INCOME TAX & WALES:

The Risks and Rewards of New Model Devolution

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About us

The Wales Governance Centre is a research centre that forms part of Cardiff University's School of Law and Politics undertaking innovative research into all aspects of the law, politics, government and political economy of Wales, as well the wider UK and European contexts of territorial governance. A key objective of the Centre is to facilitate and encourage informed public debate of key developments in Welsh governance not only through its research, but also through events and postgraduate teaching.

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Contents

Executive Summary

Almost six years after the possibility was first raised, the Welsh Government will soon begin to receive a £2 billion share of the Income Taxes paid by taxpayers in Wales. For the first time, a direct link will be established between the relative performance of the Welsh economy and the amount that ministers have to spend on public services; political parties will be able to present competing policy packages of Welsh taxes and public services at Assembly elections.

But while the merits and demerits of the principle of Income Tax devolution have been widely debated, the practicalities of implementing partial fiscal devolution to Wales have not. The success of tax devolution in bringing increased financial empowerment as well as true accountability to devolved Welsh politics will, however, largely be determined by the method used to adjust the block grant after its introduction.

Given the precedent of extensive discussions over the method of adjusting the Scottish Block after full devolution of income tax in Scotland, the precise method chosen to implement tax devolution in Wales is likely to be the subject of intense political negotiations. Using three adjustment methods that have featured prominently in the Scottish fiscal framework negotiations, this report demonstrates that the method chosen to reduce the Welsh block grant to account for the additional Income Tax revenues has the potential to cause losses of hundreds of millions of pounds each year to the Welsh budget.

This report argues that important developments have emerged since the work of the Holtham and Silk commissions, which now need to be factored when considering how to implement tax devolution. The population growth rate in Wales has recently diverged significantly from that of England, with Wales' population growing at less than half the rate of the UK as a whole from 2008 to 2014. Furthermore, UK Government policy to rapidly increase the personal allowance will have drawn disproportionately more of Welsh incomes out of the Income Tax base than was the case across the UK as a whole. So while Income Tax receipts have grown by 6% across the UK since 2010-11, the equivalent figure for Wales is only 2%, with recent reports from the Office of Budget Responsibility suggesting that the main factor behind this divergence has been the asymmetric effect of UK tax policies since the start of the decade (OBR, November 2015). This is because, like Northern Ireland but unlike Scotland, Wales has income levels that are significantly below the UK average. 55% of all taxpayers' income in Wales comes from individuals earning less than £30,000, compared with 42% across the UK. Although the proposed block grant adjustment methods should theoretically shield either government from negative impacts derived from the tax policy decisions of the other, analysis of Income Tax data in this report shows why this would not have been the case.

Given the multiple hundreds of millions of pounds at stake for Wales, and given also the UK government's intention to continue to increase the personal allowance, it is vital that the key issues in this debate are well-understood and that potential hazards widely known. As persuasively argued elsewhere (Holtham 2015), solutions arrived at during negotiations focused on Scotland may not necessarily represent an acceptable outcome in the rather different circumstances of Wales.

The magnitude of these potential discrepancies makes HM Treasury's discretionary role in intergovernmental fiscal arrangements even more problematic. This report concurs with a 2015 review by the Bingham Centre for the Rule of Law in recommending the establishment of an independent adjudication commission to advise the Treasury on devolution finance and grant matters. This body would also be responsible for adjudication in the event of disputes between governments that cannot be resolved through joint ministerial processes.

Given these outstanding issues, and in the absence of a timeline for the devolution of Income Tax to Wales, discussions on changing tax rates and policy during the forthcoming Assembly elections should be regarded as premature. Over the five years of an Assembly term, a block grant adjustment method that disadvantages Wales could represent a cumulative loss of hundreds of millions to the Welsh budget. That the method is likely subject to lengthy negotiation makes it impossible to begin to calculate potential aggregate impacts of any changes to the Income Tax rates themselves.

