non-devolved function. • The National Insurance Fund is operated and managed separately from the Consolidated Fund. There is a legal and perceptual link with the welfare state which makes contributions unsuitable for devolution in the context of a social union.
Fuel duty	<ul style="list-style-type: none"> • Under the EU Energy Products Directive, member states must set a single rate for each fuel type. • Potential for economic distortions if fuel duty rates were different in Wales and England.
Alcohol and tobacco excise duties	<ul style="list-style-type: none"> • Extremely mobile products and as a consequence there is great potential for tax avoidance.
Vehicle excise duty	<ul style="list-style-type: none"> • Administratively complex because the legal owner of a vehicle may not be the registered keeper. • Potential for economic distortions.
Stamp duty on shares	<ul style="list-style-type: none"> • Potential for tax avoidance and economic inefficiencies.
Capital gains tax, other than on property and land	<ul style="list-style-type: none"> • Administratively complex to devolve except on immobile tax bases such as property and land. • Potential for tax avoidance.
Betting, gaming duties	<ul style="list-style-type: none"> • Potential for avoidance (for example by using the internet).
Inheritance tax	<ul style="list-style-type: none"> • Potential for avoidance.
Insurance premium tax	<ul style="list-style-type: none"> • Administratively difficult to devolve. • Potential for economic distortions.
Climate change levy	<ul style="list-style-type: none"> • Closely aligned with energy policy, which is a non-devolved function. • Potential for economic distortions.

Summary

4.27 The existing empirical literature on tax devolution suggests that it is possible for relatively small sub-national regions to operate somewhat different tax policies from their neighbouring regions within an integrated economy. That said, such tax differences could induce migratory flows between regions, as well as behavioural responses in those who remain. Although their magnitudes are uncertain and perhaps small, both the migratory and the behavioural response are disproportionately likely among the affluent, while out-migration is also more likely to be the response of the young and highly skilled to a relatively high sub-national tax burden.

4.28 Wales is much more integrated into the UK economy than is Scotland. This makes it more difficult to devolve tax-varying powers to Wales since the risk of economic distortions or tax avoidance is greater.

4.29 In aggregate, around £17 billion of tax revenue was raised in Wales and paid to the UK exchequer in 2007-08, the most recent year for which robust data are available. This amounts in total to more than the entire Welsh block grant in the same year (£13 billion). The single largest revenue raiser was income tax (£5.2 billion).

4.30 In considering the feasibility of devolving a tax to Wales, we have considered the following criteria:

- i) accountability;
- ii) economic efficiency;
- iii) administrative efficiency;
- iv) policy relevance;
- v) legal constraints; and
- vi) the impact on the UK tax base.

4.31 Assessing the options for tax devolution against those criteria leads us to conclude that the following options for devolution are worth investigating:

- i) income tax;
- ii) corporation tax;
- iii) taxes on property and land, including stamp duty land tax and capital gains tax on property and land;
- iv) a package of smaller taxes with relatively immobile bases that are aligned with existing devolved responsibilities: landfill tax, aggregates levy and air passenger duty; and
- v) new taxes, which could be levied by the Assembly Government on goods or activities that are currently untaxed at the UK level.

Chapter 5: Tax devolution and the block grant

Overview

5.1 This Chapter considers how an element of devolved tax-varying power could be integrated into the current block grant-based funding regime that operates in Wales and the other devolved administrations. It provides:

- i) a discussion of the risks to the Welsh budget in the event of tax devolution; and
- ii) an outline of the various ways in which devolved taxes and block grant funding could be combined.

Integrating tax devolution with expenditure equalisation

5.2 If tax devolution is to make sense, it is necessary to pay attention to the interaction of the devolved taxes and the block grant, which will continue to provide the bulk of the Welsh budget. Clearly devolution means that after the fact the devolved administration should be free to alter tax rates and take the consequences, positive or negative, on its revenue without any offsetting changes being made to the block grant. When a tax is first devolved to Wales or a tax base is shared, however, the country begins to meet some of its public expenditure needs from its own tax revenue. The grant it receives from the UK Government is reduced at that point. Just as sums under the Barnett Formula were increased when expenditure responsibilities were devolved, the grant must be reduced when revenue sources are devolved. The deduction can be managed in different ways, but all options give rise to some surprisingly complex issues concerning the incentives they create for the devolved administration and the distribution of risks among the different tiers of government.

5.3 Since the UK tax system has long been highly centralised, the grant system for devolved administrations has been based on expenditure equalisation. Indeed the same is true of local government finance where revenue support grants are based on needs formulae, not on a principle of revenue equalisation. Any tax devolution should continue to operate within that framework. That means some notion of tax effort is essential. In principle, the central government provides a grant that ensures local and sub-national needs can be met assuming the subsidiary authority is making a standard tax effort on its devolved revenue base. When a tax is fully devolved, it can contribute to an increase or reduction in overall revenues of the devolved administration to the extent that there is a deviation from the standard tax effort. Suppose, now, the central government reassesses the need for public services and increases taxes to provide more. Since the block grant to devolved administrations will rise in consequence, it is normal that their tax effort should rise in line with the extra effort decreed at the centre. To put it another way, the central government by raising taxes centrally has raised the definition of standard tax effort. Devolution means that Wales, or Scotland, is not obliged to follow but then it must expect to have its relatively lower tax effort reflected in its relative resources.

5.4 That has the following implication. Suppose Wales takes complete control of a given tax base with a revenue in year zero of £100 million. It gives up let us suppose £100 million from the block grant. If subsequently the UK raises the tax in question to increase public spending, the “standard” receipts from the Welsh tax base will rise. A bigger deduction will then be made from the block grant, balancing the extra expenditure which will have consequential for Wales. Of course those arguments

are symmetrical. If the UK Government cuts taxes and public expenditure, that will be reflected in the block grant and should equally be reflected in a smaller deduction from that grant for any tax devolution. This implication does not pertain if a tax base is shared, as in the case of income tax under the Calman proposals in Scotland. If the UK raises income tax in that case it collects the extra revenue from the devolved area even though the devolved administration has its own income tax. There is no change in the overall relative tax effort in the devolved administration's area so no need to alter the block grant.

5.5 Those adjustments may all seem rather complicated and the Calman Commission looked to cut through all that by proposing to cut the block grant by an appropriate percentage for each tax devolved. We agree with the instinct to seek simplicity, but the Calman solution, while coherent, is not the only solution and we do not believe it is likely to be best for Wales. We will be proposing our own short cuts which mitigate those difficulties.

Risks to the Welsh budget

5.6 At present, the Welsh block grant is set for a three year period when the UK Government conducts a spending review.⁵⁶ We have discussed the limitations of Barnett as a means for determining the Welsh budget at length in our first report, but the process does at least have the benefit of providing a fairly high degree of budgetary certainty. Welsh Ministers are able to make spending decisions that are based on reasonable expectations about the total level of resources that will be at their disposal over several years. The Welsh budget may be altered at short notice in response to major economic shocks affecting the UK, but routine risks relating to tax revenues and borrowing costs are borne by the UK Government. Devolution of tax-varying powers, in replacing a portion of the block grant with a stream of devolved tax receipts, has the potential to expose the Welsh budget to a number of risks that are, at present, managed at the UK level.

5.7 There are three main risks associated with devolved tax receipts:⁵⁷

- i) **Macro fiscal or cyclical risk.** Some tax receipts are highly cyclical with significant year-on-year volatility.
- ii) **Differential tax base growth.** This is the risk that the tax base in the devolved administration grows differently from the equivalent tax base across the UK as a whole and therefore over time generates differing levels of resources for the devolved administration than it would have received from a grant-based regime that is ultimately sourced from the UK tax base.
- iii) **Policy risk.** If powers over the overall structure of a devolved tax (such as the size of the bands and allowances in the case of income tax) are retained at the UK level, there is a risk that a policy change by the UK Government could have a large impact on the revenue raised by the devolved tax. We refer to this as UK policy risk. Similarly, Welsh policy risk arises if decisions by Welsh Ministers impact on the Welsh tax base and affect the revenue raised by a devolved tax.

⁵⁶ Although this is how the system has generally operated since 1997, the UK Government's decision to delay its Comprehensive Spending Review until the autumn of 2010 means that at the time of writing the Assembly Government does not know its budget beyond 2010-11.

⁵⁷ We are grateful to Professor David Heald for a submission that provided useful advice on the different types of risk introduced to devolved budgets as a consequence of tax devolution.

5.8 It can surely be agreed that risks consequent on the actions of the Assembly Government should be borne by its budget and risks consequent on the action of the UK Government should be borne by UK budgets. Exogenous risks arising from elsewhere should be pooled across the union. It follows that an ideal regime should in principle shelter the Welsh budget from cyclical and UK policy risk, as those are not under the control of Welsh Ministers. However, the Welsh budget should not be protected from Welsh policy risk, i.e. changes to the tax base arising from decisions of Welsh Ministers should have their budgetary impact in Wales.

5.9 The extent to which it is appropriate for the devolved budget to be exposed to differential tax base growth risk is not straightforward because it may stem from outside forces or be the result of Welsh policies. It is in any case highly unlikely that those different effects could ever be disentangled in practice, making it impossible to develop a funding system that allocates this risk across the governments of the UK in an ideal way. However, it is possible to keep risks in mind when settling on the value of each tax and then to structure the grant deduction most appropriately for each devolved tax.

Pricing devolved tax revenues

5.10 In devolving a tax, Welsh Ministers exchange a stream of block grant revenue that is funded from tax revenues pooled at the UK level for an element of funding derived from taxes that are levied in Wales. The “price” paid by Welsh Ministers for those devolved tax receipts is a combination of:

- i) the offset to the block grant that takes place at the time of devolution; and
- ii) the way in which this offset is calculated in future years.

5.11 When deciding on a fair price, a range of economic and non-economic factors must be taken into account. From an economic perspective, the attractiveness of this exchange depends on the following features of the tax:

- i) the tax yield;
- ii) the expected growth rate of the tax;
- iii) the volatility of the tax (relatively volatile revenues are less attractive because they introduce unpredictability into the devolved budget); and
- iv) the extent to which the tax revenue is correlated with other devolved receipts (a tax that is highly correlated with other devolved revenues is less attractive as it amplifies swings in the budget).

5.12 Those factors will vary from one tax to another, meaning that from a purely economic perspective the appropriate price for devolving a tax will not be the same in all instances. A high yielding, stable tax, whose receipts are expected to grow rapidly should not be priced in the same way as a tax with low, volatile yields that are in long-term decline.

5.13 There are several non-economic reasons why tax devolution might be desirable, which may alter the price that Ministers are willing to pay. For instance, a tax may provide a valuable instrument that makes it easier to achieve policy objectives in an area of devolved responsibility. There may also be a value in devolution for its own sake, i.e. as a demonstration of the autonomy of the devolved administration. The attitudes of the devolved administration and the UK Government towards risk are

also relevant factors in determining a fair price for devolving a tax. While we are unable to put a value on non-economic reasons for tax devolution, by making certain assumptions about attitudes to risk it is possible to very roughly indicate the sort of deal that might be appropriate for any candidate tax. This is discussed further in Annex 7.

5.14 Very broadly the deduction from the block grant can take one of four forms, which we consider below and in Annex 8:⁵⁸

- i) **own base deduction (OBD):** the deduction from the block grant is indexed to the assessed growth in the devolved tax base;
- ii) **indexed deduction (ID):** the initial deduction is indexed to an external variable such as the relevant UK tax base;
- iii) **proportionate deduction (PD):** the grant is reduced by a given percentage; the initial deduction therefore grows at the same rate as the grant itself; and
- iv) **fixed real deduction (FRD):** the grant is reduced by an agreed sum which is then indexed to inflation; i.e. the present value of tax receipts is equated to a real annuity which is deducted from the grant.

Own base deduction (OBD)

5.15 Under this approach, if Welsh Ministers decided to set tax rates in Wales identical to those in the UK, devolved revenues in Wales would be the same as the deduction from the block grant. In these circumstances the overall size of the Welsh budget would be the same as if it were entirely determined by a block grant and it would carry no new risks. If, on the other hand, Ministers chose to set Welsh tax rates above UK rates, an estimate would be made of the amount of additional revenue that this would raise from Welsh taxpayers and this sum would be added to the devolved tax revenues. Similarly, a decision to lower rates relative to the UK would result in a reduction in the estimated Welsh tax take.⁵⁹ Once rates in Wales differed from those in England, the Welsh budget could be exposed to the risks set out above, such as the possibility that the Welsh tax base might grow more slowly than that of England. However, those risks would apply only to the increment that was being added to or deducted from the devolved revenues to reflect the rate difference. By returning tax rates to UK levels, the overall Welsh budget would revert back to being the same as if it were wholly grant-funded.

⁵⁸ The precise way in which each of these options would work will need to be assessed against the "Azores tests" to ensure compatibility with European law (see Chapter 7, paragraphs 7.7-7.15).

⁵⁹ Payments made from estimates should be adjusted subsequently to reflect outturns.

Box 5.1: Hypothetical example of the OBD model**£ billion**

	Year 1	Year 2	Year 3
Block grant	15.0	15.5	16.0
Devolved tax revenue	1.0	1.1	1.4
Block grant deduction	1.0	1.1	1.2
Total resources for Wales	15.0	15.5	16.2

The block grant is set for three years at the time of a UK spending review. In the absence of any changes in devolved tax rates, devolved tax revenues are identical to the block grant deduction and the total resources available to the Assembly Government are the same as if it were wholly block grant funded. In the above hypothetical example, with no change in tax rates, devolved tax revenues increase by £100 million in year 2. There is an equal and offsetting increase in the block grant deduction in the same year. In year 3, there is further underlying growth in revenues of £100 million, but Welsh Ministers also choose to increase devolved tax rates by an amount that increases the devolved Welsh tax take by a further £200 million. In this case, the block grant deduction only increases by £100 million to reflect the underlying growth in Welsh devolved tax revenues. The total resources available in year 3 increase by £200 million compared to the situation where the Assembly is wholly block grant funded.

Indexed deduction (ID)

5.16 This system would permanently replace a proportion of the block grant with revenue from devolved taxes. In the first year of operation, the block grant would be reduced by an amount equivalent to the devolved tax take, leaving the overall resources available to Wales unchanged. In future years, the revenue from devolved taxes would flow directly to the Welsh budget, and the size of the off-setting reduction in the block grant would be calculated annually, based on some reference variable such as the growth across the UK of the taxes devolved to Wales. For example, in the event that an economic shock caused the revenue from a devolved tax to fall across the UK, the deduction applied to the block grant would be reduced to account for this. Such an approach would ensure that the Welsh budget would be largely protected against UK policy and cyclical risks - so long as Welsh and UK rates were equivalent.

5.17 By replacing an element of the block grant with a stream of devolved tax revenues, the Welsh budget would be exposed fully to the risk of differential tax base growth. If the devolved tax base were to grow relatively slowly in comparison to the growth of those tax bases across the UK, the resources available in Wales would be less than a wholly block grant-funded regime would provide. On the other hand, if the revenue from the devolved taxes were to grow relatively rapidly, it could result in the Welsh budget being larger than it would have been under a wholly block grant-funded system.

Box 5.2: Hypothetical example of the ID model**£ billion**

	Year 1	Year 2	Year 3
Block grant	15.0	15.5	16.0
Devolved tax revenue	1.0	0.5	0.6
UK equivalent of the taxes devolved to Wales	20.0	10.0	10.0
Block grant deduction	1.0 (6.7 per cent of block)	0.5 (3.2 per cent of block)	0.5 (3.1 per cent of block)
Total resources for Wales	15.0	15.5	16.1

Under this model, devolved tax revenues are added to the Welsh budget in year 1, and are offset by a proportionate reduction in the block grant, leaving overall resources unchanged. In subsequent years, the block grant reduction is recalculated based on the growth of the UK equivalent of the tax base that is devolved to Wales.

In year 2, the revenue from devolved taxes in the above example falls sharply as the result of a UK-wide economic shock. The block grant reduction is recalculated based on this reduced UK tax take, shielding the Welsh budget from the volatility of variations in the devolved tax base that impact equally on the UK.

The deduction to the block grant in year 2 is calculated to the following formula:

$$\text{Yr 2 reduction} = \text{yr 1 reduction} * \frac{\text{yr 2 UK equivalent tax}}{\text{yr 1 UK equivalent tax}} = 1.0 * \frac{10}{20} = 0.5$$

Although not shown above, if the impact of the economic shock had been different in Wales and the UK, then the Welsh budget would have been exposed to the disproportionate element of the shock.

In year 3, UK equivalent tax revenues remain at year 2 levels, and so the block grant reduction is unchanged. In this year it is assumed that Welsh Ministers decide to increase devolved Welsh taxes by an amount equivalent to £100 million. As a consequence, the devolved tax revenue component of the Welsh budget increases by this amount.

Proportionate deduction (PD)

5.18 This is the model that we understand to have been recommended by the Calman Commission in relation to Scotland. As in the ID option, this funding system would permanently replace some of the block grant with a stream of devolved tax revenues. Under the Calman Commission's proposals, there would be a proportionate reduction in the block grant, which would mean that the overall size of the budget would be unaltered in the first year of tax devolution. Unlike the ID option, the proportionate block grant reduction would not be recalculated in future years under this approach. Rather, the same percentage deduction would be made from the block grant as was applied in year 1. This would mean that the Welsh budget would be exposed to all exogenous risks causing cycles or differential trends, even if devolved Welsh tax rates were equivalent to those in the rest of the UK. If, for example, a UK-wide economic shock caused the revenue from a devolved tax to fall sharply, there would be no offsetting adjustment made to the block grant element of the Welsh budget.

Box 5.3: Hypothetical example of the PD model

The following example demonstrates the risks to the Welsh budget associated with negative economic shocks to its tax base. However, it should be noted that Wales would gain under this model, if there were positive shocks.

£ billion

	Year 1	Year 2	Year 3
Block grant	15.0	15.5	16.0
Devolved tax revenue	1.0	0.5	0.6
Amount that taxes devolved to Wales raise in the rest of the UK	20.0	10.0	10.0
Block grant deduction	1.0 (6.7 per cent of block)	1.03 (6.7 per cent of block)	1.07 (6.7 per cent of block)
Total resources for Wales	15.0	15.0	15.53

As in the ID model, devolved tax revenues are added to the Welsh budget in year 1, and are offset by a proportionate reduction in the block grant, leaving overall resources unchanged. However, under PD the block grant reduction is held fixed at (in this hypothetical case) 6.7 per cent of the block grant, leaving the Welsh budget fully exposed to the risk of variations in the devolved tax base.

The above example uses an identical scenario to that shown in Box 5.2, whereby tax revenues fall sharply in Wales and the UK in year 2 in response to a common economic shock. In this case the block grant reduction of 6.7 per cent is still applied, reducing it by a little over a billion, while the revenue from the devolved tax has fallen to £0.5 billion. The full impact of the shock is therefore felt on the Welsh budget.

In year 3, it is assumed that tax revenues remain at year 2 levels but that Welsh Ministers decide to increase devolved Welsh taxes by an amount equivalent to £100 million. This sum is added to the Assembly Government's budget, but the total resources available to Welsh Ministers continue to be depressed by the reduction in the devolved tax base resulting from the UK-wide shock.

Fixed real deduction (FRD)

5.19 If revenues from a tax are forecast to grow slowly relative to its volatility or even decline over time, it might not be appropriate to apply a percentage deduction to the block grant. In such circumstances, a fixed lump sum reduction, or a lump sum reduction uprated in line with prices, might be more appropriate. The risk characteristics of this approach are identical to the PD model. The key difference is that a different payment has been made for the tax base. The initial deduction grows with prices, not with the block grant. So long as there is real growth in devolved public expenditure therefore the FRD approach will turn out to entail a smaller deduction over time than the PD approach. In effect Wales shoulders all the same risks but is compensated for bearing them by taking a smaller cumulative deduction from the block grant. This approach is most appropriate for small taxes whose receipts are marginal in the context of the UK budget, so that indexation or adjustment for UK rate changes hardly justifies the effort involved.

Identifying the right approach

5.20 The impacts of the four models are summarised in Table 5.1. As explained above, it is not ideal for the Welsh budget to be left open to UK policy or cyclical risk, since those risks do not arise as a consequence of decisions under the control of Welsh Ministers. Exposing the Welsh budget to those risks, which are more easily borne at the UK level, simply generates financial uncertainty and volatility. The pooling of those risks at the UK level is advantageous both to Wales and the UK as a whole. A disadvantage of the PD and FRD models is that they leave the Welsh budget carrying cyclical risks and possibly UK policy risks unless specific offsets are negotiated for the latter. This may not be particularly problematic for taxes that raise relatively small sums or that do not vary greatly with the economic cycle, but in the case of large and highly cyclical taxes the PD and FRD models would require borrowing powers to offset budgetary volatility, which raises other issues.

5.21 It is sometimes argued that a degree of exposure to the risk of differential tax base growth would strengthen the incentives faced by Welsh Ministers to implement policies that promote economic growth. We regard that argument as relatively unimportant since politicians already have strong incentives to seek ways to improve the economic circumstances of their electorates. Moreover, under the current constitutional settlement it is arguable whether the Assembly Government possesses the policy levers to alter significantly the relative rate of economic growth in the short to medium term. However, the much more potent argument is that tax policy is sure to affect to some extent the growth of the tax base and that policy should not be entirely protected from its own consequences.

Table 5.1: Exposure of the Welsh budget to risks under alternative models of devolution⁶⁰

Risk	Example	OBD	ID	PD and FRD
UK policy	UK Government increases thresholds or allowances of a partly devolved tax, reducing the revenue raised by the devolved tax in Wales.	No risk	No risk	Exposure to risk in absence of specific adjustment if tax is shared. No risk if tax is fully devolved.
Welsh policy	A change in devolved tax policy harms the Welsh tax base.	Limited risk but biased incentives	Exposure to risk.	Exposure to risk.
Cyclical	Economic slowdown reduces tax receipts across the UK and in the devolved administration.	No risk	Some risk if Welsh and UK cycles not aligned	Exposure to risk, even if Welsh and UK cycles are aligned
Differential tax base growth	Devolved tax receipts grow more slowly over time than equivalent tax receipts across the UK as a whole.	No risk	Exposure to risk	Exposure to risk

5.22 A disadvantage of the OBD model is that it shields the devolved budget from Welsh policy risk. Moreover, if it is assumed that a change in tax rates in Wales relative to the UK could have a significant impact on the Welsh tax base, then under the OBD approach the budgetary impact of raising or lowering taxes is asymmetric. If Welsh taxes were set **above** those of the UK, and if as a consequence the tax base declined substantially, then the Welsh budget would initially be boosted by an amount equivalent to the additional Welsh tax burden (i.e. the excess of the Welsh tax rate over and above the UK tax rate) multiplied by the devolved tax base. Over time the amount raised by the additional Welsh tax would fall as the devolved tax base shrank in response to adverse economic incentives caused by the higher tax burden - but Wales would not bear the consequences of the falling revenue from the non-incremental part of the tax, as it would under either of the other models. The OBD model therefore dilutes the appropriate financial incentive against raising taxes.

5.23 An even greater difficulty arises with the OBD model if Welsh taxes are set **below** UK rates and if it is assumed that the Welsh tax base increases significantly as a consequence. In those circumstances, the Welsh budget would, correctly, fall in the first instance by an amount equivalent to the lower relative Welsh tax burden (i.e. the extent to which the Welsh tax rate is lower than the UK rate) multiplied by the Welsh tax base. This decrease in resources would become greater over time as the tax base grew and so the value of the tax reduction became larger, leading to ever bigger deductions from the block grant. In other words, the greater the economic benefit from cutting taxes,

⁶⁰ Assuming no change in devolved tax rates relative to UK rates.

the greater would be the financial penalty on the Welsh budget, resulting in a disincentive to lower Welsh tax rates. That makes us wish to exclude the OBD as an option and to choose among the other possibilities when considering specific taxes.

5.24 The best model for each candidate tax will have to be assessed on its own merits, and a “one size fits all” approach is unlikely to work. The Calman Commission has recommended that a common approach, namely the PD model, should be applied to all devolved taxes; the initial offset to the block grant should be equivalent to the devolved tax take in the first year of devolution, and in subsequent years the offset should be a fixed proportion of the grant. Our analysis suggests that for many taxes, on purely economic grounds, this is unlikely to represent a reasonable deal for the Assembly Government. A percentage cut in a growing grant is a disproportionate payment for a tax base that is static (see Annex 7). The devolved budget would acquire a relatively high element of risk and volatility in exchange for relatively little revenue. The ID model deals with those issues, but to work effectively it requires a reference index at the UK level which is reasonably well aligned with the devolved tax. Such an index will not always be available, so we therefore suggest applying different models to different taxes. Large, growing and cyclical revenue streams with a reasonable UK reference index should be subject to the ID approach, while smaller taxes with no obvious reference index should operate according to the PD or FRD option. As indicated in paragraph 5.3, if a tax base is shared, deductions are indexed to a UK tax base, and if it is fully devolved deductions are indexed to UK receipts.

5.25 All models other than the OBD expose the Welsh budget to an element of differential tax base growth risk. If differential tax base growth persists over a period of many years, and if that risk is borne by the devolved budget with no opportunity for periodic reassessment of the devolved administration’s ability to raise its own resources from taxation, it could over time lead to an indefinite drifting apart of the capacity of the devolved area and that of the rest of the UK to provide public services. Such an unlimited drift raises questions over the integrity of the union. We therefore have a potential conflict between the need for devolved government to bear the consequences of its actions and the need to keep divergences in potential public services within some broad limit. There is no perfect solution but the best compromise appears to be very infrequent reviews of the tax bases of the devolved administration and a consequent adjustment to deductions from the block grant. If this is done frequently we relapse to the OBD model and its associated incentive problems, but if it is done at long enough intervals, with no compensation for shortfalls or windfalls in the interim, it can leave significant and appropriate incentives intact while preventing unlimited divergence. The review period must be at least ten years to meet those requirements. If UK expenditure rounds continue to be for three year periods, we would recommend a rebalance after four or five such periods.

Summary

5.26 In devolving a tax, Welsh Ministers exchange a stream of block grant revenue that is funded from tax revenues pooled at the UK level for an element of funding derived from taxes that are levied in Wales. The grant should reflect relative need adjusted for the portion met by own resources and assuming a standard tax effort, where “standard” is necessarily defined at the UK level.

5.27 The “price” paid by Welsh Ministers for a stream of devolved tax revenues is a combination of:

- i) the offset to the block grant that takes place at the time of devolution; and
- ii) the way in which subsequent adjustments to the block grant are made.

5.28 When deciding on a fair price, a range of economic and non-economic factors must be taken into account. Those factors will vary from one tax to another, meaning that from a purely economic perspective the appropriate price for devolving a tax will not be the same in all instances. A high yielding, stable tax, whose receipts are expected to grow rapidly should not be priced in the same way as a tax with low, volatile yields that are in long term decline.

5.29 The extent to which tax devolution transfers risks to the Welsh budget is determined by the precise way in which any devolved tax interacts with the block grant. Each option has certain drawbacks, and none appears unambiguously preferable to other options in all circumstances. Our analysis suggests that the best model for each candidate tax will have to be assessed on its own merits, and that a “one size fits all” approach is unlikely to work.

Chapter 6: Addressing the accountability deficit - income tax devolution

Overview

6.1 This Chapter considers whether some powers over income tax should be transferred from the UK to the Welsh level of government. It provides:

- i) an estimate of income tax revenue raised in Wales;
- ii) consideration of the likely consequences if income tax rates differed between Wales and England; and
- iii) a detailed analysis of the scope for income tax devolution in the Welsh context.

Income tax revenue raised in Wales

6.2 Table 6.1 provides estimates of the revenue raised from income tax in Wales in 2009-10 (excluding tax on savings). It shows that income tax was paid by almost 1.4 million people in Wales in that year, and generated approximately £4.2 billion in receipts.⁶¹ It is clear therefore that devolution of control over some or all of income tax in Wales to the Assembly Government would much increase its accountability to Welsh citizens.

Table 6.1: Estimated number of income tax payers and revenue raised in Wales, excluding savings and distributions, 2009-10

Marginal rate of taxpayer	Taxpayers (000s)	Revenue (£million)
Basic	1,280	2,850
Higher	90	1,300
Total	1,370	4,150

Source: HMRC and Commission calculations

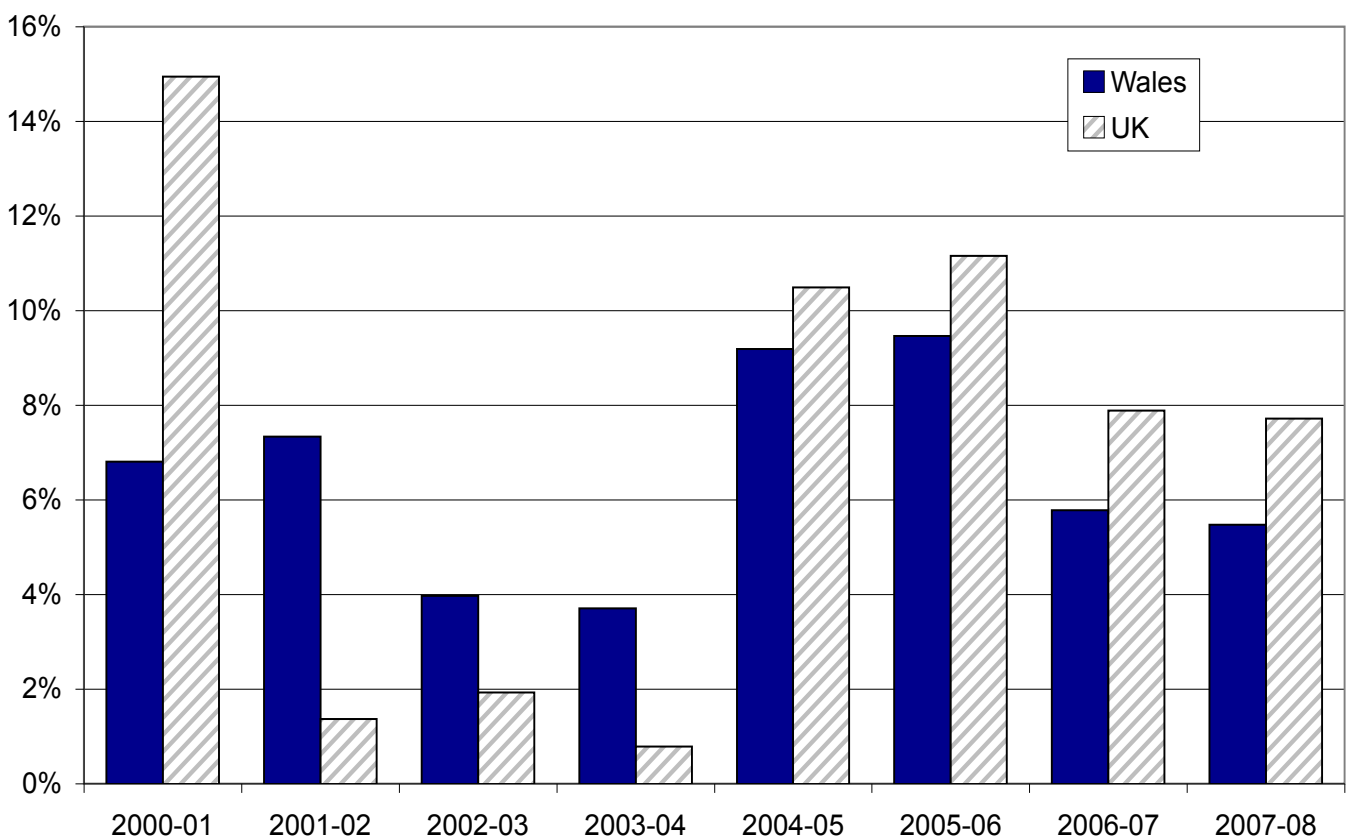
6.3 Chart 6.1 shows that income tax receipts have grown consistently over the period from 2000-2008 in both Wales and the UK. In much of the early part of the decade, Welsh receipts grew somewhat more quickly than was the case in the UK, while in later years the reverse has tended to be true. In general, Welsh income tax receipt growth has been less volatile than UK receipt growth. It is likely that a lack of exposure to the financial services industry accounts for the relative stability of income tax receipts in Wales. Although robust figures are not available at the Wales level, across the UK income tax receipts declined sharply in 2009-10 and are expected to still be below the 2007-08 level in 2010-11. It is highly likely that receipts in Wales have also fallen.

⁶¹ A discussion of the methodology used to derive the estimates in Table 6.1 and subsequent analysis in this Chapter is provided in Annex 5.

6.4 The analysis in this Chapter does not include income from savings, though all other elements of income tax (on employed and self-employed earnings and pensions) are included. While there is no reason in principle to distinguish between income from savings (so-called “unearned income”) and income from work (“earned income”), devolution of the former would significantly increase the opportunities for tax avoidance within the UK. Unearned income, unlike most employment, does not require the recipient to be anywhere in particular so location is harder to pin down. It has also been suggested that devolution of powers to vary the income tax charged on unearned income would run into technical collection difficulties. At present, financial institutions deduct basic rate income tax at source from interest paid on savings. If tax rates on unearned income varied across the UK this process would become more complicated. While we are not in a position to determine the magnitude of the likely collection difficulties, the potential for tax avoidance is clear and therefore we do not propose that powers to vary tax rates on savings should be devolved.

6.5 There is, of course, a large number of ways in which income tax could be devolved to Wales. Welsh Ministers could be given powers over the basic rate alone, or over all rates. The revenue from income tax could be devolved in its entirety, or it could be shared in varying proportions with the UK Government. Powers over thresholds, allowances and other structural aspects of the tax could be partly or wholly passed to Welsh Ministers. The analysis that follows is designed to shed light on the feasibility of those options and their implications for the Welsh budget. In the event of fiscal devolution, the Assembly Government would have the power to lower as well as to raise the taxes under its control, and since Wales is a small country neighbouring a much larger one, the effect of tax changes would not necessarily be symmetrical.

Chart 6.1: Year-on-year growth in income tax receipts, excluding tax on savings, Wales and UK



Source: Commission calculations

6.6 To assess the usefulness of income tax as a devolved source of revenue it is necessary to estimate the effect of changing rates of tax on the Welsh economy. As set out in Chapter 4, economic theory suggests that an increase in tax rates relative to England might cause some net out-migration from Wales (migration response) and to alter the work effort of those who remained in Wales (behavioural response). In the following section, we attempt to assess the likely impact of an increase in income tax rates in Wales relative to England, taking account of the migration and behavioural responses. We consider separately the likely impact of an increase in the higher rate (currently set at 40 pence across the UK) and in the basic rate (currently set at 20 pence).⁶²

Estimating a behavioural response to an increase in income tax rates

6.7 A number of empirical studies have attempted to estimate a behavioural response to changes in marginal income tax rates.^{63, 64} This literature has produced a wide range of estimates varying with country and time period. We have used the values from a study which summarises the current literature on empirical research.^{65, 66}

6.8 The behavioural response is estimated to be larger for people with relatively high incomes than for those with relatively low incomes. On average, a one percentage point increase (a one pence in the pound increase) in the higher rate of income tax leads to a reduction in the taxable income of higher rate taxpayers of just under one per cent.⁶⁷ Intuitively that seems on the high side but we have no better information. A one percentage point increase (a one pence in the pound increase) in the basic rate of income tax results in a decrease in the taxable income of basic rate taxpayers of 0.4 per cent⁶⁸ (see Annex 5 for further details of these calculations). When estimating the impact of a change in the basic rate, we have assumed that the behavioural response applies only to basic rate payers. Following a change in the basic rate the marginal tax rate of individuals above the higher rate threshold has not changed so we assume that a change in the basic rate does not change their reported pre-tax income.⁶⁹

⁶² We have not attempted to analyse the impact of an increase in the recently-introduced 50 pence top rate of income tax, which applies to taxable income over £150,000 per year. We estimate that very few people in Wales (around 4,000 in total) are likely to have any earnings in this tax bracket.

⁶³ See Saez et al, 2009, for a review of the empirical work in this area.

⁶⁴ We are grateful to Professor James Foreman-Peck for his correspondence on the likely impact of income tax increases in Wales. Analysis of a model of the Welsh economy leads Professor Foreman-Peck to conclude that "according to the model, the Welsh economy is quite insensitive to a small income tax differential against England" (Foreman-Peck, 2010 p.1). For further information on the model, see Foreman-Peck and Lungu, 2009, and Foreman-Peck 2010.

⁶⁵ Values proposed in Brewer et al, 2008. Pooling of elasticity estimates from several studies yields approximate bounds on taxable income elasticity of (0:47; 0:54) for high income individuals (Chetty, 2009). The estimates that we use in this analysis fall within these bounds. For higher rate tax payers an elasticity of 0.5 is applied.

⁶⁶ The definition of elasticity applied is the elasticity of gross income (which is a function of work effort) with respect to the effective after tax wage when the latter is altered by a change in the tax rate.

⁶⁷ Applying an elasticity of 0.5.

⁶⁸ Applying an elasticity of 0.25.

⁶⁹ The average tax rate for higher rate tax payers would clearly change following a change in the basic rate of tax. However, economic theory suggests that it is changes to the marginal tax rate that are most influential in determining behavioural response. See Meghir and Phillips, 2008.

Estimating a migration response to an increase in income tax rates

6.9 Migration effects are likely to be country-specific depending on the size of a tax jurisdiction, its degree of economic integration with neighbours and the existence or otherwise of a shared language. For those reasons, nothing in the empirical literature would serve as a reasonable proxy for the migration response in the Welsh case. We have therefore attempted to set limits on the estimated impact of an increase in Welsh income tax rates relative to England by making plausible assumptions about the costs and benefits that would arise if a taxpayer considered moving in order to take advantage of income tax differences.

6.10 There is an up-front direct cost associated with moving home that acts as a disincentive to leaving Wales in response to an increase in Welsh income tax rates relative to England. Stamp duty land tax, removal costs, solicitors' and estate agents' fees are all usually incurred when moving house and have to be paid at the time of the move. In addition, for most people a move over any significant distance will be likely to involve dislocations to family life such as reduced contact with friends and relatives, or the need for children to change school.⁷⁰ Those indirect costs are more difficult to quantify in monetary terms than are the direct costs of moving, but they are likely to be no less significant in determining where people choose to live (see Chapter 4).

6.11 Set against the direct and indirect costs are the benefits of reduced income tax payments that would arise in the event of a move. A complicating factor is the fact that while moving costs are incurred immediately, the gains from paying less income tax arise over a period of years. A thorough analysis of the costs and benefits of moving would discount income gains that occur in the future, and would also incorporate an assumption about future earnings growth. Discounting future benefits would reduce the attractiveness of moving to avoid an increase in income tax, while assuming that earnings will be higher in future than they are at present would make moving more attractive. Given the uncertainties with this analysis we decided that little was to be gained from introducing estimates of those factors, and instead have assumed as a first approximation that the effects of earnings growth and discounting future gains are offsetting. We have therefore not discounted future costs and benefits relative to the present, nor have we assumed any growth in earnings over time. We assume that costs and benefits are assessed over a ten year horizon.

6.12 People who live close to the border between a low and high tax jurisdiction will face a different set of costs and benefits than will those living far from the border. For "borderers" the indirect costs of relocating to the low tax region may be modest, since moving only a short distance would enable them to enjoy the benefits of a lower tax bill while incurring minimal disruption to their lives. It is likely that some of the financial advantage of lower taxes would be offset by shifts in house prices on either side of the border, with properties close to the border on the Welsh side becoming relatively cheaper and those on the English side becoming somewhat more expensive. At the limit, it is possible that house price adjustments would be sufficient to eliminate any financial advantage from moving. However, the international empirical evidence on this point is inconsistent (see Chapter 4) and we therefore believe it is reasonable to assume that, in the event of income tax rates in Wales being higher than those in England for a sustained period of time, there will be some additional deterioration in the Welsh tax base close to the border over and above that which occurs across the country as a whole.

⁷⁰ Studies from the USA (where there are differences in a range of tax rates across states) show that inter-state migration is influenced by expected income but also a range of non-monetary factors such as availability of parks, recreation facilities, climate and relative crime rates. See Cebula, 2005, for a summary.

6.13 By comparing costs and benefits in this way we are able to estimate approximately the number of people who might gain from moving out of Wales in response to increases in income tax rates. This makes it possible to set a limit on the number of people who might move following a given tax increase.

The impact of a higher rate increase

Higher rate increase: gross revenue raised

6.14 Table 6.2 shows the estimated gross impact of increasing the higher rate of income tax in Wales by one pence, two pence and three pence. Before making any allowance for migration or behavioural response, a one pence increase in the higher rate would raise £16 million in total, while three pence would raise £48 million. Note that the figures in our analysis relate to the total tax raised from Welsh residents. The actual impact on the Welsh budget depends on what proportion of total tax receipts is devolved and how the behavioural and migration responses affect that portion.

Table 6.2: Gross revenue raised by increasing the higher rate of income tax in Wales

£ million	
Tax rate change	Gross revenue
1p	16
2p	32
3p	48

Source: Commission calculations

Higher rate increase: behavioural response

6.15 In order to estimate the behavioural response to a one pence increase in the higher rate, we use the estimates summarised in paragraph 6.8 and explained further in Annex 5.⁷¹ This causes the gross tax take from increasing the higher rate to fall from £16 million to £3 million.

Higher rate increase: migration response

6.16 The income tax saving that could be made by moving to England following an increase in the higher rate in Wales will vary depending on an individual's earnings. Basic rate taxpayers will obviously be unaffected. For higher rate taxpayers whose earnings place them only slightly above the higher rate threshold, the possible income tax saving would also be modest. However, for those on very high incomes, the tax benefits of moving out of Wales could be significant.

⁷¹ Brewer et al, 2008.

6.17 Table 6.3 shows the annual income that would be necessary to make moving worthwhile (over a ten year horizon) following a one pence increase in the higher rate of income tax in Wales, for a range of different moving costs. It shows that an income of £150,000 or more would be necessary to offset moving costs of £10,000 over ten years. For each additional £10,000 of moving costs, incomes need to be at least £100,000 higher to offset those costs.

