

Business as usual? The Barnett formula, business rates and further tax devolution

IFS Briefing Note BN155

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ISBN: 978-1-909463-66-0

Executive summary

Funding the UK nations' devolved governments: the present situation

- Currently, the vast majority of the money spent by the devolved governments of Scotland, Wales and Northern Ireland comes in the form of block grants from the UK Treasury. The devolved governments then decide how to allocate this funding between different services and departments.
- How these block grants *change* from year to year is determined largely by the Barnett formula – which aims at providing the same pounds-per-person change in funding for the devolved governments as the change in funding for comparable services in England.
- When the population of Scotland grows at the same rate as that in England, application of the Barnett formula leads to a relative narrowing of the gap in spending per head between Scotland and England. This is because a given pounds-per-person increase in spending would represent a smaller *percentage* increase in spending per person in Scotland due to its initial higher level of spending. However, in practice, the substantially slower growth of the Scottish population in the 35 years since the Barnett formula came into use has largely prevented this ‘Barnett squeeze’ from taking place.

¹ Exemplary research assistance from Olga Gdula is gratefully acknowledged. The author would like to thank Jon Donaghy and Keith Jarrett at HM Treasury, Julian Revell at the Welsh Government, Louise Hester and Bill Stitt at the Scottish Government, and Andrew McAvoy at the Northern Ireland Executive for help. He would also like to thank Paul Johnson for comments and advice. The author also gratefully acknowledges funding from the Economic and Social Research Council (ESRC) through the Centre for the Microeconomic Analysis of Public Policy at IFS (grant reference ES/H021221/1).

- In addition to the block grant (and a few other ring-fenced grants from the UK government), some spending on devolved services is funded by devolved taxes and charges. These include council tax – or its counterparts, district and regional domestic rates in Northern Ireland – which is devolved to all three nations, and business rates, which are fully devolved to Scotland and Northern Ireland but only partially devolved to Wales at present (full devolution is set to occur in April 2015).

The Barnett formula and business rates: a problematic relationship

- Under full devolution of business rates, Scotland and Northern Ireland keep the revenues raised and bear the risk of them rising or falling. As a result, their block grants from the Treasury are smaller than they otherwise would be. Furthermore, changes in spending in England that are related to underlying changes in English business rates revenues should not generate a consequential change in the block grant to these countries' devolved governments.
- One way to achieve this is to give spending notionally funded by business rates revenues in England a 0% weight in the Barnett formula for Scotland and Northern Ireland (but a 100% weight for Wales, where business rates are not yet fully devolved).
- Because, notionally at least, business rates revenues are redistributed to local authorities via grants, the Barnett formula treats them as part-funding the CLG: Local Government (CLG:LG) budget. In practice, however, how much is spent on the CLG:LG budget is not linked to business rates revenues in England: in recent years, for instance, the CLG:LG budget has seen substantial cuts at the same time as English business rates revenues have been increasing.
- The approach adopted therefore exposes Scotland and Northern Ireland not only to their own business rates revenue risk, but also to the risk that the CLG:LG budget changes differently from overall spending on public services in England. So if the CLG:LG budget grows more, or is cut less, than other budgets, Scotland and Northern Ireland will lose. If it grows less, or is cut more, they gain. This is clearly not in the spirit of the Barnett formula, suggesting that the existing formula treats business rates in a flawed way.
- We find that these flaws will lead to Scotland's and Northern Ireland's budgets being cut by £600 million and £200 million /*less*, respectively,

as a result of the 2010 and 2013 Spending Reviews, than they would have been under a ‘corrected’ version of the formula. In Scotland’s case, this follows on from budget increases of £400 million *more* as a result of Spending Reviews during the 2000s, than it would have seen under a ‘corrected’ formula. Taken together, the £1 billion in additional funding for Scotland represents around 3% of its budget in 2015–16.

- We also find that the flaw in the Barnett formula’s treatment of business rates means Scotland’s budget has increased by significantly more since 2000 than it would have done had business rates not been fully devolved.

Lessons for further tax devolution

- The experience with business rates illustrates how important it is to get the details of tax devolution right. In designing further tax devolution, we should not make the same mistake of treating a devolved tax as funding a particular UK government department when working out how it will interact with the Barnett formula (unless there is a direct link between that department’s budget and how much is raised from a particular tax).
- More broadly, however, analysis of business rates devolution shows there is a close link between the way the block grants are adjusted to take account of tax devolution and the type of revenue risks that the devolved government (and, on the flip side, the UK government) bears.
- There is often a strong case to devolve taxes in a way that means the devolved government bears only the risk that its revenues grow more or less quickly than revenues from the comparable tax in the rest of the UK. We term this the *relative* risk.
- Doing this means that the devolved government bears the revenue risk associated with its policies. If, for instance, changes in tax or other economic policy cause its revenues to grow more or less slowly than comparative revenues in the rest of the UK, it gains or loses the marginal revenues. This provides policymakers with incentives to make policy in a way that takes account of the feedback effects on its own tax revenues. On the other hand, the UK government would bear the risk associated with UK-wide macroeconomic cycles and revenue trends – risks that might be more difficult for the devolved government to bear.

- To devolve the relative risk, the block grant reduction made when a tax is devolved should be indexed to tax revenues from the equivalent tax in the rest of the UK.
- It is not always possible or desirable to devolve the relative risk, however. Take, for example, North Sea oil and gas revenues. Because the vast majority of these revenues come from Scottish waters, there is little in the way of a rest-of-the-UK tax base to index the block grant reduction to.
- In such cases, an alternative way of indexing block grant reductions is required. The lesson from the experience with business rates is that this choice must be carefully considered to ensure that the devolved government and the UK government are bearing the appropriate types of revenue risk and that neither side is gaining unfairly at the other's expense.

1. Introduction

Recent years have seen increasing debate about – and increasingly significant change in – the way that the devolved governments in Scotland, Wales and Northern Ireland are funded.

Currently, the devolved governments receive most of their funding in the form of a block grant from Westminster. How this grant changes from year to year is largely determined by the Barnett formula – which aims at providing the same pounds-per-person change in funding for the devolved governments as is the case in England for comparable services. This means that the size of the block grants today depends on the historic level of spending in Scotland, Wales and Northern Ireland before the formula was introduced in the late 1970s and on the application of the Barnett formula to changes in spending since then.² Therefore there is no link between grant size and spending needs in a particular country, nor the amount of tax revenues raised in that country. This situation has led to calls for funding reform.

For instance, the Welsh government and a House of Lords Committee on the Barnett formula have both argued that the Barnett formula should be

² HM Treasury also sometimes makes changes to grants that are not based on the Barnett formula (a process sometimes termed ‘formula bypass’). In addition, grants are also changed when there are changes to what services are devolved.

replaced by a needs-based system of determining grants.³ However, the UK government currently has no plans for such a reform, and the Conservative, Labour and Liberal Democrat parties pledged to retain the existing ‘Barnett allocation’ in their pre-referendum ‘vow’ of further devolution to Scotland.⁴

There have been moves, though, to make the devolved governments more responsible for raising their own revenues. Under the Scotland Act 2012, landfill tax and stamp duty land tax policy and revenues will be devolved to Scotland from April 2015, and 10p of each income tax band will be devolved to Scotland from April 2016, with an offsetting reduction in the block grant. The Wales Bill, currently going through parliament, will grant similar taxation powers to the Welsh government from April 2018. And, following the recent ‘No’ vote from Scotland, the Smith Commission is considering proposals for further devolution of taxation (and other responsibilities) to the Scottish government – with each of the political parties and a range of campaign groups offering different answers.⁵

But this briefing note takes a step back from these big questions about whether there should be further tax devolution and whether there should be a move to a needs-based formula. Instead, it focuses on the more technical – but important – question of how devolved taxes should interact with the block grant and the Barnett formula. And, more specifically, it examines how the formula interacts with business rates,⁶ which are already fully devolved to Scotland and Northern Ireland and are set to be

³ The Welsh government’s position is based on analysis presented in the Holtham Review of funding (<http://wales.gov.uk/funding/financereform/reports/?lang=en>). For the House of Lord’s committee’s findings, see <http://www.publications.parliament.uk/pa/ld/ldebarnett.htm>.

⁴ See <http://www.dailyrecord.co.uk/news/politics/david-cameron-ed-miliband-nick-4265992>.

⁵ The proposals from the five main parties in Scotland can be found on the Smith Commission website (<https://www.smith-commission.scot/resources/>). The Devo More (<http://www.ippr.org/publications/funding-devo-more-fiscal-options-for-strengthening-the-union>) and Devo Plus (<http://www.devoplus.com/downloads/>) campaigns also have proposals for further devolution.

⁶ Non-domestic rates. We use the colloquial term ‘business rates’ for ease of exposition, but it should be noted that non-domestic rates are also payable on non-business non-domestic property (such as that used by charities, schools, hospitals and other government organisations).

fully devolved to Wales from April 2015. This is important because it has implications for the debate about 'fair funding' and lessons for how to adjust funding mechanisms as further taxes are devolved.

The current treatment of business rates by the Barnett formula for Scotland and Northern Ireland is flawed, and could be reformed to better meet the stated policy aims. The calculations presented in this paper suggest that these flaws have resulted in Scotland receiving around £400 million more and Northern Ireland around £130 million more in funding this year than they would have if a 'corrected' version of the formula had been in place when the fiscal consolidation began in 2010. By next year, 2015–16, these figures will have grown to £600 million extra for Scotland and £200 million extra for Northern Ireland. In the context of block grants and business rates revenues that together total around £30 billion and £11 billion, respectively, this means funding will be over 2% higher than it would have been had a 'corrected' Barnett formula been introduced in 2010. Put another way, the cuts Scotland and Northern Ireland will have had to deliver between 2010–11 and 2015–16 will be more than one-fifth smaller than if the 'corrected' formula had been in place during this period.

This may be seen as unfair to the people of England and Wales. And if further taxes are devolved to Scotland, Wales or Northern Ireland, efforts should be made to try to avoid a similarly problematic relationship with the Barnett formula (or any successor formula).

The rest of this note proceeds as follows. Section 2 provides further information on how the UK nations' devolved governments are funded. This includes a description of the operation of the Barnett formula and of the changing role of devolved taxes. Section 3 then looks in more detail at how the Barnett formula interacts with business rates – a relationship that is, at present, problematic. We compare the grants Scotland and Northern Ireland have received under the existing formula with what they would have received under a 'corrected' formula, and what they would have received if treated in the same way as Wales. As discussed above, this reveals that, in recent years, Scotland and Northern Ireland have significantly benefited from this flaw in the formula's design. Section 4 discusses the broader lessons for the devolution of further taxes – focusing on how the choice of block grant adjustment affects the type of revenue risks borne by the devolved and UK governments. Section 5 concludes.