1

Introduction

Following Chancellor George Osborne's announcement on 25 November 2015, partial devolution of Income Tax is set to take place to Wales without the requirement of an affirmative vote in a referendum (as previously set out in the Wales Act 2014). The Welsh Government will soon become responsible for raising a substantial proportion of its budget. Both the Holtham and Silk Commissions were clear about the potential benefits of Income Tax devolution. These arguments have been widely accepted by parties across the political spectrum, both here in Wales as well as in Scotland. Indeed, the decision to go ahead with the partial devolution of Income Tax to Wales is perhaps best understood as part of a broader trend in the development of the UK's territorial constitution in which fiscal devolution is seen as vital to ensure 'accountability'. But while the merits and demerits of the principle of Income Tax devolution have been widely debated, the practicalities of implementing partial Income Tax devolution to Wales have not. This report evaluates the proposed method of implementing Income Tax devolution and highlights major threats to the Welsh budget under the current proposals.

The success of Income Tax devolution in bringing increased financial empowerment as well as true accountability to devolved Welsh politics will largely be determined by the method used to adjust the Welsh block grant to account its introduction. As suggested by recent discussions regarding adjusting the Scottish Block Grant, the precise method chosen is likely to be the subject of intense political negotiations. Before these negotiations begin, however, and given the multiple hundreds of millions of pounds at stake for Wales, it is vital that the key issues are well-understood and that potential hazards are widely known. It is equally important to understand that solutions arrived at during negotiations focused on Scotland may not necessarily represent an acceptable outcome in the rather different circumstances of Wales (as persuasively argued in Holtham 2015).

Section 2 provides an introduction to Income Tax devolution to Wales and discusses how Wales' current funding by block grant will be adjusted in its wake. Section 3 explores how recent UK Government tax policy has disproportionately impacted the amount of Income Tax collected in Wales and argues that the proposed method of adjusting the Welsh block grant will expose the Welsh Budget to disproportionate impact from UK Government policies on allowances, thresholds and reliefs. Section 4 discusses the options of adjusting the Welsh block grant in more detail. It also presents two illustrative and hypothetical scenarios to show how Income Tax devolution would have impacted the size of Welsh Budgets in previous years, demonstrating the effect of UK Government policy as discussed in section 3 and 4. Section 5 concludes.

2

The Welsh Rates of Income Tax

According to the latest available HMRC data, of the £163 billion collected across the UK, more than £4.5 billion of Income Tax is raised in Wales on an annual basis, from around 1.4 million Welsh taxpayers. Historically, Income Tax has been by far the single largest source of public revenue raised in Wales, although VAT collections have increased to a similar level in recent years.

TABLE 1: Income Tax Receipts, UK and Wales, 2005/06 – 2014/15 (£ Millions)

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
UK	134,916	147,712	151,738	153,442	144,881	153,491	150,939	152,030	156,898	163,109
Wales	4,452	4,771	4,871	4,864	4,506	4,789	4,604	4,546	4,691	4,877

Source: HMRC (2015)

The Holtham and Silk Commissions established a number of reasons for considering Income Tax the most suitable candidate for fiscal devolution to Scotland and Wales. As Income Tax yields are dependent on employment levels and taxpayer incomes, its devolution would create a link between the monies available to fund Welsh public services and the performance of the Welsh economy. It is also a highly visible and well understood tax, paid by most people at some stage of their lives. Its devolution should therefore increase public interest and engagement in Welsh Government activities. Devolution would also enable Welsh political parties to offer voters a meaningful choice between different levels of taxation and expenditure at Assembly elections.

Unlike the UK Government's proposals for Scotland, which will devolve the entire Non-Savings and Non-Dividend Income Tax base to Holyrood, Income Tax collected from Welsh taxpayers will be shared between the Welsh and UK Governments. Specifically, each of the three UK Income Tax rates will be reduced by 10p in the pound for those defined as Welsh taxpayers. The Welsh Government will then have the power to set its own rate in each band, collecting revenues raised from taxes set at these rates.

As in Scotland, Income Tax paid on savings and dividends income will not be devolved. As the Holtham Commission argued, income from these sources is harder to pin down to any particular location, and as such was deemed inappropriate for devolution. Furthermore, powers in relation to thresholds, allowances and reliefs in Wales will be reserved for the UK Government. Westminster will still determine what is classed as taxable income, when taxpayers begin to pay Income Tax, and at what levels of income the basic, higher and additional rates apply.