6.18 While we have no robust way of calculating the direct moving costs of high earning individuals, it is reasonable to assume that such people will be likely to purchase expensive properties and so incur a stamp duty charge of at least £10,000.⁷² In addition, affluent individuals are likely to have above average removal costs. On top of those direct costs will come the indirect costs of moving away from friends and family, disrupting children's education and so on, which are very difficult to express in monetary terms but nonetheless are likely to be significant for most people. It therefore seems reasonable to assume that the total direct and indirect moving costs for high earning individuals are likely to be much in excess of £10,000, and could well be over £20,000. Table 6.3 shows that some 1,500 people in Wales, altogether paying taxes of £170 million per annum, have earnings that would make moving worthwhile, even if the direct and indirect costs of moving were £20,000. If half of those people chose to leave Wales, the impact on Welsh tax receipts would be £85 million. We shall base our estimate of the migration response to a one pence increase in the higher rate of income tax on this value.

6.19 We argued above that the indirect costs of moving are likely to be much lower for people living close to the border than for the remainder of the population. While we have no way of estimating those costs, for illustrative purposes we assume that residents close to the border face direct and indirect moving costs of half of the value we have assumed for the rest of Wales (i.e. £10,000). Table 6.3 shows that for this value of moving costs, earnings over £150,000 per year are necessary before moving becomes worthwhile. If we assume that half of the people who live within, say, 30 minutes driving time of the border and earn over £150,000 move in response to a one pence increase in the higher rate, the tax base is reduced by a further £10 million.⁷³

6.20 Combining the hypothesised all-Wales migration response with the additional conjectured impact for residents close to the border therefore gives an overall eventual migration response of -£95 million, building up over a number of years.

⁷² Properties valued at over £250,000 have stamp duty levied at three per cent of their value, and for properties over £500,000 this rises to four per cent.

⁷³ The methodology used to estimate the number of people within drive time limits assumes that individuals complete the journey by travelling at the speed limit for the journey's entirety. This is unrealistic as the average speed of a journey will be less than the speed limit. To account for this we have used a 20 minute drive time as a proxy for the number of people that are actually within 30 minute drive time of the border.

Table 6.3: Annual income required to generate financial advantage from moving out of Wales for a range of costs, over a ten year horizon⁷⁴

Estimated direct and indirect moving costs	Annual income required for income tax saving to match or exceed estimated costs over ten years	Estimated number of individuals in Wales with income above the threshold	Impact on Welsh income tax receipts if half of individuals with income above threshold moved out of Wales	Number of people in this earnings category who would have to migrate for the impact of a one pence increase in the higher rate to become negative
£10,000	£150,000	4,000	–£150 million	250
£20,000	£250,000	1,500	–£85 million	150
£30,000	£350,000	1,000	–£70 million	125
£40,000	£450,000	700	–£55 million	100

Source: Commission calculations

6.21 While this analysis is a thought experiment rather than truly empirical research and produces only a very rough guide to the highest likely response, the results are nonetheless striking. Although relatively few people are likely to move in response to a one pence increase in the higher rate, those who do move are likely to have high incomes. As a consequence, total tax raised in Wales could plausibly fall as a result of a rise in higher rate income tax.⁷⁵

6.22 It is worth noting that only a very small migration response is required for a higher rate income tax increase to have a negative net impact on the devolved budget. Even if we assume that there is no behavioural response following a one pence increase in the higher rate, if only 150 of Wales's highest earners moved out of Wales (10 per cent of the total number earning over £250,000 per year) this would result in no additional revenue being raised from Welsh residents.

Higher rate increase: overall impact

6.23 Table 6.4 summarises the estimated impact of a one pence increase in the higher rate of income tax. Combining the behavioural response with the migration response could cause the gross revenue raised to become strongly negative. In something like a plausible worst case scenario, income tax from Welsh residents is reduced by over £100 million, so that the net revenue raised falls by some £92 million.

⁷⁴ Little information is available on the top end of the income distribution in Wales, and therefore the Table provides only an approximate number of individuals within each income bracket.

⁷⁵ People move home periodically - on average around once every five to ten years (ONS British Household Panel Survey, 1991-1996) - and at that point the direct costs of moving are effectively "sunk" and no longer act as a barrier to relocating to the lower tax jurisdiction. We have not attempted to model behaviour at the point at which direct moving costs become sunk, but were we to do so the result would be to increase the negative impact on the tax base arising from an increase in the higher rate of income tax.

Table 6.4: Revenue raised by increasing the higher rate of income tax in Wales, including behavioural and migration response**£ million**

Tax rate change	Gross	Behavioural response only	Behavioural and migration response
1p	16	3	-92

Source: Commission calculations

Estimating the impact of a basic rate increase

Basic rate increase: gross revenue raised

6.24 In this section, we repeat the above analysis, assuming an increase in the basic rate only. Table 6.5 shows the gross revenue raised by adding one pence, two pence and three pence to the basic rate in Wales, before allowance is made for any behavioural and migration response. It is estimated that one pence would raise £175 million in total, while three pence would raise around £525 million. The gross revenue raised by increasing the basic rate by one pence is therefore around ten times greater than the gross revenue generated by a one pence increase in the higher rate.

Table 6.5: Gross revenue raised by increasing the basic rate of income tax in Wales**£ million**

Tax rate change	Gross revenue
1p	175
2p	350
3p	525

Source: Commission calculations

Basic rate increase: behavioural response

6.25 Once again, in order to estimate the behavioural response to a one pence increase in the basic rate, we use the estimate summarised in paragraphs 6.8.⁷⁶ We assume a behavioural response from basic rate tax payers only. This causes the tax take from increasing the basic rate by one pence to fall from £175 million to £163 million.

⁷⁶ Derived from Brewer et al, 2008.

Basic rate increase: migration response

6.26 One important difference between raising the basic rate and raising the higher rate of income tax is that the impact of an increase in the basic rate is capped. Regardless of one's income, a one pence increase in the basic rate only increases an income tax bill by a maximum of £374 per year. In contrast, an increase in the higher rate has an open-ended impact on the income tax due. As a consequence, high earners are less likely to move in response to an increase in the basic rate than they are in the event of an increase in the higher rate.

6.27 The fact that an increase in the basic rate has a capped impact on tax bills means it is relatively straightforward to compare the costs of moving with the income saved by so doing. Table 6.6 shows that avoiding a one pence increase in the income tax rate would save a maximum of £3,740 over ten years. This suggests that, once direct and indirect moving costs are taken into account, few people would move for less than a three pence increase in rates. We therefore tentatively conclude that for the bulk of the Welsh population the migration response to a one pence increase in the basic rate is roughly zero, and is likely to be small, at least until changes exceed three pence.

Table 6.6: Maximum saving (before moving costs) from moving in response to a change in the basic rate of income tax

£

Tax rate change	Maximum saving over ten years
1p	3,740
2p	7,480
3p	11,220
4p	14,960
5p	18,700

Source: Commission calculations

6.28 As previously discussed, the indirect costs of moving from Wales to England will be much lower for people living close to the border than they will be for the remainder of the Welsh population. When considering the impact of a higher rate income tax increase, we assumed that there was an additional migration response among high income individuals who lived within 30 minutes driving time of the border. It is much less clear that there would be a significant migration response close to the border if the basic rate of income tax were increased in Wales. The capped nature of the tax increase means that the financial gains from moving across the border are low and therefore likely to be insufficient to offset even modest estimates of moving costs.⁷⁷ Adjustments in house prices would be expected to further weaken the financial incentives to move. That said, it is plausible to anticipate

⁷⁷ As noted previously, direct moving costs are sunk when people are planning to move anyway. We have assumed that the indirect costs outweigh the financial gains of moving to a lower tax jurisdiction for increases in the basic rate of up to three pence, so that even when direct costs are sunk, there is no migration response from the general population.

that over time the tax differential would lead to some weakening of the Welsh tax base close to the border by influencing the normal flow of migrants over time. If, say, within a 30 minute driving time distance of the border there is a five per cent deterioration of the Welsh income tax base for every one pence increase in the tax rate, then the migratory response to a basic rate increase of one pence causes Welsh income tax receipts to fall by just over £30 million. A three pence increase results in receipts falling by nearly £100 million, but those numbers are illustrative only, and any estimate is pure supposition.

Basic rate increase: overall impact

6.29 On the basis of those assumptions, for a one pence increase in the basic rate, the gross revenue could fall from £175 million to £163 million when the behavioural response is included, and to perhaps £132 million when the behavioural and migration responses are combined.⁷⁸

Table 6.7: Revenue raised by increasing the basic rate of income tax in Wales, including behavioural and migration response

£ million

Tax rate change	Gross	Behavioural response only	Behavioural and migration response
1p	175	163	132
2p	350	325	260
3p	525	485	385

Source: Commission calculations

The likely impact of cutting income taxes in Wales

6.30 So far we have supposed higher taxes in Wales and asked how many people might move. What about the reverse possibility? What would be the response to lower rates in Wales? The costs and benefits we have considered are not radically different in Wales and the west of England. However, the population of England living within 50 miles of Wales is roughly five times the total Welsh population and the number on high incomes is surely a larger multiple still. We have no means of gauging what the reaction would be. Many of those people are tied to their location in order to earn those incomes. Some would be resistant to move for family or other reasons. Nonetheless a response to higher rate tax cuts two or three times the size of the response to tax rises is not impossible. There would no doubt be a tendency to classify second homes in Wales as the primary residence, whenever that was plausible. Conditions for residence in Wales would need to be defined in terms of time spent, as is currently done when defining UK status, but there is no denying that enforcing strict compliance with such definitions would be prohibitively intrusive and expensive and some successful avoidance would occur.

⁷⁸ Tables 6.4 and 6.7 show the eventual effect of behavioural and migration responses. In all likelihood the responses would build up over time and would be smaller than shown for some years after a tax increase.

Implications for income tax devolution to Wales

6.31 The above analysis implies that income tax devolution would give Welsh Ministers significant powers to vary the amount of resources under their control. Substantial uncertainties remain but the following inferences are reasonably robust:

- i) small differences in basic rates of income tax (up to around three pence) between Wales and England could be sustained over a period of time without being likely to induce significant migration or behavioural response;
- ii) a small increase in the Welsh basic income tax rate relative to the UK has the potential to generate substantial additional revenue for the Assembly Government (although the exact revenue impact will depend on how much income tax is devolved to Wales);
- iii) high earning individuals would be most likely to move or alter their behaviour in response to a change in Welsh income tax rates. The loss of a small number of high earning individuals could have an appreciable impact on the Welsh income tax base;
- iv) increasing the higher rate, it appears, would at best raise little additional revenue and would be quite likely to substantially reduce the income tax paid by Welsh residents;
- v) decreasing the higher rate could potentially raise significant sums (though we cannot reliably quantify this effect), as high earning individuals in England would have an incentive to have a Welsh residence for tax purposes; and
- vi) variations in the higher rate would have to be limited if a serious degree of tax avoidance is to be prevented.

6.32 We conclude that devolution of some aspects of income tax is feasible and would enhance the accountability of the Assembly Government to its electorate. However, care will have to be taken not to reduce the administrative efficiency of the existing regime and to limit the impact on the income tax base of the UK Government. We now consider the details of how best to implement income tax devolution in Wales.

What rate-setting powers should be devolved?

6.33 In considering what powers might be devolved we have set two goals. One is to maximise the freedom for manoeuvre of an Assembly Government, subject to all the essential limitations imposed by being part of the UK; the second is to ensure that the system does not bias the decision in any particular direction. It is not for us to decide whether Wales is more likely to want to follow a tax-raising or tax-lowering policy; our task is to ensure it is equally able to follow either with its devolved powers.

6.34 At present, the Scottish Government is able to vary the basic rate of income tax by up to three pence above or below the basic rate that is applied across the UK. The Calman Commission proposed that this power should be replaced by a new Scottish rate of income tax, which would be applicable to all tax bands. UK income tax rates in Scotland would be reduced by ten pence, with a corresponding once and for all proportionate reduction in the Scottish block grant (what we have called the PD model in Chapter 5). The Scottish rate could be set at the “default” rate across all bands (currently ten pence) that would restore the total rate of income tax in Scotland to the UK level. Alternatively, if the Scottish rate were set above / below the level necessary to restore total income tax rates in Scotland to the UK level, then the overall resources available to Scotland would increase / decrease.

6.35 If implemented, the Calman Commission's recommendation would mean that a change in the Scottish rate of income tax would affect the marginal rate of all income tax bands by the same amount. Whatever the merits of that proposal in the Scottish context, our analysis suggests that it would be unattractive for Wales. Our estimates show that increasing the income tax rate faced by higher rate payers in Wales would be unlikely to raise substantial revenue even assuming no migration or behavioural response. Once an allowance is made for those factors, the net budgetary effect could well be negative. An insistence that any increase in taxes must apply across all income tax bands could reduce its revenue yield and perhaps reduce the likelihood of such powers being used. While Welsh Ministers might choose to increase tax rates on high income individuals to satisfy their principles of fairness, it seems unreasonable to require them to do so, given that such an increase could well have a negative overall impact on the budget.

6.36 An alternative option to the Calman Commission's proposal would be to give Welsh Ministers powers to vary income tax rates separately. In such circumstances, they might raise taxes but another response might be to cut the higher rate in order to attract high earning individuals into Wales. While it is not possible to estimate the impact of such a policy precisely, the financial incentive for those with very high incomes to acquire a Welsh residence could be substantial. For instance, a one pence reduction in the higher rate of tax for an individual with an annual income of £1 million would be worth around £10,000 per year. A policy of reducing the higher rate of tax could therefore generate additional revenues for the Assembly Government by attracting high earners and boosting the Welsh tax base.

6.37 Viewed in narrow terms, such a policy might be unattractive to the UK Government since, by creating a "tax haven" for high earners within the UK, it has the potential to undermine the UK tax base. However, the UK has a general as well as a budgetary interest in raising the relative GVA performance of Wales. The UK Government should therefore be ready to accept some modest use of lower taxes if that is what the Assembly Government wished to try.

6.38 A policy of lowering income tax rates could have offsetting benefits for the UK as a whole. If reductions in marginal income tax rates on high earners succeeded in promoting economic growth by incentivising work and encouraging entrepreneurship (we make no judgment about the likely effectiveness of such policies), the resulting decline in relative need would reduce any needs-based block grant allocated to Wales, producing a gain to the UK exchequer. It would therefore seem reasonable for the tax regime in Wales to contain adequate flexibility to enable the Assembly Government to vary the higher rates of income tax, provided this can be done in a way that is compatible with the constraints imposed by the economic union.

6.39 While small differences between the top rate in Wales and the rest of the UK may be acceptable to the UK Government especially if, as a result of such a policy, Wales might require a smaller needs-based block grant, there would be very understandable reluctance to give Welsh Ministers the power to set tax policy in a way that caused significant harm to the UK tax base. We believe that an acceptable compromise would be to enable Welsh Ministers to set the basic and higher rates separately, but that the extent to which rates could vary from the UK rate should be constrained. We propose that income tax rates in Wales should be allowed to vary by no more than three pence relative to the UK. If that proposal is not accepted, a second best fallback would be to devolve powers to vary the basic rate only. We believe that any proposal which constrains the devolved administration to move rates in a way that impacts at the margin on both basic and higher rate taxpayers is not appropriate for Wales.

How should income tax revenue interact with the block grant?

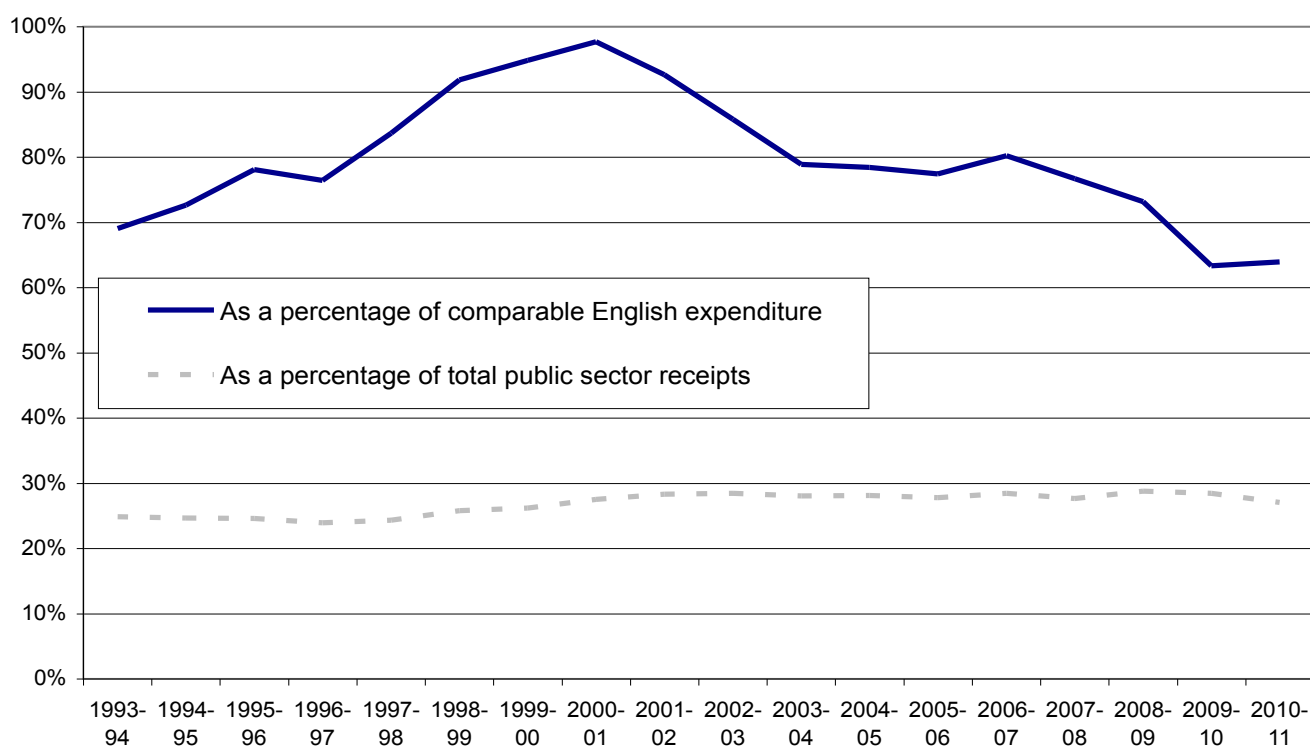
6.40 Chapter 5 set out the main ways in which devolved tax revenues could interact with a block grant. We believe that the OBD model is not appropriate for income tax devolution in the form that we propose - particularly if powers over the higher rates are devolved - as this could result in a biased incentive to raise rather than cut taxes.

6.41 Public spending, which is financed by both revenue and borrowing, drives the current block grant arrangement in Wales. The relative importance of these two sources of finance tends to change over time. This is illustrated in Chart 6.2, which shows that UK income tax has varied greatly in recent years in relation to expenditure in England on programmes devolved to Wales (comparable spending). The chart also shows that this variation is not because of any great change in the contribution of income tax to overall public sector receipts. If income tax were devolved in line with the PD or FRD options, growth in the overall Welsh budget could diverge significantly and over extended periods of time from expenditure growth in England. The Welsh budget would therefore be subject to a substantial element of macro fiscal risk.

6.42 Income tax is also an area where UK policy changes are frequent and are made at short notice (typically in budget statements). This UK policy risk would be difficult to manage under the PD or FRD options, with significant potential for disputes.

6.43 On balance, therefore we recommend applying the ID model for income tax devolution. In the first year of operation, the block grant would be reduced by an amount equivalent to the additional resources allocated to Wales from Welsh income tax revenue. In subsequent years, the offset would be recalculated based on the growth of the corresponding income tax bases across the UK. The offset would be recalibrated periodically to avoid unlimited divergence (see paragraph 5.25).

Chart 6.2: UK income tax receipts as a share of total public sector receipts and comparable English spending (per cent)



Source: HM Treasury, HMRC and Commission calculations

6.44 This approach removes cyclical and UK policy risk from the Welsh budget, and introduces no bias into the financial incentives to raise or lower tax rates. It does, however, expose the Welsh budget to differential tax base growth risk in between recalibrations of the block grant offset. The advantage is Wales reaps much of the benefit or costs of its own policy initiatives.⁷⁹

How much of each income tax band should be devolved?

6.45 If the same number of pence of each income tax band were devolved to Wales, the ability of Welsh Ministers to vary tax rates separately would be constrained by the fact that an increase in the basic rate in Wales would give the devolved Welsh income tax structure the appearance of being regressive. For example, if ten pence across all income tax bands were devolved, then increasing the basic rate while leaving higher rates unchanged would give a devolved Welsh income tax structure of eleven pence at the basic rate, ten pence at the higher rate and ten pence at the top rate. This would be politically difficult to justify and might therefore bias tax decisions. Devolving a constant proportion of all tax rates avoids this problem. If, say, half of each band were devolved the Welsh income tax rates would initially be ten pence, 20 pence, 25 pence, and if the basic rate were increased by one pence they would become 11 pence, 20 pence, 25 pence. By devolving a constant proportion of each band, the progressive nature of the devolved income tax structure would be maintained and a potential bias in tax decisions would be avoided.

6.46 A further consideration in devolving powers over income tax is the desirability of ensuring that the devolved budget is exposed to a reasonable proportion of each band over which Welsh Ministers have some power, so as to maintain a financial interest in the growth of that element of the tax base. Once again, devolving a constant number of pence in each band (and hence a declining proportion of each band) has some undesirable characteristics in this regard. If, say, ten pence of each income tax band were devolved, the devolved administration would initially own half of the 20 pence basic rate band, but only a quarter of the higher 40 pence rate and only a fifth of the new 50 pence top rate. In order to ensure a reasonable financial stake in each band, and to avoid problems of apparent regressivity biasing tax decisions, we therefore favour taking a fixed proportion of each tax band.

6.47 The greater the share of the block grant that is replaced by devolved income taxes, the larger is the Welsh budget's exposure to the risk of differential tax base growth. There is no way of identifying precisely the optimal amount of differential tax base growth risk that should be borne by the Welsh budget, but given our preference for devolving a constant proportion of each band rather than a fixed number of pence across each band, the most straightforward approach is to devolve half of income tax rates across all income bands. That implies that ten pence of the basic rate, 20 pence of the higher rate and 25 pence of the new top rate of 50 pence should be devolved to Wales. See Annex 8 for further discussion of this.

6.48 Table 6.8 shows the impact on the Welsh budget of changes in income tax rates in line with our preferred solution. The gross effect is unchanged, but the negative impact of the behavioural and migratory response on the Assembly Government's receipts is half that shown in Tables 6.4 and 6.7. The behavioural effect on the Welsh tax base is shared with the UK Government, while there is a positive impact on the income tax receipts of the rest of the UK as some tax payers move from Wales to England. If, for example, the higher rate in Wales was one pence higher than the rest of the UK then, following the migration response outlined above, we estimate that receipts for the rest of the UK would rise by around £40 million (see Annex 5).

⁷⁹ The options for implementing this approach are set out in Annex 8.

Table 6.8: Estimated impact on the Assembly Government's budget resulting from an increase of one pence in the basic rate and higher rate of income tax**£ million**

Tax rate change	Gross effect	Including behavioural impact	Including behavioural and migration impact
Basic rate	175	163	152
Higher rate	16	10	-39

Source: Commission calculations

Allowances and thresholds

6.49 This discussion has proceeded entirely in terms of income tax rates with no reference to income tax thresholds or allowances. We believe that the latter elements should remain under UK Government control. Tax liability in the UK is calculated by applying rates after all other calculations have been made. Applying different rates to taxpayers with a different residence tax code is a manageable business, but the complexity and cost of administering the system would rise sharply if the rules governing the tax base varied across the UK. One drawback of this approach is that it prevents the Assembly Government taking steps to improve the design of the income tax system. However, we are not satisfied that the cost of Wales creating its own collection agency or paying HMRC the full cost of operating a second system can be justified. Therefore income tax reform must remain an issue to be addressed at the UK level.

Making a tax decision

6.50 At present, the Scottish Parliament is not required to vote on the rate at which the Scottish Variable Rate (SVR) is set. In the absence of a formal decision to vary the SVR, the default UK rates are applied and Scotland receives its Barnett-determined block grant. An important component of the Calman Commission's recommendations for further income tax devolution to Scotland is the requirement to compel the Scottish Parliament to vote annually to set the proposed Scottish rate of income tax. The Parliament would of course be free to set the Scottish rate at a value that would restore parity with the rest of the UK, but it could do this only as the result of an active decision.

6.51 We favour this approach being adopted in the Welsh context, since it would involve the devolved administration making a real decision about tax and would remove the possibility of "doing nothing" with this important fiscal power. By taking an annual vote on Welsh rates of income tax, the accountability of the National Assembly to its citizens would be made clear.

Recommendation - income tax

The Assembly Government should acquire limited powers to vary income tax rates in Wales.

- i) The basic and higher rates of income tax in Wales should be reduced by ten pence, 20 pence and 25 pence. The block grant should be reduced by an equivalent amount in the first year of the new system. In subsequent years, the size of the block grant deduction should be calculated to reflect the growth of the relevant income tax bases across the UK as a whole.
- ii) The National Assembly should vote annually to set Welsh income tax rates, which would be additional to the reduced UK rates that would apply in Wales.
- iii) Welsh Ministers should ideally be able to vary separately all rates of Welsh income tax. Income tax rates in Wales should be allowed to vary by no more than three pence relative to the prevailing rate in the UK. If this recommendation is not accepted, a second best alternative would be to devolve powers to vary only the basic rate.
- iv) The UK Government should retain responsibility for income tax on savings and distributions, and for designating income tax bands, allowances and thresholds.

Summary

6.52 We estimate that, in 2009-10, income tax was paid by almost 1.4 million people in Wales, generating approximately £4.2 billion in receipts. Devolution of control over some or all of the funds raised from income tax in Wales to the Assembly Government would substantially enhance its accountability to Welsh citizens.

6.53 We have attempted to assess the likely impact of a variation in income tax rates between Wales and England, taking account of the migration and behavioural responses. Given the uncertainties in the data and the absence of real empirical evidence we can make only very general inferences by considering costs and benefits to individual taxpayers. Nevertheless, we believe the following inferences are reasonably secure:

- i) small differences in basic rates of income tax (up to around three pence) between Wales and England could be sustained over a period of time without being likely to induce a significant migration or behavioural response;
- ii) a small increase in the Welsh basic income tax rate relative to the UK has the potential to generate substantial additional revenue for the Assembly Government;
- iii) high earning individuals would be most likely to move or alter their behaviour in response to a change in Welsh income tax rates. The loss of a small numbers of high earning individuals could have an appreciable impact on the Welsh income tax base;
- iv) increasing the higher rate, it appears, would at best raise little additional revenue and would be quite likely to substantially reduce the income tax paid by Welsh residents;

- v) decreasing the higher rate could potentially raise significant sums (though we cannot reliably quantify this effect), as high earning individuals in England would have an incentive to have a Welsh residence for tax purposes; and
- vi) variations in the higher rate would have to be limited if a serious degree of tax avoidance is to be prevented.

6.54 We conclude that devolution of some aspects of income tax is feasible and would enhance the accountability of the Assembly Government to its electorate.

6.55 We consider that Welsh Ministers should be empowered to set basic and higher rates separately, but that the extent to which rates could vary from the UK rate should be constrained. We propose that income tax rates in Wales should be allowed to vary by no more than three pence relative to the UK. If that proposal is not accepted, powers to vary the basic rate only would be preferable to being obliged to move basic and higher rates together.

6.56 Devolved income tax receipts should interact with the block grant in line with the ID model that was outlined in Chapter 5.

6.57 Income tax thresholds and allowances should remain under the control of the UK Government.

6.58 Due to the risk of incentivising tax avoidance, and also because of possible collection difficulties, we do not propose that powers to vary tax rates on savings (so-called "unearned income") should be devolved.

6.59 Were income tax to be devolved to Wales, the National Assembly should be required to vote annually to set the proposed Welsh rates of income tax. It could, of course, set the rates at values that would restore parity with the rest of the UK but, by taking an annual vote, the accountability of the National Assembly to its citizens would be made clear.

Chapter 7: Devolution of other tax-varying powers to Wales

Overview

7.1 There are several other taxes that are currently levied by the UK Government but that could be devolved to Wales in a way that is consistent with the principles of the union. The case for their devolution on accountability grounds alone is not as strong as for income tax, but together they would generate significant revenue and they could also be useful policy levers in areas of existing devolved responsibility. This Chapter considers the pros and cons of devolving those taxes to Wales and also discusses the possibility of new taxes being introduced in Wales. It provides:

- i) a discussion of corporate taxes, including the feasibility of devolving some control over corporation tax in a way that is consistent with the constraints of UK and EU membership;
- ii) an overview of the current property taxation regime, with consideration of the case for devolving stamp duty land tax and capital gains tax on property and land;
- iii) a review of the case for devolving smaller taxes with relatively immobile bases that are aligned with devolved powers, namely landfill tax, aggregates levy and air passenger duty; and
- iv) a discussion of the case for enabling new taxes to be introduced in Wales in areas of devolved competence with the consent of both the National Assembly and the UK Parliament.

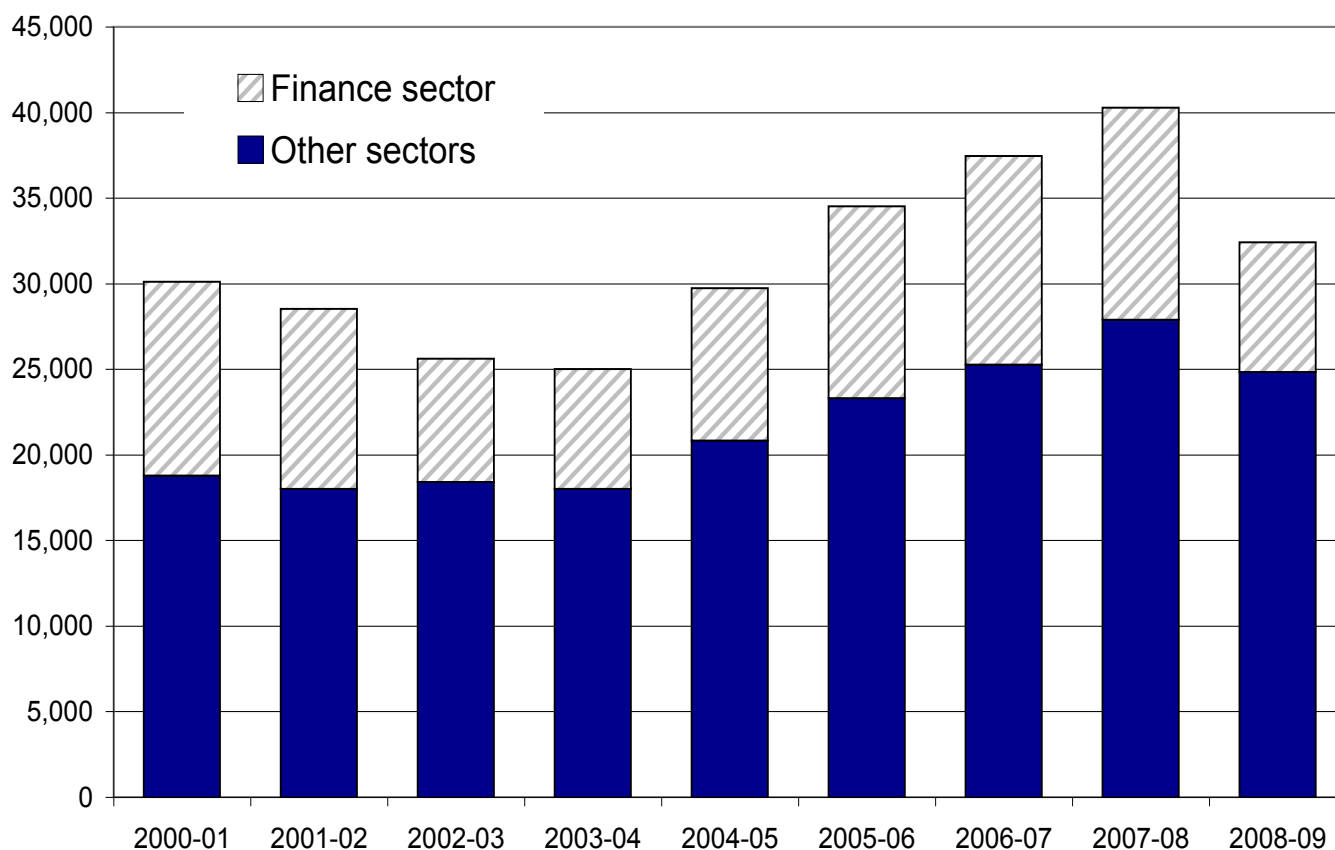
Candidates for devolution: corporate taxes

Corporation tax

7.2 Several submissions to the Commission have suggested that corporation tax should be devolved to Wales. Indeed it has been argued forcefully to us that some transformational change is required to improve Wales's relative economic performance within the UK and no other single change would be likely to be as effective as giving Welsh Ministers the scope to reduce corporation tax.

7.3 Chart 7.1 shows UK corporation tax receipts over time, excluding North Sea oil. Receipts declined over the first half of the last decade, followed by a sharp increase and reduction over the second half. As the chart shows, the finance sector is responsible for a lot of this volatility.

7.4 There are no published statistics on corporation tax receipts in Wales. Indeed, there is a conceptual issue about how such receipts should be measured. Many of the enterprises operating in Wales will also be operating in other parts of the UK, so it is not clear how the taxes or underlying profits of such enterprises should be geographically assigned at a sub-UK level. The Government Expenditure and Revenue publication in Scotland (GERS) assigns corporation tax on the basis of Gross Operating Surplus in the regional GVA estimates. This in turn is largely allocated according to the distribution of overall employees' income across regions.

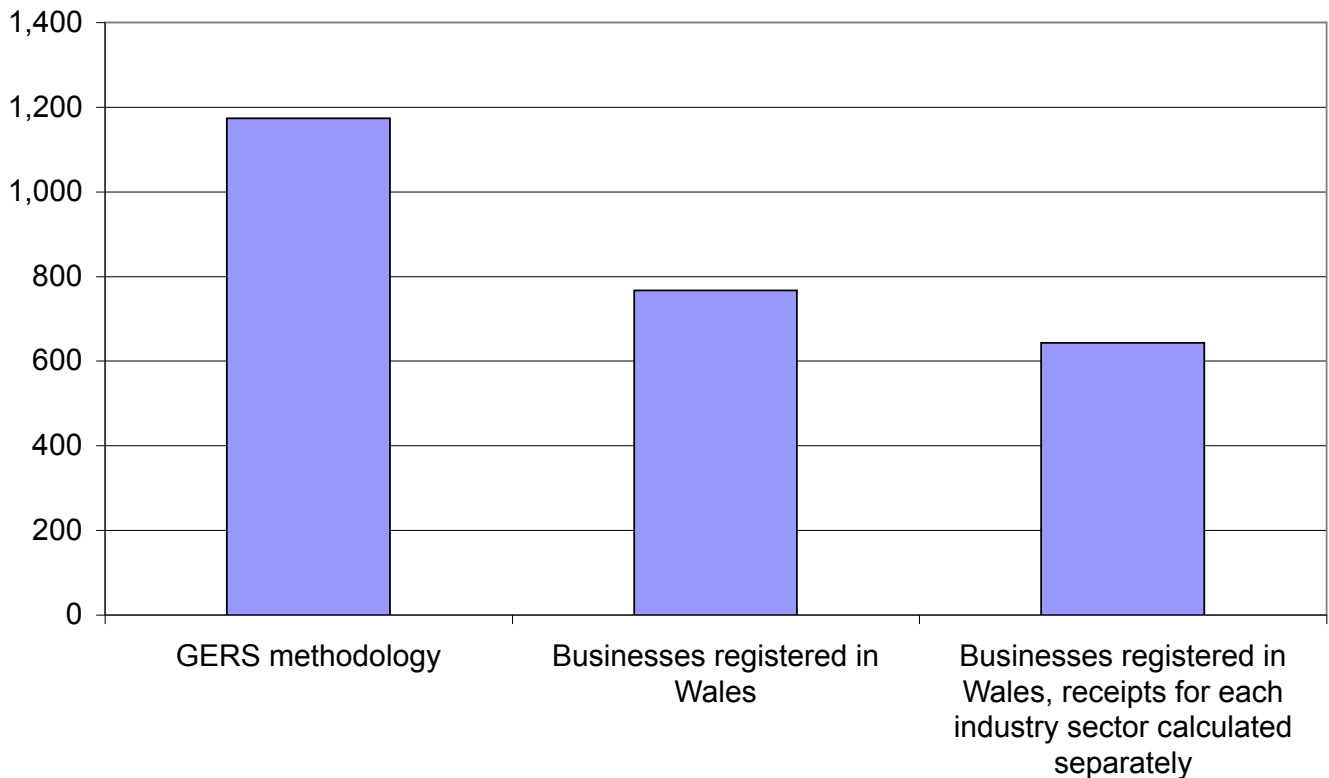
Chart 7.1: UK non-North Sea corporation tax receipts, £million

Source: HMRC

7.5 Chart 7.2 shows estimates of corporation tax receipts in Wales using those different methodologies. Applying the Gross Operating Surplus split from the regional accounts gives estimated receipts of a little under £1.2 billion in 2008-09. However, this estimate falls to under £800 million if the share of turnover in Welsh-registered businesses is used. The estimate falls even further if this calculation is carried out separately for receipts from each industry sector. This is because Welsh-registered businesses account for a greater share of turnover in sectors which generate less corporation tax.

7.6 The former UK Government considered and rejected the case for devolution of corporation tax to Northern Ireland following the Varney Review.⁸⁰ The case for devolution of this tax might appear stronger for Northern Ireland than it is for Wales, since Northern Ireland is separated from the rest of the UK by sea (thus reducing the scope for displacement of economic activity within the UK) and also shares a land border with the Republic of Ireland, which has used relatively low corporation tax rates as a tool of economic development policy. Despite those factors, Varney advised (and the then UK Government agreed) not to devolve powers over corporation tax to Northern Ireland. However, we note that the UK Government formed following the May 2010 general election is committed to "producing a government paper examining potential mechanisms for changing the corporation tax rate in Northern Ireland".⁸¹

⁸⁰ Varney, 2007.⁸¹ HM Government, 2010 p.28

Chart 7.2: Estimates of corporation tax receipts in Wales, 2008-09 (£millions)

Source: Commission calculations

7.7 It is evident that varying corporation tax in different parts of the UK raises issues at both the UK national and the European level and these may be in conflict. The UK Government would presumably wish to ensure that any variation was implemented in a way that was regionally equitable and not costly to HM Treasury. Yet devolution would also have to be consistent with European law, which precludes tax systems that could be interpreted as State aid to some businesses at the expense of others.

7.8 Our starting point is that the need for economic development is not identical with the need for expenditure on public services. The latter need is best measured by the kind of factors we discussed in Chapter 3 but a development need is indicated better by relative levels of GVA per head. One theoretical approach could be to make changes to the rate of corporation tax that were proportional to the difference between GVA per head in a given region and the UK average. For example, one could ignore the first ten percentage points of deviation in GVA per head and say regions with a GVA per head between 80 and 90 per cent of the UK average could discount corporation tax by up to 15 per cent of the tax rate in force across the rest of the UK. Regions with a GVA per head of between 70 and 80 per cent of the UK average could discount by 25 per cent, those between 60 and 70 per cent by 35 per cent. The discount could be multiplied by a factor so the above discounts would become 30, 50 and 70 per cent respectively if the factor were 2; the key would be proportionality with the GVA shortfall in the region concerned.

7.9 Companies wishing to claim the discount would have to demonstrate economic activity in the region concerned. This should not be a "brass plate" exercise; the location of head office would not be relevant. Corporation tax liability would depend on the location of economic activity. Evidently that could be defined in various ways but many countries, including the USA, have well-tried formulae for

allocating corporation tax bases across regions.⁸² The simplest approach would be to allocate liability by proportion of payroll with the stipulation that payroll administration has to follow the physical location of the employees. Once activity is assigned to different regions it becomes possible for the tax rate to vary by region. It would be for the company to establish the location of its activities.

7.10 The most straightforward way of varying corporation tax across the UK would be for this to be done by the UK Government; corporation tax would remain a UK tax, with no implications for devolved administration budgets. The tax would be collected by HMRC and receipts would accrue to the UK Government as at present. However, a scheme of this nature is highly likely to be challenged under European law and may very well be ruled out with the State aid argument.

7.11 The extent to which corporation tax can be permitted to vary within a decentralised EU member state in order to promote economic development has been the subject of recent legal dispute. A decision by the Portuguese Government to enable the government in the Azores to set a lower corporation tax rate in order to promote economic development was challenged by the European Commission (EC). In response, the European Court of Justice ruled against the Portuguese Government on the grounds that the government in the Azores was “insufficiently autonomous” from the central government. This was because the reduction in tax revenue which might result from reductions in taxes in the Azores was offset by a financing mechanism which involved a budgetary transfer from the Portuguese central government. Box 7.1 summarises the “Azores judgment”.

Box 7.1: Summary of the Azores Judgment on tax devolution

In 1999 the Government of the Autonomous Region of the Azores adopted rules which included a reduction of the rates of national Portuguese tax on company revenue. The reduction was to apply in the Azores. The purpose of the rules was to allow economic operators in the region to overcome the structural disadvantages deriving from their location on the periphery of the EU.

The EC initiated a formal investigation procedure on the grounds that the measures were selective aid. It concluded that the measure constituted aid and that the aid was incompatible with the Treaty that established the European Community.

The case was considered by the Constitutional Court of the European Court of Justice. The Court ruled that determination of whether the tax constituted selective aid required an examination of whether that measure provided an advantage for certain undertakings in comparison with others which were in a comparable legal and factual situation. The “normal” tax rate was the rate in force in the geographical area constituting the “reference framework”.