2. Funding the UK nations' devolved governments: the present situation

Currently, the vast majority of taxes – including income tax, National Insurance, VAT and corporation tax, among others – are paid by people all over the United Kingdom to the UK government. On the other hand, responsibility for government spending in and on behalf of Scotland, Wales and Northern Ireland is split between the UK government and the devolved governments and local authorities in each of these countries. For instance, in 2012–13, around 40% of spending on behalf of Scotland was undertaken by the UK government (with the largest item being social security benefits, followed by defence), but the remaining 60% (including spending on health, education, transport, social services, and law and order) was undertaken by the Scottish government and Scottish local authorities.⁷ Because they raise relatively little revenue directly themselves, the devolved governments of Scotland, Wales and Northern Ireland rely on transfers from the UK government to fund this spending.

These transfers come largely in the form of block grants from the UK Treasury – one for capital (investment) spending and one for current (day-to-day) spending. These are the overall departmental spending limits (DELs) for the devolved governments in Scotland, Wales and Northern Ireland.⁸ The devolved governments then decide how to allocate this funding between different services and departments.

How these block grants *change* from year to year is determined largely by the Barnett formula – which aims at providing the same pounds-per-person change in funding for the devolved governments as the change in funding for comparable services in England. Box 1 provides background information on the introduction of this formula.

⁷ Scottish Government, *Government Expenditure and Revenue Scotland 2012–13*, 2014, available at <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/GERS>.

⁸ Funding for the UK government's Scottish, Welsh and Northern Ireland Offices is top-sliced from their country's DEL.

Box 1. The origins of the Barnett formula^a

The Barnett formula was introduced in 1978 (and began operating for Scotland and Northern Ireland in 1979 and for Wales in 1980) and is named after Joel Barnett, the then Chief Secretary of the Treasury. Prior to that, during the 1960s and early-to-mid-1970s, public expenditure plans for Scotland, Wales and Northern Ireland were settled by negotiation within the wider public expenditure framework, on much the same basis as for other government departments. Because such negotiations were often difficult – especially during periods of public spending restraint such as the late 1970s – and because there were referendums on devolution to Scotland and Wales taking place in 1979, it was felt that continuing with this approach was undesirable and that a more ‘mechanical’ approach to budget allocation would be beneficial: hence, the Barnett formula.

This was not the first time a formula had been used: in 1888, the then Chancellor, George Goschen, decided to use a formula to allocate probate duties to each of the nations of the UK in proportion to their then respective populations. This ‘Goschen formula’ came to be used to allocate further areas of public spending over time and, unlike Barnett, it applied to the *level* of spending, not the *changes* in spending. Furthermore, the formula continued to be based on 1888 relative populations despite the fact that Scotland’s population fell relative to that in England and Wales substantially over the following decades. Thus, by the 1960s, when the formula fell out of use, Scotland received substantially more than its population-based share of UK government spending. The relatively high levels of public spending in Scotland that are often attributed to the Barnett formula therefore actually precede its introduction. In fact, when the population of Scotland grows at the same rate as that in England, application of the Barnett formula leads to a relative narrowing of the gap in spending per head between Scotland and England. That is because a given pounds-per-person increase in spending would represent a smaller *percentage* increase in spending in Scotland due to its initial higher level of spending. However, in practice, the substantially slower growth of the Scottish population in the 35 years since the Barnett formula came into use has largely prevented this ‘Barnett squeeze’ from taking place.

^a For further information on the history of the Barnett formula and the reasons for its introduction, see House of Commons Library, ‘The Barnett formula’, Research Paper 07/91, 2007 (<http://www.parliament.uk/documents/commons/lib/research/rp2007/rp07-091.pdf>) and House of Lords, Select Committee on the Barnett Formula, *The Barnett Formula: Report with Evidence*, 1st Report of Session 2008–09, 2009 (<http://www.publications.parliament.uk/pa/ld/ldbarnett.htm>).

The formula is used to calculate changes to the block grants as part of the UK government's Spending Reviews setting out multi-year spending plans (such as the 2010 Spending Review, which set out plans for 2011–12 to 2014–15) and when changes to these plans are made at subsequent Budgets and Autumn Statements.

At Spending Reviews, the Barnett formula calculates the change in the block grants to the devolved governments based on the changes in planned spending by UK government departments. However, not all functions of the various departments are devolved to Scotland, Wales and Northern Ireland, and the functions that are devolved vary by nation. To take account of this, the various sub-programmes of each department are given a factor that reflects whether the function is devolved (100%) or not devolved (0%). The idea behind this is that one needs to provide money to the devolved government if the UK government is going to be spending money on something in England that is a responsibility of the devolved governments in the rest of the UK (hence the 100% weight), but not if the UK government picks up the tab for that service in the other country(ies) too (hence a weight of 0%). For example, the Rail Network Grant, which is part of the Department for Transport's overall budget, funds investment in rail infrastructure in England and Wales. In other words, this sub-programme is devolved to Scotland and Northern Ireland (so is given a factor of 100% for these nations) but not devolved to Wales (so is assigned a 0% factor).

A weighted sum of the individual percentages for each departmental sub-programme is then used to calculate an overall percentage of a department's expenditure that is devolved (this is called the *comparability factor*); this will vary by nation. Table 1 shows the comparability factors used in the 2010 Spending Review (and the 2013 Spending Round).

For some departments, all or virtually all functions are devolved, so the comparability percentages are 100% (Education) or very close to 100% (Health, CLG: Communities) for all nations. For others, few (Energy and Climate Change) or very few (Chancellor's departments) functions are devolved to any nation. And for some departments, there is substantial variation in comparability percentages between nations – such as Transport (due almost entirely to differences in whether the Rail Network Grant is devolved, as discussed above) and CLG: Local Government (CLG:LG).

Table 1. Departmental comparability percentages

Department	Scotland	Wales	Northern Ireland
Education	100.0%	100.0%	100.0%
Health	99.1%	99.1%	99.1%
Transport	98.0%	73.1%	100.0%
CLG: Communities	99.5%	99.5%	99.3%
CLG: Local Government (LG)	17.3%	100.0%	17.3%
Business, Innovation and Skills	79.1%	78.4%	79.2%
Home Office	76.0%	0.0%	76.0%
Justice	99.7%	0.0%	99.5%
Law Officers' departments	100.0%	0.0%	94.0%
Energy and Climate Change	20.6%	20.6%	20.7%
Environment, Food and Rural Affairs	93.2%	91.6%	98.7%
Culture, Media and Sport	96.0%	90.2%	96.0%
Work and Pensions	0.0%	0.0%	100.0%
Chancellor's departments	0.5%	0.5%	0.7%
Cabinet Office	7.4%	6.3%	14.3%
Independent bodies	0.3%	0.3%	37.1%

Source: HM Treasury, *Statement of Funding Policy*, 2010

(http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/d/sr2010_fundingpolicy.pdf).

These comparability factors are then used together with information on relative populations to determine how changes in UK departmental spending announced at Spending Reviews affect grants to the devolved administrations.⁹ In particular, the change in the devolved government's block grant is calculated by summing the following calculation across departments:

$$\begin{array}{ccccc} \text{Cash change in} & & \text{Department's} & & \text{Appropriate} \\ \text{department's} & \times & \text{comparability} & \times & \text{population} \\ \text{DEL} & & \text{percentage} & & \text{proportion} \end{array}$$

Changes in grants to the devolved administrations are calculated during Spending Reviews using these comparability factors because changes at the level of the sub-programmes are generally not known at this time. If all

⁹ When spending changes are made at Budgets or Autumn Statements, on the other hand, HM Treasury usually determines whether the specific item (e.g. extra spending on free school meals) is something that is devolved to a particular country. If it is, a full 100% factor is used; if not, there is no change in grant for the devolved government. The 'full' formula (using comparability factors) is only used if more general changes to departmental budgets are made in Budgets (as happened in 2013) or Autumn Statements (as happened in 2012 and 2013).

sub-programmes subsequently see their spending change in line with the overall department's budget, then using the comparability factor generates an appropriate change in grants to the devolved administrations to cover comparable functions. However, if the subsequent relative changes in spending differ by sub-programme, then the changes in funding for the devolved administrations may not reflect the changes in the amount spent on comparable functions in England.

Unfortunately, there seems little that can be done about this without specifying detailed within-department spending plans at the time of Spending Reviews or making adjustments to initial allocations to the devolved governments once these plans are finalised. Neither of these seems particularly attractive given the need both for UK departments to have flexibility when allocating their budget between specific sub-programmes and for the devolved governments to have reasonable certainty about the block grants they will get.¹⁰ And given that there is little reason to think that there will be systematic differences in changes in spending on sub-programmes that are devolved versus those that are non-devolved, one might expect this issue to even out across departments and/or over time.

The way comparability factors are currently calculated for CLG:LG is especially problematic, though. This is because of a flaw in the way the Barnett formula treats one specific item – local government expenditure in England that is notionally funded by business rates revenues. It is to this issue of devolved taxes and business rates in particular that we now turn.

Devolved taxes

In addition to the block grant (and a few other ring-fenced grants from the UK government), some spending on devolved services is funded by devolved taxes and charges. These include council tax – or its counterparts, district and regional domestic rates in Northern Ireland – which is devolved to all three nations, and business rates, which are fully devolved to Scotland and Northern Ireland but only partially devolved to Wales at present.

¹⁰ Although it is worth noting that, under plans for income tax devolution, adjustments to initial allocations will be made if income tax revenues do not come in in line with forecasts used to determine the initial allocations. This shows that it is feasible (if not always desirable) to make adjustments to initial allocations.

Council tax is set, collected and kept by local authorities. As such, it sits outside of the DELs for the UK government departments that enter into the Barnett formula's calculations. Thus, council tax does not interact directly with the Barnett formula, and changes in local government spending in England funded by changes in council tax do not generate changes in grants to the devolved governments of Scotland, Wales or Northern Ireland via the Barnett formula.

Business rates, on the other hand, are largely collected by local authorities but they do not retain all of the revenues: instead, revenues are at least partly pooled across local authorities and then redistributed according to UK or devolved government funding formulae.^{11,12} This means central government grants to local authorities in England that are notionally funded by business rates form part of the CLG:LG DEL. Similarly, business rates revenues collected in Northern Ireland, Scotland and Wales also fund part of their devolved governments' budgets. Because of this, business rates do interact with the calculation of the block grants for the devolved governments – and with the Barnett formula. We show in the next section that the way the Barnett formula is adjusted at the moment to account for business rates devolution is problematic, though, and could be improved upon.