The Welsh rates of Income Tax set at 10p in each band would raise £2.02 billion in 2015-16, according to the November 2015 forecasts from the Office for Budget Responsibility. Taken alongside the devolution of other smaller taxes, the portion of Welsh Government spending financed by the Block Grant will fall to 79%.

By any account, fiscal devolution represents a major course-change in Wales' devolution journey. However, as will be illustrated in the following report, the financial impact of Income Tax devolution is unpredictable and irregular, and the method chosen for adjusting the Welsh block grant to account for the revenues received directly from Income Taxes have the potential to cause losses to the Welsh Budget of hundreds of millions of pounds per year. Understanding why this is so is of major importance in the upcoming negotiations with the Treasury on the method of adjustment. Getting the negotiations wrong could have extremely detrimental impacts on the new accountability incentives bestowed upon the Welsh Government and the funds available for spending on Welsh public services after devolution.

2.1 Adjusting the Welsh block grant: the multi-million pound question

The system of funding the subnational governments of the UK in the early years of devolution is unusual in an international context. Rather than collect revenues from own-sourced taxes, the Welsh Government receives a block grant from the UK Government to pay for devolved services, set annually by the Treasury primarily using the Barnett Formula. This block grant is set at £14.4 billion in 2015-16: there have been adjustments to reflect changes in the devolution settlement as well as UK Government spending restraint that has resulted in real-terms reductions in public spending in Wales.

Under the proposed system, and to account for the extra revenue the Welsh Government will obtain from Income Taxes collected from Welsh taxpayers, a downward adjustment will be made to the block grant. In the first year of devolution, this adjustment is straightforward: it can simply equal the revenue being devolved to Wales, leaving the overall size of the Welsh Government budget unchanged.[1] In future years, however, the Holtham Commission outlined three potential risks that will affect the Welsh budget: Cyclical (or Macro fiscal) risk; differential tax base growth, and policy risk (such as the UK government's decisions to raise personal allowances). Both the Holtham and Silk Commissions argued persuasively that the Welsh budget should only be exposed to the differential tax base risk that results from policies and actions by the Welsh Government, such as a decision to reducing the Welsh rate of Income Tax. External macroeconomic risks, such as rapidly declining revenues after the global financial crisis of 2008, should be pooled across the Union.

To ensure an appropriate deduction to the block grant that would be fair to both governments over time, the Holtham and Silk Commissions considered a range of possible methods that had significantly different impact on future risks to the Welsh budget. Both commissions recommended what Holtham termed an **'Indexed Deduction'** method of adjustment. After the first year, the block grant adjustment would be indexed to the annual change in the **equivalent UK tax base**. If the UK tax base increases by 5% in a given year, the amount taken off the block grant will also grow by 5%, and this added deduction will need to be made up for by growth in Welsh Income Taxes. The Welsh adjustment, which will be in the amount of hundreds of millions of pounds each year, is therefore intricately linked to tax base growth **in the rest of the UK.**