The reference framework may be limited to the area of geographical competence of an infra-state body (such as the National Assembly) in circumstances where the infra-state body plays “a fundamental role in the definition of the political and economic environment in which undertakings operate”. In other words, the infra-state body must exercise “sufficiently autonomous” powers.⁸³

⁸² See Donald and Douglas, 1996, for a summary.

⁸³ European Court of Justice, 2006 (paragraph 58).

A tax measure has been adopted in the exercise of sufficiently autonomous powers when three conditions are met:

- i) The decision must have been taken by a regional or local authority which had, from a constitutional point of view, a political and administrative status separate from that of the central government (“institutional autonomy”). Institutional autonomy only exists where the infra-state body assumes the political consequences of a tax reduction measure.
- ii) It must have been adopted without the central government being able to directly intervene as regards its content (“procedural autonomy”).
- iii) Finally, the financial consequences of a reduction of the national tax rate for undertakings in the region must not be offset by aid or subsidies from other regions/areas or central government. (“financial autonomy”). Financial autonomy only exists where the infra-state body assumes the financial consequences of a tax reduction measure.

On the facts of the case the Azores did not fulfil all of those conditions. The reduction in tax revenue which might result from cutting tax rates in the Azores was offset by a financing mechanism which involved a budgetary transfer from the Portuguese central government. The measure therefore failed to meet the test of financial autonomy. For this reason the disputed measures were assessed in relation to whole of Portuguese territory. The court held that the Commission had properly classified them as selective and incompatible aid.

A summary of subsequent rulings of relevance to this issue is included in Annex 5.

7.12 The most secure way of enabling corporation tax to vary in Wales relative to the UK therefore is to devolve the tax and to structure the powers devolved to Wales and their budgetary consequences in a way that falls within the Azores criteria. To comply with Azores the decision on whether to reduce the corporation tax rate would have to reside exclusively with the Assembly Government as would the extent of any reduction, up to the GVA-determined limit. It could be argued that the mere existence of an agreed limit to any cut compromises the “autonomy” of the devolved administration. Ultimately we must leave such questions to the lawyers but a European judgment subsequent to Azores offers hope that autonomy is not necessarily vitiated by an agreement between the central government and devolved administration where it set out pre-established limits on the competence of the devolved administration.⁸⁴

7.13 Full devolution of corporation tax in a way that allowed Welsh Ministers to set rates within constraints that were determined by reference to relative GVA is an option worthy of consideration, although it would carry acute budgetary risks. Those risks would have to be weighed against the potential of the tax as a development tool.⁸⁵ In the first place when the tax was devolved its current receipts would be deducted from the block grant, as with any other devolved tax. If disparities in relative GVA were sufficiently large to permit the devolved administration to lower the tax, it would bear the full cost of the reduction on its own revenues - which is necessary to conform to the Azores judgment. Devolution would also introduce substantial unwelcome volatility into the Welsh budget.

⁸⁴ See Annex 5 on the “Rioja cases” (paragraphs A5.38-A5.54).

⁸⁵ The Commission sought legal advice on whether, were corporation tax to be devolved to Wales, different rates of tax might then be applied within Wales, for example a lower rate within the Convergence Fund region. The Assembly Government’s Legal Services Department advised that the introduction of different rates of tax within Wales would require the approval of the EC as regional State aid compatible with the Treaty. The Legal Services Department felt that such an approach was unlikely to be considered favourably by the EC, as any measure that reduced costs of undertakings in an indiscriminate way, such as a reduction in tax, would be considered to be “operating aid”.

The operational gearing of companies means the tax receipts can fall heavily after a recession. If the tax raises over £1 billion pounds, fluctuation of one third could reduce receipts in a recession year by over £300 million. Moreover if Wales were to reduce the tax by, say, 25 per cent, that would entail a revenue sacrifice of over £250 million in the first year. Even the most favourable response would take time, so some revenue sacrifice would continue for several years.

7.14 It also appears likely that to avoid challenge from the EU, Wales would have to take all the cyclical and other risk associated with the tax without any grant offset. The grant deduction to pay for the tax would have to be on the PD model of a proportionate cut. Taking on this tax would therefore require a larger borrowing capability for cyclical smoothing of the budget than would otherwise be necessary.

7.15 A policy of setting corporation tax rates within agreed limits determined by regional per capita GVA, would be unlikely to be very costly to HM Treasury. Any losses to HM Treasury would come from actions by UK-based firms seeking to reduce their tax liability. Those, however, would be self-limiting under the scheme being discussed. If few companies moved operations, losses would be minor. If there were a substantial response, regional GVA would be likely to rise, reducing the permissible discount. At the limit, if regional GVA rose above 90 per cent of the UK average the discount would cease. If GVA were to be increased by investment by companies from outside the UK attracted by lower taxes there would be no loss to HM Treasury.

7.16 Evidently a great deal of preparatory work would have to be undertaken before any such schemes could be evaluated and introduced. In particular, the compatibility of any proposals with European law would need careful study. Nonetheless, we consider those issues to be worthy of further consideration though we do not assume the Assembly Government will necessarily wish to proceed. We recommend that the Assembly Government confer with the UK Government and the other devolved administrations to investigate the feasibility of devolving corporation tax.

7.17 Meanwhile, an alternative way for Ministers to lower the burden of taxes on businesses in Wales (should they wish to do so) would be by exercising the existing devolved powers to lower NDR. Below we discuss those powers and consider the case for greater devolution.

Recommendation - corporation tax

The Assembly Government should seek discussions with the UK Government and the other devolved administrations about the feasibility of devolving corporation tax. Any specific proposal will need evaluation to ensure its compatibility with European law, notably the question of whether any UK-wide agreement on limits to rate changes would be permissible. It is clear that the full budgetary impact of devolved corporation tax must fall on the Assembly Government. This would introduce substantial volatility into the Welsh budget.

Non-Domestic Rates (NDR)

7.18 NDR, or business rates, are levied on the occupiers of non-domestic properties and are the means by which businesses and other occupiers of non-domestic property contribute towards the costs of local authority services. NDR raised £0.9 billion in Wales in 2008-09.

7.19 Powers over NDR are partly devolved to Wales, but the budgetary impact of varying NDR is complicated. NDR is collected by local authorities, but the revenue raised is pooled at the all-Wales level and redistributed to councils along with the Revenue Support Grant (RSG) that the Assembly Government provides to fund council services.

7.20 Changes to the Assembly Government's overall resources depend on consequential effects from the distribution of NDR receipts in England, which affect the Welsh Departmental Expenditure Limit (DEL) via the Barnett Formula. In this report we have generally simplified the actual flow of funds by using the term block grant to mean the Assembly Government DEL. In this context we need to be a bit more precise. The Barnett Formula determines the Assembly Government's DEL. NDR receipts in Wales contribute to the financing of the DEL, with the balance provided by the UK Government from central funds. As long as NDR policy is the same in Wales as in England, the level of NDR receipts in Wales has no impact on the total resources available to the Assembly Government. If decisions by the Assembly Government result in reductions in the NDR yield in Wales relative to England, the Statement of Funding Policy allows the UK Government to reduce the Assembly Government's DEL, so that its own contribution to the financing of that DEL is not increased. There is currently no mechanism to increase the DEL if the Assembly Government increases NDR rates relative to England. In effect that means the Assembly Government can reduce NDR and have less money to spend if it wishes but, as it stands, it cannot increase NDR to get more money.

7.21 England operates a business rate relief scheme from which Wales gets consequential effects. In 2008-09 the Assembly Government enhanced its small business rate relief scheme. The Assembly Government and UK Government reached agreement on adjustments to the Welsh DEL, to reflect the fact that Welsh businesses were being under taxed relative to England.⁸⁶

7.22 In Scotland, NDR is outside of DEL, and is therefore a distinct stream of revenue akin to council tax. This means that variations in NDR receipts in Scotland have a real impact on the Scottish budget in a way that is not the case in Wales. If Wales were to move to the Scottish system, it would generate additional volatility in the Welsh budget, as shortfalls or windfalls in actual NDR receipts compared to planned receipts would no longer be offset in-year by the UK Government. On the other hand, it would also provide Welsh Ministers with greater powers, since they would be able to increase NDR relative to England should they wish to do so.

7.23 If, by moving to the Scottish system, the Assembly Government would acquire substantial additional powers to vary NDR, we would see a case for so doing as it would provide a valuable policy tool to Welsh Ministers. However, the present system has in fact allowed the Assembly Government to lower NDR in Wales relative to England in recent years through the business rate relief scheme. We understand that there is nothing in principle that would prevent more radical steps to be taken if

⁸⁶ In his March 2010 Budget Statement the then Chancellor of the Exchequer announced a significant enhancement of rate relief for business in England from October 2010 for one year and Welsh Ministers have decided that comparable rate relief arrangements will apply in Wales.

Welsh Ministers so desired.⁸⁷ While in principle Welsh Ministers could increase NDR relative to England more easily if the revenue was wholly under their control and outside of the DEL as in Scotland, in practice it seems unlikely that this policy option would be attractive. The rationale for devolving corporate taxes is to provide a tool for promoting economic development, which implies setting lower rates than prevail in adjacent regions. We note that the Scottish Government has not in fact exercised its powers over NDR in recent years. Indeed, the Scottish Government's economic strategy outlines a commitment to ensure that NDR in Scotland will not rise above the rate set in England.⁸⁸ Given that Wales already has significant powers to lower NDR and is unlikely to want to increase the tax relative to England, we see little case for moving to the Scottish system since that would result in additional budgetary volatility for little real enhancement of tax-varying power.

7.24 Detailed examination of the operation of NDR is beyond our remit. Certain representations have been made to us, however, which seem *prima facie* reasonable and which we draw to the Assembly Government's attention. Total pooling of NDR with no recognition of its source leaves councils with little financial incentive to encourage business in their area. There may therefore be a case to permit councils to retain a proportion of NDR from new developments, perhaps for a fixed period of time.⁸⁹

Candidates for devolution: property taxes

7.25 In principle, property taxation is an appealing source of revenue for a devolved administration because the tax base is immobile. In addition, the value of residential property in Wales is approximately £200 billion so the base is a very large one. However, property is already taxed in Wales through the council tax, which is administered by local authorities with the resources being allocated specifically to fund council activities. It therefore plays a central role in underpinning the accountability of local government, which we have no wish to change. Council tax has an important role in helping to finance the Welsh public sector seen as a whole, and in that context we can ask whether it is as well designed as it might be. Of course we recognise a political constraint: that property taxes, while admired by economists, tend to be more unpopular with the general public than other taxes because they typically take the form of large lump sum demands that are not automatically withheld with transactions or cash flows.

⁸⁷ The current NDR system is governed by the Local Government Finance Act 1988, and the National Assembly for Wales currently does not have the legislative competence to introduce a replacement system. The Welsh Ministers have only limited powers to reduce business rates in Wales. A reduction in business rates could be effected in one of two ways. The first would be through a reduction of the NDR multiplier, the second would be by way of the introduction of a discrete NDR relief scheme but subject to compliance with State aid requirements. Within the current legislative competence of the Assembly and the Welsh Ministers, the first option could only be applied on a nationwide basis, whereas the second option could be applied on a geographical or sectoral basis. In either case, a reduction in NDR would result in a reduction in revenue to the UK Exchequer. If HM Treasury deemed the level of reduction to be disproportionate to that in England there would be an expectation on the part of the Treasury that the Assembly Government would make up that shortfall from other resources within its control. HM Treasury have made it clear within their Statement for Funding Policy that where the decisions of the Assembly result in a reduced NDR in excess of any comparable decision in England, it reserves the right to reduce the National Assembly's budget by an equal amount. Neither the National Assembly nor the Welsh Ministers have the power to abolish NDR altogether. As mentioned above, the Welsh Ministers do, however, have the executive powers to give defined sectors of business a rates moratorium.

⁸⁸ Scottish Government, 2007.

⁸⁹ The Local Authority Business Growth Incentive Scheme that previously operated in Wales enabled local authorities to retain an element of NDR.

7.26 In addition to council tax, property is subject to certain taxes when it is bought. Specifically, properties and land are liable for stamp duty land tax at the point of purchase, and capital gains tax is also levied on the sale of properties and land (although this is not levied on properties that serve as a primary residence). We review each of those taxes in turn.

Council tax

7.27 Council tax in Wales is levied on residential properties by local authorities. All homes are allocated to one of nine bands (labelled A-I) based on their market value as at 1st April 2003. The council tax rate for each band is a fixed fraction or multiple of the rate for a Band D property. Homes occupied by students or by a single person qualify for a discount on the council tax, while those on low incomes have the tax paid in full in the form of council tax benefit. In 2008-09, council tax raised £1.2 billion in Wales (including council tax benefit). Box 7.2 summarises the current council tax regime.

7.28 Local authorities retain their council tax receipts, which on average finance around 17 per cent of their revenue expenditure. The rest of their budget comes from the Assembly Government in the form of the RSG, NDR and specific grants. The RSG is allocated via a detailed formula that seeks to allocate resources to local authorities on the basis of relative need, and which takes account of the ability of each area to raise council tax. The funding formula is operated by the Assembly Government but is agreed with local authorities. Council tax therefore forms one element of an intricate local authority funding regime.

7.29 There is understandable wariness about reforming local taxation after the experience of introducing the community charge in 1989-90. A comprehensive review of local government finance that was commissioned by the UK Government and was published in 2007 concluded that the council tax remained fit for purpose, while suggesting gradual reform.⁹⁰ Nonetheless council tax has a number of disadvantages and it is therefore worth considering whether Wales could adopt reforms to the general advantage.

Box 7.2: Overview of council tax in Wales

Council tax places each home in Wales into a band based on the value of the property. There are nine bands from A (for properties valued under £44,000) to I (for properties valued over £424,000). Each local authority is responsible for adjusting its council tax annually, which is done by announcing a change in the amount paid by a band D property. The council tax paid by homes within other bands is calculated as a fixed ratio relative to band D properties within that local authority. A common set of ratios are applied across Wales by the Assembly Government and vary between 6/9 for a band A property and 21/9 for properties in band I.

Reductions of 25 per cent are available for homes occupied by single persons and full discounts available for certain groups such as students. Council tax benefit, which is paid directly by the DWP to the relevant local authority, meets the full cost of the tax for those on low incomes.

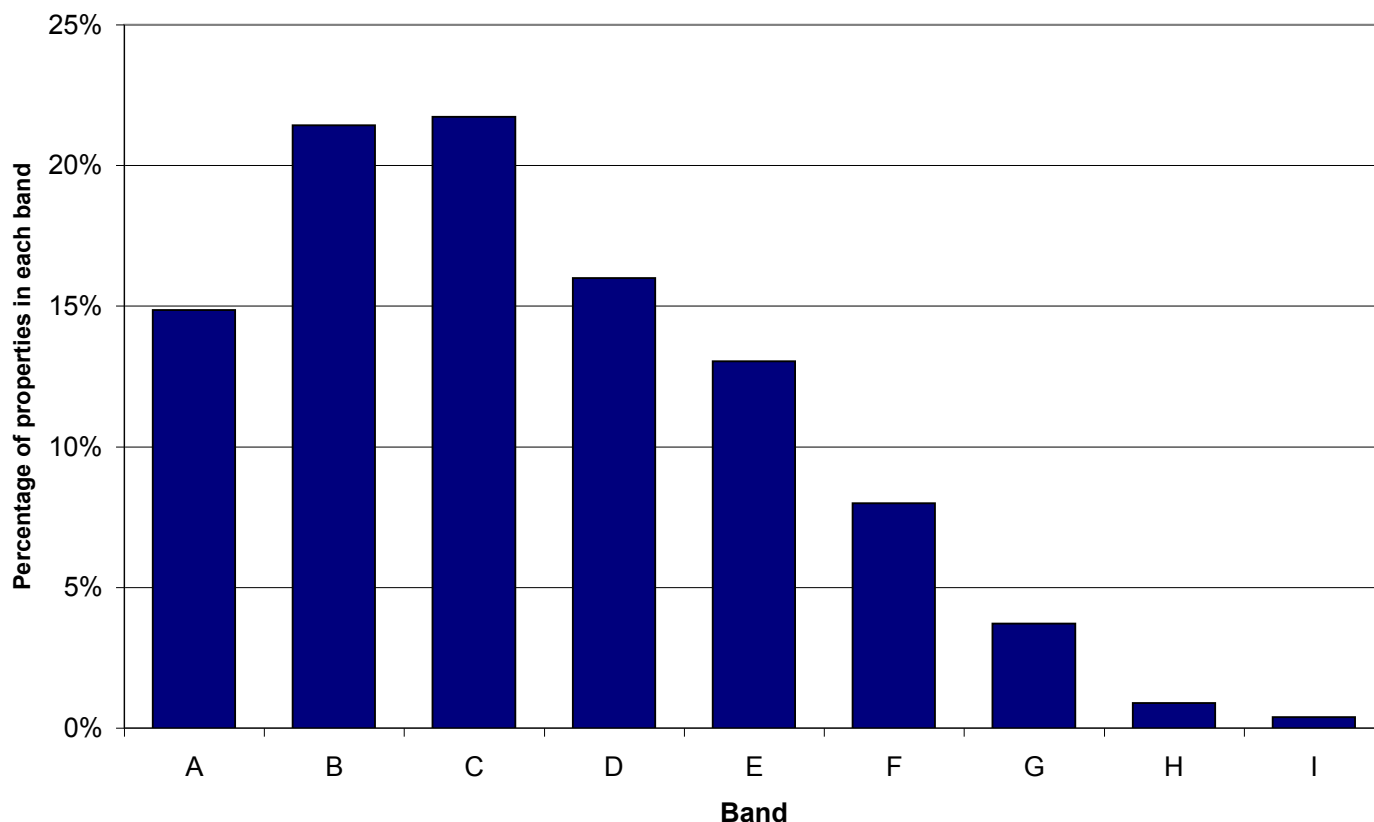
⁹⁰ Lyons, 2007.

Welsh Ministers make known their expectations of acceptable council tax increases each year. If an authority's planned council tax increase exceeds those expectations it is open to Welsh Ministers to take steps to limit ("cap") the authority's budget requirement for the year and therefore restrict the effective council tax increase. This power has not been enforced since the National Assembly was established in 1999.

Powers to undertake property revaluations lie with the Assembly Government rather than individual councils.

7.30 Chart 7.3 shows that homes in Wales are concentrated at the lower end of the valuation distribution. 58 per cent of homes are in categories A-C, which correspond to a 2003-4 market valuation of £91,000 or less. Only around five per cent of homes fall into the highest valuation categories G-I (with a 2003-04 market valuation of £223,001 or more).

Chart 7.3: Distribution of chargeable dwellings, Wales 2009-10



Source: Welsh Assembly Government

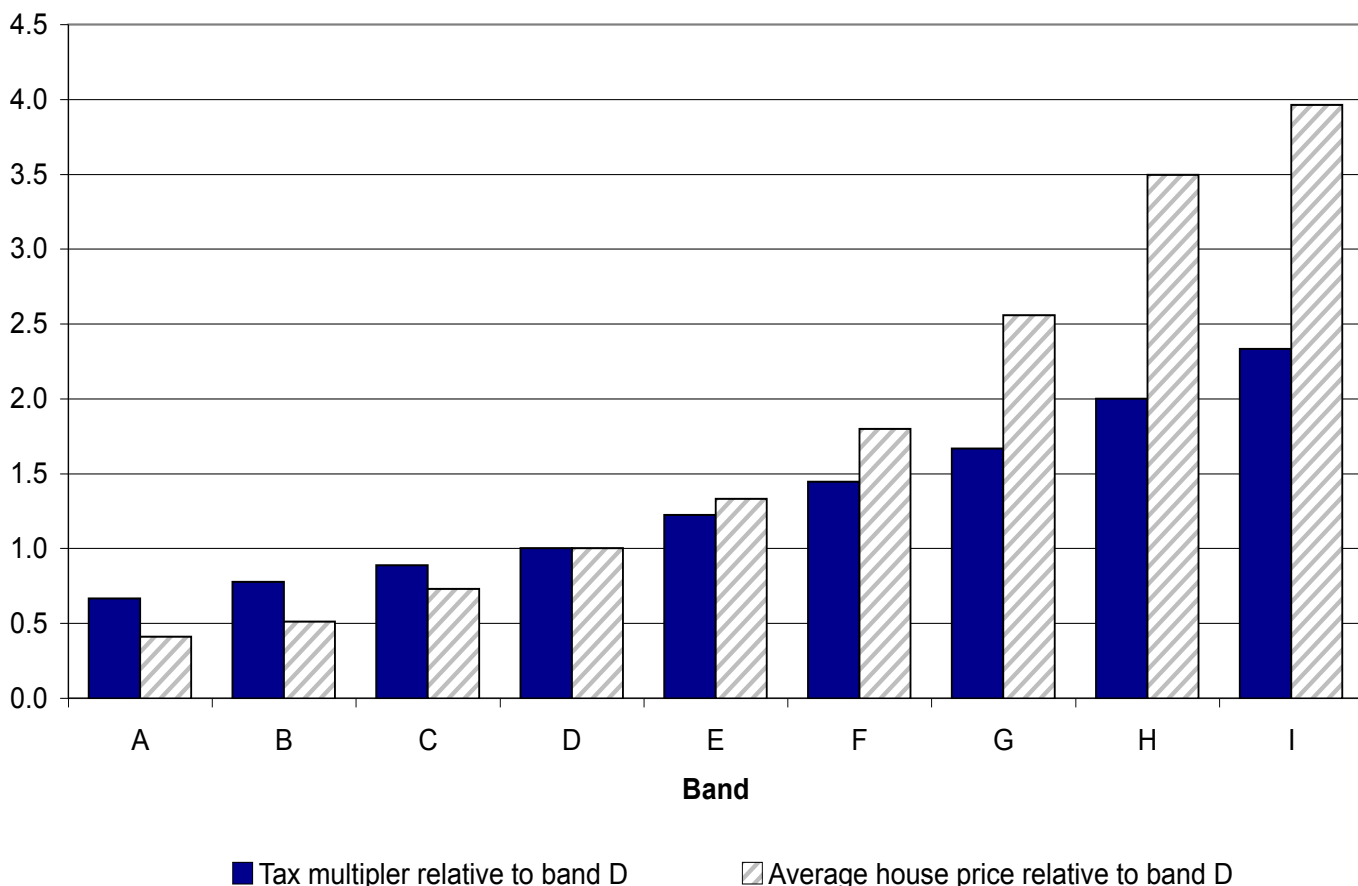
7.31 Council tax is regressive with respect to property values. Chart 7.4 shows that the tax rate for higher value properties increases more slowly than the value of the property band to which it relates. Council tax is also regressive in relation to income; it accounts for a lower proportion of income for those on higher incomes. However, personal discount components together with council tax benefit do much to mitigate its regressive aspects. This is illustrated in Chart 7.5, which is taken from the

Lyons inquiry⁹¹ and is based on English data but whose broad conclusions are applicable to Wales. The Chart shows that, if full take up of council tax benefit were to occur (which it does not), council tax would be progressive over lower income groups and then would become fairly flat across the middle of the income distribution.

7.32 At present, Welsh Ministers have significant powers to alter council tax (for example by changing the number of bands, adjusting the progressivity of the tax by altering the ratios applied to each band and altering the frequency of property revaluations), but they lack the power to wholly abolish it or to replace it with some other property-based tax.

7.33 Wales is ahead of England in improving the way in which council tax is implemented. The English council tax regime continues to be based on the 1993 property values that were calculated when the tax was first introduced, and the number of bands has also remained unchanged since that date. In contrast, Wales held a revaluation exercise in 2005, and has a statutory commitment to a further revaluation by 2015. An extra band was also introduced at the time of the revaluation for properties over £424,000.

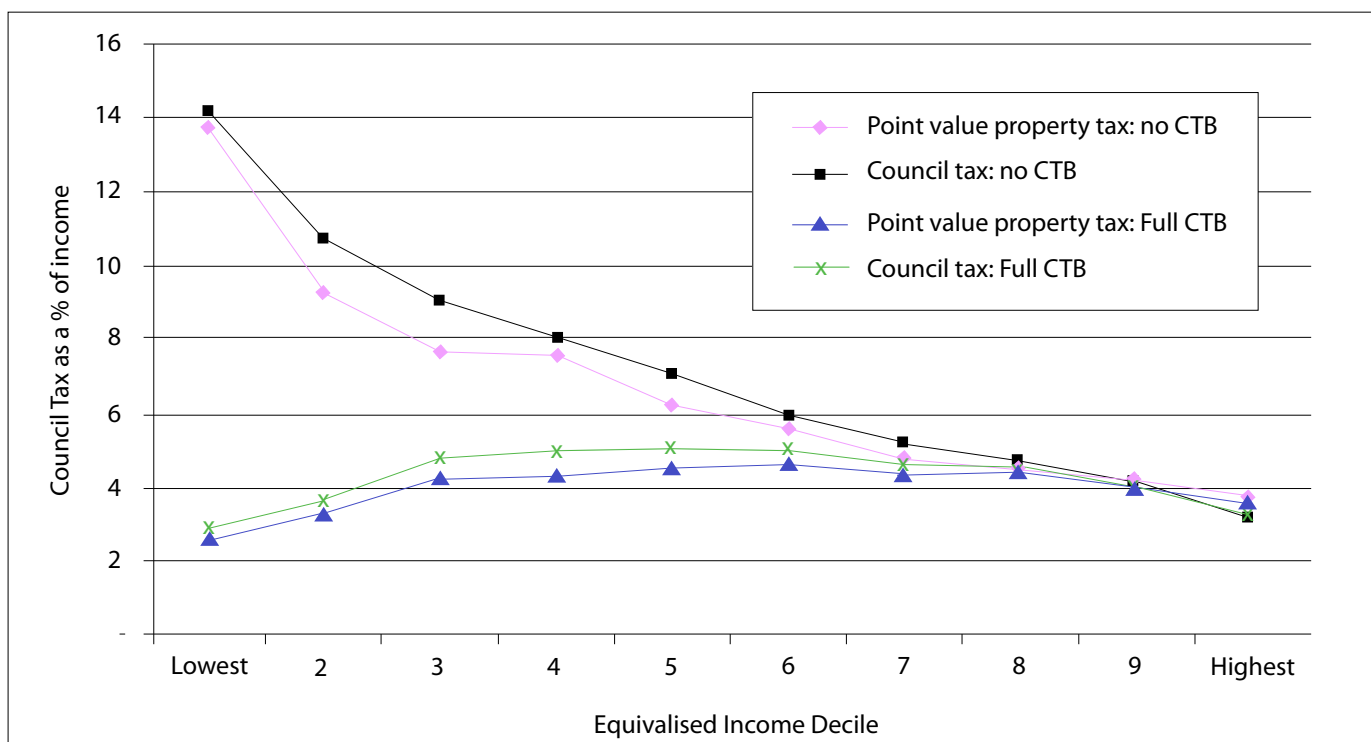
Chart 7.4: Average council tax rate and average property band value relative to properties in band D



Source: Welsh Assembly Government

⁹¹ Lyons, 2007 (Annex C, p.47).

Chart 7.5: Lyons Inquiry analysis of council tax and point value property tax as a proportion of household income⁹²



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7.34 There is a good case for taking those reforms further, by creating additional bands at the upper end of the distribution and by shortening the ten year revaluation cycle that is currently in place. A further option worthy of consideration would be to adjust the ratios applied to each band, so as to more closely align tax rates with property values. Those reforms would reduce the regressivity of council tax in relation to property values, and would ensure that it was implemented on the basis of up to date information about house prices.

7.35 Further work would be necessary to determine how far those reforms could be taken. It may be that a substantial reform of the current system is possible, introducing very many more bands (or at the limit replacing bands altogether with a point valuation of each property), and linking rates directly to current property prices through summary annual revaluations using some form of indexation.⁹³ Revaluations are not cost-free, but more frequent indexed-based exercises would have the advantage of reducing the sharp changes that result from intermittent reassessments of property values. For example, annual summary revaluations, revised by thorough exercises every five years, would make tax changes smoother and less prone to large, intermittent shifts. Some states and localities in the USA levy a proportional property tax based on current values without apparent difficulty.

⁹² A point value property tax describes a system where a constant tax rate is applied to all properties and the tax is based on the estimated value of the property.

⁹³ While Welsh Ministers have the ability to alter the number of council tax bands and the proportional relationship between the bands, it is considered to be impractical (and doubtful legally) for them to seek to use their power to increase the number of bands so greatly that the system approximates one of point valuation.

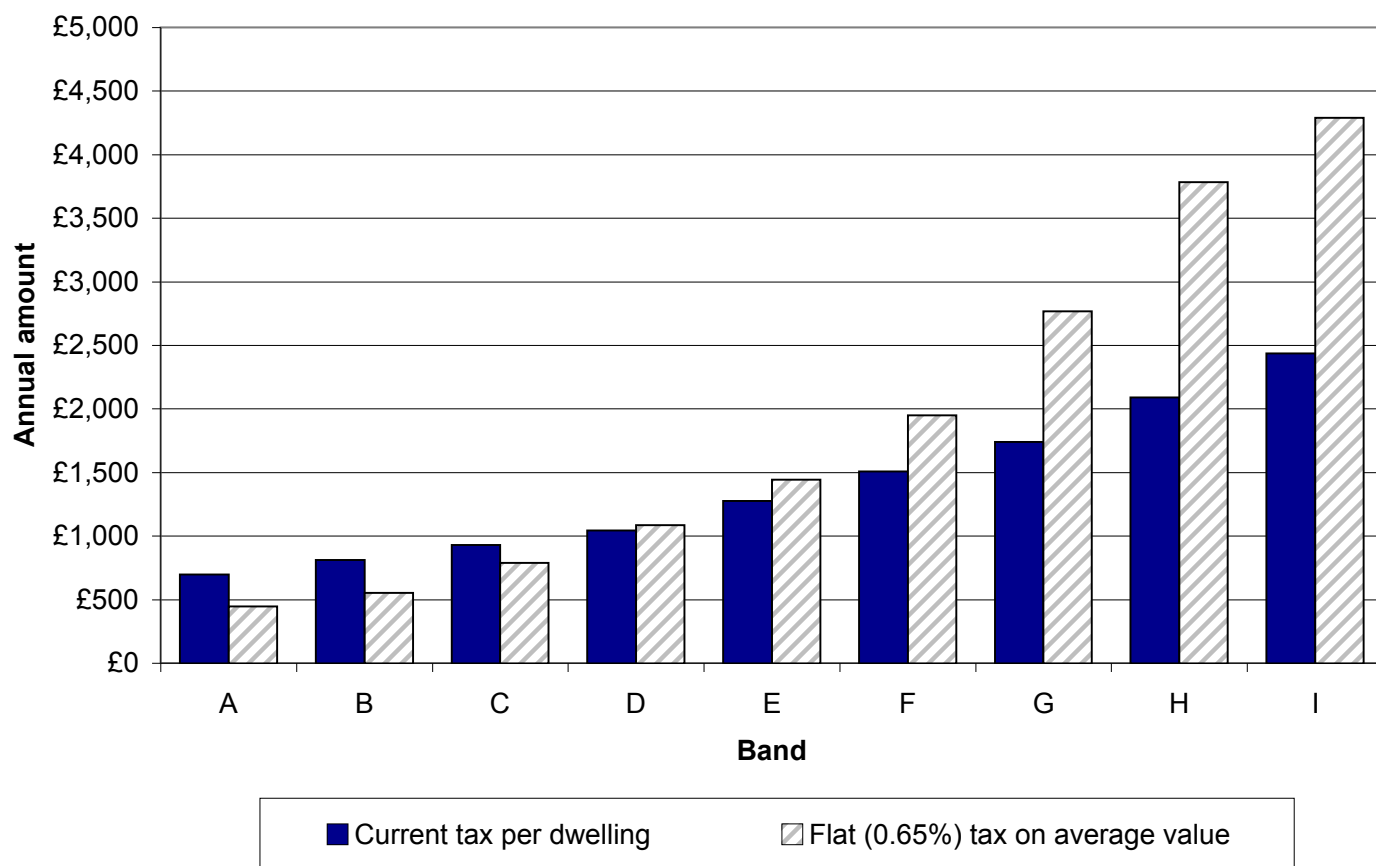
7.36 As an illustration of the possible consequences of such a comprehensive reform, a flat tax set at 0.65 per cent of the market value of a property would raise a roughly equivalent sum to that raised by council tax and would eliminate the regressive aspect of the current regime with respect to property prices, though its impact on regressivity in relation to income would be much more limited (see Chart 7.5). Chart 7.6 shows how council tax levels with a flat tax rate would compare with the current council tax levels in Wales in each band.

7.37 Since more tax would be paid by occupiers of valuable properties under such a reform, charges on some lower value properties, which are often paid out of council tax benefit, would decline. While such an action would primarily benefit HM Treasury, by reducing the council tax benefit claims from Wales, it could be of some advantage to Welsh local authorities, which have to process those claims.

7.38 Of course, any change to the system of property taxation would create winners and losers, and the distributional impact of reform would need to be assessed before any set of proposals could be recommended with confidence. Concern is often expressed that a system that aligned council tax more closely with property values would bear heavily on the asset rich cash poor, such as widows living in a former family home. To the extent that this is a problem, it might be alleviated by allowing a deferral mechanism so that payment of taxes could be postponed until the sale of the house or the death of the occupant and become a charge on the capital value.

7.39 Any specific major reform of council tax would require detailed study that is beyond the scope of this report. It is ultimately a matter of political judgment to determine the appropriate relationship between property values and council tax. The calculation is complicated by the hybrid nature of the council tax; it is partly a tax on property, and partly a charge for locally-provided services. Indeed, there could be an advantage to making the user charge element explicit as a way of making the tax more transparent and hence more acceptable. The hybrid form of the tax explains why it is currently regressive with respect to housing wealth. We are mindful, given the troubled history of local taxation in the UK, of the importance of perceptions, and of ensuring that any reform has broad public consent. With that in mind, we believe that there would be merit in considering reform along the lines set out above.

7.40 Property provides a large and immobile tax base, capable of raising substantial sums. In terms simply of revenue raised, the current council tax regime is equivalent to a property tax rate of around 0.65 per cent on average. If this were increased to, say, 0.8 per cent, an extra £300 million would be raised in Wales. It is therefore clear that the property tax regime should be kept in good order so as to increase the acceptability of the tax and to ensure that this source of revenue can make its full contribution to financing Welsh public services.

Chart 7.6: Comparison of current council tax and a hypothetical flat tax: annual tax by band

Source: Commission calculations

Council tax on second homes

7.41 At present, second homes are eligible for a council tax discount of up to 50 per cent, at the discretion of the local authority. However, there is no scope for local authorities to charge second home owners more than the standard council tax. This appears anomalous. While second home owners are likely on average to place fewer demands on public services, a case could also be made that high rates of second home ownership in an area can have negative externalities by, for example, putting upward pressure on property prices and making it difficult for local people to buy homes in their communities. Moreover, second home owners are likely to be relatively affluent, which further weakens the case for setting a lower council tax for such properties.

7.42 There are around 20,000 second homes in Wales. As Table 7.1 shows, those are disproportionately concentrated in relatively few local authorities. Over a quarter of all second homes in Wales are in Gwynedd, where they comprise around ten per cent of the total housing stock.

7.43 It should be a matter for local authorities to determine whether the council tax on second homes should be set at a discount or a premium to the standard charge. In areas where the local preference is to encourage second home ownership for whatever reason, a discount might be

appropriate, but in areas where it is felt that the negative consequences of second home ownership outweigh the benefits, it should be open to local authorities to reflect those harmful impacts in the council tax levied on second home owners.⁹⁴

Table 7.1: Distribution of second homes: selected local authorities in Wales

	Number of second homes	Percentage of Wales total	Percentage of local authority housing stock
Gwynedd	5,567	27	10
Cardiff	2,956	15	2
Pembrokeshire	2,786	14	5
Isle of Anglesey	1,789	9	5
Swansea	1,682	8	2
Ceredigion	1,344	7	4
Powys	1,232	6	2
Carmarthenshire	720	4	1
Conwy	644	3	1
Vale of Glamorgan	594	3	1

Source: Welsh Assembly Government

Capital gains tax on property and land sales in Wales

7.44 Capital gains tax is levied on profits or gains made following the sale or disposal of a range of assets, including certain land and property transactions. For many assets, such as shares and other financial instruments, devolution of capital gains tax is not practical or desirable as there would be substantial scope for tax avoidance and economic distortion. However, capital gains tax on land and property in Wales is a candidate for devolution since for those assets the potential for avoidance, while still an issue, is greatly reduced. The tax is not levied on primary residences but is applied to:

- i) properties bought for investment purposes, for example under a buy to let arrangement;
- ii) second homes, for example holiday homes in the UK or overseas;
- iii) business premises, such as a shop or a factory; and
- iv) land, such as agricultural land.

7.45 For tax payers who are required to complete a self-assessment tax form, capital gains tax is collected via this process. Tax payers that are not required to complete a self-assessment tax form must inform HMRC of any capital gain made on a liable asset. Exact figures for the tax receipts from

⁹⁴ The recent draft National Assembly for Wales (Legislative Competence) (Housing and Local Government) Order 2010 (LCO) included a proposal to transfer to the National Assembly for Wales, the power to legislate in relation to Council Tax payable for dwellings which are not the main residence of an individual. This power might, for example, include giving Welsh unitary authorities greater discretion in respect of council tax on second homes. The LCO was laid before the UK Parliament, but did not proceed through all necessary Parliamentary stages in advance of Parliament's dissolution for the May 2010 general election.

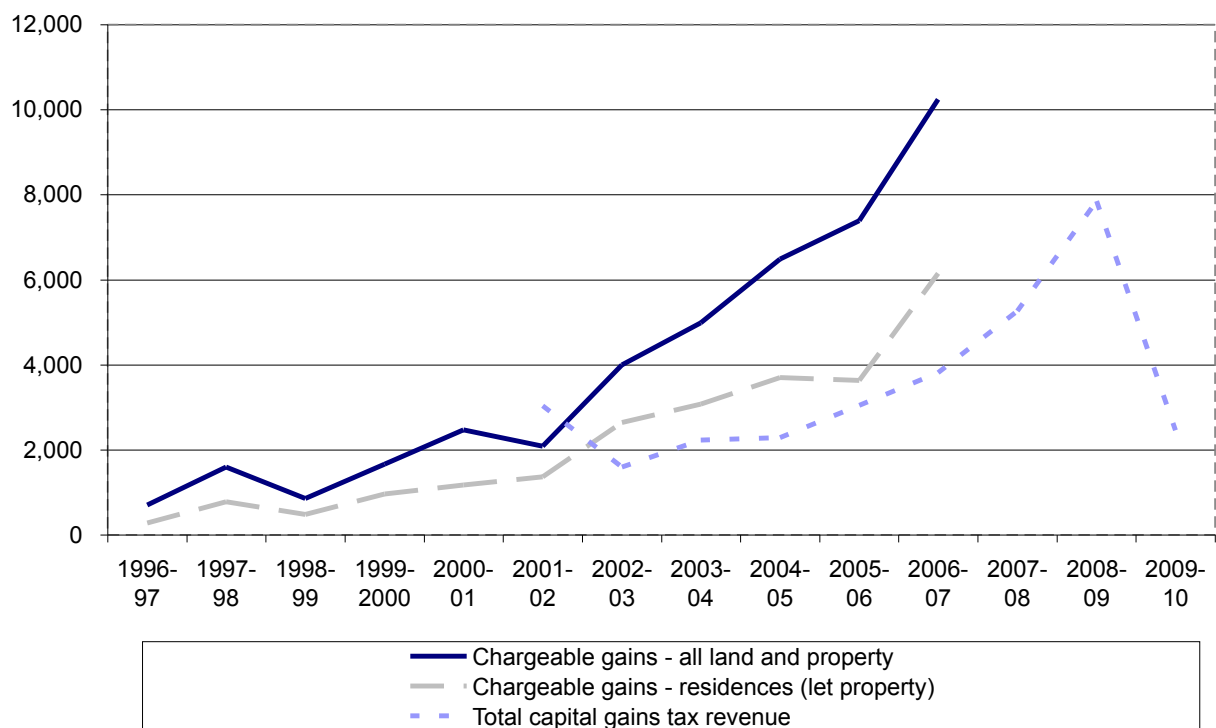
capital gains tax on land and property in Wales are not available. However, assuming that Wales's share of the tax is proportional to its contribution to UK GVA, we estimate that capital gains tax receipts from commercial and residential property and land sales in Wales was approximately £50 million in 2006-07, of which around £30 million was collected from residential property and land sales.

7.46 The administrative costs associated with devolution of this tax could be significant, given that there may be a need to amend the self-assessment forms by which UK citizens make declarations of their tax liabilities. These costs would have to be robustly estimated before a firm recommendation on the advisability of devolution could be made.

7.47 As Chart 7.7 shows, revenues from the tax are potentially highly volatile. While revenue from each taxable asset is not available, the series of chargeable gains (i.e. revenues that are liable for capital gains tax) from property is also volatile, following general trends in house prices. Nevertheless, the scope for changing the rate is considerable since it has varied from a tapered system with a top rate of 40 per cent to the current single rate of 18 per cent in the UK in the last three years, although the potential for avoidance remains a factor and so revenue accruing from large rate changes could be disappointing.

7.48 The likely lack of correlation between the UK and Welsh revenue streams generated by this tax means that there is no obvious reference series by which to determine offsets to the block grant. As a consequence, it would be difficult to apply the ID model in the event that this tax was devolved to Wales. Therefore, the PD or FRD models offer the best options and analysis points to PD (see Annex 7), although given the volatility of the tax this would import some cyclical risk into the Welsh budget.