Under the Scotland Act 2012 and the Wales Bill currently going through parliament, these taxes are set to be joined by stamp duty land tax and landfill tax (in 2015 in Scotland and 2018 in Wales) and partial powers over income tax rates on non-savings income (in 2016 in Scotland and subject to a referendum in Wales). The Smith Commission is also considering the case for further devolution of tax (and spending) to

¹¹ Local authorities in Wales do not retain any business rates revenue; it is all pooled and redistributed via grants to local authorities. This was also the case in England (until 2013) and Scotland (until 2012), since when local authorities retain a portion of the growth in their business rates, at least for a period of a few years. See S. Adam and H. Miller, 'Business rates', in C. Emmerson, P. Johnson and H. Miller (eds), *The IFS Green Budget: February 2014*, Institute for Fiscal Studies, London (http://www.ifs.org.uk/budgets/gb2014/gb2014_ch11.pdf).

¹² Tax rates and rules are set by the UK government (for England) and the devolved governments in Scotland and Wales. Northern Ireland operates a somewhat different system of national and regional business (and residential) rates.

Scotland following the 'No' vote in the Scottish referendum and the three main Unionist parties' 'vow' of further reform.

Revenues from these other taxes currently accrue to the UK Treasury and when (or, in the case of income tax in Wales, if) they are devolved, a corresponding reduction to the block grant will have to be made. This means calculating an initial block grant reduction, and developing and agreeing a mechanism to adjust this reduction over time as revenues from the devolved taxes (and the same taxes in England) change. Section 4 of this note examines this seemingly 'techy' issue and shows that it is an important thing to consider and that it relates to how much and what type of revenue risk the devolved government is to bear from devolved taxes. It also looks at what lessons can be learned from the (problematic) way in which business rates have been devolved.

3. The Barnett formula and business rates: a problematic relationship

Business rates are fully devolved to Scotland and Northern Ireland. This means not only that the devolved governments in these countries set tax rates and policies but also that their budgets depend, in part, on how much revenue is raised from business rates in their country. In particular, the system is set up with the aim that the devolved governments bear the full revenue risk from business rates during a Spending Review period. For instance, they gain from the increases in business rates revenues that occur when the economy is doing well and more business properties are being built and occupied, and they lose from the falls in business rates revenues that occur during business downturns.

In contrast, while business rates policy is largely devolved to Wales, the resources available to the Welsh government do not depend on how much revenue is raised from business rates in Wales, unless changes in revenues are directly related to Welsh government business rates policy decisions (such as granting exemptions or discounts). Instead, the UK Treasury bears the risk of Welsh business rates revenues and adjusts the block grant it gives the Welsh government accordingly if revenues are lower or higher than expected.

This is set to change in April 2015 with the full devolution of business rates to Wales, at which point the Welsh government will begin to bear the revenue risk. However, the current difference in the extent of business rates devolution is the reason why the Barnett formula's treatment of

spending in England funded by business rates revenues differs between Scotland and Northern Ireland on the one hand and Wales on the other (see Table 1 earlier).

Scotland and Northern Ireland keep their own business rates revenues and bear the full risk of what happens to these revenues. As a result, their block grants from the Treasury should be smaller than they would be if business rates were not devolved: they cannot benefit from a 'full' block grant and keep their own business rates revenues. And changes in spending in England that are due to changes in business rates revenues should not generate a consequential change in the grant to these countries' devolved governments. One way to try to achieve this is to give spending notionally funded by business rates revenues in England a 0% factor in the Barnett formula for Scotland and Northern Ireland. In principle, changes in such spending would therefore not lead to changes in the grants going to Scotland and Northern Ireland. On the other hand, because Wales effectively pools its business rates revenues and revenue risk with England, it should receive a consequential change in funding; hence, a 100% factor for Wales.

Because, notionally at least, business rates revenues are redistributed to local authorities via grants, they are treated as a sub-programme ('national non-domestic rate payments') of the CLG: Local Government DEL. For instance, in the 2010 *Statement of Funding Policy* (used for the 2010 and 2013 Spending Reviews), of the £26.0 billion total provision for this DEL in 2010–11, £21.5 billion was grants funded by business rates revenues. This represents 82.7% of the department's DEL and means that while the comparability factor for CLG:LG was 100% for Wales, it was just 17.3% for Scotland and Northern Ireland. In other words, for every £1 per person change in this department's budget, the Welsh government saw a £1 per person change in its block grant, but the Scottish and Northern Irish governments saw only a 17.3p per person change.

However, allocating English business rates revenues to the CLG:LG DEL, and thereby reducing its comparability factor while leaving other comparability factors unchanged, means that Scotland and Northern Ireland do not only bear business rates revenue risk: they also bear the risk of changes to CLG:LG's budget being different from those of other departments serving England (such as the English NHS or Education). For instance, when CLG:LG's budget increases by less (or falls by more) than

those of other departments, Scotland and Northern Ireland benefit from the fact that they receive only a partial consequential from changes in CLG:LG's budget but 'full' consequentials from changes in other departments' budgets. But Scotland and Northern Ireland need not necessarily benefit from this feature of the formula. Were the CLG:LG budget to increase by more (or fall by less), they would lose out from the

Box 2. An example showing how the existing treatment of business rates by the Barnett formula is flawed

First, suppose that there is no change in business rates revenues anywhere across the UK. Second, suppose that, for whatever reason, the UK government decides to increase spending on education in England by £1 billion and cut grants to English local government by £1 billion. This would leave overall government spending in England unchanged and, following the logic underlying the Barnett formula, the grants to the devolved governments should also be unchanged.

But what would happen in practice? Wales would receive a £57.2 million budget increase as a result of the increases to the Education DEL and an offsetting £57.2 million budget cut as a result of the cuts to the CLG:LG DEL, leaving its block grant unchanged overall.^a On the other hand, Scotland would receive a £98.9 million budget increase as a result of the increase in the Education DEL, but a cut of only £17.1 million as a result of the cut to CLG:LG, because of its 17.3% comparability factor.^b This results in it seeing its block grant increasing by £81.8 million. Northern Ireland would gain £28.1 million from the same mechanism.

Conversely, if spending on education in England were cut by £1 billion and grants to English local government increased by £1 billion, Scotland and Northern Ireland would see their block grants *fall* by £81.8 million and £28.1 million, respectively (again Wales would be unaffected).

Thus the size of the block grants to Scotland and Northern Ireland depends not only on how much is spent in England, but also on how it is allocated between DCLG:LG and other departments serving England. This is clearly not in the spirit of the Barnett formula.

^a These figures are calculated as £1,000 million multiplied by 100% (the comparability factor for both Education and CLG:LG for Wales) multiplied by 5.72% (Wales's population as a percentage of England's in 2013, which is the most up-to-date currently available).

^b These figures are calculated as £1,000 million multiplied by 100% and 17.3% (the comparability factor for Education and CLG:LG, respectively, for Scotland) multiplied by 9.89% (Scotland's population as a percentage of England's in 2013). Analogous calculations are made for Northern Ireland.

fact that they receive only a partial consequential from changes in the CLG:LG budget but 'full' consequentials from other changes. Box 2 provides a simple numerical example of these effects in action.

This feature of the Barnett formula means the block grants for Scotland and Northern Ireland have been relatively insulated from the large cuts to the CLG:LG budget since 2010. For instance, in the 2010 Spending Review, planned cuts to the CLG:LG DEL between 2010–11 and 2014–15 amounted to £5.7 billion in cash terms. This equated to £110 per person in England, holding population fixed at its mid-2009 level (this is the population estimate that was used in the 2010 Spending Review).¹³ The Barnett consequentials for this change amounted to a cut of £110 per person for Wales, but £19 (17.3% of £110) per person for Scotland and Northern Ireland. Similarly, cuts to the CLG:LG DEL in 2015–16 as a result of the 2013 Spending Round will amount to £49 per person in England, resulting in consequential equivalent to £49 per person in Wales, but only £8 per person in Scotland and Northern Ireland.¹⁴

Not all UK government departments have seen such substantial cuts in their budgets, however. The NHS budget was protected in real terms: an increase of more than £10 billion in cash-terms funding between 2010–11 and 2014–15 was announced at the 2010 Spending Review. Education spending was also relatively protected. In contrast to the partial pass-through of the cuts to the CLG:LG budget, Scotland and Northern Ireland benefited *fully* from the protection of the NHS and Education budgets due to their 100% (or near-100%) comparability factors under the Barnett formula.

This would not be a problem if the amount spent on CLG:LG was directly linked to how much was raised in business rates revenues in England – in that case, increases or cuts to this budget would reflect rises or falls in English business rates revenues that Scotland and Northern Ireland should not bear under full devolution. Increases or decreases in other departments would, on the other hand, reflect rises or falls in other tax

¹³ In practice, the fall in CLG:LG DEL per person during these years will have been substantially greater because of population growth. The Barnett formula takes no account of forecast population growth.

¹⁴ Based on the mid-2010 population estimates, which were used in the 2013 Spending Round.

revenues or borrowing – which Scotland and Northern Ireland should also gain or lose from. But in reality, the CLG:LG budget does not depend on how much is raised in business rates revenues at all. For instance, while the 2010 Spending Review led to cuts of £5.7 billion in CLG:LG DEL between 2010–11 and 2014–15, business rates revenues are forecast to have increased during the same four years. This reflects the fact that the notional allocation of business rates revenues to grants to local government does not bind in reality.¹⁵

Thus, under the existing formula, the block grants to Scotland and Northern Ireland depend not only on overall spending on comparable (devolved) services in England, but also on whether that money is allocated to the CLG:LG budget or the budgets of other UK government departments serving England. This is clearly not in the spirit of the Barnett formula, and can lead to arguably unfair differences in spending changes in Scotland and Northern Ireland vis-à-vis England and Wales.

Changing the Barnett formula to better account for business rates

Given this flaw in the Barnett formula, two key questions follow:¹⁶

- What have the financial effects of this flaw in the formula been?
- And can the Barnett formula be changed to fix this flaw?

We address these questions in reverse order.

The problem identified arises because the Barnett formula treats business rates revenues as a sub-programme of the CLG:LG budget. While business rates do notionally fund part of this budget – and one can therefore see why this approach has been taken – we have shown that this approach leads to Scotland and Northern Ireland bearing the risk of spending being reallocated within England. They can win or lose from this risk.