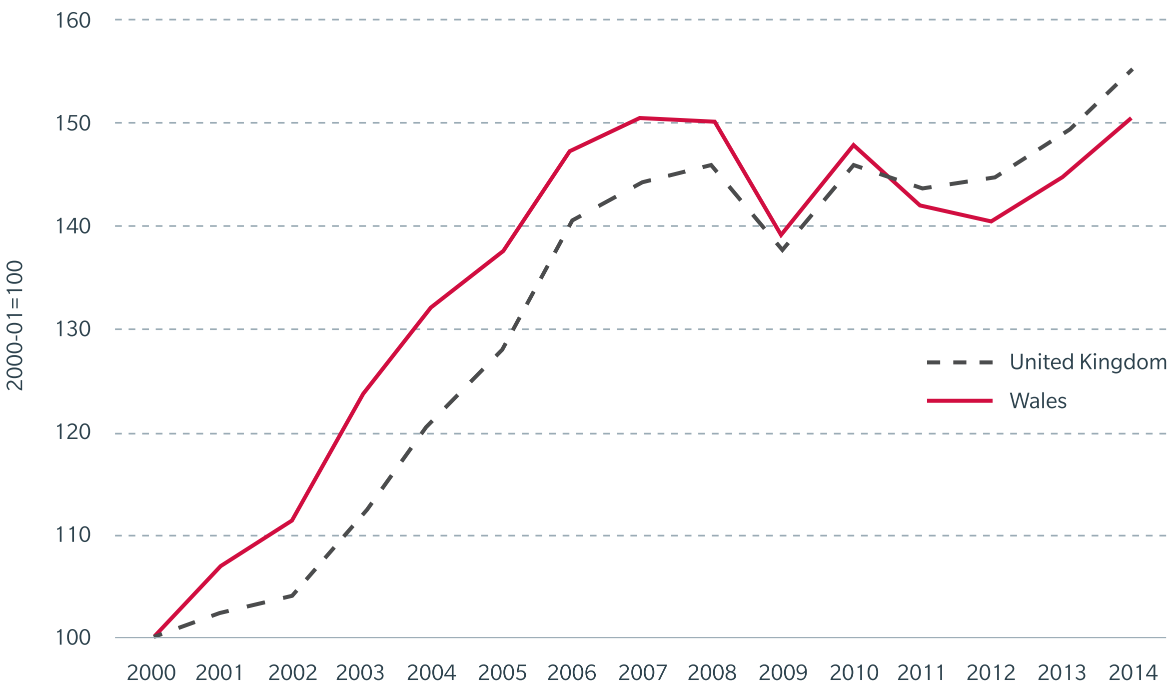
Holtham and Silk gave a series of good reasons to support the Indexed Deduction method. First is the incentive effect it creates for the Welsh Government, which will be rewarded with extra revenues if the Welsh tax base grows relatively quickly. A direct incentive link between public spending decisions and improved economic performance in Wales is surely to be welcomed. Second, this method is also effective in pooling UK-wide economic risks at the UK level. For example, a UK-wide recession would reduce Welsh Government Income Tax receipts, but as the UK tax base would also fall, the block grant adjustment would become smaller, protecting the size of the Welsh Government budget.

The Silk Commission selected 2000-01 as the start date of an analysis to illustrate how Income Tax devolution would have performed against the old block grant system. Figure 1 shows the relative growth in Income Tax receipts in Wales compared with the UK as a whole, starting from this date onwards.[2] In the first half of the decade, Welsh receipts grew rapidly, outpacing UK-wide receipts. As will be explored later in the report, a system of partial Income Tax devolution would have meant a larger Welsh Government budget during this period than under the prevailing block grant funding arrangement.

1 To mitigate the impact of discrepancies between OBR forecasts and collections of devolved Income Tax, the Wales Bill Command Paper (2014) envisages a short transition period to manage this forecasting risk. To facilitate direct analysis of longer term economic and tax policy factors affecting Welsh Income Tax, the scenarios in this report do not assume forecasting errors during the transition period.

2 Limitations in the available Survey of Personal Incomes data make it challenging to exactly quantify the various components explaining differences in performance between Welsh and UK income taxes; for example, tax policy, population changes, income per capita changes, or GVA.

Figure 1: Growth in Income Tax receipts in Wales and the UK (2000-01=100)