Chart 7.7: Trends in UK capital gains tax revenue and chargeable gains on property and land sales, £million



Source: HMRC

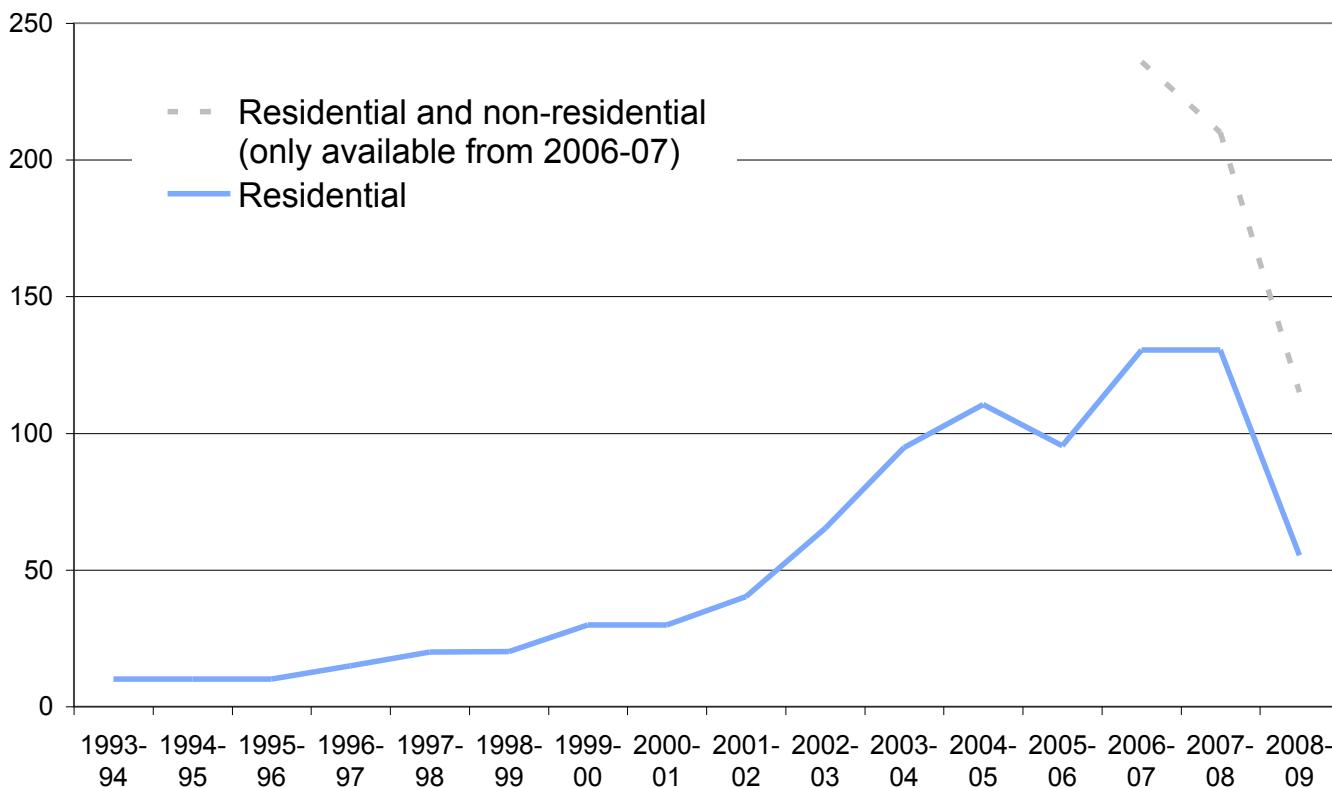
Stamp duty land tax

7.49 Box 7.3 summarises how stamp duty land tax operates at present. This tax raised £240 million in Wales in 2006-07, equivalent to around 1.9 per cent of the block grant in that year. However, Chart 7.8 shows that revenues are highly volatile. In 2008-09, the combined residential and non-residential elements raised only £115 million.

7.50 As already stated, property taxes are in principle attractive candidates for devolution, since they are clearly tied to a specific location, thus reducing the risk of avoidance or other economic distortions. The Calman Commission proposed, and the former UK Government accepted in principle, that stamp duty land tax should be devolved to Scotland. Welsh Ministers already have significant powers over housing, therefore devolution of this tax would be aligned with existing devolved responsibilities. We see a good case for devolving powers over stamp duty, because it raises appreciable revenue and could be altered without distortion. The volatility of the tax receipts is, however, a complicating factor.

7.51 As in the case of capital gains tax on property and land sales, there is no clear reference series that could be used to apply the ID model to stamp duty land tax. This means that some form of the PD or FRD models would have to be applied, with the consequence that the cyclical risks associated with this tax would fall on the Welsh budget. Because of that the PD model would be expensive and we recommend the FRD model in this case.

Chart 7.8: Trends in stamp duty land tax receipts in Wales, £ million



Source: HMRC

7.52 There is a good case that stamp duty would benefit from reform. Removing the step-wise banded approach and making it a set percentage of the value of the property would reduce distortions and improve the operation of the property market. This reform has been proposed by many experts who have examined the tax.⁹⁵ One advantage of devolving this tax is that it would allow Welsh Ministers to introduce such reforms. Since the tax liability is calculated by the conveyancer, it ought to be feasible for the tax to operate differently in Wales from the rest of the UK.

7.53 We recommend that any discussions that take place at a UK level about the technical issues that need to be overcome before this tax could be devolved to Scotland should be broadened to include Assembly Government officials. This would ensure that issues of relevance to Wales are taken into account.

7.54 Taken as a package, our proposals on property taxation would link the funding of public services in Wales to a substantial and immobile tax base. The reform of council tax so as to align the tax more closely with property values, coupled with the devolution of stamp duty land tax and perhaps capital gains tax on land and property transactions, would provide Welsh Ministers with a set of new policy levers in an important area of devolved competence.

Box 7.3: Stamp duty land tax

Stamp duty is levied on purchases of property or shares. Only stamp duty land tax, the property-related element, is suitable for devolution. No stamp duty is paid on properties where the purchase price is less than £125,000. If the price is above that level then stamp duty is levied at a rate of between one and four per cent of the whole purchase price according to the bands shown in the table below.

Residential property - purchase price	Rate of stamp duty land tax (per cent)
£125,001 - £250,000	1
£250,001 - £500,000	3
£500,001 and above	4

The bands are slightly different for non-residential properties. Stamp duty is collected by HMRC, usually via the solicitor or conveyancer dealing with the property transaction.

In its March 2010 Budget, the former UK Government announced two years of full stamp duty relief on property purchases of up to £250,000 for first time buyers. In addition, it was intended that from 2011-12, a five per cent rate of stamp duty would be introduced for residential properties valued at over £1 million.

⁹⁵ For example, see Royal Institute of Chartered Surveyors 2009.

Recommendation - property taxation

Stamp duty land tax should be devolved to Wales, provided a fair offset to the block grant can be negotiated. Once devolved, Welsh Ministers should be given control over all aspects of the tax, making it possible to reform its structure.

The administrative costs of devolving capital gains tax on property and land should be explored with HMRC. If administrative costs are not prohibitive, then it should be devolved to Wales, provided a fair offset to the block grant can be negotiated.

The Assembly Government should consider the reform of council tax by investigating (i) the introduction of additional bands covering high value properties and (ii) the scope to undertake more frequent revaluations of the housing stock.

Local authorities should be given discretion to levy a higher council tax on second homes.

Minor taxes: landfill tax, aggregates levy, air passenger duty

7.55 In Chapter 4, we identified three small taxes with immobile tax bases that are linked to the policy responsibilities of the Assembly Government, namely landfill tax, aggregates levy and air passenger duty.

Box 7.4: Key features of landfill tax, aggregates levy and air passenger duty

Landfill tax is levied on waste disposed by way of landfill. The tax has two rates, which are applied at £2.50 and £48.00 per tonne in 2010-11. The lower rate applies to inert or inactive materials, and covers most building fabrics and excavated earth. The higher rate covers materials such as wood, piping and plastics. The tax is collected by HMRC from registered landfill operators.

Aggregates levy is a tax on sand, gravel and rock that is dug from the ground or dredged from the sea in UK waters. Quarry operators pay £2 tax per tonne of excavated sand, gravel or rock. Importers of aggregates also pay the tax once the material is used commercially. The tax is collected by HMRC. It is currently subject to a legal challenge on the basis that it violates State aid rules.

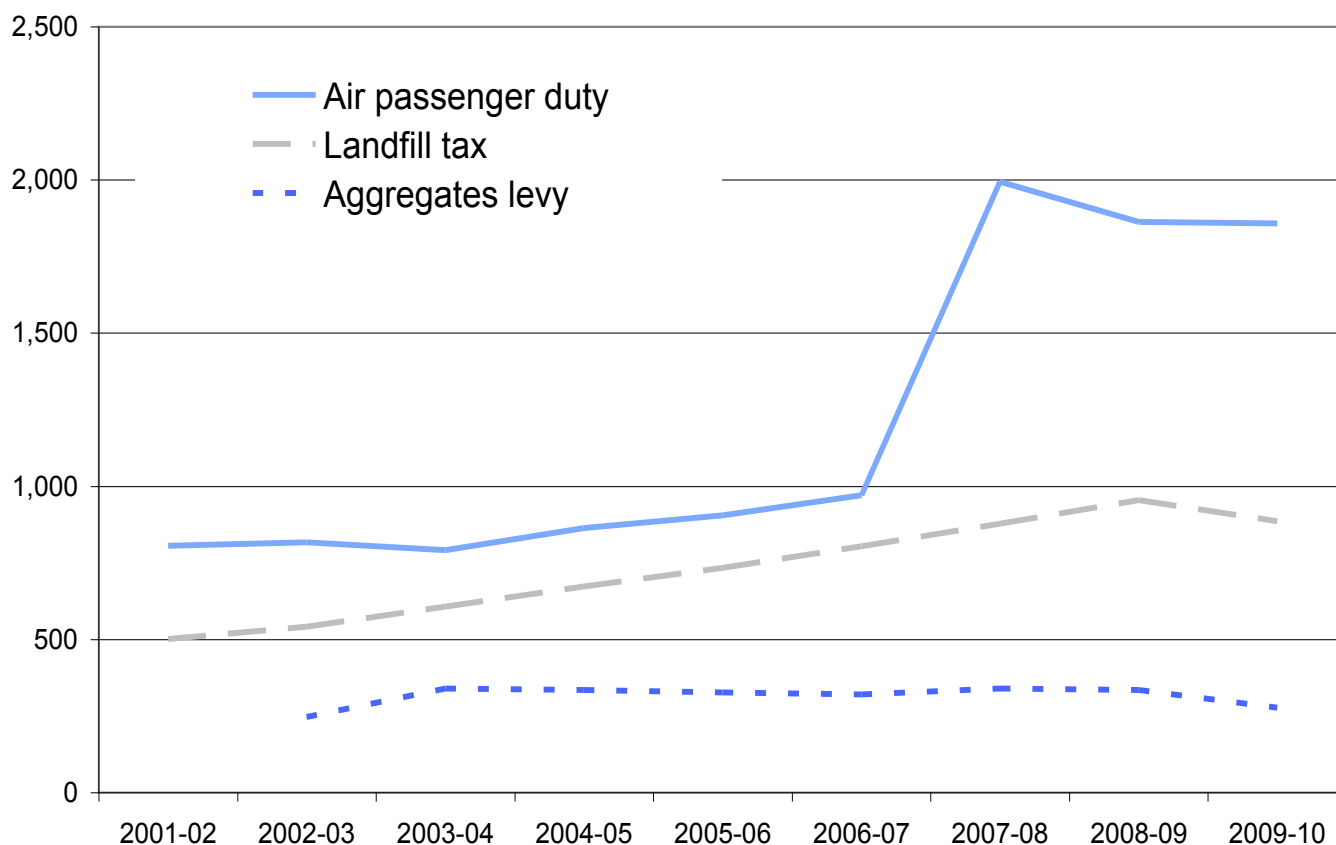
Air passenger duty is an excise duty charged on the carriage of passengers from UK airports. The rates are based on a four band structure depending on the distance of the destination from London. Standard rates vary from £22 for destinations under 2,000 miles from London to £110 for destinations over 6,000 miles from London. Reduced rates, which apply to economy class passengers, are half the standard rates and so vary from £11 to £55. The duty is collected by HMRC from aircraft operators.

7.56 Landfill tax is the most significant of the three taxes in terms of its revenue generating capacity, raising an estimated £40 million in Wales in 2006-07. UK figures show that receipts from landfill tax have been on a steady upward trend in recent years (Chart 7.9), peaking at £950 million in 2008-09. The increase in receipts has come from higher tax rates, particularly on active waste. The volume of waste in 2008-09 was 35 per cent lower than in 2001-02.

7.57 Aggregates levy raised an estimated £20 million in Wales in 2006-07.⁹⁶ Chart 7.9 shows that at the UK level receipts from the tax have been fairly static over the last decade. Increased tax rates in the last two years have been offset by falling volumes.

7.58 It is estimated that air passenger duty generated around £10 million of revenue in Wales in 2006-07. At the UK level there was a sharp increase in receipts in 2007-08, reflecting a doubling of duty rates in February 2007.

Chart 7.9: Trends in UK receipts from landfill tax, aggregates levy, air passenger duty, £ million



Source: HMRC

⁹⁶ This is based on the share of UK aggregates extracted from Wales. This share (ten per cent) is greater than the "Barnett consequentials" that Wales receives from increases in the Aggregates Levy Sustainability Fund that is designed to alleviate the negative externalities associated with the extraction of aggregates.

7.59 Taken as a package, Table 7.2 shows that landfill tax, aggregates levy and air passenger duty raised £70 million in Wales in 2006-07, or around 0.6 per cent of the block grant in that year.

Table 7.2: Revenues raised by landfill tax, aggregates levy and air passenger duty in Wales, 2006-07

Tax	Percentage of block grant	Annual revenue raised in Wales
Landfill tax	0.3	£40 million
Aggregates levy	0.2	£20 million
Air passenger duty	0.1	£10 million
Total	0.6	£70 million

Source: Commission calculations

7.60 In principle those three taxes are reasonable candidates for devolution. They are easily tied to a specific location (making it easy to determine whether the tax falls within the remit of a devolved administration), and they are levied on relatively immobile activities (which reduces the risk that cross-border variations in tax rates will lead to economic distortions). While they do little for accountability (since they are not paid regularly by a large proportion of the population) and raise relatively limited resources, they do relate to devolved areas of responsibility and could therefore be useful policy tools. Devolution of powers over those taxes would deepen rather than broaden the scope of devolved responsibilities, since they would provide Welsh Ministers with greater ability to act in areas that are already largely within their sphere of responsibility.

7.61 The Calman Commission recommended the devolution of those taxes to Scotland. The former UK Government accepted the case for devolving landfill tax and aggregates levy, but noted that “The detailed mechanism and timing of implementation for each will need to be carefully assessed in the light of State aid and competition issues, in consultation with the European Commission; and of the need to minimise any economic and delivery risks. Aggregates levy carries particular State aid issues, as well as scope for “cross-border” market distortion of the aggregates market, which will need to be worked through in full before introduction”.⁹⁷ Devolution of air passenger duty was rejected by the then UK Government, citing difficulties in relation to State aid rules, competition considerations and international aviation agreements. We are not persuaded that devolving air passenger duty is particularly problematic; we are not aware of any particular legal barriers to devolution and note that other EU states (for example Germany) are able to apply taxes on air travel at rates that vary across regions.⁹⁸

7.62 The new UK Government has stated its intention to reform air passenger duty so that it is levied on a per plane rather than a per passenger basis. The implications for the devolution of this tax are not clear at the time of writing but the likelihood of reform at UK level may make devolution impractical.

⁹⁷ Scotland Office, 2009 p.11.

⁹⁸ International Air Transport Association, 2006

7.63 The case for devolution of the other taxes ultimately depends on their usefulness as policy levers and the block grant sacrifice required to obtain them. It is a matter for Ministers to decide whether tax powers relating to landfill tax and aggregates levy would strengthen their ability to shape policy in relation to economic development, environmental control and land management. We therefore recommend that the Assembly Government should undertake an assessment of the usefulness of those taxes as policy instruments, in the light of Ministerial objectives in those areas. If it is concluded that the taxes would provide Ministers with useful policy levers, then we recommend that they should be devolved to Wales, assuming a reasonable deduction from the block grant can be agreed.

7.64 If devolved, our view is that the FRD model offers the most appropriate way for those taxes to be integrated into the Welsh budget, given the small sums involved and the idiosyncrasies of those taxes. The lack of appropriate reference indices at the UK level means that the ID model would probably not be workable. For example, there is little reason to assume that air passenger duty receipts in Wales (largely derived from activity at Cardiff airport) would be well matched with air passenger duty receipts in England, where international hubs such as Heathrow are likely to be the dominant sources of revenue. The use of the FRD model would mean that upon devolution, the revenue raised from those taxes in Wales would be added to the Welsh budget, accompanied by the deduction of a fixed amount from the block grant that fairly reflected the risks and revenue raising capacity of those taxes. The deduction from the devolved budget would be updated in line with inflation each year.

7.65 In the meantime, it is important that any discussions between the UK Government and the Scottish Government about devolving those taxes to Scotland should also include representatives of the Assembly Government, in order to ensure that issues of relevance to Wales are fully taken into account.

Recommendation - minor taxes

The Assembly Government should undertake an assessment of the usefulness of landfill tax, air passenger duty and aggregates levy as policy instruments, in the light of Ministerial objectives in those matters. If it is concluded that the taxes would provide Ministers with useful policy levers then they should be devolved to Wales, assuming a reasonable deduction from the block grant can be agreed.

We are aware of the practical barriers that will have to be overcome before these taxes can be devolved. Welsh representatives should play a full part in any discussions taking place at the UK level in order to ensure that the taxes can also be devolved to Wales, if that is what Welsh Ministers wish.

New taxes

Developing a mechanism to create new devolved taxes

7.66 The Calman Commission proposed that a new mechanism should be developed that would allow Scottish Ministers to introduce new Scottish taxes for policy reasons, provided the UK Parliament gave its consent. Under the Calman Commission's proposal, the UK Parliament would be able to make a "temporary addition to the legislative competence of the Scottish Parliament for a particular agreed purpose".⁹⁹ This would provide a way for both Parliaments to give their consent to the introduction of new taxes in Scotland.

7.67 We believe a similar mechanism would be worthwhile in Wales. A piecemeal approach to the devolution of powers to levy new taxes has parallels with the current law-making powers of the National Assembly, whereby legislative powers can be drawn down from the UK level in the form of Legislative Competence Orders (LCOs). The proposal would therefore create something approaching a system of Financial Competence Orders. We recognise that the LCO process has been criticised as being unnecessarily slow and restrictive, but we view those drawbacks as being a price worth paying for establishing a mechanism that would enable Welsh Ministers to develop new taxes in areas of devolved responsibility with the consent of the UK Parliament.

7.68 The principle guiding the impact of new taxes on the budget of a devolved administration ought to be that additional tax effort generates additional resources, while reduced tax effort generates fewer resources. For example, any new tax introduced in Wales would represent additional tax effort if no such tax is in place in England and the Welsh tax would have no effect on English tax receipts. Therefore, the revenue raised by such a tax should be retained in Wales for expenditure on devolved services.

7.69 In the course of our work we have received a number of suggestions for new taxes that could be adopted in Wales. We do not make firm recommendations about specific new taxes, but below we briefly consider the pros and cons of the following candidates:

- i) a tax on tourism to pay for public amenities necessitated by the tourist industry;
- ii) "corrective taxes" to discourage certain activities that are harmful to health and generate negative externalities; and
- iii) natural resource taxes, to provide a return to Welsh citizens from activities that make use of Welsh resources.

Tourism taxes

7.70 Various forms of tourism tax are operated in many different countries, municipalities and cities around the world. Some are targeted specifically at tourists (such as a bed levy applied to hotels, guest houses and other forms of commercial accommodation) while others are paid by tourists and residents alike (such as a charge on restaurant bills). Schemes can be statutory or voluntary. In the latter instance tourists are invited to pay either via optional supplements added to hotel bills or through collections that are located at visitor attractions.¹⁰⁰

⁹⁹ Commission on Scottish Devolution, 2009 p.103

¹⁰⁰ Deloitte, 2006.

7.71 Table 7.3 shows that there were around 11 million trips made in Wales in 2008, of which around eight million were holidays. In aggregate those trips resulted in 22 million nights spent in commercial accommodation. A nominal tax on bed nights of, say, one pound might therefore raise in the order of £20 million per year across Wales.

7.72 A tourism tax levied on hotel bed nights would do little to enhance the accountability of the Assembly Government, since it would raise only modest amounts and would by definition be levied largely on visitors, the majority of whom are from outside Wales and therefore have no direct interest in the decisions of the devolved administration.¹⁰¹ If set at a low rate, the potential for economic distortions from a tourist tax is probably modest, but the easy availability of substitutes means that there would be a risk of distortions at higher rates. On the other hand, tourism is a devolved responsibility and, to the extent that tourism generates negative externalities, a tax would offer a mechanism for those to be offset.

7.73 Since a tourism tax is not currently in existence in the UK, thought would have to be given to how it would be collected, monitored and enforced. One possible mechanism could be by local authorities using the structures already in place to collect business rates and council tax. Given the relatively low estimate of revenue that is likely to be generated by a tourism tax, the initial set up costs and subsequent recurrent administrative costs might be a substantial proportion of total receipts. Nonetheless, such a tax may be worth considering.

7.74 Since many of the costs and externalities of tourism fall on local authorities, who are likely to be in a better position to know what local businesses can bear than the Assembly Government, we believe that any such tax would best operate at the local level, under the control of councils rather than the Assembly Government. The tourist tax could be at least partly hypothecated to improving facilities in areas where it was levied. That might make it more acceptable to the tourist industry and would decisively strengthen the case for it to be a local tax.

Table 7.3: Tourism in Wales: key statistics, 2008

	million
Holidays	7.7
Other trips	3.0
Nights spent in commercial accommodation	22.2

Source: Visit Wales 2008

¹⁰¹ Visit Wales, 2008

Corrective taxes

7.75 Governments frequently use tax powers as a means of reducing activities that are harmful to individuals or to the environment. The Assembly Government has extensive responsibility for health and environmental issues. There is a range of possible taxes that could be introduced to address local environmental issues, such as a tax on car parking. Below we briefly consider the extent to which the ability to levy taxes on activities that are harmful to health could, in principle, be a useful policy lever.

7.76 The UK Government already levies significant excise duties on alcohol and tobacco (generating £8.5 billion from alcohol and £8.2 billion from tobacco in 2008-09) and differences in those duties across the EU have generated a large cross-border trade.¹⁰² The potential for tax avoidance along the Wales-England border is clearly much greater than it is between, say, the UK and France. Any corrective taxes that were applied to those products in Wales but not in England would have to be set at a very low rate in order to avoid large economic distortions. Of course, the lower the tax the less effective it would be at discouraging harmful behaviour.

7.77 Table 7.4 shows that around £900 million was spent on alcohol in Wales in 2006-07, and just under £350 million was spent on tobacco. A nominal one per cent tax on alcohol sales in Wales might therefore raise around £10 million, while a similar tax on tobacco would generate less than £5 million. Focusing a corrective alcohol tax on drinking outside the home might reduce the scope for tax avoidance, as people are less likely to be indifferent about where they go for a night out than they are about which supermarket supplies the alcohol that they drink at home. If this approach were followed (perhaps on the grounds of reducing the externalities from excessive drinking in city centres), the approximate revenue generated by a one per cent tax would be around £5 million. However, a tax that was levied on licensed premises but not on supermarket sales of alcohol would clearly be contentious, particularly in view of the fact that an increasing share of alcohol sales is off-licence trade.

Table 7.4: Household expenditure on alcohol and tobacco in Wales, 2006-07

	£ million	Share of UK total (per cent)
Alcoholic drink away from home	502	4.0
Alcoholic drink brought home	399	4.6
Total alcohol	901	4.3
Tobacco	348	5.7

Source: ONS Family Spending

7.78 As with all new taxes, mechanisms for collection and enforcement would need to be developed before the tax could be introduced. The costs of such activities would need to be deducted from the gross receipts provided by the tax to assess whether a tax would be financially feasible.

¹⁰² Anderson and Baumberg, 2006.

7.79 We do not propose that the existing UK excise duties should be devolved to Wales, but the potential for Welsh Ministers to levy corrective taxes on products that are harmful to health is worthy of exploration. An alternative course may be to collaborate with any UK-wide measures to impose minimum prices on alcoholic drinks.

Natural resource taxes

7.80 Natural resources are an emotive issue in Wales where the scars and spoil tips of an industrial revolution that generated untold wealth around the world still look down on some of the poorest communities in the UK. As massive wind turbines spread across Welsh hills and discussion of barraging the Severn estuary continues, there is an understandable desire to ensure Wales derives lasting benefit from the current and future exploitation of its resources. The desire is reinforced by the knowledge that past exploitation has often entailed depredations in Wales itself, from the forcible drowning of small villages for reservoirs to a widespread degradation of the landscape.

7.81 Such sentiments have to contend, however, with the fact that the current commercial value of Welsh resource extraction is rather modest. Table 7.5 shows the output of natural resources in Wales in 2008, and provides an approximate estimate of the turnover in coal, wind, timber and water. In total, the turnover from those resources in Wales is very roughly £500 million.

Table 7.5: Approximate turnover generated by Welsh natural resources, 2008

	Output 2008	Price	Approximate turnover	Tax revenue
Coal	1,743,000 tonnes	£65 tonne	£113 million	
Wind	864 GWh	£70 MWh	£60 million	
Timber	900,000 tonnes		£20 million	
Water extraction			£300 million	
Aggregates	19,300,000 tonnes	levy £1.60 tonne		£31 million

Sources: The Coal Authority, Department for Energy and Climate Change, Forestry Commission, Dwr Cymru Welsh Water, UK Minerals Year Book

7.82 Water generates the largest estimated turnover of all Welsh natural resources, at £300 million a year or more.¹⁰³ A tax on water supplied from assets based in Wales set at, say five per cent, would be likely to generate less than £20 million. A complicating factor is that for most homes water usage is unmetered. The water bill of those homes is based on the property's rateable value rather than water usage. In such circumstances, a supplement to the water bill would tax the supply but not the consumption of water.

¹⁰³ This figure is likely to be a conservative estimate. We estimate total turnover from the water supply activities of Dwr Cymru Welsh Water to be around £300 million per annum. The boundaries of the water supply companies do not follow traditional administrative boundaries. As a consequence, our estimate includes an unknown sum relating to extraction of water supply sources in England. In addition, Severn Trent extracts water from mid Wales to supply customers in England. These factors make it difficult to estimate the total revenue generated by water extraction in Wales.

7.83 Around one third of the water from Wales supplies residents of England, therefore any tax that was levied on water by the Assembly Government would fall partly on English residents. If the UK Government were to permit the Assembly Government to tax water sourced from Wales, it is possible that it would require the proportion of the tax that ultimately fell on English residents to be deducted from the Welsh block grant - so the UK Government would, in effect, get that revenue. While that would reduce the revenue potential of the tax for Wales still further it may convey a political benefit; Wales would be receiving payment for a resource it was exporting instead of receiving grant money because of its relatively high needs.

7.84 At present coal production is untaxed. Since coal is a commodity that trades at a global price, any tax would have to be structured as a windfall tax, payable on sales above a reference price that protected the marginal producer. This makes it difficult to estimate the potential revenue that could be raised from such a tax, but with an estimated turnover of £113 million in 2008 the sums involved would clearly be modest.

7.85 Electricity generation using wind power has a turnover in Wales of around £60 million. At present, this source of power is subsidised by the UK Government. It would seem anomalous for

7.86 The turnover from timber production in Wales is only around £20 million, so any tax on this resource would only generate nominal sums. Moreover, timber production is subsidised via the Forestry Commission, so as with wind power it would be difficult to apply both a tax and a subsidy at the same time.

7.87 In addition to the resources listed in Table 7.5 it has been suggested that Wales possesses in its coal measures significant reserves of natural gas that are not currently exploited commercially but could generate significant revenue in the event of an increase in the price of gas. It is difficult to be certain how the revenues from any such gas production would be taxed and impossible to estimate the resulting revenues, but it is likely that they would be liable for supplementary corporation tax that is currently levied on gas extracted from the North Sea. As things stand, this revenue would accrue to the UK Government rather than the Assembly Government. While there is an argument for devolving that tax the matter would no doubt become inseparable from the issue of Scottish claims on North Sea revenues.

7.88 In summary, the scope for generating revenue from taxing natural resources in Wales seems limited at present. Nonetheless, many people would wish to see the principle established that Wales can tax resource exploitation, especially when it has very considerable negative externalities for Welsh residents. Moreover, the power to tax some natural resources may be a worthwhile policy lever in certain areas of devolved responsibility, such as environmental matters. The aggregates levy discussed above is in a sense a natural resource tax (and its rationale is to offset the damage done to the landscape by quarrying); if devolved it could conceivably be broadened over time to cover other resources. Resource taxes may therefore be worthy of further study with a view to establishing principles for their use.

Recommendation - new taxes

A procedure should be confirmed to enable the UK Parliament to confer power on the National Assembly to introduce new taxes in Wales, where the Assembly requests that power.

The resources derived from those taxes should be allocated on the principle that additional tax effort by the devolved administration should generate additional resources, whereas reduced tax effort should result in fewer resources.

Summary

7.89 It has been argued that the devolution of corporation tax, giving Welsh Ministers the scope to reduce business taxation, could be the catalyst required to boost Wales's relative economic performance within the UK. Estimates of corporation tax receipts in Wales vary, for 2008-09 ranging from £600 million to £1.2 billion, depending on definition and methodology.

7.90 We recommend that the Assembly Government should seek discussions with the UK Government and the other devolved administrations about the feasibility of devolving corporation tax. Any specific proposal will need evaluation to ensure its compatibility with European law, notably the question of whether any UK-wide agreement on limits to rate changes would be permissible. It is clear that the full budgetary impact of devolved corporation tax must fall on the Assembly Government. This would introduce substantial volatility into the Welsh budget.

7.91 We have reviewed the current property taxation regime and examined the case for devolving stamp duty land tax and capital gains tax on property and land. We recommend that the Assembly Government should consider further reform of council tax by:

- i) introducing additional bands covering high value properties; and
- ii) undertaking more frequent revaluations of the housing stock.

7.92 We consider that it should be a matter for local authorities to determine whether the council tax on second homes should be set at a discount or a premium to the standard charge. Where the local preference is to encourage tourism through second home ownership, a discount might be appropriate, but in areas where the negative consequences of second home ownership outweigh the benefits, local authorities should be able to reflect those harmful impacts in the council charge levied on second home owners.

7.93 The administrative costs of devolving capital gains tax on property and land should be explored with HMRC. If administrative costs are not prohibitive, then it should be devolved to Wales, provided a fair offset to the block grant can be negotiated.

7.94 We recommend that stamp duty land tax should be devolved to Wales, provided a fair offset to the block grant can be negotiated.

7.95 Landfill tax, aggregates levy and air passenger duty are not paid regularly by a large proportion of the population and they raise relatively limited resources. The case for devolving them to Wales depends on their usefulness to Welsh Ministers as policy instruments. If, following assessment, Ministers conclude that they would provide useful policy levers, we recommend that those taxes should be devolved to Wales. In the meantime, it is important that any discussions between the UK Government and the Scottish Government about devolving those taxes to Scotland should also include representatives of the Assembly Government, in order to ensure that issues of relevance to Wales are fully taken into account.

7.96 A mechanism should be confirmed to enable the Assembly to introduce new taxes in Wales with the consent of the UK Parliament. Under our proposal, the National Assembly would be able to request from the UK Parliament a transfer of powers to legislate to introduce a specific tax measure that would apply only in Wales. The resources derived from those taxes should be allocated on the principle that additional tax effort by the devolved administration should generate additional resources.

Chapter 8: Devolution of borrowing powers to Wales

Overview

8.1 This Chapter considers whether the Assembly Government should be able to borrow to fund its activities. It provides:

- i) a brief summary of the way in which the UK Government borrows from the capital markets;
- ii) a description of the borrowing powers that are available to Welsh Ministers, other devolved administrations and local authorities;
- iii) a discussion of the main conclusions from the economics literature about whether sub-national governments should have borrowing powers;
- iv) a recap of the recommendations on funding flexibility made by the Commission in its first report;
- v) consideration of the extent to which the current regime limits the ability of Welsh Ministers to undertake capital spending;
- vi) consideration of the case for extending borrowing powers under the current funding regime and in the event of tax devolution; and
- vii) a discussion of the case for Wales to be able to borrow directly from capital markets.

UK Government borrowing

8.2 The UK Government borrows from capital markets in order to fund public expenditure, when tax receipts are insufficient to cover planned spending. Between 1997 and 2008 borrowing was subject to two fiscal rules, which stated that:

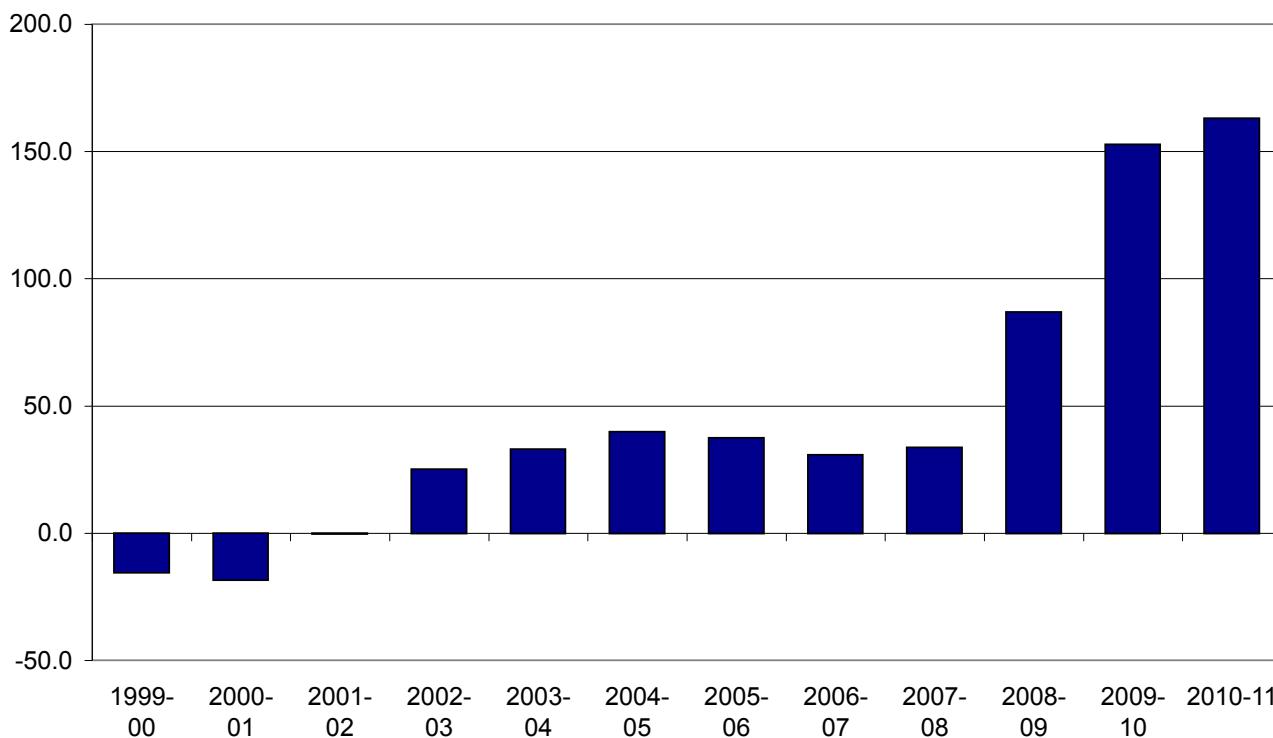
- i) over the course of the economic cycle, the government would borrow only to finance capital expenditure (the “golden rule”); and
- ii) the UK’s net public sector debt would not rise above a threshold of 40 per cent of Gross Domestic Product (the sustainable investment rule).

8.3 Following the onset of the recession in 2008, UK Government borrowing has increased very substantially (see Chart 8.1) and, at the time of writing, a new control framework has yet to be promulgated.

8.4 UK Government borrowing is undertaken by the Debt Management Office (DMO), which is an executive agency of HM Treasury. This means that the DMO is legally and constitutionally part of HM Treasury, but operates at arm’s length from Ministers. The DMO’s remit is to carry out

the Government’s debt management policy of minimising financing costs over the long term, taking account of risk, and to minimise the cost of offsetting the Government’s net cash flows over time, while operating in a risk framework approved by UK Government Ministers. Debt issued by the UK Government is highly rated, which means it incurs low rates of interest.

Chart 8.1: UK public sector net borrowing (£ billion)



Source: HM Treasury Public Finances Databank

Borrowing powers of devolved administrations and local authorities

8.5 The Assembly Government does not have the power to borrow in order to fund public services in a manner comparable to the UK Government.¹⁰⁴ All services have to be resourced from within the Assembly Government’s annual budget, which is funded via the block grant. There are, however, limited conditions under which the Assembly Government can borrow additional funds. Welsh Ministers may borrow from the Secretary of State for Wales to meet a temporary excess in expenditure over income or to provide a working balance. This borrowing must not at any time exceed £500 million.¹⁰⁵

¹⁰⁴ See Annex 6.

¹⁰⁵ This limit can be increased by the Secretary of State for Wales by order with the consent of HM Treasury - see s. 122(3) Government of Wales Act 2006. The draft order must be approved by the House of Commons.

8.6 At present, similar rules apply in Scotland as operate in Wales, although the Calman Commission recommended providing Scottish Ministers with the ability to borrow up to a certain limit to fund capital expenditure. Under the Calman Commission's proposals, Scottish borrowing would be undertaken via the DMO. The former UK Government accepted the case for Scotland to be given limited borrowing powers along with enhanced ability to vary taxes, with the proviso that any borrowing would have to be self-financed by setting Scottish taxes above those of the UK.

8.7 The Northern Ireland Executive carries out functions that are undertaken by local authorities elsewhere in the UK, and it already has limited borrowing powers, which were acquired under the 2002 Reinvestment and Reform Initiative. Under this arrangement, the Executive gained access to additional capital expenditure funded by borrowing from the DMO. Borrowing was limited to £125 million in 2003-04 and £200 million per annum thereafter. The borrowing power and arrangements are broadly equivalent to the prudential borrowing regime that regulates borrowing of local authorities (see below). Borrowed funds are used to finance capital investment rather than recurrent spending. The purpose of the programme is to increase capital investment in Northern Ireland over and above increases in DEL agreed in spending reviews.

8.8 Local authorities are able to borrow to fund capital expenditure. In principle, they are able to borrow from commercial banks and could also issue their own debt. In practice few do so, since they are able to borrow via the Public Works Loan Board (PWLB). This is a statutory body which operates within the DMO, and which will lend to local authorities at close to gilt rates, over any period of maturity. Since borrowing from commercial institutions or issuing debt under their own name would incur a higher interest rate charge, local authorities generally find that the most attractive option is to borrow via the PWLB. The PWLB's funds are drawn from the National Loans Fund, which is the account that brings together all the UK Government's lending and borrowing. Local authority borrowing is subject to the Prudential Borrowing Code (see Box 8.1 for more discussion of the PWLB and the Prudential Code). Local authorities, other public sector organisations and the private sector can also borrow from the European Investment Bank (EIB, see Box 8.2 for more details).

Box 8.1: The PWLB and the Prudential Code for Borrowing

The PWLB consists of a board of Commissioners, whose functions are to consider loan applications from local authorities and other prescribed bodies and, where loans are made, to collect the repayments. At present nearly all borrowers are local authorities requiring loans for capital purposes. The Commissioners are legally required, before making a loan, to satisfy themselves that there is sufficient security for its repayment.

Money is provided by Act of Parliament and is drawn from the National Loans Fund. Interest rates are determined by HM Treasury, and are generally marginally above the cost at which the UK Government itself can borrow in the gilts market over comparable maturities. During the year 2008-09 the PWLB made advances totalling more than £6 billion (of which around £217 million was to local authorities in Wales). The balance of principal outstanding at 31 March 2009 was around £51 billion.¹⁰⁶

¹⁰⁶ Public Works Loan Board, 2009

Borrowing by local authorities from the PWLB is subject to the Prudential Borrowing Framework, which is based largely on self-regulation. The Chartered Institute of Public Finance and Accountancy (CIPFA) issues guidance for local authorities, and borrowing must be undertaken with regard to CIPFA's "Prudential Code".

The Prudential Borrowing Framework places great weight on the importance of sustainability, prudence and in particular affordability as the ultimate constraint on whether borrowing should take place and the amount that a local authority can spend or borrow. For local authorities, affordability is determined by a judgment about acceptable council tax levels and in the case of borrowing to provide housing, acceptable rent levels. However, this decision is underpinned by a range of judgments such as likely levels of capital receipts, additional revenues raised from fees and charges in "invest to save" schemes and treasury management considerations.

Box 8.2: Borrowing from the EIB

The EIB was set up in 1958 to provide long-term lending to both the public and private sector to help organisations meet EU policy objectives.

The EIB offers two main facilities for lending: direct loans for large scale projects (more than €25 million) and intermediate loans for small and medium scale projects. Intermediate loans are accessed via national and regional intermediary banks where the lending decision remains with the intermediary bank.

The EIB is AAA rated which means that loans are available at rates of interest close to the UK Government borrowing rate.

In Wales, a number of organisations have accessed EIB funding. Dwr Cymru Welsh Water borrowed £100 million for water supply and wastewater management schemes. Bron Afon Community Housing Ltd borrowed £55 million to refurbish over 8,000 social housing units in the County Borough of Torfaen. In a joint initiative between Finance Wales and the Welsh European Funding Office, £75 million of EIB funding has been accessed to provide venture capital and loans for businesses in Wales.

EIB funding is also available to local authorities in Wales but is not widely accessed as local authorities can borrow directly from the PWLB (see Box 8.1).

Borrowing by sub-national governments: lessons from the economics literature

8.9 An obvious but important point to make when considering the case for devolution of borrowing powers is that borrowing would not provide the Assembly Government with additional resources. Rather, borrowing results in a reallocation of expenditure over time; future resources are drawn forward, but subsequently have to be repaid with interest. The case for borrowing is strongest for capital projects that will raise economic capacity and ultimately revenue. It is clearly unsustainable over the medium term to fund out of borrowed funds recurrent spending that has no pay-back.