The solution is to treat English business rates revenues as part-funding *all* departmental spending that is England-only (rather than just part-funding

¹⁵ This is true, even though the £5.7 billion in cuts to CLG:LG *exceeded* the £4.5 billion recorded as being funded by sources *other* than business rates, because local government receives other grants that sit outside the CLG:LG DEL – the biggest of which is the Dedicated Schools Grant (part of the Education DEL).

¹⁶ There is also a third question: would the Scottish and Northern Irish governments have agreed to the full devolution of business rates if it had been implemented differently? Unfortunately, we cannot know the answer to this question.

CLG:LG). Doing this would mean that Scotland and Northern Ireland would still bear the risk of their own business rates revenues, but would no longer bear the risk of the CLG:LG budget changing differentially to that of other UK government departments serving England.

How does one make an adjustment to the comparability factors to implement such an approach? A straightforward and easy-to-understand approach is to treat English business rates revenues as part-funding all departments that are focused on providing services to England only. To do this, one needs to:

- decide which departments these are – one reasonable choice (but not the only choice, as discussed in Box 3) is CLG:LG plus those other departments where the comparability factor is more than 50% for *every* devolved nation (so that the majority of what that department funds is England-only);
- calculate what fraction of these departments’ overall spending is notionally funded by English business rates revenues (it was 9% in 2010–11) and reduce the existing comparability factors for each department by this amount in *percentage points*.

Table 2 shows the impact of our percentage-point adjustment approach on the 2010 *Statement of Funding Policy*’s comparability factors.

Table 2. Suggested amended comparability factors, 2010 Statement of Funding Policy

Department	Scotland		Northern Ireland	
	Existing	Suggested	Existing	Suggested
Education	100.0%	91.0%	100.0%	91.0%
Health	99.1%	90.1%	99.1%	90.1%
Transport	98.0%	89.0%	100.0%	91.0%
CLG: Communities	99.5%	90.5%	99.3%	90.3%
CLG: Local Government	17.3%	91.0%	17.3%	91.0%
Business Innovation and Skills	79.1%	70.1%	79.2%	70.2%
Environment, Food and Rural Affairs	93.2%	84.2%	98.7%	89.7%
Culture, Media and Sport	96.0%	87.0%	96.0%	87.0%

Note: CLG: Local Government’s suggested comparability factor is calculated as 100%–9.0%. This is because the existing comparability factor is 100% if one ignores business rates revenues. Source: HM Treasury, *Statement of Funding Policy*, 2010 (http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/d/sr2010_fundingpolicy.pdf); authors’ calculations.

Box 3. An example showing how the existing treatment of business rates by the Barnett formula is flawed

The approach adopted here is not the only approach one could take. An alternative would be to reduce the comparability factor for each department by the same *percentage* of that department's *lowest* comparability factor (the lowest comparability factor represents the fraction of a department's expenditures that relate to sub-functions covering England only).^a This percentage would be calculated by dividing English business rates revenues by the total amount spent by government departments on functions that relate to England only (which would be calculated by multiplying each department's expenditure by that department's lowest comparability factor and then summing across departments).

The percentage reduction would be higher than the equivalent percentage-point reduction, and would mean comparability factors for departments that currently have high comparability factors would be reduced by more in *percentage-point* terms than those of departments with low comparability factors.^b

In one way, this approach is preferable to the one we have adopted – it treats English business rates as funding a higher proportion of the budget of departments that spend more of their budget on sub-programmes relating to England only. However, it is rather more complex to implement and explain than an approach based on a common *percentage-point* reduction in comparability factors, and in practice the different approaches lead to very similar funding allocations.^c Because the perceived legitimacy of funding systems is likely to depend to some degree on the extent to which they are transparent and easy to understand, we therefore use the simpler *percentage-point* method.

^a For instance, suppose that the comparability factor of a department is 90% for Scotland and Northern Ireland and 70% for Wales, and that all functions that are devolved to Wales are also devolved to Scotland and Northern Ireland (in practice, this is nearly always the case). Then, 70% of expenditure relates to sub-programmes covering England only, 20% to England and Wales, and 10% to the whole United Kingdom. Thus the lowest comparability factor represents the fraction of expenditure relating to England only.

^b For instance, if the percentage reduction was 10%, a department with an initial lowest comparability factor of 100% would see a 10 percentage point reduction, while one with an initial 50% lowest comparability factor would see a 5 percentage point reduction.

^c We show the effects of using this alternative approach for the 2010 Spending Review in an online appendix (http://www.ifs.org.uk/docs/bnbarnett_phillips_appendix.pdf). If anything, the 'gains' to Scotland and Northern Ireland from the flaw in the Barnett formula look slightly *larger* when using the alternative 'corrected' formula than when using our simpler 'corrected' formula: £410 million for Scotland, for instance, compared with the £400 million reported in Table 3 of this briefing note.

Given the amended comparability factors in Table 2, we can assess how large the impacts of the ‘flaw’ in the Barnett formula have been by comparing recent spending allocations under the existing formula with those under the ‘corrected’ formula.

This is done for the 2010 Spending Review in Table 3 and for the 2013 Spending Round in Table 4 (all figures are in real terms, 2014–15 prices).¹⁷ The tables also include the forecast real-terms growth in business rates revenue. These forecasts do not differ according to whether we apply the existing formula or our ‘corrected’ formula, but we include them in order to calculate the overall budget cuts under each version of the formula. In the case of Northern Ireland, these forecasts are based on business rates revenue out-turns for 2010–11 to 2013–14, after which point we assume revenues grow in line with Office for Budget Responsibility (OBR) forecasts for business rates in the UK (excluding Scotland). The figures show real-terms growth of £13 million between 2010–11 and 2014–15. For Scotland, we use figures for the distributable amount of business rates revenues contained in Scottish government Budgets – forecasts for which are available as far as 2015–16.¹⁸ Scottish distributable non-domestic rate revenues are forecast to grow by a substantial £437 million between 2010–11 and 2014–15. Using the same approach as in Northern Ireland would result in substantially lower forecast growth – £187 million. This shows that the Scottish government is forecasting growth in its distributable business rates income that significantly exceeds forecast business rates revenue growth for the UK as a whole.¹⁹

¹⁷ Note that changes to spending allocations were also made in the 2012 and 2013 Autumn Statements and the 2013 Budget, but we have been unable to obtain data that allow us to model the impact of reforms to the Barnett formula on the allocations made on these occasions. This means that our results do not cover all spending changes made since 2010 but they do cover the vast majority.

¹⁸ The distributable amount can differ from the amount of revenues actually raised in a particular year due to adjustments to account for revenue surpluses or deficits in earlier years, but it follows the same long-term trend as underlying revenues.

¹⁹ How fast Scottish business rates grew in real terms is not central to the analysis of this subsection – because, as has been noted, the same forecasts are used when applying the ‘corrected’ formula as when applying the existing formula. Thus any change in forecasts affects the size of the cuts under both scenarios by exactly the same cash amount. However, it does affect analysis in the next subsection, where we

Table 3. 2010 Spending Review allocations under existing and ‘corrected’ Barnett formula

	Change in funding (£ million) 2010–11 to 2014–15		Difference	
	Existing formula	Corrected formula	£ million	% of spending in 2014–15
Scotland				
Current DEL	–904	–1,402	–497	–2.0%
Capital DEL	–1,192	–1,095	+97	+4.2%
Business rates	+437	+437	0	0.0%
Total resources	–1,658	–2,059	–400	–1.3%
Northern Ireland				
Current DEL	–434	–601	–167	–1.8%
Capital DEL	–448	–416	+33	+4.1%
Business rates	+13	+13	0	0.0%
Total resources	–869	–1,003	–134	–1.2%

Notes:

(a) The figures reported here for ‘Existing formula’ will not match published Spending Review allocations for Scotland. This is because the Scottish government deferred the in-year cuts made by the UK government in 2010–11 until 2011–12, and this was accounted for in published figures. These deferred cuts are stripped out from the figures reported here as they relate to policy decisions made before Spending Review 2010.

(b) We have been unable to obtain forecasts of Northern Irish business rates revenues for 2014–15 and beyond. Figures for Northern Irish business rates revenue changes reported in this table, subsequent tables and the text of this briefing note take actual growth in business rates revenues in Northern Ireland between 2010–11 and 2013–14, and assume that growth after 2013–14 matches the average growth rate in business rates revenues for the UK as a whole.

Source: Author’s calculations using HM Treasury spreadsheets used for calculating Barnett consequentials; business rates revenues are obtained from the Scottish Budget and directly from Northern Irish finance personnel. Note that figures for business rates revenues for Scotland refer to the ‘distributable amount’, which can differ from actual revenues obtained in a given year due to forecasting errors. All figures are in real terms, 2014–15 prices.

The results of our exercise are stark.

Table 3 shows that had this ‘corrected’ formula been applied in the 2010 Spending Review, the resulting planned current DEL for Scotland in 2014–15 would have been £497 million lower than that actually allocated under the existing formula. This is because Scotland (and Northern Ireland) would have received bigger Barnett consequentials from the large falls in the CLG:LG budget, and smaller consequentials from the increases in the NHS budget. Another way of thinking about this is that the cuts to

examine how Scotland would have fared under partial devolution (where it does not bear business rates revenue risk). See footnote 28.

Scotland's current DEL between 2010–11 and 2014–15 were over one-third smaller (at 3.4%) than they would have been under the 'corrected' formula (5.3%).²⁰

In contrast, cuts to Scotland's capital DEL would have been £97 million *smaller* using the 'corrected' formula. This is because of the lower comparability factors for departments seeing substantial cuts to their capital DELs under the 'corrected' formula (CLG:LG has no capital DEL). Taken together, this means Scotland's allocation in 2014–15 was £400 million higher than if the 'corrected' formula had been applied in the 2010 Spending Review. This means the Scottish government's overall spending power in 2014–15 (including its business rates revenues) was 1.3% higher than it would have been if the 'corrected' formula had been in place since 2010. For Northern Ireland, the corresponding figures are £134 million and 1.2%, respectively.²¹

Table 4 shows a similar story for the 2013 Spending Round. The real-terms reduction in budgets in 2015–16 would have been close to £200 million higher in Scotland and £65 million higher in Northern Ireland under the

Table 4. 2013 Spending Round allocations under existing and 'corrected' Barnett formula

	Change in funding (£ million) 2014–15 to 2015–16		Difference	
	Existing formula	Corrected formula	£ million	% of spending in 2015–16
Scotland				
Current DEL	–500	–659	–159	–0.6%
Capital DEL	+277	+244	–34	–1.3%
Business rates	+90	+90	0	0.0%
Total resources	–133	–326	–193	–0.6%
Northern Ireland				
Current DEL	–182	–236	–54	–0.6%
Capital DEL	+100	+89	–11	–1.2%
Business rates	+24	+24	0	0.0%
Total resources	–57	–122	–65	–0.6%

Note: See note (b) for Table 3.