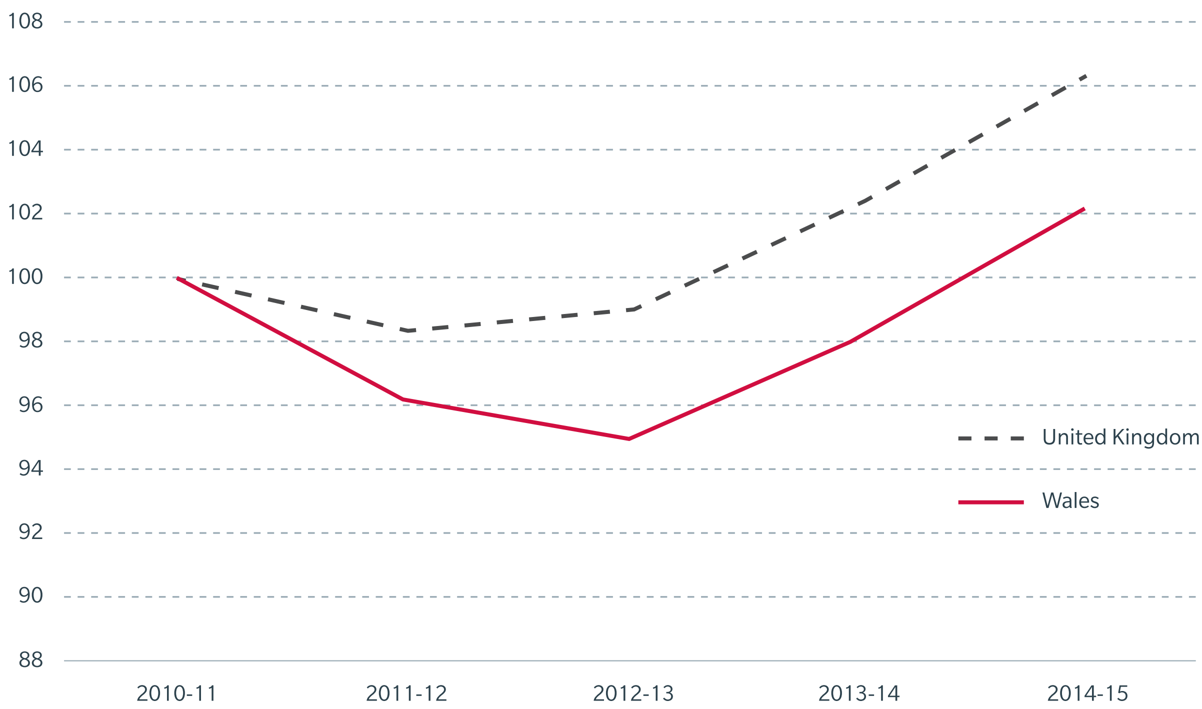


Source: HMRC

However, there appears to have been a reversal in comparative fortunes in more recent years, as can be seen in the switchover of the Wales and UK trend lines in figure 1 and even more clearly in figure 2.[3] **Since the start of the current decade, Income Tax receipts across the UK have grown by 6% but receipts in Wales have grown by less than 2%.** If fiscal devolution had been introduced in 2010-11, the relatively slow growth in Welsh Income Tax revenues over this period would have resulted in a smaller Welsh Government budget under partial Income Tax devolution. **As shown in section 5, these losses to the Welsh budget could amount to more than £100 million per year.**

3 The latest available Welsh Income Tax data is for 2012-13. OBR devolved tax forecasts assume that the Welsh share of UK Income Tax will remain constant; however, this share has in all likelihood continued to fall (for reasons explored in section 3). If so, the divergence since 2010-11 would be greater than shown in figure 2.

Figure 2: Growth in Income Tax receipts in Wales and the UK (2010-11=100)



Source: HMRC

Of course, the potential for such losses would be part and parcel of the increased responsibility and accountability that came with the partial devolution of Income Tax to Wales. **But closer examination of this shortfall suggests that it would not have been the result of Welsh Government policy or failure, but rather of UK Government's policy decisions to remove lower income earners from the tax system by increasing the personal allowance.**

Significantly, this policy risk to the Welsh Budget was specifically assumed by the Silk Commission to be adequately counteracted through application of the Indexed Deduction method. But, in line with recent evidence in the parallel Scottish debate (Cuthbert, 2015), recent data shows that UK policy risk is not countered via existing methods of deducting the block grant after devolution.

Note that the reversal in Welsh fortunes with respect to Income Tax growth may not have been apparent at the time that the recommendations to the Holtham Commission and the first report of the Silk Commission were being considered.

The next section outlines how UK Government policies (that will remain reserved after Income Tax devolution) have disproportionately impacted the Welsh Income Tax base. While Income Tax will have an important role in enhancing the accountability of the Welsh Government in the third decade of devolution, this finding should sound a note of caution in upcoming negotiations over the method of reducing Wales' block grant after fiscal devolution.