8.10 Sub-national governments in many developed countries possess borrowing powers. A good case for such powers can be made. It has been argued that borrowing may be the economically appropriate way to finance sub-national capital outlays on the grounds of both allocative efficiency and intergenerational equity.¹⁰⁷

8.11 However, a debate in the economics literature has focused on the extent to which such borrowing creates a problem of “moral hazard”, whereby sub-national governments exploit implicit or explicit guarantees from the central government, leading to imprudent action by lenders and sub-national governments and ultimately creating unplanned fiscal liabilities for central government.¹⁰⁸ Recent debt crises among sub-national governments in Brazil and city level bankruptcies in the USA demonstrate that this is not a purely theoretical concern.

8.12 The academic literature and country experiences, however, do not suggest that the devolution of borrowing powers necessarily results in damage to the central government’s ability to maintain fiscal discipline and macroeconomic stability. International experience demonstrates that the design of the regulatory framework under which borrowing powers are devolved is central to ensuring that sub-national borrowing does not jeopardise the national government’s fiscal objectives.¹⁰⁹ It is common for the central government to impose strict limits on the borrowing powers of sub-national administrations. Typically, sub-national borrowing will be limited to a pre-defined amount over a specified time period.¹¹⁰ Provided an appropriate framework is in place that protects the central government’s legitimate interests, sub-national borrowing can be both feasible and desirable.¹¹¹

Funding flexibility: recap of the Commission’s recommendations in its first report

8.13 The UK Government’s public expenditure rules make a distinction between resource budgets (which fund recurrent spending such as staff costs) and capital budgets (which fund investment in assets such as buildings and roads). One of the strangest features of the present funding regime is that the Welsh budget is divided into separate capital and resource streams on the basis of England’s need to spend on capital. Resource spending by UK Government departments in England leads to resource consequentials, while spending in England on capital projects generates capital consequentials. Welsh Ministers are allowed to transfer funds from resource to capital budgets, but cannot move money from capital into resource without the consent of HM Treasury. Welsh Ministers also have a limited ability to save unspent funds, which can be drawn down in future years under the End Year Flexibility provisions. However, access to EYF is not automatic and requires discussion with and agreement from HM Treasury, thus limiting the usefulness of EYF as a mechanism for saving resources for transfer into future years.

¹⁰⁷ Bird, 2000.

¹⁰⁸ Ahmad, 1999.

¹⁰⁹ Ahmad, 1999.

¹¹⁰ Ter-Minassian and Craig, 1997.

¹¹¹ Ahmad, 1999.

8.14 The Commission's first report made a number of recommendations to improve the funding flexibility available to Welsh Ministers, and to remove the arbitrary restrictions that are currently placed on the use of the Welsh block grant. Specifically, we recommended that the Assembly Government should:

- i) be able to draw forward its capital budget across the period of a spending review;
- ii) be able to switch funds from capital to resource budgets; and
- iii) have a free hand in accessing the EYF funds that it has accumulated in prior years, without the requirement for discussion with, and agreement from, HM Treasury.

Ensuring access to End Year Flexibility (EYF): strengthening the current arrangements

8.15 The ability to draw forward future capital budgets, as recommended in our first report, is in effect a limited form of borrowing, albeit within a highly constrained framework. A borrowing facility should be accompanied by an ability to save, safe in the knowledge that unspent resources will be available when required. One way of providing this assurance to Welsh Ministers would be to include an explicit statement to this effect in the Statement of Funding Policy (or ideally in a new jointly-approved Ministerial Concordat, as we proposed in our first report). The best institutional mechanism that would reinforce the statement would be to provide the Welsh Consolidated Fund with the same arrangement as the National Insurance Fund or National Lottery Distribution Fund. The balances from both of those funds are invested in government securities by the Commissioners for the Reduction of the National Debt (CRND). The interest accruing from those investments is credited to the relevant fund.

8.16 The statutory functions of the CRND are carried out within the DMO. Stocks are created specifically to meet the CRND's investment needs. Those stocks are related to a parent gilt issue and carry the same terms as that original gilt issue. They are identical to the parent gilt but are not quoted on the London Stock Exchange. All transactions in those stocks are dealt with on the basis of the current market price of the parent gilts. Stock that is no longer required by the CRND is purchased and cancelled by HM Treasury.

8.17 The establishment of such a facility for the Assembly Government to save unspent parts of its block grant would provide greater assurance that such savings were available to draw down in future budgetary periods and would strengthen the ability of the Assembly Government to plan and manage its resources over a number of years. This arrangement would also put the finances of the Assembly Government on a different footing from Whitehall departments, and one more appropriate to a distinct tier of government.

Recommendation: ensuring access to EYF

The Assembly Government should seek agreement with the UK Government for an arrangement to invest EYF funds in government securities under the auspices of the Commissioners for the Reduction of the National Debt.

This arrangement would give the Assembly Government clear property rights over unspent EYF, making it possible to save with an assurance that it will be possible to call on the resources when necessary without the need for Treasury discussion and agreement.

The need for borrowing powers in Wales: practical evidence

8.18 Capital investment typically has a multi-year time horizon. Large projects take many years to be developed, and once they are approved their impact on the budget lasts for several more years. At present, the Assembly Government has a maximum three years of certainty about its capital budget at any time. In practice, the certainty can be much more limited. For example, the decision by the UK Government to delay its Comprehensive Spending Review (CSR) until the autumn of 2010 means that at the time of writing Assembly Government's capital budget beyond March 2011 has not been specified. That makes effective planning of capital expenditure difficult. It is also potentially wasteful, as drawing up capital plans is a time-consuming and resource-intensive process, requiring specialist input.

8.19 The Assembly Government currently has a 20-year programme for capital spending on school improvement (known as the 21st century schools programme). Similarly, capital expenditure programmes in the health service are developed with a ten year planning period. In transport, the forward capital expenditure programme covers five years. There is also a forward expenditure forecast up to 2020 for trunk road improvements. A typical transport project takes many years to develop and implement.

8.20 Capital programmes are being developed therefore over much longer periods than the Assembly Government's actual capital budget horizon of three years at most. The lack of forward visibility, combined with the occasional need to contemplate projects that are large relative to the annual budget, can complicate investment planning. The main argument for borrowing powers, however, is that there are projects of a large enough scale as to make them an insupportable burden on the Welsh capital budget unless their finance can be stretched out over a longer time period. An example of a major transport capital project - the "New M4" - is discussed in Box 8.3.

Box 8.3: Major capital projects - proposed “New M4” project

A good recent example of a major capital project that was considered by the Assembly Government is the so-called “New M4”. It was proposed to construct a second motorway to the south of Newport, as a means of relieving congestion on the existing M4. Welsh Ministers decided not to proceed with the project as it was deemed unaffordable.¹¹² Nonetheless, the proposed project provides an example of some of the difficulties that the current capital budgeting arrangements cause for effective capital management and planning, especially in relation to large projects.

Development of the project began in the late 1990s with the intention that it could be ready to start by 2010. The estimated total capital costs of the new M4 project stood at around £670 million (at 2006 prices) and the estimated outturn cost in cash terms when the project was expected to begin was £1 billion. This therefore provides an example of one of the largest capital projects that the Assembly Government would be likely to undertake given its existing range of devolved responsibilities. The capital costs of the proposed Severn tidal energy schemes, for example, would rest at the UK level.

If the proposal had gone ahead, over the estimated five year construction period there would have been a peak annual capital requirement of £320 million. In comparison, the total capital budget of the Assembly Government in 2010-11 is £1.7 billion. At its peak, the new M4 project alone would therefore represent nearly 20 per cent of the total annual capital budget.

Devoting such a large proportion of the total capital budget to a single project for such an extended period of time would clearly be extremely challenging, and would have serious implications for the capital budgets of other public services. The ability of Welsh Ministers to choose between spending priorities is of course central to the current devolution settlement. However, under the current funding regime it is unclear whether major capital investment projects such as the new M4 (which are of benefit to the UK as a whole as well as to Wales), would ever be deliverable.

The case for borrowing powers*The need for borrowing powers to offset budgetary volatility arising from tax devolution*

8.21 Tax devolution could introduce a significant amount of volatility into the Welsh budget, though the extent of the volatility depends on how devolved taxes interact with the block grant (see Chapter 5). Effective management of substantial budgetary volatility would require borrowing powers for both recurrent and capital spending. However, we expect that the volatility introduced into the Assembly Government’s budget as a result of our tax devolution proposals would be modest. Income tax would, if devolved, have a much greater impact on the budget than any of the smaller taxes we have considered, but our recommendation that the ID model should be used to integrate income tax receipts into the Welsh budget would insulate the Welsh budget from UK policy risk and cyclical risk (see Chapter 5). It is possible to model what would have happened to the overall resources available to the Welsh Assembly, had income tax been devolved in line with our preferred approach since

¹¹² Welsh Assembly Government, 2009.

1999-00. The modelled allocations are not much more variable than the funding that was actually provided by Barnett. It is estimated that the overall resources available to the Welsh Assembly would have varied from their actual levels by £150 million at most in any one year.

8.22 The above suggests that the current overdraft facility of £500 million available to the Assembly Government, combined with a rollover facility enabling deficits to persist beyond the financial year end, for up to three years, would be sufficient to deal with the additional volatility arising from our preferred approach to income tax devolution. The maximum allowable overdraft would need to be kept under review and may have to be adjusted over time to take account of inflation and economic growth.

Borrowing to fund capital spending

8.23 If the Assembly Government remains wholly block grant funded, it could be argued that borrowing should be permitted up to the three year CSR window (via the “draw forward” mechanism proposed in our first report) but not beyond that period, as there are no budgets against which to borrow. That argument is not persuasive, since the Assembly Government can be sure that it will receive a budget of many billions of pounds beyond the CSR horizon, although of course the exact magnitude is uncertain. There is enough certainty to allow a constrained borrowing power for capital expenditure that fits within a UK framework provided it was small enough that its servicing was not a significant burden on the block grant. Some limited borrowing could therefore be undertaken in the absence of tax devolution.

8.24 That said, the case for borrowing powers is stronger once tax-varying powers are devolved. In such circumstances, the Assembly Government would have a distinct source of revenue under its own control that would provide additional reassurance about its ability to repay borrowed funds.

8.25 In either event, we believe the present restrictions on the Welsh capital budget are unjustifiable. The, at best, three year horizon of capital budgets offered by the current system is an impediment to effective management of capital expenditure. Devolution of limited borrowing powers for capital purposes would enable planning horizons to be extended, and would enable larger projects to be entertained than current constraints easily permit. It would therefore make it easier to align capital expenditures with Welsh priorities.

8.26 We therefore recommend that the Assembly Government should acquire limited borrowing powers to finance capital spending. A borrowing framework should be agreed between the Assembly Government and HM Treasury, and a ceiling should be placed on the total amount of debt that the Assembly Government should be able to carry. In the absence of a set of fiscal rules at the UK level at the present time, it is difficult to be specific about how borrowing at the Welsh level should operate, but it is clear that borrowing rules applied to Wales would have to be consistent with the fiscal framework of the UK Government. Borrowing in foreign currencies should be prohibited, and the Assembly Government should adhere to the Prudential Borrowing Framework.

8.27 We consider the constraint that the former UK Government proposed to impose on Scotland, with borrowing having to be funded out of higher Scottish taxes, to be unjustifiable. No UK interest is served by insisting that borrowing by a devolved administration should have to be financed by increased taxes rather than restraint of public expenditure. If the Assembly Government prefers, it should be able to repay borrowed funds from future revenues and accept the lower future public spending that would result. A debt limit of, for example, 15 per cent of annual resources with debt

maturity of ten years or more, would mean servicing costs were less than two per cent of the block grant at current or somewhat higher interest rates. They could surely be met from the block grant without infeasible cuts to public services. That would permit the Assembly Government to carry debt of some £2 billion, enough in conjunction with the capital budget to facilitate a couple of very large projects but insignificant in the UK context.

8.28 In our first report, we recommended that the Assembly Government be given the facility to move funds from capital to resource budgets as well as the power to draw forward future capital budgets. However, the ability to move funds from capital into resource was to apply only in years when no capital was drawn forward. That would ensure that drawn forward capital was used only to fund additional capital spending. The Assembly Government would be free each year either to draw forward capital to finance additional capital investment, or to move funds from capital into resource, but it could not do both. If borrowing powers to fund capital expenditure are extended to the Assembly Government, however, there should be no ability to transfer resources from capital to resource budgets, in order to ensure that borrowed funds are wholly allocated to capital expenditure.

Sources of funds

8.29 If Wales were to issue its own bonds or to borrow from commercial organisations, there would be a need for additional expertise in the Assembly Government. Those costs could be avoided by making use of the existing expertise in the DMO. The interest rate on Assembly Government-issued debt that would be demanded by lenders would also be higher than that which would be incurred by borrowing via the DMO. It is impossible to be precise about exactly how much higher interest rates would be on debt issued in the name of the Assembly Government rather than the UK Government. However, some indication is provided by Transport for London, which is a statutory corporation created to provide public passenger transport services within, to and from Greater London, and which undertook three bond issues between 2004 and 2006. The cost of borrowing for Transport for London's most recent bond issue was 38 basis points above the UK Government gilt rate.^{113, 114}

8.30 If borrowing were undertaken via the DMO, Welsh Ministers would be able to borrow over any maturity they considered appropriate at very close to gilt rates. Borrowing could have a number of different structures - fixed or floating rate, standard bond or annuity-type, for example. It is therefore unlikely, on purely financial grounds, that the Assembly Government would ever want to borrow from anywhere other than the National Loans Fund or PWLB. In the event that Welsh Ministers decided to exercise their borrowing powers, they would generally be unable to get better terms from another source without incurring risk. Moreover, ensuring that Assembly Government borrowing is undertaken by an agency of HM Treasury also helps maintain clear UK Government oversight. We conclude that borrowing by the Assembly Government should take place via the National Loans Fund or PWLB.

¹¹³ Transport for London, 2006.

¹¹⁴ Transport for London, 2004-10.

Recommendation - borrowing powers

Limited powers to borrow in order to finance capital expenditure should be devolved to the Assembly Government.

Borrowing should be undertaken via the DMO. A borrowing framework should be agreed between the Assembly government and HM Treasury, and a ceiling should be placed on the total amount of debt that the Assembly Government should be able to carry.

The current overdraft facility of £500 million available to the Assembly Government, combined with a rollover facility enabling deficits to persist beyond the financial year end, would be sufficient to deal with the additional volatility arising from our preferred approach to income tax devolution. The maximum allowable overdraft would need to be kept under review and may have to be adjusted over time to take account of inflation and economic growth.

Summary

8.31 The Assembly Government does not have the power to borrow in order to fund public services in a manner comparable to the UK Government. All services have to be resourced from within the Assembly Government's annual budget, which is funded via the block grant. There are, however, limited conditions under which the Assembly Government can borrow additional funds. Welsh Ministers may borrow from the Secretary of State for Wales sums that are required to meet a temporary excess in expenditure over income or to provide a working balance. This borrowing must not at any time exceed £500 million.

8.32 At present, the Assembly Government can only access unspent EYF funds following discussion with, and agreement from, HM Treasury. This undermines confidence that saved funds will be available when needed, and acts as a disincentive to effective budgetary planning over time. The Assembly Government should seek from the UK Government the right to invest EYF funds in government securities under the auspices of the CRND. This arrangement would give the Assembly Government clear property rights over unspent EYF.

8.33 At present, the Assembly Government has a maximum three years of certainty about its capital budget at any one time, and in practice is constrained in undertaking very large projects. Devolution of limited borrowing powers for capital purposes would enable planning horizons to be extended, and would make it easier to align capital expenditures with Welsh priorities.

8.34 We recommend that limited powers to borrow in order to finance capital expenditure should be devolved to the Assembly Government. Borrowing should be undertaken via the DMO. A borrowing framework should be agreed between the Assembly Government and HM Treasury, and a ceiling should be placed on the total amount of debt that the Assembly Government should be able to carry.

Chapter 9: The way ahead

Overview

9.1 This Chapter draws together the results of our analysis and considers the implications for both the Welsh budget and the institutions of devolved government in Wales. It provides:

- i) a review of the case for introducing a floor in the current funding regime, based on the further analysis included in this report;
- ii) consideration of the case for tax devolution in the absence of a needs-based grant;
- iii) consideration of the capacity implications for the Assembly Government and the National Assembly if our recommendations on fiscal devolution were to be implemented;
- iv) a proposal for reforming UK Government statistics so as to reflect the reality of devolved government;
- v) thoughts on which of our recommendations are likely to require explicit endorsement through a referendum; and
- vi) a discussion of our how our recommendations combine fair funding with enhanced accountability.

Relative funding and relative needs: the outlook for Wales

9.2 Estimating relative need to spend has an unavoidable element of imprecision - it cannot be calculated with certainty to the nearest pound, or even the nearest million pounds. In our first report we generated what we said was certain to be a conservative estimate and probably an under-estimate of Welsh relative needs. We concluded that if devolved activities in Wales were funded on the same basis as the UK Government applies to fund those activities in England, the Assembly Government would receive at least £114 for every £100 spent in England on functions that are devolved to Wales. The first report also demonstrated that relative funding for Wales in 2010-11 was likely to be below this level and, if the Barnett Formula remained in place, Welsh relative funding was very likely to decline further over the medium term.

9.3 As a result of the analysis in this report and in our first report, we now have a range of estimates of Welsh relative need. Table 9.1 summarises the estimates of relative need that were derived from the regression analysis in Chapter 3, while Annex 4 demonstrates the impact of relaxing some of the first report's conservative assumptions. In each case the estimates of Welsh relative need are closely aligned and fall within a range of 114-117. The fact that different approaches all generate such similar estimates provides further evidence that establishing a needs-based funding system does not have to be arbitrary or subjective. While it is not possible to arrive at a definitive point estimate of Welsh relative need, we can be confident that funding for devolved activities in Wales would fall within this range if the UK Government provided funding to Wales on the same basis as it does in England.

Table 9.1: Summary of estimates of Welsh relative needs derived from regression analysis, based on varying assumptions¹¹⁵

Tax capacity	Welsh language	Census language needs indicator, including Welsh language	Wales relative need (England = 100)
			115
√			116
√	√		117
		√	116
√		√	117

Source: Commission calculations

9.4 Since the first report was published, the outlook for public expenditure has become exceptionally uncertain. There is a likelihood of large changes in public spending plans, the possibility of fundamental reform to the public spending architecture, and uncertainty over macroeconomic prospects and the inflation outlook. It is therefore impossible at the time of writing to forecast the Welsh budget over the next few years with any degree of confidence.

9.5 Under the Barnett regime, smaller budgetary increases lead to reduced convergence, and convergence goes into reverse if budgets are cut in cash terms. A further complicating factor is that EYF draw-downs and re-profiling of expenditure in Wales or England cloud the pattern of convergence in the short term.¹¹⁶ The future rate of convergence in expenditure per head will depend on the nominal rate of increase in comparable spending programmes in England, whether driven by inflation or real changes in spending. Chart 9.1 provides projections of Welsh relative funding, based on two possible paths of change in comparable English spending. If it is assumed that this spending grows at two per cent per year over the three years starting in 2011-12 and then grows at a nominal five per cent per year in future, Welsh relative funding will fall continuously from its current position, moving ever closer to the English average. A more conservative assumption of one per cent annual cash cuts to comparable English expenditure for three years, followed by annual increases of three per cent leads to small increases in relative funding during the period of cash cuts and a resumption of convergence in subsequent years. In both scenarios, in every year, Welsh relative funding remains below the lowest point of our range of estimated relative needs, and far below the upper end of the range. Even if budget cuts are more severe than one per cent per annum in cash terms, it is unlikely that Welsh relative funding would move above the level of 115, which our unadjusted needs formula

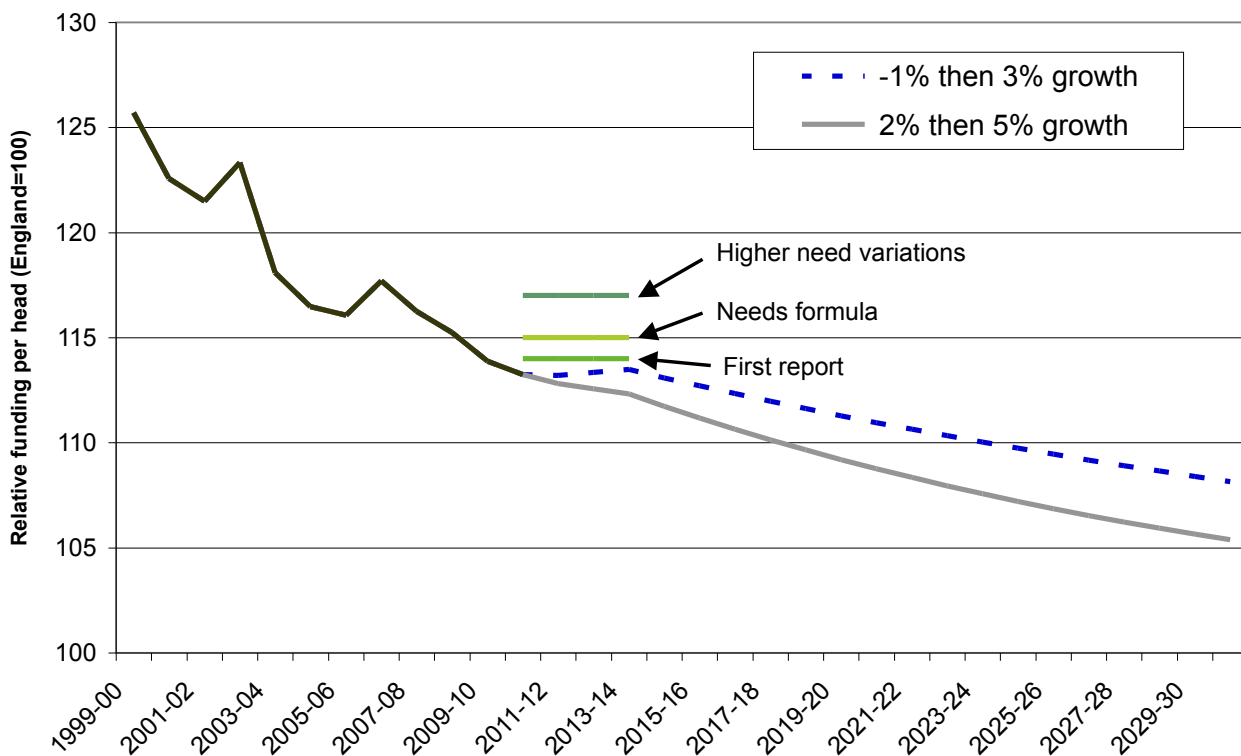
¹¹⁵ The top row shows the base case relative need in Wales. The other rows show relative need using alternative assumptions or indicators, as shown by a tick in the relevant column. The tax capacity alternative assumes local authority support is calculated based on equal local tax effort with respect to property values. The Welsh language alternative includes an estimate of first language Welsh speakers in the ethnic minority variable. The census language needs indicator alternative includes this variable instead of the ethnicity variable.

¹¹⁶ Independent Commission on Funding and Finance for Wales, 2009 Chart 2.7.

suggests would be equitable. There is therefore virtually no risk of Wales becoming over-funded, but every likelihood of persistent under-funding.

9.6 Once spending increases in cash terms, even if budgets are falling in real terms, convergence is likely to resume. We do not know what will happen to Welsh relative needs, but we do know that the Barnett squeeze will reassert itself and Wales can be expected to further converge on average English levels of funding.

Chart 9.1: Welsh relative funding projections - two scenarios of nominal spending growth¹¹⁷



Source: Commission calculations

9.7 In our first report, we recommended that, pending the introduction of a needs-based formula, a floor should be introduced to the Barnett Formula that would align funding increments with relative need. Under our proposal, the current funding regime would remain in place with the sole change that positive increments to the Welsh block grant would be multiplied by 114 per cent. This still remains an appropriate minimal solution, pending more comprehensive reform, as it would do no more than prevent Wales falling further below the lowest of all the estimates of relative needs.

9.8 It has been said that the current straitened fiscal circumstances make now a particularly bad time to move from Barnett to a needs-based formula. We disagree, since such a reform would be unlikely to increase, and could well reduce, the total resources provided to the devolved administrations relative to English expenditures. If that is politically too difficult, introduction of a floor would be almost costless in cash terms when budgets are growing slowly. If budgets were growing rapidly then the cash increases required to maintain a floor would be greater, though tiny in the context of UK budgets. From the UK Government’s perspective there is now an ideal opportunity, if it remains

¹¹⁷ Both of the scenarios illustrated assume no change in the population of Wales relative to England.

resistant to the full needs-based approach, to put in place a simple adjustment to the existing funding formula that would retain the advantages of Barnett but would also fix the huge flaw in the current system at very low cost and in a way that should be acceptable to all parts of the UK.

Tax devolution in the absence of a needs-based grant

9.9 Even if our proposals for tax devolution were implemented in full, the block grant would still account for around 85 per cent of the total resources available to the Assembly Government. Ensuring that Barnett is replaced by a system that sets the block grant by reference to Welsh relative needs therefore should be a priority for Wales.

9.10 Under the existing Barnett regime, the resources allocated to Wales lack any justification relative to a needs benchmark and are essentially arbitrary. Such circumstances impede the appropriate operation of a devolved tax system. Without an evidently fair and transparent system for allocating block grants a reduction in tax (particularly income tax) by a devolved administration could well be taken by the public as a signal of over-funding that would invite a UK Government response. In a recent paper, David Heald and Alasdair McLeod state that the fear of a challenge from HM Treasury to both levels of Scottish spending and the unconditional nature of the grant has played a role in discouraging Scottish Ministers from cutting the SVR.¹¹⁸ They conclude that “The political viability of income tax variation therefore depends on some measure of consensus that the funding system is “fair” and on Devolved Administrations having confidence that their use of taxation powers will not be nullified by actions of the UK Government”.¹¹⁹ The only way to achieve a consensus of fairness is to transparently align relative funding with relative needs. It is therefore strongly desirable for a needs-based funding regime to be in place in advance of significant tax devolution.

Implications of our recommendations for the Assembly Government and the National Assembly

9.11 At present the Assembly Government finance function is primarily focused on accounting and audit functions, such as ensuring that the block grant is spent appropriately and that accounts are accurate and timely. Devolution of any fiscal powers would represent a significant change in the tasks required of the Assembly Government.

9.12 Responsibility for collection of all devolved taxes in Wales should remain with HMRC. Even if our recommendations are implemented in full, we see no need to establish a separate Welsh exchequer. This view is consistent with the recommendations of the Calman Commission, which also concluded that HMRC should retain its role in collecting devolved taxes in Scotland.

9.13 If HMRC were to operate as the collection agency for the Assembly Government, strong working arrangements between the two organisations would have to be established. An early priority would be to develop a memorandum of understanding between HMRC, the Assembly Government and other UK bodies with an interest in how the new tax system would operate (such as DWP).

¹¹⁸ Heald and McLeod, 2010 p.16.

¹¹⁹ Heald and McLeod, 2010 p.32.

9.14 Limited borrowing powers to finance capital spending were devolved to Northern Ireland in 2002 (see Chapter 8). We understand that the additional capacity requirements this placed on the Northern Ireland Executive were minimal, once the initial procedures had been developed. Our proposals on borrowing are not different in kind from those that are now exercised by the Northern Ireland Executive. We are therefore confident that the Assembly Government would be able to take on the limited borrowing powers we propose without the need for substantial additional staff resource.

9.15 Should tax-varying powers be devolved, Welsh Ministers are likely to require some specialist support to help determine tax policy. Perhaps counter-intuitively, the need for expert advice might be greater for some of the smaller taxes which primarily have a policy rationale than for income tax, which has a revenue-raising objective. To some extent, the need for additional capacity within the Assembly Government would be reduced by developing good working relations with HMRC well in advance of any devolution of tax-varying powers. Provided that officials in the Assembly Government are able to draw on the expertise of HMRC specialists, the extra staff requirements in the devolved administration will probably be modest. That said, we envisage that some enhancement to the Assembly Government's Finance Department would be necessary once any tax-varying powers are devolved, though this is likely to comprise a fairly small unit of specialists, including economics and statistical expertise.

9.16 Equally, devolution of fiscal powers would have implications for the National Assembly. At present its financial scrutiny is undertaken by the Finance Committee, which analyses the draft budget in detail every autumn. The issues facing the Committee would become more complex in the event of fiscal devolution. Some enhancement to the official support available to the Finance Committee would be one obvious way of ensuring that the Committee was able to exercise its scrutiny role effectively in those circumstances. One option might be to establish a small unit of officials with public finance expertise that could support the work of the Committee on a full time basis once fiscal powers are devolved. A further possibility could be to enable paid experts to be co-opted onto the Committee for limited periods of time.

Transition arrangements

9.17 Both the UK Government and the Calman Commission have made it clear that a great deal of preparatory work needs to be undertaken before greater tax devolution could be implemented in Scotland. The need for thorough preparation is equally important in Wales.

9.18 It will take time - in all likelihood, several years - to prepare the ground for devolution of tax-varying powers to Wales. It would make sense for any significant new fiscal powers to be conferred on the National Assembly at a time that coincided with a National Assembly election. In any event, the earliest practical option for devolution of significant tax-varying powers would probably be not much before May 2015. It may be possible for more limited powers, for example over borrowing or certain minor taxes, to be transferred sooner. In the meantime, Wales should have a seat at the table in any discussions about fiscal devolution that are taking place at the UK level. By ensuring that Welsh interests are taken into consideration at an early stage, it may well be possible to minimise the size of future implementation costs.

Recommendation - transition arrangements

The preparatory work that is under way to implement tax devolution for Scotland should proceed on the assumption that similar tax powers could be devolved to Wales.

The Assembly Government should have a seat at the table in any discussions about fiscal devolution that are taking place at the UK level. Building this assumption in from the start will help minimise the implementation costs of tax devolution in Wales. The Assembly Government will need to develop stronger relationships with HMRC. An early priority would be to agree a memorandum of understanding to set out how a devolved tax regime would be implemented.

Reflecting devolved expenditure in UK statistics

9.19 The national accounts represent the main system for organising and articulating economic information for the UK. They include estimates of the UK domestic and national product, income and expenditure. Separate accounts are compiled for the different sectors of the economy: non-financial and financial corporations, general government, households, and the rest of the world. The general government sector is further split into central and local government. The National Assembly and the other devolved administrations are currently included in the central government sector. The European System of Accounts, which provides the framework for the national accounts, includes provision for a third tier of “provincial” government between central and local government. Following devolution, there are now three tiers of government in Wales, Scotland, and Northern Ireland. The circumstances of these institutions meet the requirements laid down in the European System of Accounts, and also in the OECD Standardised National Accounts system to be counted as a state or provincial tier. The situation should be properly reflected in the UK national accounts by taking the devolved administrations out of the central government sector and including them in a new “provincial” government sector. This development would allow the transactions involving the devolved administrations to be separately identified, including the transactions between those administrations and the UK Government.

Recommendation - improved statistics

The Assembly Government should seek modification of the UK’s national accounts to include a “provincial” tier of government spending. This reform would ensure that official statistics reflect the reality of devolved government and would help clarify the distinction between expenditure by UK Government departments and by the devolved administrations.

Need for a referendum

9.20 It is for Ministers to decide whether the proposals in this report would require a referendum to be won before they could be implemented, or whether public endorsement of a manifesto pledge in an election would be sufficient. We can only offer some reflections on the likely impact of our recommendations on the Welsh budget and on the relationship between the Assembly Government and the citizens it serves. A referendum could be held on the principle of tax-varying powers or on a

specific set of proposed tax powers. Welsh practice has tended to be to hold referenda on a specific set of limited proposals rather than on broad principle as in the Scottish case. We express no view on that other than to note that the Welsh approach tends to mean you have to have more referenda to get to the same place.

9.21 There is no suggestion that a referendum would be required to endorse devolution of borrowing powers. The purpose of enabling Welsh Ministers to borrow is to enhance their ability to manage financial resources over time. Borrowing powers have little impact on the accountability of the devolved institutions to the citizens of Wales. Moreover, constitutional precedents confirm that a referendum is unnecessary. Borrowing powers were given to the Northern Ireland Assembly without a referendum, and the former UK Government proposed to pass borrowing powers to Scotland without seeking endorsement of its plans through a referendum. An additional consideration is the fact that the Assembly Government already has limited borrowing powers (see Annex 6).

9.22 Powers to alter the structure of council tax in Wales are already devolved, so if Welsh Ministers were minded to add extra property bands or to revise the frequency of revaluations no referendum would be necessary. More fundamental reform to the council tax regime may be beyond Ministers' current powers and therefore could require primary legislation. However, previous large changes to local government taxation at the UK level have not required endorsement in a referendum.

9.23 If a referendum on broad principle is excluded, it seems unlikely that a referendum would be required for the specific devolution of stamp duty, capital gains tax on land and property, landfill tax or aggregates levy to Wales. Transferring those powers from the UK to the Welsh level of government would not fundamentally alter the relationship between the citizen and the devolved administration. The amount of money raised by those taxes is small (approximately 2.5 per cent of the current Welsh budget), so the block grant would continue to account for the vast majority of the Assembly Government's resources even if all of them were devolved. Moreover, each tax relates to an issue where responsibility already lies primarily with the Assembly Government. Devolution of those limited tax varying powers would result in a deepening rather than a broadening of the Assembly Government's remit.

9.24 Precedent implies that the proposed mechanism for introducing new taxes would also not appear to require a referendum. This incremental approach to acquiring tax-varying powers is very similar to the existing system of LCOs by which limited legislative powers are devolved to Wales at the request of the National Assembly and with the consent of the UK Parliament. The LCO system was introduced as part of the Government of Wales Act 2006 without requiring a referendum.

9.25 Devolution of powers over income tax would represent a major shift in the relationship between the citizen and the devolved administration, and would also have very substantial budgetary impact. If our recommendations were implemented, around 15 per cent of the Welsh budget would be obtained from Welsh income tax revenues. Although it is not ultimately a matter for us, it appears likely that devolution of powers over income tax would take place only after a referendum. Wales has never had, as Scotland did in 1997, a referendum on the principle of tax-varying powers and,

without that, devolving income tax may be too big a change to make without public endorsement.¹²⁰ If Ministers come to that conclusion, future UK legislation for income tax devolution to Scotland could contain clauses that would allow for devolution of income tax powers to Wales in line with our recommendations, but which would only be activated in the event of a positive referendum vote.

Conclusions: fairness and accountability

9.26 Two themes have come to dominate this report: fairness and accountability. The existing system of devolved finance has its virtues, but we consider that it has two great failings. First, it does not ensure horizontal equity among the nations of the UK and the regions of England; in a word it is unfair. Second, it has created public bodies with massive vertical imbalances in their finance; they have to spend billions of pounds of public money but they are not responsible for raising one penny of it. Experience and theory together argue that is not a situation in which public money is best spent.

9.27 It is easy enough to diagnose the failings of the current regime and we do not think reasonable people would waste much time attempting to deny them. Reform can only be opposed on the grounds that nothing better is available that would not raise worse problems. To hold such a view, we assert, it is necessary to be a monumental pessimist. One is reminded of the remark attributed to the Duke of Wellington among others: "Reform, reform? Aren't things quite bad enough already?" Much of this report has been devoted to demonstrating that change that removes the failings is possible in Wales, if the people want it.

9.28 It is important to emphasise that our proposals for fair funding are not simply a ruse by which we hope to secure additional resources for Wales. We have tried hard, both in this report and in our previous publications, to avoid any suspicion of special pleading. We maintain that a strong link between the relative needs of the devolved administrations and the block grants they receive from the UK Government is essential for any devolved system of finance to retain public and political support. That support is the only basis for further development or for ensuring that public services are funded equitably in all parts of the UK.

9.29 It is also worth re-stating that our recommendations for devolution of limited new fiscal powers to Wales are designed to go with the grain of the existing constitutional settlement. While we make no claim to constitutional expertise, we believe that almost all of our recommendations could be introduced without fundamentally altering the constitutional status of the Assembly Government and the National Assembly. We have not, for example, considered options that would move Wales substantially towards (or further away from) independence than it is at present. We therefore hope that our proposals for fiscal devolution will be judged by the extent to which they enhance accountability in a practical way, and not by whether they move Wales towards some hoped-for or feared constitutional destination.

¹²⁰ A recent report by the House of Lords Select Committee on the Constitution concluded that referendums should only be used to address "fundamental constitutional issues". The Select Committee did not attempt to provide a precise definition of a "fundamental constitutional issue" but listed the following examples: "To abolish the Monarchy; To leave the EU; For any of the nations of the UK to secede from the Union; To abolish either House of Parliament; To change the electoral system for the House of Commons; To adopt a written constitution; and To change the UK's system of currency" (House of Lords Select Committee on the Constitution, 2010 p.27). While these appear significantly more far reaching than any of the changes proposed in this report, it may be that, in a Welsh context, devolution of income tax could meet the criterion of being a "fundamental constitutional issue"

9.30 We do not suppose that the changes we recommend can all be rapid. On the fairness issue, we believe we have demonstrated that a simple, serviceable needs-based formula can be derived from existing practice to replace Barnett. Yet we acknowledge that the political obstacles are considerable and negotiation on detail could be time-consuming. That is why we proposed an interim solution of a “floor” and even that has not been immune to fear of political repercussions, although it implies relatively tiny changes to the status quo.

9.31 On the accountability issue there are legitimate reasons for the lead time for change to be even longer. Proper accountability, we argue, requires a measure of tax devolution; there we concur with the Calman Commission in Scotland. Establishing the practicalities of tax accounting and collection will require detailed work. It seems likely that preparing legislation on Calman consequently will take some time and implementation may not follow immediately on the passage of a Parliamentary Bill.

9.32 Wales, therefore, has opportunity for reflection. It must decide, broadly, what possibilities it wishes to have open by the time that Calman legislation is before the House of Commons. That would permit appropriate enabling clauses for Wales to be included in the legislation. A further period of preparation and publicity would then be necessary to air the issues and frame any question(s) to be put to the Welsh people in a referendum. The fruits of this report, if it bears any, are unlikely to be harvested before the Assembly session that begins in 2015. We hope nonetheless that the harvest will come and will be judged a good one.

Annex 1

Recommendations from the Commission's final report

Overview

A1.1 This Annex lists the recommendations made by the Commission in its final report.

Needs-based formula (Chapter 3)

A1.2 The Assembly Government should pursue the introduction of a simple needs-based formula as the means of determining the Welsh block grant.

Income tax (Chapter 6)

A1.3 The Assembly Government should acquire limited powers to vary income tax rates in Wales.

- i) The basic and higher rates of income tax in Wales should be reduced by ten pence, 20 pence and 25 pence. The block grant should be reduced by an equivalent amount in the first year of the new system. In subsequent years, the size of the block grant reduction should be recalculated to reflect the growth of the relevant income tax bases across the UK as a whole.
- ii) The National Assembly should vote annually to set Welsh income tax rates, which would be additional to the reduced UK rates that would apply in Wales.
- iii) Welsh Ministers should ideally be able to vary separately all rates of Welsh income tax. Income tax rates in Wales should be allowed to vary by no more than three pence relative to the prevailing rate in the UK. If this recommendation is not accepted, a second best alternative would be to devolve powers to vary only the basic rate.
- iv) The UK Government should retain responsibility for income tax on savings and distributions, and for designating income tax bands, allowances and thresholds.

Corporation tax (Chapter 7)

A1.4 The Assembly Government should seek discussions with the UK Government and the other devolved administrations about the feasibility of devolving corporation tax. Any specific proposal will need evaluation to ensure its compatibility with European law, notably the question of whether any UK-wide agreement on limits to rate changes would be permissible. It is clear that the full budgetary impact of devolved corporation tax must fall on the Assembly Government. This would introduce substantial volatility into the Welsh budget.

Property taxation (Chapter 7)

A1.5 Stamp duty land tax should be devolved to Wales, provided a fair offset to the block grant can be negotiated. Once devolved, Welsh Ministers should be given control over all aspects of the tax, making it possible to reform its structure.

A1.6 The administrative costs of devolving capital gains tax on property and land should be explored with HMRC. If administrative costs are not prohibitive, then it should be devolved to Wales, provided a fair offset to the block grant can be negotiated.

A1.7 The Assembly Government should consider the reform of council tax by investigating (i) the introduction of additional bands covering high value properties and (ii) the scope to undertake more frequent revaluations of the housing stock.

A1.8 Local authorities should be given discretion to levy a higher council tax on second homes.

Minor taxes (Chapter 7)

A1.9 The Assembly Government should undertake an assessment of the usefulness of landfill tax, air passenger duty and aggregates levy as policy instruments, in the light of Ministerial objectives in those matters. If it is concluded that the taxes would provide Ministers with useful policy levers then they should be devolved to Wales, assuming a reasonable deduction from the block grant can be agreed.

A1.10 We are aware of the practical barriers that will have to be overcome before these taxes can be devolved. Welsh representatives should play a full part in any discussions taking place at the UK level in order to ensure that the taxes can also be devolved to Wales, if that is what Welsh Ministers wish.

New taxes (Chapter 7)

A1.11 A procedure should be confirmed to enable the UK Parliament to confer power on the National Assembly to introduce new taxes in Wales, where the Assembly requests that power.

A1.12 The resources derived from those taxes should be allocated on the principle that additional tax effort by the devolved administration should generate additional resources, whereas reduced tax effort should result in fewer resources.

Ensuring access to EYF (Chapter 8)

A1.13 The Assembly Government should seek agreement with the UK Government for an arrangement to invest EYF funds in government securities under the auspices of the Commissioners for the Reduction of the National Debt.

A1.14 This arrangement would give the Assembly Government clear property rights over unspent EYF, making it possible to save with an assurance that it will be possible to call on the resources when necessary without the need for Treasury discussion and agreement.

Borrowing powers (Chapter 8)

A1.15 Limited powers to borrow in order to finance capital expenditure should be devolved to Welsh Ministers.