Source: See source for Table 3.

²⁰ The actual cuts reported here will differ from those reported in Spending Review 2010 documents. See note (a) to Table 3 for further details.

²¹ See note (b) to Table 3.

‘corrected’ formula. This means, taking the 2010 and 2013 Spending Reviews together, the cuts to the Scottish government’s budget between 2010–11 and 2015–16 will be around £600 million less than they would be under the ‘corrected’ formula. For Northern Ireland, the equivalent figure is £200 million. This is equivalent to around 2% of the planned 2015–16 budgets of £30.4 billion and £10.9 billion (including business rates revenues) in 2015–16 for Scotland and Northern Ireland, respectively.²²

Of course, it is the specific changes in DELs since 2010 – big cuts to the CLG:LG DEL and protection for the NHS and Education DELs – that have led to this outcome. As already mentioned, there is nothing inherent about the flaw in the Barnett formula that means it must lead to Scotland and Northern Ireland receiving cuts that are too small. If the CLG:LG budget were to increase by more than other DELs, Scotland and Northern Ireland would be penalised under the existing Barnett formula. However, this has not been the experience since devolved government started in 1999. In the 2000, 2002, 2004 and 2007 Spending Reviews, the CLG:LG budget²³ grew, but it grew less quickly than the average for departments that are focused on providing services to England only. This reflects the very large funding increases for the NHS (by far the largest of these other departments) during this period. The differences are generally a little less dramatic than since 2010, but our calculations suggest that application of the ‘corrected’ Barnett formula would have led to smaller increases in the grants to Scotland and Northern Ireland during the 2000s too. For instance, the planned increase in grants to Scotland would have been:²⁴

- around £200 million smaller than under the ‘corrected’ formula during the 2000 Spending Review period (covering 2001–02 to 2003–04);

²² Scotland’s and Northern Ireland’s budgets calculated using figures for DEL from the Public Expenditure Statistical Analyses (PESA) 2014 and forecasts for business rates revenues (see source and notes to Table 3).

²³ Or its predecessor departments’ budgets.

²⁴ Authors’ calculations using published Spending Review documents and unpublished HM Treasury spreadsheets. Figures are reported in cash terms so that they can be summed over time to give a total effect for the period. But the effect of earlier cash-terms differences in spending power would have been greater in real-terms for these earlier years.

- around £30 million smaller during the last two years of the 2002 Spending Review period (covering 2004–05 and 2005–06);
- £100 million smaller during the last two years of the 2004 Spending Review period (covering 2006–07 and 2007–08);
- £80 million smaller during the 2007 Spending Review period (covering 2008–09 to 2010–11).²⁵

Adding these effects to the £600 million from the 2010 and 2013 Spending Rounds shows that Scotland is set to see its budget increase by £1 billion more between 2000–01 and 2015–16 as a result of a ‘flaw’ in the Barnett formula. This represents around 3% of its budget in 2015–16. That Scotland and Northern Ireland have consistently received bigger increases (or smaller cuts) to their grants because of this flaw in the Barnett formula might be considered unfair to England and Wales. Given that it can be fixed relatively easily, there is a clear case for considering changes in how the Barnett formula deals with non-domestic rate revenues in future Spending Reviews. The solution outlined here would mean devolved governments would still bear the risk of their own business rates revenues, but would no longer be affected by reallocations of spending within England. Thus it would still satisfy the aims of ‘fully’ devolving business rates and would be more consistent with the principles underlying the Barnett formula.

Comparing the treatment of business rates in Scotland with that in Wales

Of course, there are alternative models of how one can devolve business rates and it is worthwhile comparing how Scotland and Northern Ireland have fared relative to these.

In this subsection we look at how they would have fared had HM Treasury borne business rates revenue risk, as it currently does for Wales under its system of ‘partial’ devolution. This allows us to examine whether Scotland has gained or lost from the ‘full’ devolution of business rates. In doing this,

²⁵ The effect in the 2007 Review itself would have been £110 million. But the cuts to Scotland’s 2010–11 DEL announced in Budget 2009 would have been £30 million less under the ‘corrected’ formula, reducing the overall effect to £80 million. Note that with the exception of Budget 2009, we have been unable to obtain the data needed to model changes to budget allocations made in Budgets or Pre-Budget Reports. However, as in the post-2010 period, the Spending Reviews account for the vast majority of the spending changes during the 2000s.

we look at how the results of this analysis differ when using the existing Barnett formula and when using the ‘corrected’ version discussed above.²⁶ Note that because modelling partial devolution is more complicated than modelling full devolution, the figures presented here should be considered our best estimates rather than fully precise, and results are not available for Northern Ireland.²⁷ The next subsection looks at how both Scotland *and* Northern Ireland would have fared if changes to the block grant to account for business rates devolution were made in the same way as planned for the devolution of income tax – a method which does not directly interact with the Barnett formula.

Table 5. Change in grants (£ million) between 2010–11 and 2014–15 from 2010 Spending Review under different versions of the Barnett formula

	Fully devolved business rates		Partially devolved business rates
	Existing formula	Corrected formula	
Scotland			
Current DEL	–904	–1,402	–1,519
Capital DEL	–1,192	–1,095	–1,193
Business rates	+437	+437	+13
Total resources	–1,658	–2,059	–2,699

Notes:

(a) The £13 million gain from business rates in Scotland under the ‘partially devolved’ scenario reflects policy changes including the ‘Public Health Supplement’ payable by large stores selling both alcohol and tobacco, a reduction in the generosity of empty properties relief, the New and Fresh Start schemes, and 2% uprating. We assume Scotland would still have received these revenues under this scenario. The revenue estimates have been obtained from correspondence with the Scottish Government.

(b) See note (a) for Table 3.

Source: Author’s calculations using HM Treasury spreadsheets used for calculating Barnett consequentials. All figures are in real terms, 2014–15 prices.

²⁶ We will publish an analysis of the related question of how Wales would have fared if business rates had been fully devolved to it in the near future.

²⁷ This is because, under the partial devolution model, while the devolved government does not gain or lose from underlying changes in business rates revenues, it does bear the direct fiscal gain or loss from business rates policy decisions (such as changing tax rates or granting exemptions). We have tried to account for the revenue implications of policy changes in our calculations where possible. However, it has been difficult to obtain information on all policy changes made. In particular, we have not obtained information on policy changes in Northern Ireland (which is why we exclude Northern Ireland from the analysis in this subsection), nor changes from prior to 2010 in Scotland. This means the figures in this subsection should be considered our best estimates rather than fully precise, especially those relating to the period before 2010.

Table 5 shows that had business rates been devolved to the Scottish government in the same way as they are to Wales at the time of the 2010 Spending Review, the spending cuts it would have faced would have been substantially larger than those it actually faced.

The Scottish government's total resources would have been reduced by close to £2.7 billion in real terms between 2010–11 and 2014–15, rather than the actual £1.7 billion of cuts required under the existing Barnett formula. This is because Scotland would have faced the full impact of the cuts to Whitehall budgets and would not have benefited from the forecast strong growth in its own business rates revenues since 2010.²⁸ The cuts in 2015–16 as a result of the 2013 Spending Round would also have been larger: £495 million instead of £130 million.²⁹

Thus, Scotland has benefited significantly in recent years from the full devolution of business rates. These revenues have increased at a time when the UK government is making substantial cuts to CLG:LG spending. This has allowed the Scottish government to make significantly smaller cuts than those required in England and Wales. The same is also very likely to be true in Northern Ireland.³⁰

²⁸ Note that if business rates income was to grow less quickly between 2010–11 and 2014–15 than in our baseline forecast (based on forecast distributable amounts listed in Scottish government Budgets), then overall budget cuts under the system of 'fully devolved' business rates would be greater than shown here. For instance, if we were to use revenue out-turns until 2013–14 and assume revenues grew in line with OBR forecasts for the UK thereafter, then business rates revenues would grow by £187 million in real terms as opposed to £437 million between 2010–11 and 2014–15. This would increase the overall cuts under full devolution with the existing formula from £1.7 billion to £1.9 billion. These are closer to (but still substantially less than) the £2.7 billion of cuts required under partial devolution. This shows that even if business rates growth is not as high as expected in Scotland, then full devolution will still result in substantially smaller cuts than would be the case under partial devolution.

²⁹ The £495 million in cuts include £35 million as a result of the lapsing of the Public Health Supplement and £10 million from a 2% uprating in April 2015.

³⁰ As noted in footnote 27, we have been unable to obtain information on business rate policy decisions in Northern Ireland. However, our calculations show that the full Barnett consequential cuts to the CLG:LG budget that Northern Ireland would have seen if business rates were only partially devolved would have led to cuts £200 million greater in the 2010 Spending Review and £90 million greater in the 2013 Spending Round. This means that, unless changes in business rates policy since 2010 have acted

Prior to 2010, however, the picture was different. Assuming that business rates policy changes in Scotland during the 2000s were broadly revenue neutral, it would have seen its budget increase by roughly £345 million *more* under partial devolution than was actually the case.³¹ In particular, Scotland would have seen increases of £205 million more in the 2004 Spending Review and £140 million extra in the 2002 Spending Review (in the 2000 and 2007 Spending Reviews, it would have seen increases very similar to what it actually saw). This means that, prior to 2010, Scotland and, in all likelihood, Northern Ireland³² were losing somewhat from the full devolution of business rates. This is because business rates revenues were growing less quickly than the CLG:LG budget in England.

To some extent, therefore, the ‘gains’ (relative to partial devolution) to Scotland and Northern Ireland since 2010 have been undoing the ‘losses’ they faced in the previous decade. However, in the case of Scotland at least, it looks as though the recent gains (around £1.4 billion in the 2010 and 2013 Spending Review periods) significantly outweigh the earlier losses (around £0.3 billion). And it is likely that the ‘gains’ will continue to build up between 2016–17 and 2018–19 as the UK government implements further cuts to DELs as part of its fiscal consolidation, while business rates revenues continue to increase.

If business rates had been fully devolved using our ‘corrected’ version of the Barnett formula, the picture would have been somewhat different. In this case, full devolution would have led to bigger losses in the 2000s. In the case of Scotland, these losses sum to £755 million.³³ Gains in the 2010

to increase business rates revenues by more than £290 million in 2015–16, Northern Ireland would also have seen bigger cuts under partial devolution than it actually faced.