3

The Disproportionate Impact of UK Tax Policy changes on Welsh Income Tax Revenues

The previous section argued that a reversal of Welsh fortunes with regards to Income Tax receipts has occurred during the past decade. Since 2010-11, Income Tax receipts across the UK have grown by 6% but receipts in Wales have grown by less than 2%. Recall that under the method proposed for reducing Wales' £14.4 billion block grant after devolution, the Welsh Government's primary source of funding will be deducted in proportion to growth in the UK Income Tax base. Deductions from the block grant to account for stronger UK tax performance may therefore not be matched by the more sluggish rates of growth in Welsh Income Tax receipts. Understanding why differential rates of growth have opened up between Wales and the rest of the UK is therefore of paramount importance in anticipating the risks and potential rewards from Income Tax devolution.

One explanation for the divergence between Welsh and UK Income Tax revenues since 2010 may have been relatively poorer economic performance in Wales. Under the Silk Commission's principles, home-grown risks such as these should not be pooled across the Union; indeed, encouraging the Welsh Government to develop growth-oriented policies is one of the central justifications for devolving Income Tax in the first place. However, earnings and employment data suggest that economic performance has not been systematically weaker in Wales over the period. Indeed, Welsh Gross Value Added (GVA) per capita has grown faster than any other UK region outside London.

Instead, as the Office for Budget Responsibility's most recent Devolved Taxes forecast states (November 2015, paragraph 2.12), the main factor behind the divergence in Income Tax receipts between Wales and the rest of the UK appears to have been the **asymmetric effect of tax policies across the UK since the start of the current decade.** Revenue-raising policies, such as the additional rate of Income Tax for incomes over £150,000 and the tapered withdrawal of personal allowances from those with incomes over £100,000, have primarily affected the highest earners. On the other hand, policies that have cut tax burdens, such as the raising of the personal allowance (as shown in table 2) have impacted the lower end of the income distribution.

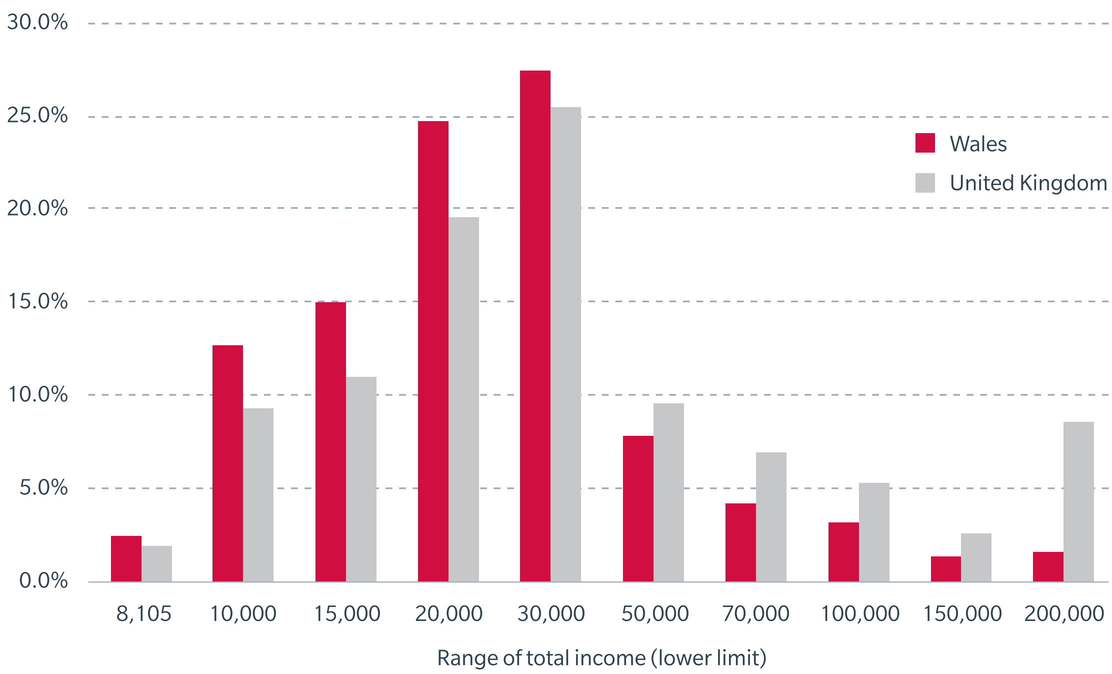
TABLE 2: Income Tax Personal Allowance Changes since 2010						
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Personal allowance	£6,475	£7,475	£8,105	£9,440	£10,000	£10,600