A1.16 Borrowing should be undertaken via the DMO. A borrowing framework should be agreed between the Assembly Government and HM Treasury, and a ceiling should be placed on the total amount of debt that the Assembly Government should be able to carry.

A1.17 The current overdraft facility of £500 million available to the Assembly Government, combined with a rollover facility enabling deficits to persist beyond the financial year end, would be sufficient to deal with the additional volatility arising from our preferred approach to income tax devolution. The maximum allowable overdraft would need to be kept under review and may have to be adjusted over time to take account of inflation and economic growth.

Transition arrangements (Chapter 9)

A1.18 The preparatory work that is under way to implement tax devolution for Scotland should proceed on the assumption that similar tax powers could be devolved to Wales. The Assembly Government should have a seat at the table in any discussions about fiscal devolution that are taking place at UK level. Building this assumption in from the start will help minimise the implementation costs of tax devolution in Wales. The Assembly Government will need to develop stronger relationships with HMRC. An early priority would be to agree a memorandum of understanding to set out how a devolved tax regime would be implemented.

Improved statistics (Chapter 9)

A1.19 The Assembly Government should seek modification of the UK's national accounts to include a "provincial" tier of government spending. This reform would ensure that official statistics reflect the reality of devolved government and would help clarify the distinction between expenditure by UK Government departments and by the devolved administrations.

Recommendations from the Commission's first report

Overview

A2.1 This Annex outlines the recommendations made by the Commission in its first report "Funding devolved government in Wales: Barnett and beyond", published July 2009.

Ensuring that funding is aligned with needs (Chapter 3 and 6)

A2.2 In the medium term the funding arrangements for Wales should be based on relative needs.

A2.3 No further decline in relative funding per head should occur in Wales until a new funding system is in place. This could be achieved in a straightforward way by simply multiplying any positive increments allocated to Wales by 114 per cent.

Enhancing the funding flexibility available to the Welsh Assembly Government (Chapter 5)

A2.4 The Assembly Government should be able to draw forward its capital budget across the period of a spending review.

A2.5 The Assembly Government should have a free hand in accessing the EYF funds that it has accumulated in prior years, without the requirement for discussion with, and agreement from, HM Treasury.

A2.6 The Assembly Government should be able to switch funds from capital to resource budgets, provided that such transfers would not cause a breach of the UK Government's overarching fiscal rules.

Reducing the likelihood of future disputes (Chapter 5)

A2.7 Technical aspects of the operation of the Barnett Formula should be administered by an independent advisory body that is at arm's length from both HM Treasury and the Assembly Government.

A2.8 The UK Government and the Assembly Government should jointly agree a new Ministerial concordat on the detailed funding arrangements for Wales.

Improving transparency (Chapter 5)

A2.9 In order to enhance the transparency of the process by which the Assembly Government is funded, the UK Government should produce an annual publication that would enable direct comparisons between Assembly Government expenditure covered by the Barnett Formula and similar expenditure in England.

A2.10 A Treasury Minister should be invited to meet the National Assembly for Wales's Finance Committee at least once in every spending review period to discuss the funds made available to Wales.

Developments in the debate on funding devolved government since the Commission's first report

Overview

A3.1 This Annex provides additional information on the following:

- i) responses to the Commission's first report;
- ii) the report by the House of Lords Select Committee on the Barnett Formula and the former UK Government's response;
- iii) the report by the Commission on Scottish Devolution and the responses by the former UK Government and the Scottish Government; and
- iv) comparison of the main recommendations of the Commissions in Wales and Scotland.

Funding devolved government: the debate in Wales

A3.2 The Assembly Government welcomed the Commission's first report and stated its intention to pursue its recommendations with the UK Government. Following a debate on the Report that was held on 14 October 2009, the National Assembly agreed a motion that:

"the National Assembly for Wales:

- (i) welcomes the first report by the Independent Commission on Funding and Finance for Wales;*
- (ii) supports the recommendations made by the Commission; and*
- (iii) endorses the Welsh Assembly Government's intention to pursue the recommendations with the UK Government."*

A3.3 On 26 November 2009, the then UK Government responded to the first report with the following statement:

"The Government welcomes many aspects of the Holtham report, which it continues to study in detail. The new arrangements are as follows:

- the Government agrees that the Barnett formula could lead to convergence to an extent that would be regarded as unacceptable although further convergence is not currently expected in the coming years;*
- the Government will make a full assessment of the extent of convergence with consideration of Wales' position relative to other parts of the United Kingdom as part of each spending review; and*

- *following this assessment the Government would be prepared to take action if appropriate to ensure Wales is not disproportionately disadvantaged.*"

A3.4 In response, the Assembly Government stated:

"We are encouraged that the UK Government has acknowledged our concerns and the analysis in the Holtham Commission's report. We also acknowledge that they have given an undertaking - for the first time - that they would take action to prevent unacceptable convergence in devolved spending levels. We now need to discuss the practical arrangements for achieving this, even if convergence continues more slowly over the next few years.

However, as Gerry Holtham himself has pointed out, the UK Government statement only takes us part of the way towards the recommendations of the Holtham Commission, and we will continue to press the UK Government on these issues in forthcoming meetings. These include access to capital budgets, flexibility over EYF, and switching between capital and revenue.¹²¹"

A3.5 Since our first report went to press, the House of Lords Select Committee on the Barnett Formula and the Calman Commission have both published their final reports. The then UK Government responded to both, including a White Paper from the Scotland Office setting out how it planned to implement the Calman Commission's recommendations.¹²² The UK Government that was formed following the May 2010 general election has stated its intention to implement the proposals of the Calman Commission.

House of Lords Select Committee on the Barnett Formula

A3.6 The House of Lords Committee, chaired by Lord Richard, examined a range of proxies for various aspects of needs and concluded that "any well-based combination of measures would show that England and Scotland have lower overall needs than Wales or Northern Ireland. But while overall need in England is almost certainly lower than that in Scotland, the relative positions of Wales and Northern Ireland could reasonably differ depending on precisely how the different measures end up being combined". The Committee also found that "the current allocation of spending does not properly reflect this basic pattern across the devolved administrations".¹²³

A3.7 In the light of those results, the Committee concluded that the Barnett Formula should be replaced by a needs-based system for allocating resources to the devolved administrations. In addition, the Committee recommended that the operation of this new regime should be undertaken by an independent advisory body, to be called the UK Funding Commission. The Committee envisaged that the Commission "would carry out an assessment of relative need, undertake periodic reviews, and collect and publish information on an annual basis about the allocation of finance to the devolved administrations".

A3.8 The then UK Government responded to the Committee's report in December 2009. It rejected both the proposed replacement of Barnett with a needs-based system, and the recommendation to establish a UK Funding Commission. However, the then UK Government did agree to include

121 "Revenue" is a term that is often used within government to refer to recurrent expenditure.

122 House of Lords Select Committee on the Barnett Formula, 2009; Commission on Scottish Devolution, 2009; HMT, 2009b; Scotland Office, 2009.

123 House of Lords Select Committee on the Barnett Formula, 2009 p.42-43.

additional statistical material of relevance to the operation of the Barnett Formula in future editions of its publication “Public Expenditure Statistical Analyses.”

The Calman Commission’s recommendations on fiscal matters and the UK Government’s response

The Calman Commission’s recommendations on taxation¹²⁴

A3.9 A key recommendation of the Calman Commission was that there should be a substantial extension in the powers of the Scottish Government to vary income tax in Scotland. The Calman Commission recommended:

“Part of the Budget of the Scottish Parliament should now be found from devolved taxation under its control rather than from grant from the UK Parliament. The main means of achieving this should be by the UK and Scottish Parliaments sharing the yield of income tax.

- a. *Therefore the Scottish Variable Rate of income tax should be replaced by a new Scottish rate of income tax, collected by HMRC, which should apply to the basic and higher rates of income tax.*
- b. *To make this possible, the basic and higher rates of income tax levied by the UK Government in Scotland should be reduced by 10 pence in the pound and the block grant from the UK to the Scottish Parliament should be reduced accordingly.*
- c. *Income tax on savings and distributions should not be devolved to the Scottish Parliament, but half of the yield should be assigned to the Scottish Parliament’s Budget, with a corresponding reduction in the block grant.*
- d. *The structure of the income tax system, including the bands, allowances and thresholds should remain entirely the responsibility of the UK Parliament.”*

A3.10 In addition, the Calman Commission reviewed the range of taxes that are currently collected by HMRC in Scotland, and considered whether each could be devolved. The Calman Commission concluded that:

“Stamp Duty Land Tax, Aggregates Levy, Landfill Tax and Air Passenger Duty should be devolved to the Scottish Parliament, again with a corresponding reduction in the block grant.”

A3.11 The Calman Commission also addressed the capacity of the Scottish Government to introduce new taxes that are not currently levied. The Commission recommended that:

“The Scottish Parliament should be given a power to legislate with the agreement of the UK Parliament to introduce specified new taxes that apply across Scotland. The new procedure we are recommending in Part 4 of our Report for the Scottish Parliament to legislate on reserved issues with the agreement of the UK Parliament could be used for this.”

¹²⁴ Commission on Scottish Devolution, 2009 p.10.

The Calman Commission's recommendations on borrowing¹²⁵

A3.12 The Calman Commission proposed the devolution of additional powers to borrow:

"Scottish Ministers should be given an additional power to borrow to increase capital investment in any one year. There should be an overall limit to such borrowing, similar to the Prudential regime for local authorities. The amount allowed should take account of capacity to repay debt based on future tax and other receipts. Borrowing should be from the National Loans Fund or Public Works Loan Board."

The Calman Commission's recommendation on the block grant¹²⁶

A3.13 The Calman Commission took the view that the block grant element of the Scottish budget should be based on needs, but made no detailed recommendations about how this should be brought about. The Commission recommended:

"The block grant, as the means of financing most associated with equity, should continue to make up the remainder of the Scottish Parliament's budget but it should be justified by need. Until such times as a proper assessment of relative spending need across the UK is carried out, the Barnett formula should continue to be used as the basis for calculating the proportionately reduced block grant."

The former UK Government's response on taxation

A3.14 In its White Paper "Scotland's future in the United Kingdom", the former UK Government endorsed most of the recommendations for devolution of additional powers over taxation, with caveats. The White Paper accepted the principle of income tax devolution, but said that this would be undertaken through a staged approach. Initially, transitional arrangements were to be put in place. The White Paper provided no firm timescale for moving beyond the transitional arrangements. It envisaged "a move to the full model proposed by the Calman Commission as soon as economic and fiscal circumstances permit." It did not provide detail on how the "full model" would differ from the transitional arrangements.

A3.15 The White Paper accepted the principle that landfill tax, aggregates levy and stamp duty land tax should be devolved to Scotland, although it noted:

"The detailed mechanism and timing of implementation of each will need to be carefully assessed in the light of state aid and competition issues, in consultation with the European Commission; and of the need to minimise any economic and delivery risks. Aggregates levy carries particular state aid issues, as well as scope for 'cross-border' market distortion of the aggregates market, which will need to be worked through in full before introduction."¹²⁷

¹²⁵ Commission on Scottish Devolution, 2009 .p.11.

¹²⁶ Commission on Scottish Devolution, 2009 .p.10.

¹²⁷ Scotland Office, 2009 p.11.

A3.16 The former UK Government rejected the recommendation that half of the revenue raised by income tax on savings and distributions should be assigned to the Scottish Parliament with a corresponding reduction in the block grant. The White Paper noted that this would create "difficult operational complications without genuinely improving financial accountability". The proposed devolution of air passenger duty was also rejected on the grounds that "state aid rules, competition considerations and international aviation agreements restrict its ability [to do so]."¹²⁸

The former UK Government response on borrowing

A3.17 The former UK Government accepted the principle of devolving borrowing powers to Scotland, but with the very significant constraint that borrowing would have to be repaid by setting Scottish taxes above UK rates.

The former UK Government response on the block grant

A3.18 The White Paper rejected the proposal to determine the block grant element of the Scottish budget by using a formula that is based on needs.

The position of the new UK Government

A3.19 Following the May 2010 general election the new government's first Queen's Speech included a commitment to bring forward legislation to implement the recommendations of the Calman Commission.

The position of the Scottish Government

A3.20 The Scottish Government is in favour of Scottish independence. In November 2009 it published a White Paper that proposed to hold a referendum on this issue, followed by a draft bill in February 2010.¹²⁹

A3.21 The Scottish Government has also published a response to the Calman Commission, stating its position in respect to each of the main recommendations. Overall, the Scottish Government viewed the Calman Commission's proposals as "a messy fudge" whose "arbitrary nature are subject to a number of significant flaws which make them demonstrably inferior to the fiscal levers available to an independent country". Of particular concern was the risk that the Calman Commission's proposals on tax devolution would "expose the Scottish budget to a significant degree of volatility, without appropriate policy levers or administrative procedures to mitigate these effects".¹³⁰

A3.22 The Scottish Government stated that the proposal to devolve responsibility for stamp duty, land tax, aggregates levy, landfill tax and air passenger duty "could be a positive development which would give the Scottish Government additional economic levers". It did not accept the proposed enhancement to borrowing powers should be restricted to capital spending, but argued that "the general concept of allowing the Scottish Government the opportunity to borrow is one that should be taken forward".¹³¹

¹²⁸ Scotland Office, 2009 p.11.

¹²⁹ Scottish Government, 2010.

¹³⁰ Scottish Government, 2009 p.7.

¹³¹ Scottish Government, 2009 p.6.

Table A3.1: Summary of the main differences in the tax recommendations of the Commission on Scottish Devolution and the Independent Commission on Funding and Finance for Wales

Calman Commission proposal for Scotland	ICFFW proposal for Wales	Reason for difference
Income tax		
A flat rate of ten pence across all income bands should be devolved.	Half of all bands should be devolved. Recommendation: ten pence of the basic rate, 20 pence of the higher rate and 25p of the new top rate should be devolved.	Devolution of the same proportion of each rate provides the right incentives for the devolved government to develop its tax base and avoids the appearance of regressivity in the event of an increase in the Welsh basic rate alone (see paragraphs 6.45-6.48). No way of determining the optimal amount of income tax to be devolved, therefore the simplest approach is to share revenues equally between Welsh and UK levels of government.
Changes to the flat rate tax would apply uniformly across all income bands.	Powers over all rates should be devolved, but they should be able to be altered separately, within the constraint of varying by no more than +/- three pence of the equivalent UK rate. If the powers to vary rates separately are not granted, a fallback position would be to devolve powers over basic rate only.	Changes to a flat rate tax would have substantial and unlimited impacts on high income tax payers, increasing the risk of a migration response. This could deter the devolved administration from using its tax varying powers. Variation with the UK should be constrained so as to limit the risk of tax policy changes in Wales impacting on the UK tax base (see paragraphs 6.33-6.39).
Interaction of devolved tax revenues with the block grant		
PD model to be used for all taxes.	ID model for income tax, case by case consideration for other taxes.	If applied to income tax, the PD model would expose the Welsh budget to significant cyclical risk. UK policy risk would also be substantial and difficult to manage. Use of the ID model would avoid those drawbacks (see paragraphs 6.40-6.44). The appropriate budgetary offset for other taxes will depend on an assessment of the growth of the tax base, their volatility, the terms on which they are offered for devolution by the UK Government and non-financial factors such as the extent to which a tax is valuable as a policy lever.

Assessing relative needs: supplementary information and analysis

Overview

A4.1 This Annex provides additional information on the methodology followed by the Commission in assessing relative needs, including:

- i) selection of needs indicators;
- ii) statistical methods;
- iii) transition mechanisms; and
- iv) possible modifications for the formula.

Introduction

A4.2 The key to developing a funding formula based on a small number of needs variables lies in determining the importance of each variable in the overall allocation of funds. We have adopted an empirical approach to this issue by estimating how much variation in current expenditure allocations across geographical areas is explained by the indicators.

Defining localities

A4.3 HM Treasury publishes detailed public expenditure statistics for the three devolved administrations and the nine English regions. However, the variation in expenditure allocations across those 12 areas does not provide enough information to estimate the relative importance of the needs indicators. There are also complications in identifying expenditure programmes which are devolved and are therefore covered by the block grant.

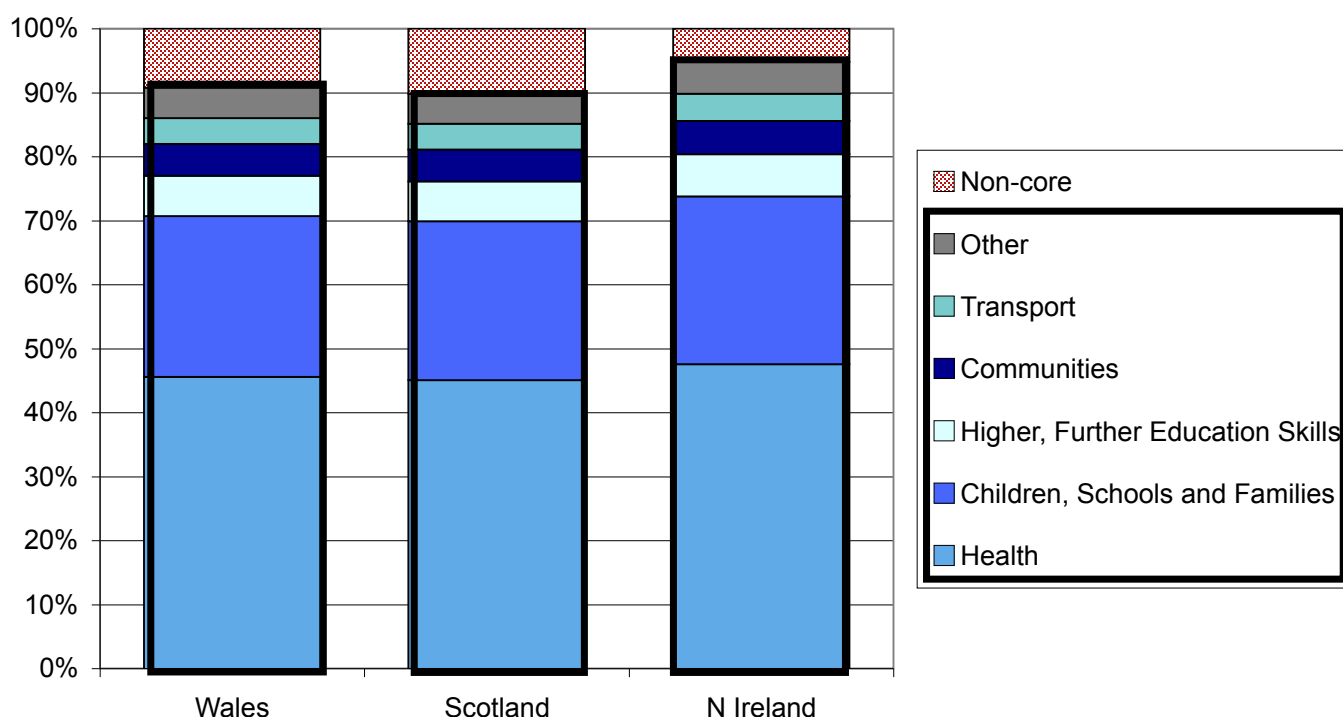
A4.4 Instead, we have used expenditure allocations across major devolved programmes where budgets are determined at a lower geographical level. Specifically, for England, we have combined National Health Service, Local Government, Schools grants, Sure Start and Supporting People for 2010-11. Those are determined at Primary Care Trust, Local (Unitary) Authority and Local Education Authority level respectively. Some areas have had to be combined in order to produce a set of geographies for which expenditure allocations can be identified across all three programme areas. Overall this enabled us to derive a consistent set of allocations across 137 areas in England. We have also compiled expenditure allocations for geographical areas in Wales and Scotland across comparable functions. There are eight areas in Wales and 14 in Scotland. The number of areas roughly reflects each country's relative population size compared with England.

Applicability to devolved budgets

A4.5 The UK operates a system of asymmetric devolution, with a different range of public services under the control of the devolved administrations in each country. The programme areas covered by our approach (health, local government and schools) account for around 80 per cent

of devolved services in Wales. The equivalent proportions for Scotland and Northern Ireland are around 70 and 75 per cent respectively. Our analysis therefore generates a somewhat more accurate estimate of relative needs for Wales than it does for the other devolved administrations. While there is some variation in the coverage of our formula across the devolved countries, it is worth noting how similar the overall scope of devolution is in each country, in terms of budgetary responsibilities. Those responsibilities can be categorised into core and non-core functions, where core functions are those that are devolved in all three countries. Chart A4.1 shows that, despite the differences in devolved responsibilities, core functions account for 90 per cent or more of the English expenditure programmes for which each nation receives Barnett consequentials.

Chart A4.1: Percentage of core and non-core functions in each devolved administration, by country



Source: Commission calculations

Choice of needs indicators

A4.6 The number of variables that could arguably be said to capture some aspect or other of need is very large. When identifying an appropriate set of needs indicators for use in our analysis, we focused our search on those general needs indicators with which more detailed indicators are correlated and which would be relevant to more than one public service. The indicators are associated with demographics, deprivation and cost, which are the main dimensions of need that are relevant to the demand for devolved public services. In addition, we considered only variables that are:

- available on a consistent basis across the UK;
- not under the direct influence of any devolved administration;
- simple to understand;

- measured to a high degree of accuracy; and
- subject to periodic review.

A4.7 As further constraints, we stipulated that when combined in a regression, each indicator should be statistically significant and that the sign of the estimated coefficient on each term should be consistent with “common sense” expectations. For example, higher deprivation would be expected to lead to an increased need to spend on devolved services, and therefore an indicator of deprivation should have a positive coefficient in the regression.

A4.8 The indicators used in our analysis are consistent with those criteria, although we are aware that the criteria are not sufficiently restrictive to define a unique set of indicators. We have not undertaken an exhaustive search of all possible combinations of needs indicators that could fulfil our criteria. In the specification search that we did conduct, the selected regression had the best fit of those which fulfilled all the other criteria. We are confident that a different set of indicators that met each of our selection requirements and explained an equal amount of variation in spending allocations would not generate an estimate of Welsh relative need that was substantially different from the one presented in this paper.

Adjusting the expenditure data: (i) damping mechanisms

A4.9 The purpose of this exercise is to generate an unbiased estimate of relative need to spend on devolved public services that is grounded in the budgetary allocations made across Wales, England and Scotland. In order to do this, an adjustment has to be made to the “raw” expenditure data that are obtained from the needs-based funding formulae currently in use. Wherever possible we have removed the impact of smoothing or damping mechanisms whose purpose is to provide a transition path from historic allocations towards the needs-based funding target. We have done this because for this exercise we are interested in the assessment of relative needs provided by a funding formula, not how this interacts with historic allocations in any particular country.

Adjusting the expenditure data: (ii) accounting for variations in taxable capacity

A4.10 The local government funding regime is devolved in each country, and takes account of the varying ability of local authorities to raise their own resources via council tax. The expenditure data we are analysing therefore includes an adjustment for taxable capacity. However, this adjustment is not undertaken on a consistent basis across countries. As stated in the main paper, we have not made any adjustment to the formula allocations to reflect variations in taxable capacity, beyond those included in the allocation formulae of each nation. We have simply taken the funding allocations generated by the formulae (net of damping mechanisms) to derive our measures of relative needs for each country. This preserves the simplicity of our approach and also ensures that the results are clearly derived from the ‘revealed preferences’ of actual budgetary allocations.

A4.11 However, in our view the needs-based funding regime for the devolved administrations should assess variations in the ability of each nation to raise its own resources in a consistent way.¹³² A practical way of reflecting this principle would be to proceed by assuming that each country makes an equal tax effort relative to current property prices. Such an approach could be incorporated within

¹³² A consistent way of measuring tax capacity becomes all the more important if sub-national authorities are given the power to levy their own taxes.

our methodology by adjusting the part of each country's local government funding formula that takes account of local taxable capacity.

A4.12 The inclusion of an adjustment for variations in taxable capacity relative to house prices would increase the relative needs of the devolved administrations: for Wales relative needs increase from 115 using unadjusted data to 116 when the adjustment is included, while for Scotland and Northern Ireland the figures move from 105 to 106 and from 121 to 124 respectively. In our view, a strong case could be made that such an adjustment gives a purer estimate of relative need than is obtained by basing the analysis on unadjusted expenditure data. However, on the grounds of simplicity, and to avoid any suspicion of special pleading, we focus on the results derived from the unadjusted data.

Formula results

A4.13 A cross-sectional multiple regression analysis was carried out for the 159 geographical areas referred to above. The overall expenditure allocation per head of the population was used as the dependent variable, expressed as a proportion of the average allocation per head for England (with England=100). The high level need proxies described in Table 3.1 were included as explanatory variables. Those were also expressed as proportional differences from the England average. The results of this regression are set out in Box A4.1. All of the need proxies are assigned weights which are significant at the 95 per cent level. In other words, all of the need proxies are found to explain a statistically significant part of the variation in expenditure allocations across the 159 geographical areas. Overall, the need variables were found to explain over 95 per cent of the variation in expenditure allocations per head across Great Britain on the programme areas covered.

A4.14 In addition to the needs variables described in Table 3.1 and in Box 3.1, there were two additional dummy variables applied to all Welsh and all Scottish areas respectively. Those dummies were included for two reasons.

- i) Firstly, the allocations for Welsh and Scottish areas are subject to a different overall budget constraint from those for English areas. The current block grants to the devolved countries are not based on an assessment of need but on the accumulated application of the Barnett Formula. In addition, within their overall block grant, the Welsh and Scottish Governments are free to make bigger or smaller allocations to those functions taken together than the UK government does for England.
- ii) Secondly, the exact programme coverage of National Health Service (NHS), local government, and schools grants will vary across the three countries. For example, in Wales the NHS allocations do not include the programmes covered by Health Commission Wales, as those are budgeted on an all-Wales basis. Any such variation will be captured by the dummy term.

Box A4.1: Simple needs-based formula

Spend per head	= 99.6 + 0.19 Under 16 dependency ratio	(4.73)
	+ 0.06 Pensioner dependency ratio	(2.41)
	+ 0.32 Combined benefit rate	(9.48)
	+ 0.02 Ethnic minority rate	(4.76)
	+ 0.02 Sparsity rate	(4.36)
	+ 0.28 Limiting long term illness rate	(4.72)
	+ 0.11 Inner London areas	(5.96)
	+ 0.87 Scottish island areas	(28.2)

(t-statistics shown in brackets)

Adjusted R² = 0.962

The following variables are included in the formula as a percentage difference from the England average:

Under 16 dependency ratio - resident under 16 year old population divided by the working age population. (2008 mid-year population estimates)

Pensioner dependency ratio - resident population over statutory retirement age divided by the working age population. (2008 mid-year population estimates)

Combined benefit rate - number of key working age benefit claimants plus children in out of work families claiming tax credits plus guarantee only pension credit claimants, divided by the resident population. The number of benefit claimants is averaged over 2008. (DWP, HMRC and mid-year estimates)

Ethnic minority rate - number of non-white residents as a percentage of the whole population. (Census 2001)

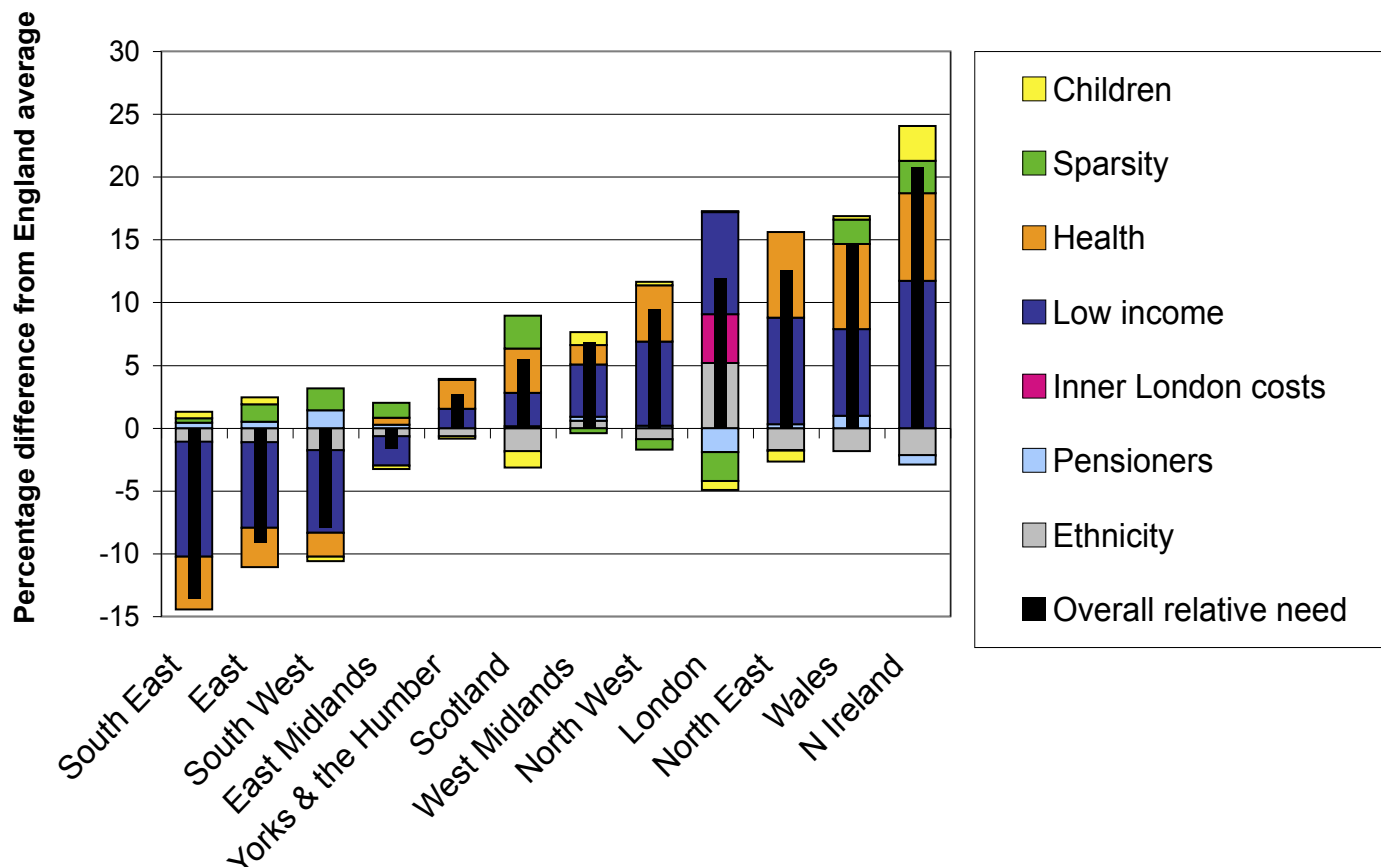
Sparsity rate - Number of people living outside settlements of 10,000 or more as a percentage of the whole population. (Census 2001)

Limiting long term illness - Age-standardised number of residents with a limiting long term illness as a percentage of the whole population. (Census 2001)

A4.15 The two area-based variables for Inner London and the Scottish Islands are dummy indicators. The reported results for Wales and Scotland exclude the weights attributed to those dummy variables. They therefore reflect relative need across the geographical areas in those countries, excluding the influence of differing budget constraints and programme coverage.

A4.16 Chart A4.2 shows the formula contribution of each variable to overall need for the English regions as well as the devolved countries, this is an expanded version of Chart 3.2 in the main text. Overall relative need per head in Wales is close to that in the North East of England, although a little higher because of greater sparsity and a higher proportion of children and pensioners.

Chart A4.2: Weighted expenditure need per head by need factor, difference from England average



Source: Commission calculations

A4.17 Detailed statistics relating to the regression analysis are included at the end of this Annex.

Possible modifications to the formula

A4.18 As noted in Chapter 3, there are alternative procedures for determining relative need. An adjustment to reflect local tax capacity has already been discussed above. In addition, needs associated with the Welsh language could be recognised in the formula. Two approaches to this are outlined in Chapter 3; including an estimate of people who speak Welsh as a first language in the ethnicity variable and replacing the ethnicity variable with the census language needs indicator (again including Welsh language speakers).

A4.19 Regressions with the two language-related adjustments both yielded adjusted R² statistics of around 0.96, as with the main regression. There was also little change to the coefficients of the explanatory variables. Both of those regressions result in relative need per head in Wales of 116 with England = 100.

A4.20 Combining the two Welsh language adjusted regressions with the local tax capacity adjustment gave rise to relative need in Wales of 117 in both cases. The adjusted R^2 statistic remained at 0.96 using the ethnicity variable but fell slightly to 0.95 using the Census language needs indicator. In the latter case two of the coefficients on explanatory variables also lost significance.

A4.21 More work would need to be done to fully investigate those alternative formulae. However, they demonstrate that there are formulae which suggest higher relative need in Wales than our main regression and which have very similar explanatory power with respect to variations in expenditure allocations between areas in Britain.

Transition mechanisms

A4.22 Our proposed transition mechanism takes a simple linear form:

$$\text{Annual adjustment} = 1/T (\text{needs target} - \text{funding at start of spending to block grant review}) \quad (\text{A4.1})$$

A4.23 If such a mechanism were introduced for Wales from the beginning of the next spending review period in 2011-12, it would operate in the following way:

- The funding gap would be estimated on the basis of relative funding in 2010-11.
- Assuming a needs target of 115 (with England=100) and funding per head in 2010-11 of 112, the funding gap would be 115-112, or £3 per head for every £100 spent in England on devolved services. This equates to around £400 million, given a block grant of some £15.5 billion in 2010-11.
- Equation A1 allocates a proportion, depending on the parameter T, of this funding gap to the Welsh block grant each year from 2011-12 to 2013-14.
- In 2014-15, relative needs in Wales would be re-assessed. Any remaining or new funding gap would be treated in the same way over the subsequent spending review period. Eventually the historic gap would be eliminated.

A4.24 If a country faced a very large funding gap, any attempt to eliminate it over a short period would produce excessive budgetary instability. It would prove especially challenging under prospective conditions of budgetary stringency if the country were significantly over-funded when the new funding regime was introduced (i.e. the transition mechanism was reducing the size of the block grant). In such circumstances, we propose that the above approach should still be followed, but with an amendment - a switch to turn the adjustment off where it would lead to excessive or unmanageable cuts. Consider a case where the transition period had been set at, say, ten years. The transition mechanism could then be expressed as:

$$\text{Annual adjustment} = \text{switch} * 1/10 (\text{needs target} - \text{funding at start of spending review}) \quad (\text{A4.2})$$

Algebraic representation of the proposed new funding mechanism

A4.25 Our proposed funding formula can be expressed as:

$$\text{Change in block grant} = \text{Needs-adjusted increments} + \text{transition mechanism} \quad (\text{A4.3})$$

which can be represented algebraically as:

$$\Delta W_t = \Delta E_t N + \alpha/T (E_0 N - W_0) \quad (\text{A4.4})$$

where

W_t	=	block grant per head
E_t	=	comparable expenditure per head in England
N	=	needs factor
T	=	transition period
E_0, W_0	=	expenditure per head in England and Wales respectively at the beginning of the review period.
α	=	binary switch variable, equal to 1 normally and 0 when $\Delta E_t \leq 0$ and $(E_0 N - W_0) < 0$

A4.26 If overall spending on devolved activities were to fall in England, or fail to grow, then the transition mechanism operating on those devolved administrations in a position of overfunding should be suspended. This would avoid punitive year-on-year budgetary reductions arising from negative needs-adjusted increments combined with negative transition adjustments.

Accounting for shifts in relative population

A4.27 Relative population movements have two impacts on relative expenditure per head. A smaller relative population reduces the size of the increments but also means that the overall budget will be spread across relatively fewer people. It is therefore necessary to account for shifts in relative population in order to ensure that relative need and funding are properly aligned.

A4.28 Under our proposed approach, shifts in relative population would be taken into account every three years as part of the recalculation of relative need. Movements in relative population will in any case be relatively modest over this time scale, therefore the simplest approach is to assume fixed relative populations over each three year period in order to ensure that our formula provides predictable budgets.

Detailed regression statistics

A4.29 The statistics and charts below relate to the regression analysis underlying the simple needs formula discussed in Chapter 3 and described in more detail in Box A4.1. The dummy variables for Wales and Scotland not only represent under- or over-spending relative to needs, but also reflect

allocation and definitional differences. The Island dummy and to some extent the London dummy mean that we accept the expenditure in those areas is partly motivated by specific factors and do not allow it to over-influence the estimates of the weighting on other indicators.

Analysis of variance					
Source	Degrees of freedom	Sum of squares	Mean square error	F value	Pr > F
Model	10	7.25176	0.72518	402.67	< 0.0001
Error	148	0.26654	0.00180		
Corrected total	158	7.51830			

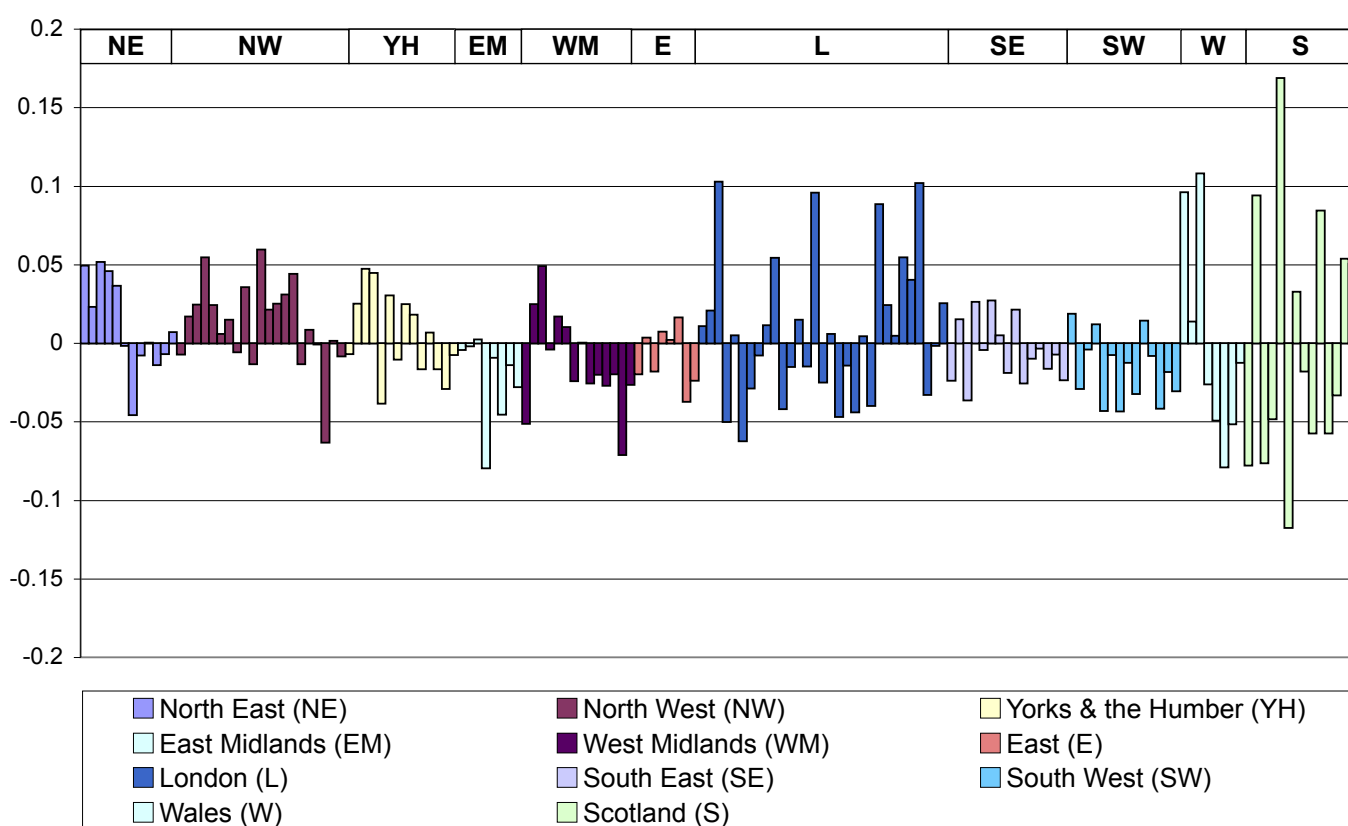
Root mean square error	0.04244	R-square	0.9645
Dependent mean	1.08346	Adj R-sq	0.9622
Coefficient of variation	3.91683		

Parameter estimates				
Variable	Parameter estimate	Standard error	t value	Pr > t
Intercept	0.996	0.004	246.09	<0.0001
Under 16 dependency ratio	0.190	0.040	4.73	<0.0001
Pensioner dependency ratio	0.061	0.025	2.41	0.0173
Combined benefit rate	0.317	0.033	9.48	<0.0001
Ethnic minority	0.024	0.005	4.76	<0.0001
Sparsity	0.023	0.005	4.36	<0.0001
Limiting long term illness	0.275	0.058	4.72	<0.0001
Inner London dummy	0.107	0.018	5.96	<0.0001
Island dummy	0.867	0.031	28.19	<0.0001
Wales dummy	- 0.072	0.018	- 4.07	<0.0001
Scotland dummy	0.218	0.015	14.45	<0.0001

Residuals

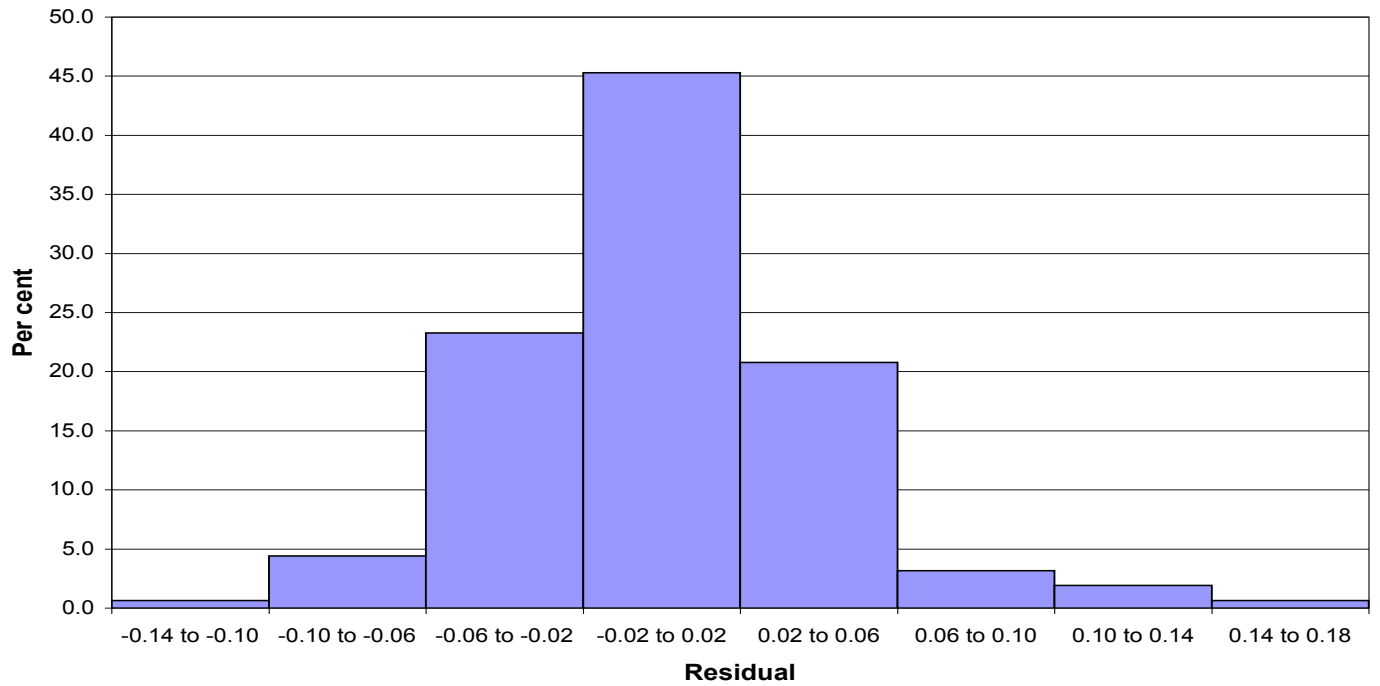
A4.30 Chart A4.3 shows the regression residuals for the 159 areas across Great Britain, colour coded by English region or devolved country. The single biggest residual is for the Highland area in Scotland, where expenditure allocations are higher than the various needs variables would suggest. It may be that the sparsity variable does not fully capture the need to spend on the small population spread across this large geographical area. In general, the residuals for individual areas tend to be larger in Scotland, Wales and London. This is not surprising for areas in the devolved countries; they are subject to different allocation formulae from those operating in England, while the English formulae will have a greater influence on the regression analysis.