³¹ If, in practice, policy changes had acted to increase business rates revenues, then budget increases under partial devolution would have been greater than we have estimated. This would result in gains under partial devolution during the 2000s being higher than £345 million. Conversely, if policy changes acted to reduce business rates revenues, then gains would have been lower than £345 million.

³² We have been unable to obtain business rates revenues for Northern Ireland for the period prior to 2004–05, but there is little reason to expect them to have grown substantially more quickly than Scotland’s during this period.

³³ Author’s calculations using published Spending Review documents and unpublished HM Treasury spreadsheets. Losses would have been £200 million in the 2000 Review, £170 million in the 2002 Review, £305 million in the 2004 Review and £80 million during the 2007 Review period (including subsequent cuts made in Budget 2009).

Spending Review and 2013 Spending Round periods would, on the other hand, have been *smaller*: around £810 million in total.³⁴ Therefore, had full devolution been implemented ‘correctly’, earlier losses would have been roughly balanced by the later gains up to 2015–16.³⁵ Thus Scotland has gained so much from full devolution of business rates *thus far* not because its business rates revenues have proved more robust than overall government spending in England. Instead, it has gained from the fact that flaws in the way full devolution has been implemented in the Barnett formula mean it has been sheltered from the particularly large cuts in the CLG:LG budget but has gained fully from the rising NHS and Education budgets.

Comparing the treatment of business rates in Scotland and Northern Ireland with that of income tax

Another option for reform of the system of business rates devolution would be to adopt the same mechanism as is to be used for income tax.

Under the Scotland Act 2012, from April 2016 the income tax rates charged by the UK government on the incomes of Scottish taxpayers are set to be reduced by 10 percentage points (to 10%, 30% and 35%) and the Scottish government will have the power to levy a flat ‘Scottish’ rate of income tax on top of these then lower UK rates.^{36,37} It could set a rate of

These figures have been calculated on the basis of business rates policies having no net revenue effect. The reasoning of footnote 31 also applies here if, in fact, business rates policy changes did lead to net increases or decreases in business rates revenues.

³⁴ This is calculated as £640 million of gains in the 2010 Spending Review (see Table 5) and £170 million of gains in the 2013 Spending Round.

³⁵ Again, because we have been unable to obtain revenue figures for Northern Ireland prior to 2004–05, we cannot perform a similar calculation for that country. However, unless business rates revenues growth was particularly strong in Northern Ireland prior to 2004–05, it seems likely that the system of full devolution of business rates would also have cost Northern Ireland in the period 2000–01 to 2015–16 if it had been implemented ‘correctly’.

³⁶ Further information on the devolved income tax powers can be found in the Scottish Parliament Information Centre’s Briefing Note 14-14, ‘The Scottish rate of income tax and additional rate taxpayers’ (<http://www.scottish.parliament.uk/parliamentarybusiness/72837.aspx>).

³⁷ Although income tax may be devolved to Wales under the terms of the Wales Bill (currently going through the UK parliament), the following paragraphs refer to Scotland only for clarity of exposition. The Wales Bill proposes that Wales will be

10%, leaving the overall tax rates people pay unaffected, or could choose a higher or lower rate.

To account for the fact that the UK is now levying lower tax rates in Scotland (and Scotland keeps the money raised from the 'Scottish' rate of income tax), the block grant from the UK Treasury to Scotland will, of course, be reduced. In the first year (2016–17), the grant reduction will be equal to forecast revenues in Scotland from that 10 percentage points of forgone income tax: the latest OBR forecast is for this to equal £5.0 billion in 2016–17. In subsequent years, the block grant reduction will be updated in line with the change in the equivalent income tax base *in the rest of the UK*. Thus if the UK tax base were to grow by 20%, the block grant reduction would be increased by 20% to £6.0 billion. If Scotland set its tax rate at 10%, it would gain and see an increase in its overall budget if its tax base grew by more than 20% – so that tax revenues increased to more than £6.0 billion – but would lose out if its tax base grew by less than 20% – so that tax revenues were lower than £6.0 billion. In addition, as well as bearing the direct 'mechanical' revenue effects of setting a Scottish rate of tax that is higher or lower than 10%, the Scottish government would also bear the second-round 'behavioural' effects if its tax policy affected the Scottish income tax base.³⁸ In other words, this way of devolving income tax means that the Scottish government will bear the *relative* risk of its revenues performing better or worse than those of the rest of the UK, but the UK government will bear the aggregate risk to UK-wide revenues (for example, if income tax revenues rise or fall across the whole of the UK in a boom or bust).

This differs substantially from how business rates are currently fully devolved to Scotland and Northern Ireland. First, there is no tricky interaction with the Barnett formula and its comparability factors. These

allowed to vary its basic, higher and additional rates independently, but the block grant reduction mechanism – our key focus here – is planned to be the same as in Scotland.

³⁸ As currently implemented, it only bears part of the second-round effects: it bears the effect on the base of its 10 percentage points of tax, whilst the UK government bears the effect on the base of the remaining UK income tax levied in Scotland. If income tax were fully devolved to Scotland, however, updating the block grant adjustment in line with the income tax base in the rest of the UK would mean Scotland bore the entire second-round effects on the income tax base (but not non-devolved tax bases such as National Insurance).

factors remain as they are in the absence of devolution of the tax (in the case of business rates, this would mean the CLG:LG comparability factor would be 100%). Second, under present arrangements, Scotland and Northern Ireland, in effect, bear the *absolute* risk of business rates revenues. For instance, if their rates revenues fall, they lose even if business rates revenues are falling by a similar amount – or, indeed, by even more – in the UK as a whole. Equally, they can gain when their business rates revenues are increasing, even if they are going up in line with – or even by less than – those in the UK as a whole. This shows that the block grant adjustment mechanism and the type of revenue risk borne by the devolved government are clearly intimately related – an issue we return to in Section 4.

How would Scotland and Northern Ireland have fared if they had borne only the *relative* risk of their business rates, as under the income-tax-style of tax devolution?

Table 6 shows that both Scotland and Northern Ireland would have fared worse under a system of relative revenue risk devolution than under the existing system during the period covered by the 2010 Spending Review.

Table 6. Change in grants (£ million) between 2010–11 and 2014–15 from 2010 Spending Review under different versions of the Barnett formula

	Fully devolved business rates		Devolving business rates in same manner as income tax ('relative risk' approach)
	Existing formula	Corrected formula	
Scotland			
Current DEL	-904	-1,402	-1,519
Capital DEL	-1,192	-1,095	-1,193
Business rates	+437	+437	+314
Total resources	-1,658	-2,059	-2,398
Northern Ireland			
Current DEL	-434	-601	-628
Capital DEL	-448	-416	-448
Business rates	+13	+13	-17
Total resources	-869	-1,003	-1,093

Notes:

(a) The figures for business rates in the last column reflect growth in business rates revenues in Scotland and Northern Ireland relative to those in England: a positive number reflects relatively faster growth, a negative number relatively slower growth.

(b) See notes (a) and (b) for Table 3.

Source: Author's calculations using HM Treasury spreadsheets used for calculating Barnett consequentials. All figures are in real terms, 2014–15 prices.

This is because they would have faced the full Barnett consequential from the cuts to CLG:LG spending – recall that under the relative risk approach, no adjustment is made to Barnett comparability factors, so the CLG:LG factor would be 100% rather than 17.3%. This would have been compounded by the fact that they would only benefit from the relative, not the absolute, growth in their business rates revenues.

In Scotland's case, because its business rates revenues are forecast to grow faster during this period than those in England, relative growth in business rates would have boosted the budget by £314 million. This means Scotland would have gained compared with the system of partial devolution analysed in the last subsection. But an increase of £314 million represents a loss compared with the absolute risk system of full devolution actually in place: absolute growth is forecast to be £437 million. This smaller increase in funding from business rates, together with the full Barnett consequential from the cut in spending in England, would have resulted in overall cuts to the Scottish budget of £2.4 billion under the relative risk model, compared with the cuts of £1.7 billion actually faced (or the £2.1 billion that would have been faced under a 'corrected' version of the current *absolute* risk system of devolution).

In contrast, relatively slow growth in business rates revenues would have cost Northern Ireland £17 million (instead of boosting its budget by £13 million).³⁹ Together with the larger Barnett consequential, Northern Ireland would therefore have seen overall cuts to its budget of £1.1 billion, compared with £0.9 billion under existing arrangements (or £1.0 billion under a 'corrected' version of the current system).

Looking to 2015–16, the Scottish government forecasts business rates revenue to grow in real terms but at a lower rate than in England. Thus, rather than seeing a budgetary boost from business rates revenue growth, under a relative risk approach Scotland would lose a little next year. And it would bear the full Barnett consequential from cuts to departmental spending. Thus it would face cuts of £463 million rather than the £133 million it is actually set to face (or the £326 million it would face under a 'corrected' version of the current system). Clearly, Scotland is benefiting from bearing the full 'absolute' risk of its business rates revenues post-2010.

³⁹ See note (b) for Table 3, which applies to Table 6.

What about in the period before 2010? During the 2000s, business rates revenues grew in both Scotland and the UK as a whole. But they grew less quickly in Scotland (37%) than in the rest of the UK (47%). Under a relative risk approach, Scotland would have been hit by this relatively slow growth, rather than gaining from the absolute growth. However, Scotland would also have gained from the full Barnett consequential from changes in local government spending. Taken together, our calculations suggest Scotland would have seen its budget increase by around £215 million more during the 2000s under the 'relative risk' approach to devolving business rates than under the actual system.⁴⁰ However, the losses since 2010 (around £1.1 billion in the 2010 and 2013 Spending Reviews)⁴¹ would be much greater. Scotland has therefore done better under existing arrangements than it would under the 'relative risk' approach.

But again, this largely reflects the flaws in the existing implementation of the absolute risk system, not a gain from the absolute risk system itself. Scotland's budget would have increased by around £625 million more as a result of Spending Reviews during the 2000s under the relative risk approach than it would have under our 'corrected' version of the absolute risk approach. And cuts to its budget since 2010 under the relative risk system would only have been £480 million higher than under the 'corrected' absolute risk approach.⁴² Thus, rather than losing, Scotland would have benefited from bearing only the 'relative' as opposed to the 'absolute' risk of business rates had the latter been implemented properly.

Summary

This section has shown that the current way in which the block grant is adjusted to account for the 'full' devolution of business rates to Scotland and Northern Ireland – by changing the CLG:LG comparability factor in the Barnett formula – is flawed. As well as bearing business rates revenue risk, the devolved governments in these countries bear the risk that CLG:LG

⁴⁰ Gaining around £345 million from the full Barnett consequential from changes in local government spending and losing around £130 million from the relatively slow rate of growth of its business rates revenues.

⁴¹ Scotland would have lost £740 million in the 2010 Spending Review and £330 million in the 2013 Spending Round from the relative risk approach.

⁴² Consisting of approximately £340 million in Spending Review 2010 and £140 million in Spending Round 2013.

sees its budget change relative to that of other UK government departments serving England. In particular, they gain when the CLG:LG budget goes up by less than average, something which has happened consistently since 2000 (and lose when it goes up by more).

Our calculations suggest that Scotland and Northern Ireland have gained from this flaw – precisely because the CLG:LG budget was first increased by less than overall spending (up until 2010–11) and was then cut by much more (since 2010–11). For example, our figures suggest the cuts to Scotland’s budget between 2010–11 and 2015–16 as a result of the 2010 and 2013 Spending Reviews will be around £600 million smaller than under a ‘corrected’ version of the formula. And this follows on from budget increases of around £400 million more in today’s terms from Spending Reviews between 2000–01 and 2010–11 than they would have been under a ‘corrected’ formula. These are fairly sizeable amounts of money in the context of a Scottish budget of just over £30 billion.

Scotland and Northern Ireland have also gained compared with the system of partial devolution that has been in place in Wales and compared with a system akin to that planned for income tax, which devolves only the risk that revenues grow more or less quickly than in England (the *relative* risk approach). But they have not gained because of the growth in their business rates revenues – they have gained because of the ‘flaw’ in the implementation of the existing system of business rates devolution.

It is possible to fix this ‘flaw’ by adjusting the comparability factors in the Barnett formula. Alternatively, a more radical reform would see a move to a system of *relative* risk devolution. Both options deserve real consideration, especially as full business rates devolution is set to be implemented in Wales next year, and in the context of further devolution. But our analysis also has implications for the devolution of additional taxes – an issue to which we now turn.

4. Lessons for further tax devolution

The most obvious lesson for further tax devolution is to not make the same mistake of treating a devolved tax as funding a particular UK government department when calculating Barnett formula comparability factors. However, it seems unlikely that this mistake would be repeated. That is because business rates revenues are notionally redistributed to local authorities via grants from the CLG:LG budget, and it might therefore seem

natural to account for business rates as part of this budget; it just turns out that this ‘common-sense’ approach has unintended consequences that make it unsuitable. Luckily, other taxes do not ‘fund’ other departments in a similar way, making it less likely such an approach would be considered in the first place.

More broadly, however, our discussion has shown that there is a close link between the way the block grants are adjusted to take account of tax devolution and the type of revenue risks that the devolved government (and, on the flip side, the UK government) bears.

Devolving the revenue risk associated with a tax is one of the key reasons for devolving a tax in the first place – it is central to the argument that tax devolution provides greater accountability and improved incentives. But how much and what type of revenue risk the devolved governments should bear is partly a policy choice. It is possible to get these choices wrong and expose devolved governments to the wrong kind of financial risks. Indeed, the flaw we have identified in the Barnett formula is that it exposes Scotland and Northern Ireland (and soon, Wales) to not just business rates revenue risk but also the risk that spending is reallocated *within* England between the CLG:LG budget and other budgets.

Conceptually, we can think of a number of forms of revenue risk:⁴³

- Devolved government policy risk. This arises if decisions by the devolved government affect its tax base and therefore tax revenues – for example, if increases in tax rates lead to reductions in economic activity, and thereby reduce the size of the tax base, or if other non-tax policies – such as economic development policies – affect the relative growth of its tax base.
- UK government policy risk. This reflects the fact that decisions by the UK government may affect the devolved government’s tax base and tax revenues. The effects might be due to areas of policy other than tax policy, or may arise if some powers over the overall structure of a

⁴³ This section draws on the final report of the Holtham Commission – which was set up in 2009 by the Welsh government to explore changes in the funding arrangements for devolved government in Wales. See chapter 5 and annexes 7 and 8 of Independent Commission on Funding & Finance for Wales, *Fairness and Accountability: A New Funding Settlement for Wales*, Final Report, July 2010, available at <http://wales.gov.uk/funding/financereform/reports/?lang=en>.

partially devolved tax (such as bands and allowances in the case of income tax) are retained at the UK level.

- Aggregate secular or cyclical macroeconomic risk. This is the risk related to the volatility of revenue from a tax over the UK-wide economic cycle (such as the high revenues from stamp duty associated with housing market and stock market booms, and subsequent falls in busts) and to UK-wide secular increases or decreases in particular tax bases.
- Differential tax base growth. This is the risk that the tax base in the devolved administration grows differently from the equivalent tax base in the rest of the UK – whether cyclically or secularly – for reasons other than devolved government policy.

It is exposure to the first kind of risk that is key to providing the accountability and incentives that are one of the key motivations for tax devolution in the first place. It is desirable that if its tax policy or other policies (such as economic development policy) can affect the size of the tax base, the devolved government should have an incentive to take this into account when making policy. Otherwise, its incentives would be improperly aligned – to policies that provide a direct mechanical boost to revenue but may reduce the size of the tax base and therefore have second-round effects that reduce revenues (for example, high tax rates on high-income individuals).

On the other hand, it seems clear that, as far as possible, the devolved government should not bear the risk associated with UK government policy decisions – the UK government should. Otherwise, the devolved government would bear risks over which it has no control, and the UK government's incentives would not be properly aligned.

What about aggregate secular or cyclical risk? Who should bear this partly reflects value judgements about how much risk-sharing there should be across the Union. But there are also practical issues involved. First is that exposure to aggregate cyclical risk increases the volatility of a devolved government's revenues – meaning a need for greater borrowing powers to smooth the impact of this on its budget. Arguably, the greater size of the UK as a whole and its larger and better-developed market for government debt make borrowing easier for the UK than for the devolved governments. The second issue is that the devolved government may only

have limited room to respond to secular changes in revenues from devolved taxes if only a few taxes are devolved. In particular, unlike the UK government, it cannot look to non-devolved taxes for additional revenues to offset a secular decline in a devolved tax. It could therefore find itself hit by falling revenues from devolved taxes, but without access to more buoyant revenue streams. In other words, the devolved government is likely to have less flexibility than the UK government to respond to both short-term cyclical and long-term secular changes in the amount of revenue raised from a particular tax base, which might make devolving such risks unappealing.

Finally, whether it is desirable for devolved governments to bear the risk that its tax base grows differentially for reasons other than policy decisions – for instance, its cycle is more volatile than that of the UK's as a whole – again reflects value judgements about the importance of redistribution and risk-sharing across the United Kingdom and on practical considerations about whether the devolved government has the flexibility to respond.

But while in principle we can distinguish between these different types of risk, in practice it is much harder to do so. If tax revenues were observed to grow more slowly in the devolved country than in the rest of the UK, for instance, how could one work out whether it was due to policy action by the devolved government or by the UK government or, perhaps, neither? Economic models could be used to simulate the impact of policy reforms. Doing so is difficult though, and the results of such exercises often depend on the precise modelling assumptions made and come with wide margins of error, which mean they would likely prove controversial.

However, as our earlier discussion of business rates highlighted, the way block grants are reduced to account for tax devolution does allow policymakers choice of whether the devolved governments should bear the *relative* or the *absolute* revenue risks.

Indexing the size of the block grant reduction to the change in the tax base (or, in another version of the approach, tax revenues) for the devolved tax in the rest of the UK (or in England) – as will be done for income tax under the 2012 Scotland Act – means that the devolved government only bears the relative revenue risk. This is because, if revenues from the devolved tax grow faster than comparable revenues in the rest of the UK, then they

also grow more than the block grant reduction: hence, the devolved government sees its budget increase. Alternatively, if revenues grow less quickly than those in the rest of the UK, they grow less by less than the block grant reduction: hence, the devolved government sees a cut to its budget. But if revenues move in line with those in the rest of the UK, it does not matter whether that aggregate trend is an increase or decrease: the devolved government's budget is unaffected.

Notice that under such a relative risk approach, the devolved government bears the *devolved government policy risk* – if its policies cause a change in its tax revenues relative to those in the rest of the UK, it gains or loses the marginal revenues. This provides policymakers with the incentives to make policy – including devolved tax policy – in a way that takes account of the feedback effects on its own tax revenues.⁴⁴ Under a pure relative risk approach, the devolved government would also bear all the risk that its tax base changes differently from the comparable tax base in the rest of the UK for reasons other than devolved government policy. As mentioned, whether this is deemed appropriate will depend on judgements about the importance of redistribution and risk-sharing across the United Kingdom. It is possible to adjust the block grant reduction so that the devolved government only gains or loses a proportion of the relative change in revenues – say, half – or only bears the risk for a given period of time.⁴⁵ Doing this does weaken the incentive effects related to devolved policy risk though (because the devolved government bears some but no longer all the risk associated with its policy decisions).

⁴⁴ If devolved policy impacts on the size of the tax base in the rest of the UK, then these incentives may not be perfectly aligned when viewed from the perspective of the UK as a whole. For instance, consider a reduction in a tax rate that leads to individuals and/or businesses relocating from the rest of the UK to the devolved country in question. Under the approach outlined, that country gains from both the increase in its own tax revenues and the fall in the revenues in the rest of the UK – both these effects contribute to the *relative* growth in its revenues. This may skew policy towards policies that shift tax base from the rest of the UK rather than increase the overall size of the tax base (or shift it from outside the UK).

⁴⁵ For instance, the system of business rates localisation in England is due to be reset in 2020 and then every 10 years, to limit the amount of time local authorities bear the risk of differential business rates growth. This particular scheme can create perverse incentives, however. See S. Adam and H. Miller, 'Business rates', in C. Emmerson, P. Johnson and H. Miller (eds), *The IFS Green Budget: February 2014*, Institute for Fiscal Studies, London (http://www.ifs.org.uk/budgets/gb2014/gb2014_ch11.pdf).

On the other hand, the relative risk approach means that much of the risk associated with UK economic policy would not be borne by a devolved government and would instead be retained by the UK government – at least to the extent that UK policy affects the size of tax bases across the UK as a whole. As discussed, this seems desirable. The devolved government would only bear the differential impact of UK policy on its tax base (that is, if it reduces or increases the size of the devolved tax base by more or less than its effect on the comparable tax base in the rest of the UK).