Chart A4.3: Regression residuals



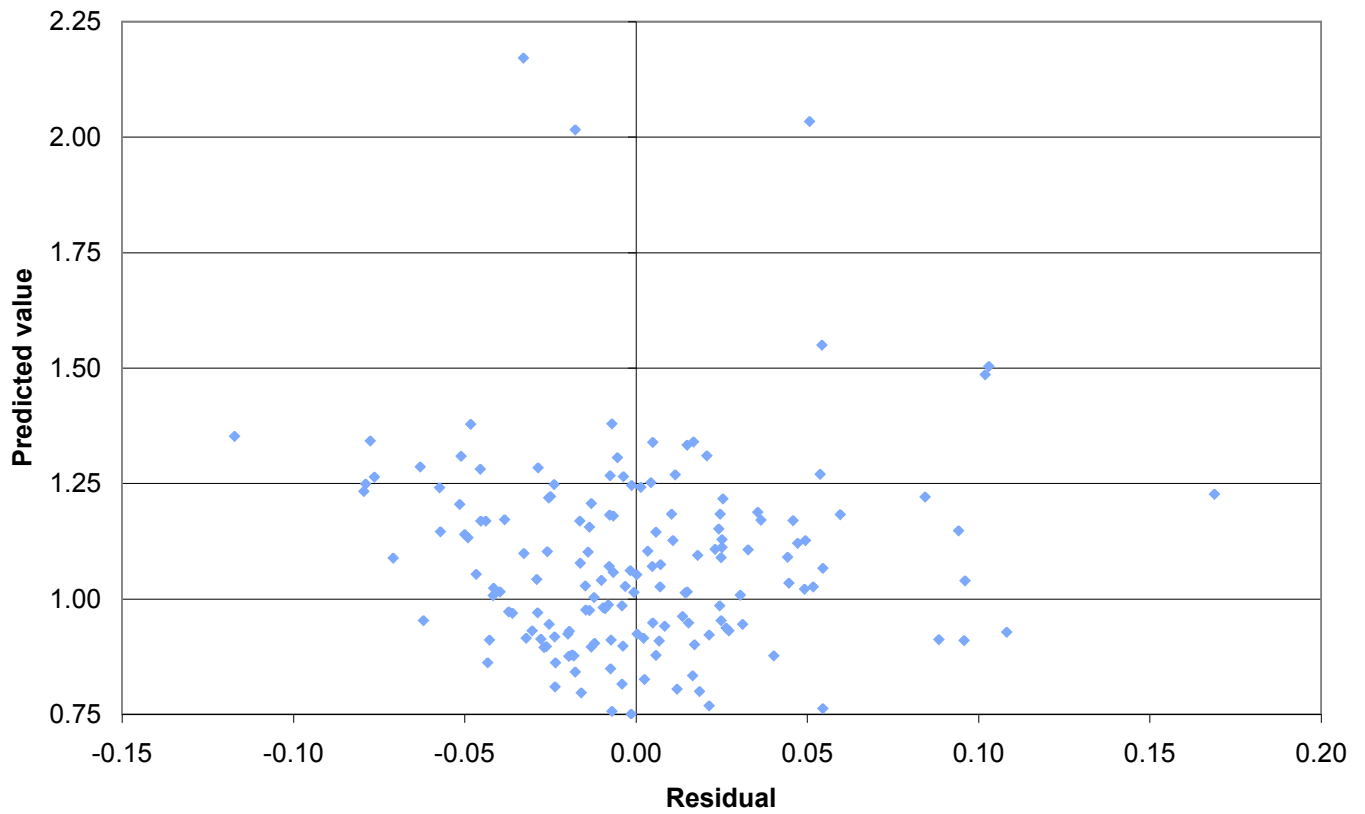
Source: Commission calculations

Chart A4.4: Residual frequency plot



Source: Commission calculations

Chart A4.5: Predicted values and residuals



Source: Commission calculations

Impact of relaxing the conservative assumptions on relative need that were made in the first report

A4.31 Table A4.1 summarises the impact of relaxing the conservative assumptions used in the assessment of relative need in our first report. The first row in the table shows the main result from the first report. Each subsequent row shows the impact of relaxing different assumptions, as described below:

- i) **Relative pupil numbers:** this alternative replaces relative need for school spending based on the defunct schools element of the English local government formula with the relative number of state school pupils per head of the population.
- ii) **Welsh language:** Welsh language need is recognised here by including an estimate of first language Welsh speakers in the old English schools formula.
- iii) **Economic development:** relative need in Wales based on its GVA per head and the regression equation illustrated in Chart 4.13 of the first report is used instead of the relative level of regional development agency funding per head in the North East.
- iv) **Transport:** the lowest of the alternative transport relative need metrics discussed in paragraphs A2.41 to A2.50 of the first report is applied to total transport expenditure, rather than average relative need across all spending areas.

A4.32 Table A4.1 shows that different combinations of those methodological adjustments lead to estimates of overall relative need per head in Wales of between 115 and 117, with England = 100.

A4.33 The relative pupil numbers and Welsh language adjustments cannot be made together because the first of these replaces the formula by which the other would operate. Apart from this, the adjustments have an additive impact on estimated relative need in Wales.

Table A4.1: Impact of relaxing the conservative assumptions on relative need that were made in the first report

Relative pupil numbers	Welsh language	Economic development	Transport	Wales relative need (England=100)
				114
√				115
	√			115
√		√		116
√		√	√	117

Source: Commission calculations

Tax devolution: supplementary information and analysis

Overview

A5.1 This Annex provides additional information on the sources, methodologies and calculations used in the discussion of tax devolution in Chapters 4, 5, and 6. The areas covered are:

- i) estimating tax receipts in Wales;
- ii) detailed income tax estimates;
- iii) estimating the impact of income tax changes in Wales; and
- iv) cases that build on the European Court of Justice's Azores judgment.

Estimating tax receipts in Wales

A5.2 This section provides details of the sources and methods used to compile estimates of tax revenues in Wales. For the most part, this relates to the information in Table 4.1. There is a separate section below on the more detailed income tax estimates referred to in Chapter 6.

A5.3 **Income tax** - aggregate income tax estimates for Wales are published by HMRC. The most recent outturn estimate, relating to 2007-08, is used in Table 4.1.

A5.4 **National insurance contributions** - there are no official estimates of national insurance contributions receipts for Wales. The figure in Table 4.1 derives from employment and self-employment income distributions published by HMRC. The parameters of the national insurance contributions system were applied to those distributions to produce receipts estimates. This result for Wales was scaled using the difference between UK estimates based on the same methodology and official UK receipts estimates.

A5.5 **Value added tax** - Wales's estimated share of aggregate UK value added tax receipts is based on Wales's share of UK household expenditure (excluding food and housing) for 2006-2008, taken from the ONS publication Family Spending 2009.

A5.6 **Corporation tax** - the estimate in Table 4.1 is based on Wales's share of UK Gross Operating Surplus in 2007, taken from the ONS Regional Accounts. This is applied to UK 2007-08 non-North Sea Corporation Tax receipts published by HMRC. The same method was used to produce the estimate for 2008-09 in Chart 7.2 labelled "GERS methodology". The estimate labelled 'businesses registered in Wales's is based on the share of UK turnover attributed to businesses registered in Wales, taken from SME statistics for 2008-09 published by the Department for Business Innovation and Skills. The third estimate in Chart 7.2 uses the same source but applies the Wales share of turnover to corporation tax receipts separately for each industry sector.

A5.7 **Fuel duty** - fuel consumption in Wales in 2007 as a percentage of the UK total was applied to overall UK fuel duty receipts for 2007-08. The fuel consumption statistics were sourced from the Department for Energy and Climate Change.

A5.8 **Alcohol and tobacco excise duties** - Wales's share of aggregate UK receipts is based on Wales's share of UK household expenditure on alcohol and tobacco for 2006-2008, taken from the ONS publication Family Spending 2009.

A5.9 **Vehicle excise duty** - the estimate of receipts from Wales is based on the percentage of licensed vehicles in Wales in 2007. The vehicle licensing statistics are published by the Department for Transport. The UK vehicle excise duty estimate was taken from Table C6 in the Budget 09 documentation published by HM Treasury.

A5.10 **Stamp duty** - land tax receipts for Wales are published by HMRC. The estimate of stamp duty receipts from securities and shares is based on the percentage of adults with shares from the ONS Individual Wealth and Assets Survey 2007. The percentage of adults with shares who live in Wales was applied to the aggregate UK receipts published by HMRC.

A5.11 **Capital gains tax** - Wales's share of receipts is based on its share of Gross Value Added in 2007, as published in the ONS Regional Accounts.

A5.12 **Betting and gaming duties** - Wales's share of aggregate UK receipts is based on Wales's share of UK household expenditure on gambling for 2006-2008, taken from the ONS publication Family Spending 2009.

A5.13 **Inheritance tax** - Wales's share of receipts is based on its share of Gross Value Added in 2007, as published in the ONS Regional Accounts.

A5.14 **Insurance premium tax** - Wales's share of total UK receipts is based on Wales's share of UK household expenditure on insurance for 2006-2008, taken from the ONS publication Family Spending 2009.

A5.15 **Landfill tax** - Receipts in Wales are based on Wales's population share.

A5.16 **Climate change levy** - Wales's share of receipts is based on its share of industrial and commercial consumption of electricity and gas, using sub-national energy consumption statistics for 2007 published by the Department of Energy and Climate Change.

A5.17 **Aggregates levy** - Receipts in Wales are based on its share of aggregates extracted in 2007, according to the UK Minerals Yearbook for 2008.

A5.18 **Air passenger duty** - Wales's receipts estimated using Civil Aviation Authority Airport Statistics, passenger analyses.

Detailed income tax estimates

A5.19 Estimates for 2009-10 of the total number of taxpayers, income and tax revenue in Wales were provided by HMRC, as shown in Table A5.1. The estimates are based on the 2006-07 survey of personal incomes (SPI) projected in line with the assumptions outlined in the Pre-Budget Report of 2009.¹³³

¹³³ HM Treasury, 2009a.

Table A5.1: Income and tax, Wales 2009-10

Parameter estimates			
Range of income (£ lower limit)	Number of individuals	Total income (£ million)	Total tax revenue (£ million)
6,475	188,000	1,560	57
10,000	339,000	4,210	327
15,000	263,000	4,560	511
20,000	306,000	7,440	1,010
30,000	92,000	2,970	444
35,000	64,000	2,400	362
40,000	42,000	1,800	281
45,000	26,000	1,210	200
50,000	40,000	2,300	463
70,000	16,000	1,320	328
100,000	10,000	1,270	364
200,000	2,000	842	287
Total	1,390,000	31,900	4,640

Source: HMRC

A5.20 The estimates provided in Table A5.1 include savings income and tax payers who are only liable for income tax based on their savings income. As explained in Chapter 6, we are recommending that income tax on savings and investments should not be devolved. This analysis therefore excludes savings income and tax payers that are only liable to income tax based on their savings income. This was done by applying the proportion of total income that was not derived from savings and investment sources in 2007-08 (the latest year available for this breakdown) by income range to the estimates in Table A5.1. Excluding tax on savings reduced the number of income tax payers to 1,370,000 and income tax revenue to £4,200 million.

A5.21 In addition to the material in Table A5.1, HMRC also provided numbers of taxpayers by their marginal rate, together with their associated income. Those estimates, combined with the method for excluding savings income described above, were used to produce the analysis in Table 6.1 of the main report.

A5.22 A more detailed distribution of income giving the number of taxpayers in smaller income bands was estimated. It was used to analyse the possible impact of migratory responses in different parts of the income distribution, as described in Chapter 6. A cubic spline interpolation was applied to data on taxpayers within broad income bands to create a smooth continuous income distribution function for Wales.

Estimates of the impact of income tax changes in Wales

A5.23 This section summaries our approach to estimating the revenue impact of changes in the basic and higher rate of income tax in Wales as outlined in Chapter 6.

Gross revenue estimates

A5.24 The gross revenue estimates of changes in income tax rates were made in line with the methodology in the tax ready reckoner and tax reliefs published by HM Treasury (2008). The gross revenue estimates were derived by applying the simulated tax rate (21 per cent for a one pence increase in the basic rate for example) to the appropriate taxable income. The estimates do not therefore include any effect the tax changes themselves have on the overall levels of income as a result of changes in the behaviour of income tax payers (this is termed the behavioural response, as discussed below).

Revenue estimates including the behavioural response

A5.25 As discussed in Chapter 4, a number of empirical studies have attempted to estimate the behavioural response following changes in marginal income tax rates. The literature provides estimates of the elasticity of income with respect to the tax rate, with different estimates applying to different income groups. Higher earners tend to have a greater elasticity than lower earners, implying that they are more sensitive to income tax changes. Those elasticity estimates are designed to capture both the income and substitution effects discussed in Chapter 6.

A5.26 The analysis in Chapter 6 estimates the behavioural response following a one pence change in the tax rate. Changes in income tax rates in the UK are traditionally referred to as changes in the number of pence in the pound that is taxed rather than a percentage increase. To estimate the behavioural response following a one pence change in the tax rate we have to apply the following formula:

$$\Delta Y = \frac{-e}{1 - METR} \quad (A5.1)$$

Where:

ΔY is the change in taxable income from a change of one pence in marginal tax rate;

e is the elasticity of income (or effort) with respect to effective after-tax wage;

$METR$ is the Marginal Effective Tax Rate which measures how much a small rise in gross earnings is lost to payments of tax and reduced entitlements to benefits.

A5.27 For most people, the $METR$ is determined by the rates of income tax and National Insurance contributions. Box A5.1 summaries the calculations used to estimate the behavioural response following a one pence increase in the basic and higher rates of income tax.

Box A5.1: Behavioural response to a one pence increase in income tax rates**Increase in the basic rate of one pence**

The empirical literature suggests that for low to middle income individuals the elasticity of income with respect to the tax rate is around -0.25.

The METR for basic rate tax payers is 38.8 per cent. This is calculated by combining the marginal basic rate of tax (20 per cent), the employee national insurance contribution rate (11 per cent) and the employer national insurance contribution rate (12.8 per cent), and dividing by one plus the employer national insurance contribution rate.

Therefore, following a one pence increase in the basic rate of income tax, taxable income is estimated to fall by 0.4 per cent ($-0.25/(1-0.388)$).

Increase in the higher rate of one pence

The empirical literature estimates that for high income individuals the elasticity of income with respect to the tax rate is around -0.50.

The METR for higher rate tax payers is 47.7 per cent. This is calculated as for the basic rate tax payer, but the marginal rate of income tax is 40 per cent and the marginal employee national insurance contribution rate is one per cent.

Following a one pence increase in the higher rate of income tax, taxable income is estimated to fall by around one per cent ($-0.5/(1-0.477)$).

Revenue estimates including the migration response

A5.28 The methodology applied to estimate the possible migratory response is described in Chapter 6. An obvious implication of migratory flows from Wales to the rest of the UK is that income tax revenues increase wherever the former Welsh residents decide to relocate. The estimated positive impact on UK income tax revenue estimates quoted in the main report assume that Welsh residents relocate to England and that their income remains at the same level (that is relocation does not result in a rise or fall in taxable income).

The Azores Judgment: subsequent rulings

Joined Cases T-211/04 Government of Gibraltar -v- Commission and T-215/04 United Kingdom -v- Commission) the "Gibraltar case"

A5.29 In 2002, the Government of Gibraltar announced its intention to repeal all its corporate tax laws and introduce an entirely new corporate tax regime for all companies in Gibraltar. The new regime consisted of a payroll tax, a business property occupation tax and a registration fee, together with a top-up tax on profits generated by financial services and utilities companies. Companies would be liable to pay payroll tax and Business Property Occupation Tax only if they made a profit, and in an amount not exceeding 15 per cent of profits.

A5.30 The EC declared that the proposed reform constituted a scheme of State aid that was incompatible with the common market. It was considered to be regionally selective because, in the Commission's view, it provided for a system of corporate taxation under which companies in Gibraltar were taxed, in general, at a lower rate than those in the UK. Both the Government of Gibraltar (in Case T-211/04) and the UK (in Case T-215/04) sought the annulment of the Contested Decision before the Court of First Instance.

A5.31 The Court of First Instance annulled the contested decision, finding (inter alia) that as regards the alleged regional selectivity, that the EC's conclusion was vitiated by an error of law and of assessment. Due to the clear status of Gibraltar, there are few points which illustrate the practical application of the three-part Azores test.

Institutional autonomy

A5.32 It was acknowledged by the principal parties that the competent Gibraltar authorities have a political and administrative status separate from that of the central government of the UK.

Procedural autonomy

A5.33 The salient facts are:

- i) company taxation falls within the category of defined domestic matters;
- ii) Gibraltar's legislature have the power to make laws for the peace, order and good government of Gibraltar - includes tax measures;
- iii) in practice Bills are passed by House of Assembly and assented to by the Queen or Governor on behalf of the Queen;
- iv) the Governor may withhold his assent or reserve certain bills for decision by the Queen;
- v) the Governor may introduce bills under certain conditions and in the interests of maintaining the financial and economic stability of Gibraltar; and
- vi) the UK retains a residual power of last resort to legislate for Gibraltar but it has only been exercised exceptionally and never in matters of taxation.

A5.34 The Court of First Instance decided that the Governor's power to assent/introduce bills could not be equated to "direct intervention" of "central government" despite the fact that he is appointed by the Queen because the case files did not show that to be so. The residual power to legislate and Governor's powers were interpreted in the light of the status of Gibraltar as a colony for whose external relations the UK is responsible. They existed to enable the UK to perform its obligations under international law - not to intervene directly as regards the content of a tax measure. This was underlined by the fact that the powers have never been used in practice.

A5.35 It was undisputed that the Gibraltar tax reform was in fact devised by the Gibraltar authorities without the intervention of the UK authorities.

Economic and financial autonomy

A5.36 The EC contended that the third condition implies that no assistance is even potentially available to the infra-state body to offset the effect of its decisions in relation to tax, i.e. that there is no need for a causal link between a measures reducing taxes and a subsidy from central government

(or another region). The Court of First Instance rejected this position on the grounds that, inter alia, it is difficult to conceive of an infra-state body which does not receive any financial support in whatever form from central government.

The current position in relation to the case law

A5.37 The EC has appealed against the Gibraltar ruling (but on the issue of material selectivity). Spain, however, has appealed mainly on the issue of regional selectivity.

The “Rioja cases” Union General de Rioja and others (joined cases C - 428/06 to C 434/06 of 11 September 2008)

A5.38 These cases build on the European Court of Justice’s decision in the Azores case.

A5.39 The Autonomous Community of the Basque Country was made up of three provinces - “Historical Territories”. The institutional political structure is complex. It appears that the Autonomous Community was comprised of two different levels: institutions common to the whole territory of the Basque Country (autonomous government and parliament) and “foral” institutions and bodies, the competence of which was restricted to the Historical Territories. The foral authorities had rights to levy and collect taxes but many other areas of competence, in particular those of economic nature, were exercised by the Autonomous Community.

A5.40 The three foral authorities adopted a tax measure which set the rate of corporation tax “generally at 32.5%” and introduced a series of fiscal deductions in connection with that tax. Legislation common to the Spanish State in this respect set the basic rate of corporation tax at 35 per cent and did not provide for such deductions.

A5.41 The national court asked whether Art.87(1) EC Treaty must be interpreted as meaning that tax measures which were adopted by infra-state bodies, were to be considered to be selective measure and, accordingly, State aid within the meaning of that provision on the sole ground that they did not apply to the whole territory of the Member State concerned.

A5.42 The European Court of Justice reiterated the three tests set out in the Azores case, i.e. the criteria of institutional, procedural, and economic and financial autonomy. It added that it was to a great extent for the national court to determine whether these criteria were satisfied on the facts of their particular case.

A5.43 The following points can be gleaned from the judgment in relation to the three tests of institutional, procedural and fiscal autonomy.

Institutional autonomy

A5.44 On examination of the Spanish constitution, the legislation governing the Basque Country and an “economic agreement” between the Basque Country and Spain, the European court concluded that the institutional autonomy criterion was satisfied as together the Basque Country and the Historical Territories had political and administrative status distinct from central government.

Procedural autonomy

A5.45 A decision of an infra-state authority must have been taken without central government being able to directly intervene as regards its content. The European court decided that such procedural autonomy does not preclude the establishment of a conciliation procedure in order to avoid conflicts, provided that the final decision taken at the conclusion of that procedure is adopted by the infra-state body and not by central government. (Note: Such a conciliation procedure might, for example, seek to streamline the draft laws of the region with the laws applicable in the rest of the country to avoid conflicts - paragraph 98).

A5.46 The fact that pre-established limits must be complied with when a decision is adopted does not in principle call this autonomy into question.

A5.47 In this particular case the following requirements on the infra-state body to take into account when adopting tax legislation were limits on its competence, not issues which went to procedural autonomy:

- the economic balance between different parts of the national territory;
- that the overall effective fiscal pressure should be equivalent to that in force in the rest of the state;
- the need to guarantee freedom of movement of persons, goods, capital and services without discrimination or distortions of competition.

A5.48 Central government was not able to directly intervene in the process of adopting a law in order to ensure compliance with these principles. Provided that these principles were complied with, the infra-state body had power to adopt tax provisions which differed in many respects from the provisions applicable in the rest of the state. It was noted that it is not apparent that in the absence of agreement within the committee (comprising central and regional government) that the central government was able to impose the adoption of a law with a particular content.

A5.49 To establish procedural autonomy it is necessary to find that central government is not able to directly intervene in the process of adopting a law by the regional authority, for example in order to ensure that the law complies with principles set out in an agreement between the Member State and the devolved region, for example as to solidarity and fiscal harmonisation.

Economic and financial autonomy

A5.50 The infra-state body must be responsible for the management of a budget.

A5.51 If there is a causal relationship between a tax measure adopted by the infra-state body and amounts paid to it by the Member State there will be no economic and financial autonomy.

A5.52 The mere fact that there are financial transfers between the central state and its infra-state bodies cannot in itself suffice to demonstrate that those bodies do not assume the financial consequences of the tax measures which they adopt. Such transfers may take place for reasons unconnected with the tax measures.

A5.53 The national court must examine whether the process of setting the amount(s) to be transferred to the infra-state body includes compensation for the cost of a tax reduction or subsidy. Compensatory amounts might not be transparent and the actual financial flows between the infra-state body and the state and between the state and other regions of that state would have to be examined to determine the real position. The key question is whether the calculation methods used to determine the amount of transfers between the Member State and devolved region have the effect of causing the Member state to compensate the cost of the tax measure.

A5.54 On the facts of this case, it appeared that there was a two-stage formula for calculating the allocation of financial resources from the state to the infra-state body and a number of other potential financial transfers which needed to be examined, including the existence of a single social security fund, a minimum public service guarantee by the state and an inter-territorial compensation fund.

Annex 6

Current borrowing powers in Wales

Overview

A6.1 This Annex summarises the borrowing powers of the Assembly Government and other public sector bodies in Wales.

The current borrowing powers of the Assembly Government¹³⁴

A6.2 The Assembly Government does not have the power to borrow in order to fund public services in a manner comparable to the UK Government. All services have to be resourced from within the Assembly Government's annual budget, funded via the block grant.

A6.3 There are, however, limited conditions under which the Assembly Government can borrow additional funds. Under Section 121 of the Government of Wales Act 2006, Welsh Ministers may borrow from the Secretary of State sums that are deemed required to meet a temporary excess in expenditure over income or to provide a working balance. HM Treasury may then issue funds to the Secretary of State out of the National Loans Fund. In total, borrowing as set out under Section 121 must not at any time exceed £500 million.

A6.4 Amounts borrowed under Section 121 must be repaid to the Secretary of State under conditions outlined by HM Treasury. Borrowing under Section 121 counts towards the Public Sector Net Cash Requirement and hence is included within the Assembly Government's total budget. Any increases in borrowing must be offset by reductions in other spending. The effect is to reduce the level of grant from the UK Government and hence to restore the UK borrowing position. Therefore, if Welsh Ministers borrowed under Section 121, the effects of such borrowing would be offset by a reduction in the grant received from HM Treasury if the sums were not re-paid using existing funds.

A6.5 The Government of Wales Act 2006 also makes provision for the Assembly Commission and the Auditor General for Wales to borrow on similar terms in order to meet temporary budget shortfalls.

A6.6 In summary, although the Assembly Government does have some borrowing powers, they are limited and are not equivalent to borrowing to fund current or future public services in a manner comparable to the UK Government or local authorities.¹³⁵

¹³⁴ Under the Government of Wales Act 2006.

¹³⁵ Following the merger of the Welsh Development Agency (WDA) with the National Assembly for Wales (as outlined in The Welsh Development Agency (Transfer of Functions to the National Assembly for Wales and Abolition) Order 2005), the Assembly inherited limited borrowing powers for the purpose of exercising functions under the Welsh Development Agency Act 1975. In the event that these powers were exercised, HM Treasury could mandate that any income raised from borrowing be treated as a receipt and would therefore pass directly to the UK Consolidated Fund, resulting in no additional net resources for the Assembly.

Borrowing powers of other public sector organisations

A6.7 While the Assembly Government has only limited powers to borrow, other public sector bodies have greater flexibility to borrow to fund public services.

A6.8 Local authorities in Wales have much greater freedom to borrow funds under the prudential borrowing system.¹³⁶ This system, detailed in the Local Government Act 2003, enables local authorities to determine their own levels of affordable capital investment and required borrowing providing they can demonstrate that borrowing can be supported within their existing resources. Specific Assembly Government consent for borrowing is no longer required under the prudential system.¹³⁷

A6.9 The Prudential Borrowing Framework places great weight on the importance of sustainability, prudence and in particular affordability as the ultimate constraint on whether borrowing should take place and the amount that a local authority can spend or borrow. Affordability is determined by a judgment about acceptable council tax levels and in the case of borrowing to provide housing, acceptable rent levels. However, this decision is underpinned by a range of judgments such as likely levels of capital receipts, additional revenues raised from fees and charges in “invest to save” schemes and treasury management considerations.

A6.10 NHS Trusts in Wales also have some limited power to borrow funds. While there are no restrictions on the source of borrowing, the aggregate of all sums borrowed must not exceed £300 million, or £600 million if the borrowing is guaranteed by Welsh Ministers. Trusts fall within HM Treasury budgetary controls and therefore such borrowing scores against the Assembly Government budget (see A4.6 above).

¹³⁶ The current legislative framework replaces the previous scheme of credit approvals where a local authority in Wales would have to seek approval from the Assembly Government on a case by case basis. ‘Credit approval’ borrowing is also termed supported borrowing, as all local government borrowing covered under the previous scheme was funded by the RSG.

¹³⁷ Although there are no UK-wide limits imposed on prudential borrowing, beyond the local authorities’ assessment of affordability, overall local authority borrowing levels are monitored by HM Treasury to ensure that public sector borrowing does not exceed central government borrowing rules. If deemed appropriate by HM Treasury, borrowing limits may be introduced.

Dealing with risky taxes

Overview

A7.1 This Annex explains the Commission's assessment of the levels of risk involved in devolving certain taxes to Wales and draws implications for the "pricing" of those taxes.

Introduction

A7.2 In Chapter 5 we argued that in the event of tax devolution, risks should be allocated appropriately. Risks consequent on the actions of the Welsh or UK Governments should be borne by the government in question. Exogenous risks arising from factors unrelated to government policy should be pooled and borne at the UK level, as they are currently. In other words, a subsidiary government taking on taxing powers should bear the full consequences of its own actions, intended or otherwise, but devolution as such is not a reason for ceasing to pool exogenous risk. In practice, however, when considering how a tax base evolves over time it is not possible to disentangle the effects of government policy and exogenous influences. Since we regard the requirement that a government bears the consequences of its own actions as primary, it follows that tax devolution will involve the subsidiary government taking on some exogenous risk.

A7.3 While that cannot be easily avoided, it can be compensated. And we argued that where risks end up in the "wrong" place after devolution, the bearer of the risk should be compensated by the party which has been inappropriately relieved of the risk. In practice that comes down to bearing the risk in mind when setting a "price" for a tax base that is being devolved. The price will generally take the form of a deduction from the block grant. The size of the deduction and its evolution over time should be influenced by the riskiness of the tax.

A7.4 It is fair to ask what constitutes riskiness in this context. The main elements are the predictability and variability of the tax. If the tax base is growing rapidly it is obviously worth more than if it is static or declining but equally important is the certitude attaching to that growth. If it can be confidently predicted to continue the tax is obviously worth more than if future growth is very uncertain. The variability of the tax is also important but that cannot be regarded in isolation. If the tax receipts tend to rise when other income sources decline, its variability may not matter; indeed it may be a good thing in diversifying income and making for overall stability. If the tax receipts are positively correlated with other sources of income, however, variability is a bad thing since it will aggravate fluctuations in income and make budgetary planning more difficult.

Pricing a tax

A7.5 It is standard practice in many branches of economics when calculating the present value of a flow of uncertain future receipts to use the notion of a "risk premium". Over long periods of time - several decades - equity investments, for example, tend to return considerably more than bonds. This is generally seen as a return to risk and is measured by the equity risk premium, equal to equities' excess return over top-rated, risk-free government bonds. We can use the theory underlying the risk premium to calculate, at least very roughly, a risk premium for a tax. While we set out a procedure

using historical, public data for the calculation, it is necessarily approximate and it would be perfectly appropriate to adjust findings using judgment of present and future circumstances.

A7.6 The idea is to ask what real annuity would be equal in value to the net present value of the receipts of the tax in question adjusted appropriately for risk. That annuity is the sum to be deducted from the block grant. The net present value would be calculated in real terms and so the annuity is a real annuity. That means the sum deducted in practice would be indexed to a measure of the general price level and rise with inflation. Since inflation is exogenous to the Welsh Assembly Government, which has no influence over UK monetary policy, there is no reason why it should benefit or suffer from unexpected changes in inflation. The deduction from the block grant should therefore be multiplied each year by a forecast index of inflation with a subsequent correction for the actual inflation outturn.

A7.7 Suppose that the UK Government devolves a tax, τ , to Wales with receipts that have an expected growth rate of g per cent a year with an annual volatility (standard deviation) of s , at constant rates. If we are considering a period of T years, and the government bond yield with a maturity of T is r , then the present value of the tax stream is:

$$PV\tau = \tau_0 \sum [(1+g)/(1+r+\rho)]^t \quad \text{for } t=1 \Rightarrow T \quad (\text{A7.1})$$

where ρ is the risk premium that we consider further below.

A7.8 We want to set $PV\tau$ equal to $A_0 \sum_t 1/(1+r)^t$ where A_0 is the real annuity to be deducted from the block grant. If the period T were very long, then it would follow that as T increased the ratio of A_0 to τ_0 would approach $r/(r+\rho-g)$ so the annuity would equal the initial tax take (indexed for inflation) only in the special case that $\rho = g$, i.e. the risk premium and the expected growth rate were the same and so cancelled out. If expected growth exceeds the risk premium, then the annuity must either be set above the initial tax take or the annual deduction must grow in real terms at a rate of $(g - \rho)$.

It remains to determine a sensible value of ρ .

The risk premium

A7.9 We use the theory developed for the equity risk premium by Mehra and Prescott (MP),¹³⁸ the so-called consumption risk premium. MP held that the riskiness of an asset increased with the covariance of the returns to that asset and the consumption stream of the investor. If consumption is closely related to "permanent income" or wealth, those variables can be used equally well. Making a number of simplifying assumptions, MP showed:

$$\rho_e = \sigma_{ec} \cdot \text{CRA} \quad (\text{A7.2})$$

where ρ_e is the equity risk premium and σ_{ec} is the covariance of the return to equities and the growth of consumption. CRA is a constant coefficient of risk aversion.

¹³⁸ Mehra and Prescott, 1985.

A7.10 The simplifying assumptions used to derive this result were that equity returns are positive on average with an i.i.d. error so that equity prices follow a process known as a random walk with determinate drift. This is not strictly true of equity prices, or of tax receipts but the consensus in the literature seems to be that the simplification is acceptable. The coefficient of risk aversion being constant is also an assumption that is contradicted in laboratory experiments of people's attitude to risk but, again, the simplification is thought to be serviceable. If either government in the devolution transaction wished to drop the simplifying assumptions, a risk premium could still be calculated using numerical methods. Here, however, we maintain the assumptions for the purposes of exposition.

A7.11 To apply MP's findings to tax receipts, we replace consumption with UK GDP. HM Treasury's receipts are generally correlated with GDP and since GDP also tends to drive non-discretionary spending on welfare, we may suppose that the UK Government's utility is closely linked to GDP growth and the riskiness of any given tax may be indicated by its covariance with GDP growth. We cannot observe the UK Government's CRA but there is good reason to suppose it can be very adequately approximated by the risk aversion implicit in the equity risk premium. If, for example, the UK Government were much less risk averse than equity investors in general, it could have issued gilt-edged securities in past decades in order to buy equities and build up a Sovereign Wealth Fund. It has never appeared tempted to do so. Indeed it sold state assets to retire debt. Moreover, the emphasis put on "risk transfer" when the state entered into public-private partnerships to build and run public services meant that the UK Government was prepared to pay contractors equity rates of return, rather than using gilt finance. The evidence of a CRA at least as great as that of the market is therefore strong.

Defining σ_{eg} as the covariance of equity returns and GDP growth and σ_{tg} as the covariance of the tax yield and GDP growth, we may define

$$\rho_t = \rho_e (\sigma_{tg} / \sigma_{eg}) \quad (\text{A7.3})$$

A7.12 If carrying out a similar exercise from the point of view of the Welsh Assembly Government, it would be appropriate to use the Welsh block grant in place of GDP, since that is the principal source of income and expenditure for the Assembly Government. There is, however, no particular reason to suppose that the Assembly Government's coefficient of risk aversion is the same as that of the UK Government. Its reluctance to use public-private partnerships could conceivably indicate a lower degree of risk aversion. On the other hand, the variability of the taxes under consideration would represent a greater proportionate threat to the Welsh budget than that of the UK as a whole and, if risk aversion is not constant but decreases with income, that would imply greater risk aversion in Wales. At any rate, we suppose that the UK Government's preferences will dominate those of the Assembly Government in this area and any instance of devolution will be carried out on terms set by the UK Government. The Assembly Government, in taking exogenous risk off the UK Government, is in effect selling insurance but we assume that it is selling in a buyer's market.

A7.13 In the main text we raised the possibility that an initial grant deduction could be indexed to the growth of UK receipts of the tax in question. That would be an attempt to shield the devolved administration from exogenous risk that was common to the Welsh tax base and the rest of the UK. Supposing such an indexation was practical, it would leave only the divergence of Welsh and UK taxes to be considered. That would imply replacing σ_{tg} in the above expression by a new term denoting the covariance of GDP and the difference in growth rates between all-UK and Welsh taxes. In general one would expect that to be a much smaller magnitude, if significant at all. Any persisting risk premium would be deducted from the growth rate implied by indexation.

A7.14 We should note that MP discovered that their theory implies very high, perhaps implausible, levels of risk aversion and they referred to that as the equity risk premium “puzzle”. The most likely explanation for the puzzle lies in people’s attitude to the risk of loss. Experiment has indicated they typically pay more attention to gains and losses than they do to the level of income or consumption. In other words they tend to adopt current or existing income as a norm and have an aversion to losses that exceeds their pleasure in gains. This sort of preference has been analysed in a branch of the theory of choice known as prospect theory.¹³⁹ In laboratory experiments people have typically shown an aversion to loss twice or even two and a half times as great as their attraction to gains. Such preferences are adequate to explain the “puzzle” of the equity risk premium. An alternative procedure to that adopted above, using prospect theory is possible but since it is less familiar and established we have not pursued it further in this report.

Empirical Results

A7.15 Tax data for Wales as opposed to the UK as a whole are not readily available for some of the smaller taxes and where available for other taxes are confined to fairly short data series.

Table A7.1: Historic data for selected taxes

	Period	Growth (per cent p.a.)	Volatility (annual s.d) (per cent)	Correlation GDP growth (per cent)
income tax	1991-2008			
UK		6.2	3.9	28.3
Wales		4.8	5.4	14.1
stamp duty	1998-2009			
UK		17.4	31.5	82.2
Wales		15.8	34.4	81.1
capital gains tax	1987-2008	11.4	32.3	-6.6
landfill	1998-2010	8.1	9.3	49.6
aggregates	2003-2010	2.7	16.7	62.3
air passenger duty	1996-2010	16.3	33.1	25.4

Note: growth of Welsh block grant 5.5 per cent 1994-2010

¹³⁹ Kahneman and Tversky, 1979.

A7.16 The data show that for both income tax and stamp duty, where comparisons are available, the UK tax receipts have grown faster than those for Wales over the past decade or more and they are more volatile in Wales than for the UK as a whole. We may suppose the same would be true of capital gains tax on residences, although data are not available to confirm that. The aggregates tax is distinguished by receipts that have grown slowly, indeed have been static after adjustment for inflation, despite an increase in rates. The other taxes have seen rapid growth but with very high annual volatility, over 30 per cent in the case of capital gains tax, stamp duty and air passenger duty. The annual correlations with UK GDP growth are generally not very high, except for stamp duty; in the case of income tax that is no doubt owing to lags in assessment and collection.

A7.17 The next table shows the risk premium for income tax, stamp duty and capital gains tax, calculated as in equation (3) above. Those numbers are, of course, exceedingly crude. Covariances of tax receipts and GDP growth have been estimated over exceedingly short time periods and there is evidence that they are unstable over time. The estimates should be taken as broad qualitative indicators of the riskiness of a tax rather than as anything more precise.

A7.18 For income tax and stamp duty, the table also shows the covariance with GDP of the difference in growth rates of Welsh and UK tax receipts. When a grant deduction is indexed to the UK growth of these taxes, there may still be a residual risk premium if the covariance of Welsh tax receipts and GDP differs from that of UK receipts and GDP. We test this by looking at the difference in the growth rates and seeing if it covaries with GDP. In fact that covariance is minute and negative in the case of income tax growth differentials and also insignificant in the case of stamp duty.

Table A7.2: Risk premia

	Cov GDP (per cent)	Ratio to FTSE cov to GDP	Risk premium (per cent)
income tax			
Wales	0.006	0.21	0.70
Wales-UK	-0.003	-0.10	-0.35
stamp duty			
Wales	0.354	3.48	12.20
Wales-UK	0.025	0.25	0.90
capital gains tax	variable	N/A	N/A

Note: assumes equity risk premium 3.5 per cent
FTSE cov with GDP over same period as respective tax

A7.19 In the case of the other three taxes, we have to correct for changes in the rates of the tax since they were introduced. We do this by considering the base of each tax, those quantities on which the tax is levied. This leads to a radically different picture.

Table A7.3: Covariance of selected taxes with GDP growth

Base of:	Period	Growth (per cent p.a.)	Volatility (annual s.d) (per cent)	Covariance GDP growth (per cent)	Risk premium
landfill (taxable waste tonnage)	1998-2009	-6.26	5.33	-0.01	-0.76
aggregates (taxable tonnage)	2003-2009	-0.52	10.70	-0.05	-2.57
air passenger duty (passengers, thousands)	1998-2009	4.93	4.36	-0.03	-1.88

A7.20 Two of the taxes turn out to have a shrinking base while air passenger duty's grows at a five per cent rate. All have a negative covariance with GDP growth though it is insignificant for landfill. For the other two taxes there is a negative risk premium to consider. The shrinking tax base reduces the value of the aggregates tax but the combination of a growing base and a negative risk premium makes it clear why the UK Government is reluctant to devolve air passenger duty.