Furthermore, by design, the relative risk approach means that the UK government and not the devolved government bears the risk associated with aggregate UK-wide secular or cyclical revenue changes. Again, this seems desirable, particularly in the case when only a subset of taxes are devolved. Otherwise, the spending power of the devolved government may diverge from that of the UK government because the particular tax that is devolved to it has a different cyclical or secular trend from other revenues or public spending. And it would not have access to other non-devolved tax instruments to offset this problem.

Under an absolute risk approach to tax devolution, the devolved governments can face just such an issue: they can win or lose if the particular taxes devolved to them have different cyclical or secular trends from overall tax revenues. This could lead to an inefficient and arguably inequitable distribution of resources across the UK.

Our analysis of business rates provides an illustration of this: business rates revenues have followed a trend that differs substantially from that of public spending on services in England (which is what enters the Barnett formula). In particular, business rates revenues grew significantly less quickly than public spending during the 2000s (growth of which was partly funded by an increase in other tax revenues and partly funded by an increase in UK government borrowing). This means Scotland and Northern Ireland lost out from the fact that they bore the full absolute revenue risk from business rates and therefore also received smaller Barnett consequential changes in public spending in England.

In the case of Scotland, business rates revenues grew by 37% in cash terms between 2000–01 and 2010–11. During the same period, spending on

public services in England more than doubled in cash terms.⁴⁶ Section 3 showed that the relatively slow growth in business rates revenues means that Scotland was losing around £345 million per year by 2010–11 relative to the situation where it bore no business rates revenue risk. Losses would have amounted to an even greater £755 million per year by 2010–11 if the absolute risk had been devolved ‘correctly’ (recall that Scotland and Northern Ireland have been gaining from flaws in the Barnett formula’s treatment of business rates).

In contrast, between 2010–11 and 2015–16, business rates revenues are forecast to grow by 35% in Scotland, at a time when public spending in England is being cut. As we discussed earlier, this means Scotland will gain around £1.4 billion a year by 2015–16 because it bears the full risk of business rates revenues (gains would have been smaller, at around £810 million, if this had been implemented ‘correctly’ in the Barnett formula).

Under a relative risk approach to tax devolution, the budgets of the devolved governments in Scotland and Northern Ireland would not be affected by aggregate trends in business rates revenues. Instead, these governments would only lose if business rates revenues grew more slowly than business rates revenues in England (not if they grew more slowly than public spending, as under the current Barnett formula-based absolute risk approach) and only gain if they grew more quickly.

During the 2000s, business rates revenues did grow more quickly in the rest of the UK than in Scotland (by 47% as opposed to 37%), meaning Scotland would still have lost out under a ‘relative risk’ model. But the losses would have been much smaller (at around £130 million) than under the ‘absolute risk’ model. Similarly, while business rates revenues are set to grow by substantially more between 2010–11 and 2015–16 in Scotland than in the rest of the UK (by 35% compared with 20%), and Scotland would gain from this, the gain would be smaller (at around £390 million) than under the absolute risk model.

This shows that the relative risk model would have delivered changes in the Scottish and Northern Irish governments’ budgets that were more similar to the changes in England and Wales. But these devolved

⁴⁶ Author’s calculations using data from the 2004, 2007 and 2011 Public Expenditure and Statistical Analyses.

governments would still have lost and gained if their business rates revenues under- or over-performed relative to revenues in England, maintaining their incentives to encourage business growth.

The relative risk model therefore seems in many ways a fairer and more sensible approach than devolving the full 'absolute' revenue risk. We would therefore recommend that if further – but not all – taxes are devolved, first consideration should be given to devolving the relative revenue risk as opposed to the absolute revenue risk – particularly for relatively large and more cyclical taxes such as National Insurance, VAT or income tax. Indeed, there may also be a case to shift from an absolute to a relative risk approach for business rates. This would provide incentives for the devolved governments to grow their tax bases, but their budgets would not be skewed by cyclical or secular differences in aggregate trends in devolved versus non-devolved taxes (and borrowing).

This does not mean that taxes should always be devolved on a relative risk basis, by adjusting block grant reductions using the growth of comparable tax bases in the rest of the UK. For some taxes, this may not be desirable. For instance, the majority of North Sea oil and gas revenues come from Scottish waters – around 84% according to the Scottish government's GERS publication.⁴⁷ Because of this, there is little in the way of a rest-of-the-UK tax base with which to index the block grant reduction. There may be other practical difficulties in determining the appropriate tax base with which to index the block grant reduction – especially if the UK government makes substantial reforms to the base of a tax that has been devolved.

However, if one moves away from the relative risk approach, it does not become any easier to choose an indexation method. In particular, under the absolute risk system, there is no single obvious way to adjust the block grant reduction over time.

One option is to index the size of the block grant reduction to a measure of government spending. The present system of full business rates devolution, for instance, in effect indexes the size of the block grant reduction to changes in the CLG:LG DEL. Thus, the block grant reduction increases in size when the CLG:LG DEL is increased. We have argued that

⁴⁷ Scottish Government, *Government Expenditure and Revenue Scotland 2012–13*, 2014, available at

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/GERS>.

this is a flawed approach but that it could easily be reformed so that the block grant reduction were indexed to changes in the overall DEL for all departments largely serving England. This would mean the devolved government would gain if revenues from the devolved tax grew faster than government spending in England, or lose if revenues grew more slowly.

Alternative methods of indexation include price indexation – where the block grant reduction is fixed in real terms – or GDP indexation – where the block grant reduction changes in line with either trend/potential or actual GDP. Different methods will be more or less appropriate depending upon circumstances. Price indexation probably would not be appropriate for a tax that is likely to grow in real terms as the economy grows, such as income tax or VAT (otherwise, devolution represents a growing windfall gain to the devolved government). Conversely, indexation in line with GDP would not be appropriate for a tax that is likely to be flat or falling in real terms – such as cigarette or fuel duties, perhaps. Notice that the degree of cyclical revenue risk borne would differ substantially depending on whether trend or actual GDP is used for indexing the block grant reduction: to the extent that revenues vary in line with the economic cycle, indexing to actual GDP would relieve the devolved government of cyclical risk.

Another option is to index to an initial forecast of revenue. Consider again the case of North Sea oil and gas. The block grant reduction for the years ahead could be set in advance based on forecasts for revenues from the Scottish portion of the North Sea under existing policy. This would build in the expected long-term decline in oil revenues, but would leave the Scottish government bearing the risk of revenues under- or over-performing compared with forecasts. It would, for instance, gain or lose if its policies led to a slowing or speeding-up of that decline. Agreeing on the forecast revenues could be more challenging, however – the devolved country government would have an incentive to underestimate and the UK government to overestimate.

More generally, because the exact indexation method used could have considerable implications for devolved government budgets, negotiations would likely be difficult. And it would not be surprising, if ex post, there were calls for redress if one side feels it has done badly out of the approach in place. Such issues could undermine the working relationship between the devolved and UK governments. This may be another reason to give

first consideration to the relative risk model of tax devolution – the method for block grant reduction is clearer.

5. Conclusions

The way the devolved governments in Scotland, Wales and Northern Ireland are funded is set to change in the coming years. In particular, the Scotland Act and Wales Bill devolve landfill tax and stamp duty land tax, and partially devolve income tax powers and revenues; devolution of corporation tax to Northern Ireland is under active consideration; and the three main parties have all promised further devolution to Scotland following the recent 'No' vote. However, for a number of years yet, most of the funding for the devolved governments will continue to come in the form of a 'block grant' from the Treasury. How devolved taxes will interact with the Barnett formula – used to determine changes in these block grants – is therefore an important issue.

This briefing note has looked at the way the Barnett formula interacts with a tax that is already fully devolved to Scotland and Northern Ireland – business rates – to see whether this works well, and whether lessons can be learned for further tax devolution.

The devolution of business rates is set up in a way that aims at the devolved governments bearing the full risk of their business rates rising or falling. They should therefore not receive extra funding under the Barnett formula for increases in spending in England that are funded by increases in business rates revenues. The way this is currently achieved is to treat English business rates revenues as partly funding the CLG: Local Government budget and to reduce the Barnett formula 'comparability factor' for that department: therefore only a small fraction of the change in the CLG:LG budget is passed on to Scotland and Northern Ireland.

This might seem a natural solution given that business rates revenues are pooled centrally and then redistributed to local government in the form of grants. But in practice, changes in the CLG:LG budget are not linked to changes in business rates revenues. For instance, in recent years, the CLG:LG budget has been cut substantially at a time when business rates revenues have been growing. This means that treating business rates as part of the CLG:LG budget is inappropriate in the context of the Barnett formula because it means that Scotland and Northern Ireland are subject not only to risk in business rates revenues, but also to changes in the

CLG:LG budget relative to the budgets of other UK government departments (such as Health and Education). In particular, if the CLG:LG budget goes up by more than those of other departments, the devolved governments lose out, but if the CLG:LG budget goes up by less (or falls by more), they gain, from this treatment.

The latter situation is what has happened in practice. Analysis of the 2010 and 2013 Spending Reviews suggests that Scotland and Northern Ireland have benefited significantly from the fact that the Barnett formula has passed on only a small fraction of the large cuts to the CLG:LG budget, but fully passed on the protection of NHS and education spending in England. Calculations suggest Scotland and Northern Ireland benefiting to the tune of £600 million and £200 million a year in 2015–16. This has allowed them to deliver substantially smaller cuts than required in the rest of the UK, which is arguably unfair to the people in England and Wales.

We have suggested a way the treatment of business rates by the Barnett formula can be amended to address this problem – by treating business rates as partly funding all services in England that are largely devolved to Wales, Scotland and Northern Ireland, rather than just CLG:LG. An obvious lesson for when further taxes are devolved is to similarly treat them as funding general expenditure in England rather than a specific department.

But analysis of business rates also has broader lessons about how to devolve the revenue risk from devolved taxes in a world where some taxes are devolved but others are retained at Westminster. Our analysis suggests that rather than bear the absolute revenue risk from a devolved tax (as is the case with business rates), it may be more appropriate if devolved governments bear only the *relative* risk that tax revenues from that tax grow more or less quickly than revenues from the same tax in England. This would provide incentives for the devolved governments to grow their tax bases (under the relative risk approach, they benefit from incremental revenues as these increase their revenues relative to England). But their budgets would not be skewed by cyclical or secular differences in aggregate trends in devolved versus non-devolved taxes (and borrowing) as has occurred with the devolution of business rates. This might be considered to be fairer to Wales, Scotland and Northern Ireland – and, importantly, to England too.