A7.21 In order to price each tax we must make an assumption about the growth of the tax base over the next, say, 15 years, after which we assume a revaluation of each tax base occurs and a recalibration of the block grant. The "prices" that we cite below are tentative and should not be taken too literally. However, we do believe they help to establish a starting point for the discussion of the revenue value of each tax and of what sort of deduction from the block grant is appropriate for each tax. More research on the characteristics of each tax in the Welsh context would obviously be appropriate.

Income tax

A7.22 We suppose real GDP growth averages 2.5 per cent, including a period of cyclical recovery, with inflation around 2.25 per cent, giving nominal GDP growth around 85 per cent of its rate over the past two decades. For income tax, we suppose an income elasticity of 1.1, compared with the 1.14 observed in recent years, giving real income tax growth of 2.75. It seems eminently reasonable that real UK tax receipts would grow more slowly than during the late boom. We make no specific assumption that Welsh receipts would grow differently from those of the UK. With a current bond yield just over four per cent, implying real yields in the 1.5-2 per cent area, and a risk premium of 0.75 per cent, the corresponding real annuity would be worth about 118 per cent of base year tax receipts. An alternative arrangement would be to deduct the value of tax receipts in year one and index the deduction to the growth of UK tax receipts or the UK tax base. Given the tendency of the

Welsh tax base and receipts to grow more slowly than those of the UK over the past 15 years, that course implies some risk for Wales. However, the covariance of the difference between the growth of Welsh and UK income tax receipts and UK GDP is negative but it is quite insignificant, implying no residual risk premium.

Stamp duty

A7.23 This is a rapidly growing tax but one that is highly volatile and highly correlated with GDP and, as such, is very risky. The UK Government should be content to cede it to Wales in return for a stable deduction from the block grant. If historic nominal growth in the Welsh receipts of 15.8 implying real growth around 13.5 per cent is repeated then a risk premium of some 12 per cent implies a value for this tax of about 111 per cent of base year receipts, indexed to the general price level. Lower projected growth of receipts would reduce the tariff. If future growth is 85 per cent of its boom rate, for example, the real annuity value of the tax falls to 97 per cent of base year receipts. Alternatives of indexing the deduction to UK receipts of the tax or reducing the block grant by a fixed percentage would be unattractive for Wales. If the UK Government were to insist on either there would be no revenue case for accepting devolution. There are other reasons to accept devolution of this tax, however - as a policy instrument and also in order to reform it, since its present structure is odd and inferior. It is a political judgment whether those reasons are strong enough to accept devolution should the UK Government not agree a substantial risk premium.

Capital gains tax on non-primary residences

A7.24 These tax receipts are negatively correlated with GDP over the period since the late 1980s which would imply a substantial negative risk premium. Over the past ten years, however, the correlation has been positive. It is hard to justify a risk premium on that basis. The volatility could be a problem for budgetary planning in Wales, though it is negatively correlated with the grant which means it may not often destabilise total receipts. Moreover the variability of the tax has a pronounced skew. In a good year, receipts can rise more than they fall in a bad one, relative to the average take. Pricing the tax, however, is extremely difficult. Its volatility means that there would no doubt be disputes about the base-year deduction. Indexation to a UK base would be problematic since the Welsh housing market is unlikely to keep pace with that in the South East during housing booms. The fast historical growth of the receipts, if projected forward, would imply that a deduction of the real annuity type would be prohibitively expensive in the short term, worth perhaps 250 per cent of base year receipts. The deduction would need to be negotiated ad hoc at the time when devolution was proposed in view of the state of the housing market and receipts at the time. This may be a tax where a proportionate reduction in the block grant is the fairest option.

Air passenger duty

A7.25 The UK Government is reluctant to devolve this tax at the time of writing although the stated reasons for reluctance are unpersuasive. In the UK its revenues have grown at a 16 per cent annual rate, nearly 14 per cent in real terms but largely because rates have changed. Passenger numbers have grown at an average of 4.9 per cent. Growth of receipts and GDP are positively correlated but growth of passenger numbers is negatively correlated., implying a negative risk premium of over 1.75 per cent. The tax would have a real annuity value of some 176 per cent of base year revenues if historic growth continues.

Aggregates

A7.26 This is a slow-growing tax with considerable volatility but all growth is owing to variations in the tax rate. The base, taxable tonnage, is declining slightly. The base is negatively correlated with GDP giving a negative risk premium of 2.5 per cent. With a real discount rate just under two per cent the fair real annuity deduction would be 118 per cent of base-year receipts. It could be argued that the base has shrunk precisely because the UK Government has raised rates and proposes to continue doing so, that receipts are the result of an optimal tax policy. The implication is that the growth of receipts should be used rather than the growth of the tax base in calculating a risk premium. The argument is dubious but it turns out that receipts are highly correlated with GDP and imply a risk premium of 6.6 per cent, much higher than the growth rate. On that basis the value of the tax would be only 66 per cent of base year receipts.

Landfill

A7.27 Receipts have grown close to six per cent but the base, taxable waste tonnage, has shrunk at over six per cent a year. The net present value is therefore less than eight times current receipts and implies a fair deduction of 63 per cent of base year receipts, indexed to general prices. Like aggregates tax a policy of raising rates could be considered intrinsic to the tax. We can value the tax using the growth of receipts but they are correlated with GDP, implying a risk premium of some 5.5 per cent. That is slightly below the growth rate of receipts so, unlike aggregated, the implied value rises - to some 105 per cent of base year receipts. We prefer the original calculation but in either event a fixed real deduction is adequate to pay for this tax. Again this tax falls in an area of devolved policy responsibility so the Assembly Government may wish to take it as a policy instrument.

Conclusion

A7.28 The most straightforward basis for devolving income tax to Wales seems to be using the ID approach of indexing the block grant deduction to the growth of UK tax base. That would eliminate shared cyclical risk to the WAG. The risk Wales then takes on would not command a risk premium. Income tax is by far the most significant tax in terms of revenue and the one that most closely serves the purpose of increasing accountability.

A7.29 Applying a sensible risk premium, the UK Government should be prepared to devolve stamp duty for a deduction roughly equal to base year receipts, indexed to inflation. The same goes for aggregates tax and landfill tax owing to their stagnant bases. That should be acceptable to the Assembly Government but it is doubtful if any of those taxes are worth taking on revenue grounds if the cost involves a percentage cut in the block grant or even a deduction indexed to the specific UK tax receipts. There may, of course, be policy or other political reasons for devolving a tax. For example, there is a strong case for reform of stamp duty, which could be undertaken if the tax were devolved, and it is a potentially significant source of revenue. It would, however, introduce considerable instability into the Welsh budget. It is a political decision whether the advantages outweigh the drawbacks. Air passenger duty is worth more to HM Treasury, perhaps 176 per cent of base year receipts. However, the former UK Government was disinclined to devolve and the price may well be prohibitive to the Assembly Government. For capital gains tax on secondary residences a reasonable fixed real deduction is hard to calculate and a proportionate cut in the block grant seems reasonable in this case.

Annex 8

Conceptual and practical issues in devolving the income tax

The tax schedule

A8.1 The decomposition of the income tax into a tax levied by the UK Government and a tax devolved to a subnational authority raises issues that are addressed in this annex.

A8.2 The UK-wide tax formula for the individual taxpayer is as follows:

$$\tau^{UK}(b) = \left\{ \begin{array}{l} r^L \times b \\ (r^L \times \theta) + r^H \times (b - \theta) \end{array} \right\} \text{ or } \left\{ \begin{array}{l} 0.2 \times b, \text{ for } b \leq \theta \\ (0.2 \times \theta) + 0.4 \times (b - \theta), \text{ otherwise} \end{array} \right\}$$

A8.3 Here τ^{UK} is the tax schedule of the UK, r^L is the marginal "low rate", r^H is the marginal "high rate", b is the individual tax base (net income beyond allowances), and θ is the threshold for the high rate bracket (£ 37,400 in 2009/10). Recently the UK has introduced a third marginal rate of 50 per cent, but for simplicity of exposition this is disregarded in this annex.

Step one: Choosing the model of tax devolution

A.8.4 The main options for devolving income tax powers to a subnational authority could be formalised as follows:

Notation:

UK tax rate on basic rate income: r^L

Welsh tax rate on basic rate income: r_W^L

UK tax rate on higher rate income: r^H

Welsh tax rate on higher rate income: r_W^H

(2a) Proportional (unlimited):

A8.5 In this case there is a single Welsh rate $r_W^L = r_W^H = r_W$. For a Welsh tax payer the amount paid then becomes:

UK tax	WAG tax	
$(r^L - s) \times b$	$r_W \times b$	for $b < \theta$

where s is the number of tax points (pence) of the tax base b assigned to Wales; $r_w = (s + \rho)$ and ρ is any Welsh increment, positive or negative to the initial tax points allocated and

UK tax	WAG tax	
$(r^L - s) \times \theta + (r^H - s) \times (b - \theta)$	$r_w \times b$	for $b > \theta$

A8.6 That is the option the Calman Commission proposed for Scotland: a tax levied at a single rate across the whole tax base.

(2b) Proportional (truncated):

UK tax	WAG tax	
$(r^L - s) \times b$	$r_w \times b$	for $b < \theta$
and		
$(r^L - s) \times \theta + r^H \times (b - \theta)$	$r_w \times \theta$	when $b > \theta$

A8.7 In this case the Welsh tax is levied only on incomes up to the higher rate threshold and higher rate tax payers, in effect, pay a lump sum Welsh tax = $r_w \times \theta$

(2c) Progressive (two rates):

UK tax	WAG tax	
$(r^L - s) \times b$	$r_w^L \times b$	for $b < \theta$

where $r_w^L = s^L + \rho^L$ and Wales has s^L of lower-rate tax points and can add a lower-rate-specific increment ρ^L , positive or negative.

And

UK tax	WAG tax	
$(r^L - s^L) \times \theta + (r^H - s^H) \times (b - \theta)$	$(r_w^L \times \theta) + r_w^H \times (b - \theta)$	when $b > \theta$

where $r_w^H = s^H + \rho^H$ and Wales takes s^H the share of higher-rate tax points and can add a higher-rate-specific increment ρ^H , positive or negative.

A.8.8 Equation 2c is this Commission's preferred option, with the condition that $-3p \leq \rho^L, \rho^H \leq +3p$ limiting changes to tax rates. In addition, s is set at 0.5 of the UK tax rate in the base period for all tax bands. The choice for a symmetrical progressive income tax regime at the point of devolution was mainly motivated by a characteristic of option (2a), preferred by the Calman Commission, namely under that rule, the overall marginal tax rate for high-income earners would always be affected by changes in Welsh tax rates by the same amount as that of basic rate payers.

A8.9 For instance, if the devolved administrations introduced an increment of $\rho = 3p$, the combined marginal rate of taxpayers under the high rate would increase to $r^H + \rho = 43p$. For Wales, that could be disadvantageous in view of the analysis of Chapter 6. In those circumstances the option of a positive ρ is less likely to be exercised. Similarly, since a negative ρ would entail significant revenue losses (the majority of taxpayers falls under the low rate), a tax cut would be expensive in revenue terms. So the formal tax policy lever ρ could remain perpetually idle. By contrast, the progressive sharing scheme that we propose would allow the Assembly Government to change ρ^L and ρ^H differentially leaving the marginal rate of either basic or higher-rate tax payers unchanged.

A.8.10 A fallback position could be to restrict the power to levy income tax up to the higher-rate threshold only (the truncated version according to formula 2b). This would limit the tax burden for high income earners to a lump sum corresponding to the threshold value times the basic rate, which would not affect higher marginal rates. However, that could restrict the effectiveness of any tax-reduction policy.

Step two: Creating “tax room” for the devolved administrations using the analytics of the taxpayers’ distribution function

A.8.11 The transfer of tax points to the devolved administrations is supposed to create “tax room” for subnational policies but it also represents a revenue loss for the UK Government that would have to be compensated by adjusting the grant to maintain vertical fiscal balance. The UK Treasury has the relevant information showing the taxes collected on individuals residing in the subnational jurisdiction as well as their aggregate tax base. According to our proposal for income tax the “tax room” would be half of the revenue collected from Welsh taxpayers in a base period, hence $T_0^W/2$; for the Calman Commission it would be the devolved tax rate times the tax base recorded for Scotland in a base year, hence $10\% \times B_0^S$. While the initial deduction is uncontroversial, its evolution over time can proceed according to different rules, as discussed in Chapter 5.

Step three: adjusting the grants formulae

Notation:

Total resources available to Wales at time t	R_t
Aggregate UK taxable income at time t	B_t
Aggregate UK income tax receipts at time t	T_t
Block grant at time t	G_t

A subscript 0, for example B_0 indicates an initial value in the base year of devolution.

The superscripts L and H denote basic rate and higher rate respectively; for example B_t^H is income taxable at the higher rate. Subscript W indicates the variable applies to Wales only.

A8.12 The formulae for Welsh resources for the different rules discussed in Chapter 5 of the report are as follows:

(3a) Own base deduction (OBD):

$$R_t = G_t - T_{w0} \times \frac{B_{wt}}{B_{w0}} + T_{wt}$$

This adjustment is revenue neutral as long as the subnational tax regime does not differ from that of the UK at the time of devolution. Only changes in tax rates result in different resources from the block grant before deductions.

(3b) "Proportionate deduction" (PD):

This is the deduction from grant of a fixed proportion γ of the current grant equivalent to the devolved tax revenue in the base period.

$$R_t = G_t - \gamma G_t + T_{wt}$$

where $\gamma = \frac{T_{w0}}{G_0}$

There is a net gain/loss if the income elasticity of the devolved tax is greater/smaller than the income elasticity of the grant. The Calman Commission proposed this type of adjustment.

(3c) Indexed deduction (ID):

This is the deduction from grant of a fixed amount equivalent to the devolved tax revenue in a base period, to be indexed according to an "appropriate UK indicator".

$$R_t = G_t - (T_{w0} \times I_t) + T_{wt}$$

where the appropriate indicator I_t is discussed below.

(3d) Fixed real deduction (FRD):

$$R_t = G_t - \left(A_0 \times \frac{P_t}{P_0} \right) + T_{wt}$$

The grant is reduced by an agreed fixed real annuity A_0 , which is then indexed to inflation, say, consumer prices.

The choice of the indexation mechanism

A.8.13 We have concluded that (3c) is the most appropriate mechanism in the case of income tax devolution. It therefore remains to determine the most appropriate definition of the index I . If we use the Welsh tax base, the mechanism collapses to that of (3a), which we reject in the report because of the biased incentives it creates. Changes to tax rates will in general have effects on the tax base and these must be allowed to affect devolved revenues so that the effects of tax policies are internalised and taken into account by policy-makers. The own-base deduction fails on that criterion and indexation must therefore be some quantity independent of the devolved tax base. We have considered three other possibilities.

(4a) Index grant deduction to growth in total UK taxable income:

$$I_t = \frac{B_t}{B_0}$$

where of course

$$B_t = B_t^L + B_t^H$$

(4b) Use two indices; index disaggregated grant deduction to separate bases:

The grant deduction becomes:

$$I_t = \left(T_{w0}^L \times \frac{B_t^L}{B_0^L} \right) + \left(T_{w0}^H \times \frac{B_t^H}{B_0^H} \right)$$

A.14 This defines two indices, by dividing UK taxable income into that income which is taxable at the basic rate and that income taxable at the higher rate. Total taxes of high-rate taxpayers are reduced by the aggregate lump sum payments subject to the basic rate: $N^H \cdot \theta \cdot r^L$, where N is the number of taxpayers. Those payments are added to taxes paid by low-rate taxpayers. The base year receipts of the devolved Welsh income tax are similarly disaggregated and the appropriate index used on each.

(4c) Index grant offset to growth in a UK standard revenue index:

$$I_t = \frac{(s^L \times B_t^L) + (s^H \times B_t^H)}{(s^L \times B_0^L) + (s^H \times B_0^H)}$$

A.8.15 In effect this takes the number of tax points allocated to Wales for the higher and lower rate taxes and uses those to weight together the disaggregated UK tax bases. That makes an index to be applied to the grant deduction.

A.8.16 Each of these mechanisms has advantages. (4a) has the great merit of simplicity. Its drawback from a UK Treasury perspective is that by construction it will grow at the same rate as taxable income. The tax receipts devolved to Wales will tend to grow faster because income tax receipts generally have an income elasticity exceeding one (see below). That could give Wales a windfall over time. The mechanism also leaves Wales subject to UK policy risk. Should the UK Government alter the higher rate threshold θ , Welsh tax receipts will in general change but the grant deduction indexed to aggregate taxable income will not.

A8.17 On that score (4b) is superior. Changes in θ will alter the growth of the higher and lower tax bases and Welsh tax receipts as before. Now, the different growth rates are captured by the disaggregated bases and the effect on receipts is offset by a concomitant change in the grant deduction. However, the effect of these disaggregated indices will in general not be to give the overall grant deduction the same income elasticity as tax receipts.

A8.18 On the other hand (4c) will give a deduction that, at constant tax rates, will grow at the same rate as income tax receipts in the UK. However, that is not necessarily appropriate. Over recent decades, Welsh GVA has tended to grow more slowly than that of the UK. If that persists, Welsh income tax receipts at uniform rates will grow more slowly than their UK equivalents since the income elasticities of Welsh and UK income taxes are broadly similar (see below).

A8.19 Given that the higher tax base grows faster than the basic-rate tax base, (4b) tends to give a slightly higher income elasticity for the deduction than (4a), though materially lower than (4c). Overall, we consider it a good compromise among the competing approaches.

Note: comparative tax buoyancy

A8.20 **The tax revenue elasticity** ϵ_{TB} is an indicator of tax buoyancy over time. It related the percentage increase of tax revenue to the percentage increase of the tax base.

So:
$$\epsilon_{TB} = \frac{dT/T}{dB/B}$$

A8.21 As the average real tax base expands, a proportional tax system produces a proportional increase in tax revenue ($\epsilon_{TB} = 1$) while under a progressive system tax revenues will grow disproportionately stronger as more taxpayers become subject to the progressive rate(s) ($\epsilon_{TB} > 1$).

A8.22 Available data on the distribution of taxpayers by income bracket can be interpolated using a cubic spline function to generate a density function which enables us to calculate the cumulative frequency for any taxable income¹⁴⁰. The distribution functions tell us, for instance, what percentage of taxpayers had a taxable income below the threshold in the respective year (£33,300 for 2006/07). This percentage is reproduced in the Table A8.1.

¹⁴⁰ These data and normalized distribution and density functions for UK taxpayers are available from the Commission on request.

Table A8.1: Proportions of tax payers earning above the higher-rate threshold

Per cent

	Share of taxpayers below threshold	Share of taxpayers above threshold
UK	81.9	18.1
Scotland	83.7	16.3
Wales	86.6	13.4

A8.23 The Welsh population of taxpayers is more heavily concentrated in lower income brackets relative to both Scotland and the UK as a whole. From the distribution function it appears that the modal taxpayer has more or less the same income in the UK as in Scotland and Wales, although the normalized number of modal taxpayers is significantly higher in Wales than in both Scotland and the UK. The main differences are recorded in higher income brackets where the normalized density of Welsh taxpayers is clearly lower than in the UK and in Scotland. That will affect aggregate tax potential and tax elasticities for the different devolved administrations. The historical taxing powers of the UK, Scotland and Wales and the relevant aggregate elasticities are shown in Table A8.2 (fiscal year 2006/07).

Table A8.2: Average income tax per capita and tax elasticity

	Standardized aggregate tax per capita (benchmark = UK)	Aggregate tax elasticity relative to a change in real income
UK	100	1.211
Scotland	92	1.220
Wales	79	1.226

A8.24 The Welsh tax base is weaker than its UK or Scottish counterparts but the aggregate tax elasticity is much the same.

Independent Commission on Funding and Finance for Wales

Overview

A9.1 This Annex provides additional information on the following:

- i) the origins of the Commission;
- ii) its terms of reference;
- iii) the relationship of the Commission to the Assembly Government;
- iv) the Commission's reporting arrangements; and
- v) the members of the Commission.

Origins of the Commission

A9.2 The Commission was established by the Assembly Government in line with a commitment in "One Wales: a progressive agenda for the government of Wales". Specifically, One Wales states that:

"There will be an independent Commission to review Assembly Funding and Finance, to include a study of the Barnett Formula, of tax-varying powers including borrowing powers and the feasibility of corporation tax rebates in the Convergence Fund region, including the implications of recent European Court of Justice Rulings in this area."¹⁴¹

Terms of reference

A9.3 The Commission's terms of reference are to:

- look at the pros and cons of the present formula-based approach to the distribution of public expenditure resources to the Welsh Assembly Government; and
- identify possible alternative funding mechanisms including the scope for the Welsh Assembly Government to have tax varying powers as well as greater powers to borrow.

¹⁴¹ Welsh Assembly Government, 2007 p.6.

Relationship of the Commission to the Assembly Government

A9.4 The Commission is separate from the Assembly Government for the purposes of communicating and consulting with the public, collecting, considering and analysing information, and producing reports.

A9.5 The Commission is supported by a small secretariat of officials on secondment from the Assembly Government.

Reporting arrangements

A9.6 The Commission reports jointly to the First Minister Carwyn Jones AM, the Deputy First Minister Ieuan Wyn Jones AM and the Minister for Business and Budget Jane Hutt AM.

A9.7 The Commission was charged with producing a first report by the summer of 2009 and a final report by summer 2010.

Members of the Commission

A9.8 **Gerald Holtham** is Managing Partner of Cadwyn Capital LLP and former Chief Investment Officer of Morley Fund Management, the investment arm of Aviva PLC. The Aberdare-born economist has wide experience of conducting and applying economic research on a range of public policy issues as director of IPPR and at the OECD and the Brookings Institution. He is actively involved in Welsh public life, and is currently a Director of the Institute of Welsh Affairs, a visiting Professor at Cardiff University Business School and a member of the Assembly Government's Economic Research Advisory Panel.

A9.9 Mr Holtham's previous roles include:

- Director of the Institute for Public Policy Research, London;
- Head of General Economics Division at the Organisation for Economic Co-operation and Development, Paris;
- Fellow and Tutor at Magdalen College Oxford; and
- Visiting Fellow, Brookings Institution, Washington DC.

A9.10 **David Miles** is a member of the Bank of England's Monetary Policy Committee, a visiting Professor of Financial Economics at Imperial College, University of London, and was until August 2009 a non executive Director of the Financial Services Authority. The Swansea-born specialist in research on financial markets has published widely on many aspects of finance and macroeconomics. In 2003, he undertook an independent review for the Chancellor of the Exchequer of the UK housing market, focusing on the absence of much longer-term fixed rate lending. He joined the Bank of England's Monetary Policy Committee in June 2009.

A9.11 Professor Miles's previous positions include:

- Managing Director and Chief UK Economist at Morgan Stanley;
- Professor of Financial Economics at Imperial College;
- Chief UK Economist for Merrill Lynch;

- Department of Economics, Birkbeck College, London; and
- Bank of England.

A9.12 Paul Bernd Spahn is Professor Emeritus of Goethe University, Frankfurt am Main, Germany. After retirement from the university in 2005, he served as Macro Fiscal Advisor to the Minister of Finance and Treasury of Bosnia and Herzegovina, and became the founding Executive Director of the House of Finance in Frankfurt. A former Vice-President of the University of Frankfurt, Professor Spahn has held several visiting professorships across the world, has published widely in scholarly and policy-oriented journals and has provided expert advice to more than fifty governments worldwide.

A9.13 Professor Spahn has worked with international organisations such as:

- International Monetary Fund;
- World Bank;
- United Nations;
- Organisation for Economic Co-operation and Development;
- Economic Commission for Latin America and the Caribbean;
- European Commission; and
- Council of Europe.

Appointment of the Commissioners

A9.14 The Chair of the Commission, Gerald Holtham, was appointed jointly by the then First Minister the Rt Hon Rhodri Morgan AM, the Deputy First Minister Ieuan Wyn Jones AM and the then Minister for Finance and Public Service Delivery, Andrew Davies AM. The other Commissioners, Professor David Miles and Professor Paul Bernd Spahn, were appointed by the three Ministers in consultation with the Chair.

A9.15 The Chair of the Commission was appointed in July 2008 and the other Commissioners were appointed in September 2008.



From left to right:

David Miles, Gerald Holtham, Paul Bernd Spahn

Stakeholder engagement

Overview

A10.1 In undertaking its work, the Commission has sought to engage with a wide range of experts and others with an interest in its activities. This Annex provides information on the following:

- i) the Commission's website;
- ii) the Commission's calls for evidence;
- iii) engagement with the UK Government and the devolved administrations;
- iv) engagement with other bodies reviewing the funding of the devolved administrations;
- v) other contributors to the Commission's meetings; and
- vi) public seminars and other engagement.

A10.2 The Commissioners are very grateful to all those who gave freely of their time to assist the Commission in its evidence sessions.

The Commission's website

A10.3 The Commission has maintained a website¹⁴² where it has published:

- the Commission's first report: "Funding devolved government in Wales: Barnett and beyond";
- the Commission's working paper on needs assessment: "Replacing Barnett with a needs-based formula";
- submissions received in response to the Commission's calls for evidence;
- commissioned research;
- answers to frequently asked questions;
- summary notes of the Commission's meetings;
- press releases referring to the Commission's work; and
- contact details for the Commission's secretariat.

¹⁴² www.walesfundingreview.org / www.adolygiadariannucymru.org

The Commission's calls for evidence

Phase 1 call for evidence

A10.4 The Commission issued a call for evidence on 7th October 2008 and received responses from 31 individuals and organisations:

John Aldridge
Dr. Eurfyl ap Gwilym
Madoc Batcup
Bridgend County Borough Council
Dr. Gillian Bristow
Cardiff Council
Children's Commissioner for Wales
Martin Davies
Dyfed-Powys Police
Flintshire County Council
Professor James Foreman-Peck
Professor David Heald
Higher Education Wales
Institute of Revenues Rating & Valuation
Isle of Anglesey County Council
Professor Charlie Jeffery
Professor David King
Russell Mellett
Merthyr Tydfil County Borough Council
NAHT Cymru
NHS Trust Directors of Finance
Parliament for Wales Campaign
Dr. David Pickernell
Plaid Cymru
Society of Welsh Treasurers
Sustrans Cymru
Vale of Glamorgan Council
Wales TUC Cymru
Welsh Conservatives
Welsh Liberal Democrats
Welsh Local Government Association

In addition, Dr. John Ball submitted a copy of his monograph "*A strategy for the Welsh Economy*"¹⁴³ and Cymru Yfory - Tomorrow's Wales submitted a copy of its evidence to the House of Lords Barnett Formula Select Committee.¹⁴⁴

¹⁴³ Ball, 2008.

¹⁴⁴ Cymru Yfory - Tomorrow's Wales, 2009.

A10.5 The responses were published on the Commission's website from January 2009.

Phase 2 call for evidence

A10.6 The Commission issued a second call for evidence on 23rd July 2009 and received responses from sixteen individuals and organisations:

- Gweirydd ap Gwyndaf
- Dr. John Ball
- Madoc Batcup
- Mike Blundell
- Cardiff Council
- Professor James Foreman-Peck
- Gwynedd Council
- Professor Andrew Hughes Hallett
- Professor David Heald
- Russell Mellett
- Newport City Council
- Parliament for Wales Campaign
- Plaid Cymru
- Sir John Shortridge
- University of Wales Institute, Cardiff
- Welsh Conservatives

A10.7 The responses were published on the Commission's website in December 2009.

Engagement with the UK Government and the devolved administrations

Assembly Government and National Assembly

A10.8 The Commission has held a number of meetings with the Ministers to whom it reports: the First Minister, the Deputy First Minister and (prior to December 2009) the Minister for Finance and Public Service Delivery and (from December 2009) the Minister for Business and Budget. The Commission has also met a range of officials from the Assembly Government.

A10.9 The Chair met the National Assembly's Finance Committee following publication of its first report and the Commission took evidence during its second phase from officials working to the Finance Committee.

UK Government

A10.10 The Commission met officials of: HM Treasury in December 2008, November 2009 and February 2010; the UK DMO in November 2009; HMRC in November 2009 and February 2010; and ONS in January 2010.

Scottish Government

A10.11 The Commission met the First Minister of Scotland, the Rt Hon Alex Salmond MSP, in February 2009. The Commission met Scottish Government officials in February and October 2009, and in March 2010.

Northern Ireland Executive

A10.12 The Commission met officials of the Northern Ireland Executive in January 2009.

Engagement with other bodies reviewing the funding of the devolved administrations

Commission on Scottish Devolution

A10.13 The Commission met the Commission on Scottish Devolution, chaired by Sir Kenneth Calman, and also members of its Independent Expert Group, in February 2009.

House of Lords Ad Hoc Select Committee on the Barnett Formula

A10.14 The Chair had a private meeting with the Select Committee when the Committee visited Wales in March 2009. The parallel reporting timetables of the Select Committee and the Commission meant that it was not possible for the Commission to present formal evidence to the Select Committee.

Other contributors to the Commission's meetings

A10.15 The following experts were invited to meet the Commission to discuss aspects of the first phase of its work:

John Aldridge, former Finance Director at the Scottish Executive
Dr. Eurfyl ap Gwilym, Economic Adviser to Plaid Cymru
Professor Michael Artis, Swansea University
Professor David Bell, University of Stirling
Professor David Blackaby, Swansea University
Dr. Gillian Bristow, Cardiff University
Professor James Foreman-Peck, Cardiff Business School
Paul Griffiths, Adviser to the Welsh Local Government Association
Professor David Heald, University of Aberdeen
Professor David King, University of Stirling
Guy Lodge, Institute for Public Policy Research
Professor Iain McLean, University of Oxford
John Osmond, Institute of Welsh Affairs
Vanessa Phillips, Welsh Local Government Association
Alan Trench, University of Edinburgh
Professor David Ulph, University of St Andrews

A10.16 The following experts were invited to meet the Commission to discuss aspects of the second phase of its work:

Dr. Eurfyl ap Gwilym, Economic Adviser to Plaid Cymru
Kate Barker CBE, author of the review "Delivering stability: securing our future housing needs"

Professor David Bell, University of Stirling
 Professor Robin Boadway, Queen's University, Ontario
 Dr. Gillian Bristow, Cardiff University
 Simon Brooks CB, Vice President, European Investment Bank
 Professor James Foreman-Peck, Cardiff Business School
 Paul Griffiths, Welsh Local Government Association
 Dr. Graham Gudgin, Oxford Economics
 Professor David Heald, University of Aberdeen
 Chris Jones, Finance Director, Glas Cymru
 Professor Dylan Jones-Evans, University of Wales
 Belkis Kaader, Adviser, European Investment Bank
 Professor John Kay
 Peter Kenway, Director, New Policy Institute
 Professor Iain McLean, University of Oxford
 Professor Kevin Morgan, Cardiff University
 John Osmond, Institute of Welsh Affairs
 Professor Ray Rees, University of Munich
 Robert Schofield, Head of Division for UK lending, European Investment Bank
 Alan Trench, University of Edinburgh
 Professor David Ulph, University of St Andrews
 Mike Williams, former Chief Executive of the Debt Management Office

Public seminars

A10.17 Following competitive tender, the Commission provided small grants of up to £5,000 to the Institute of Welsh Affairs and to the Wales Institute of Social and Economic Research, Data and Methods to organise free seminars addressing issues arising from the second part of the Commission's remit (tax and borrowing powers and further work on needs-based formulae). The seminars were held as follows:

- 18 January 2010, Cardiff (organised by the Wales Institute of Social and Economic Research, Data and Methods)
- 22 February 2010, Aberystwyth (organised by the Institute of Welsh Affairs)
- 23 February 2010, Bangor (organised by the Institute of Welsh Affairs)
- 24 February 2010, Cardiff (organised by the Institute of Welsh Affairs)

Other engagement

A10.18 The Chair also accepted invitations to speak at conferences and other gatherings, including:

- Welsh Finance Director's Conference, 14 October 2008
- CIPFA Wales·Cymru Conference, 28 November 2008
- Plaid Cymru Spring Conference, 19-20 February 2010
- Welsh Labour Spring Conference, 26-28 February 2010
- Welsh Conservatives Spring Conference, 05-07 March 2010
- Wales Governance Centre Seminar ("Calman and Holtham: the public finance of devolution and the fiscal constitution"), 18 March 2010

Abbreviations used in the report

AME	Annually Managed Expenditure
CIPFA	Chartered Institute of Public Finance and Accountancy
CRND	Commissioners for the Reduction of the National Debt
CSR	Comprehensive Spending Review
DEL	Departmental Expenditure Limit
DMO	Debt Management Office
DWP	Department for Work and Pensions
EC	European Commission
EIB	European Investment Bank
EU	European Union
EYF	End Year Flexibility
FRD	Fixed Real Deduction
GERS	Government Expenditure and Revenue publication in Scotland
GDP	Gross Domestic Product
GVA	Gross Value Added
HMRC	HM Revenue and Customs
ID	Indexed Deduction
IES	Identifiable Expenditure on Services
IMF	International Monetary Fund
LCO	Legislative Competence Order
METR	Marginal Effective Tax Rate
NDR	Non-Domestic Rates
NHS	National Health Service
OBD	Own Base Deduction
ONS	Office for National Statistics
PD	Proportionate Deduction
PWLB	Public Works Loan Board
RSG	Revenue Support Grant
SME	Small and Medium Enterprises
SVR	Scottish Variable Rate

References

- Ahmad, J. (1999) "Decentralizing borrowing powers", PREM notes number 15, January 1999, The World Bank
- Anderson P. and Baumberg B. (2006) "Alcohol in Europe: a public health perspective", Institute of Alcohol Studies, UK, report for the European Commission
- Ball, J. (2008) "A strategy for the Welsh economy", Institute of Welsh Affairs
- Bird, R. (2000) "Intergovernmental fiscal relations: universal principles, local applications", International Studies Program working paper 00-2
- Brewer, M., Saez, E. and Shephard, A. (2008) "Means-testing and tax rates on earnings", prepared for the Report of a Commission on Reforming the Tax system for the 21st Century, chaired by Sir James Mirrlees
- Chetty, R. (2009) "Bounds on elasticities with optimization frictions: an application to taxation and labour supply", UC Berkeley Working Paper
- Cebula, R.J. (2005) "Internal migration determinants: recent evidence", International Advances in Economic Research, Springer, vol. 11(3), pages 267-274
- Cebula, R.J. (2009) "Migration and the Tiebout-Tullock hypothesis revisited", American Journal of Economics and Sociology, Vol.68, No.2
- Commission on the Powers and Electoral Arrangements of the National Assembly for Wales (2004) "Report of the Richard Commission"
- Commission on Scottish Devolution (2009) "Serving Scotland better: Scotland and the United Kingdom in the 21st century"
- Cymru Yfory - Tomorrow's Wales (2009) "Evidence from Cymru Yfory - Tomorrow's Wales to the House of Lords Barnett Formula Committee"
- Deloitte (2006) "Edinburgh Tourism Action Group transient visitor tax - investigation study report"
- Donald, E.L. and Douglas, J.A. (1996) "Massachusetts single-sales factor apportionment", The Tax Adviser, Vol.27, Issue 9, p575
- Egger, P. and Radulescu, D.M. (2008) "The influence of labour taxes on the migration of skilled workers", CESIFO Working Paper No. 2462
- European Court of Justice (2006) "Case C-88/03 - Judgment of the Court - Portuguese Republic v. Commission of the European Communities"
- Foreman-Peck, J. (2009) "Submission to the Independent Commission on Funding and Finance for Wales", published on the Commission's website at: www.walesfundingreview.org

Foreman-Peck, J. (2010) "Simulation of the impact of a one percent income tax increase on the Welsh economy", submission to the Independent Commission on Funding and Finance for Wales, published on the Commission's website at: www.walesfundingreview.org

Foreman-Peck, J. and Lungu, L. (2009) "Fiscal devolution and dependency" *Applied Economics* 41(7)

Heald, D. (1980) "Territorial equity and public finances: concepts and confusion", *Studies in Public Policy* number 75, Centre for the Study of Public Policy, University of Strathclyde, Glasgow

Heald, D. (2009) "Response to Holtham Commission's consultation on tax and borrowing powers for Wales" published on the Commission's website at: www.walesfundingreview.org

Heald, D. and McLeod, A. (2010) "The taxation and borrowing powers of the UK devolved administrations", paper presented to the Political Studies Association's Specialist Group Conference on British and Comparative Territorial Politics, University of Oxford, 7-8 January 2010

HM Government (2010) "The coalition: our programme for government"

HM Treasury (1979) "Needs assessment study - report"

HM Treasury (2003) "The United States as a monetary union", EMU study

HM Treasury (2009a) "Pre-Budget report 2009"

HM Treasury (2009b) "House of Lords Select Committee on the Barnett Formula: the Government's response", Command Paper 7772

HM Treasury (2009c) "Tax ready reckoner and tax reliefs"

House of Commons Welsh Affairs Committee (2009) "Wales Office Annual Report 2009: examination of witnesses (Questions 1-68), Rt Hon Peter Hain MP and Mr Glynne Jones, 27 October 2009"

House of Lords Select Committee on the Barnett Formula (2009) "The Barnett Formula: report with evidence"

House of Lords Select Committee on the Constitution (2010) "Referendums in the United Kingdom", 12th Report of Session 2009-10, HL Paper 99

Independent Commission on Funding and Finance for Wales (2009a) "Funding devolved government in Wales: Barnett and beyond", first report

Independent Commission on Funding and Finance for Wales (2009b) "Working paper: replacing Barnett with a needs-based formula", published on the Commission's website at: www.walesfundingreview.org

International Air Transport Association (2006) "Economic briefing: European aviation taxes"

International Monetary Fund (2009) "Debt bias and other distortions: crisis-related issues in tax policy"

Kahneman, D. and Tversky, A. (1979) "Prospect theory: an analysis of decisions under risk", *Econometrica*, 47, 313-327.

Liebig, T and Sousa-Poza A (2006) "The influence of taxes on migration: evidence from Switzerland" Cambridge Journal of Economics, 30, 235-252

Liebig, T., Puhani, P. A. and Sousa-Poza, A. (2007) "Taxation and internal migration - evidence from the Swiss Census using community-level variation in income tax rates", Journal of Regional Science, vol. 47, No. 4

LE Wales (2009) "Statistical investigation of needs proxies", report for the Independent Commission on Funding and Finance for Wales, published on the Commission's website at: www.walesfundingreview.org

Lotz, J.R. (1997) "Denmark and other Scandinavian countries: equalisation and grants" in Ahmad, E. (ed.) (1997) "Financing decentralized expenditures, an international comparison of grants"

Lyons, M. (2007) "Place shaping: a shared ambition for the future of local government" Lyons Inquiry into Local Government

Meghir, C. and Phillips, D. (2008) "Labour supply and taxes", prepared for the Report of a Commission on Reforming and Tax System for the 21st Century, Chaired by Sir James Mirrlees

Mehra, R. and Prescott, E.C. (1985) "The equity premium: a puzzle", Journal of Monetary Economics 15: 145-161

Oates, W. E. (1969) "The effects of property taxes and local public spending on property values: an empirical study of tax capitalization and the Tiebout Hypothesis", Journal of Political Economy, University of Chicago Press, vol. 77(6), pages 957-71

Oates, W.E. (1972) "Fiscal federalism", Harcourt-Brace-Jovanovic, Princeton

Oates, W.E. (1999) "An essay on fiscal federalism", Journal of Economic Literature, American Economic Association, vol. 37(3), pages 1120-1149

Oxford Economics (2008) "Regional winners and losers in UK public finances"

Public Works Loan Board (2009) "Public Works Loan Board 134th annual report 2008-09"

Rosenthal, L. (1999) "House prices and local taxes in the UK", Fiscal Studies Vol.22, no.1, 61-76

Royal Institute of Chartered Surveyors (2009) "Affordable housing (England and India)"

Saez, E., Slemrod, J. B. and Giertz, S.H. (2009) "The elasticity of taxable income with respect to marginal tax rates: a critical review", NBER Working Papers 15012, National Bureau of Economic Research Inc

Schaltegger, C. A., Somogyi, F. and Sturm, J. (2009) "Tax competition and income sorting: evidence from the Zurich Metropolitan Area", CESifo Working Paper Series No. 2824

Scottish Government (2007) "The government economic strategy"

Scottish Government (2009) "The Scottish Government response to the recommendations of the Commission on Scottish Devolution"

Scottish Government (2010) "Scotland's future: draft referendum (Scotland) bill consultation paper"

Scotland Office (2009) "Scotland's future in the United Kingdom: building on ten years of Scottish devolution", Command Paper 7738

Ter-Minassian, T. and J. Craig (1997) "Control of subnational government borrowing", in Ter-Minassian (ed) "Fiscal federalism in theory and practice".

Tiebout C.M. (1956) "A pure theory of local expenditures", Journal of Political Economy, Vol. 64, 416-424

Transport for London (2004-10) series of independent credit rating reports by Fitch, Standard & Poor and Moodys, published on the Transport for London website at:
<http://www.tfl.gov.uk/corporate/about-tfl/investorrelations/1468.aspx>

Transport for London (2006) "TfL issues new bond", press notice dated 17 March 2006, published on the Transport for London website at:
<http://www.tfl.gov.uk/corporate/media/newscentre/archive/3660.aspx>

Varney, D. (2007) "Review of tax policy in Northern Ireland", HM Treasury"

Visit Wales (2008) "Research update 2008"

Welsh Assembly Government (2007) "One Wales: a progressive agenda for the government of Wales: an agreement between the Labour and Plaid Cymru Groups in the National Assembly"

Welsh Assembly Government (2009) "The new M4 Project - Magor to Castleton", statement of information, published on the Assembly Government's website at:
<http://wales.gov.uk/publications/accessinfo/drnewhomepage/transportdrs2/transportdrs2009/m4projmagor-castleton/?skip=1&lang=cy>

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