That UK policies in recent years have had asymmetric effects across the UK is not a new observation, but it has not received perhaps as much prominence in the debate over tax devolution for Scotland as it might otherwise have, simply because the magnitude is less challenging in Scotland than it is for Wales. As Professor David Heald of the University of Glasgow noted in his oral evidence to the Scottish Parliament's Devolution (Further Powers) committee session of 11 December 2014:

It is really important that one recognises that Wales and Northern Ireland are in significantly different positions from Scotland, which is sufficiently close to the UK average that we do not need to worry too much about tax-base equalisation in terms of Income Tax.Wales and Northern Ireland have income levels that are way below the UK average, and their Income Tax revenues will be affected by the UK practice of putting up the personal allowance so much.

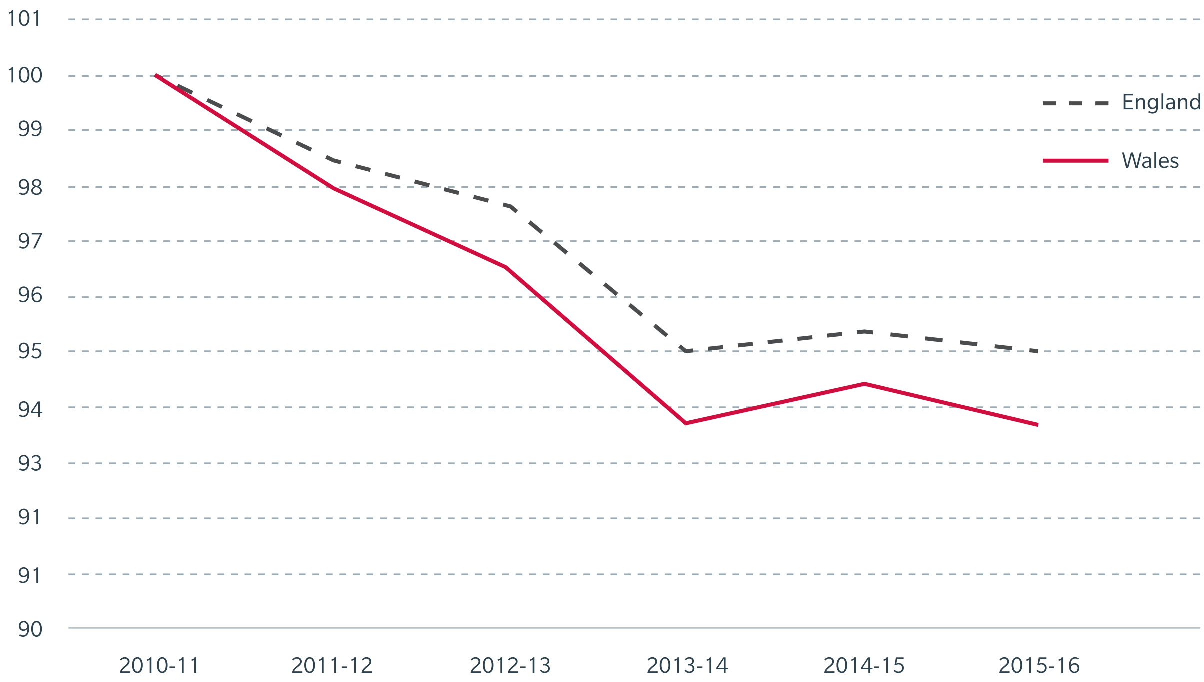
To see why UK tax measures will have had a disproportionate impact on the Welsh share of Income Tax, we can look at how distributions of incomes in Wales compare to the UK as a whole (figure 3). Wales has lower wages than the UK average, so the Welsh tax base is more heavily skewed towards the lower ranges of income. 55% of all taxpayers' income in Wales is earned by individuals earning less than £30,000 a year, compared with 42% across the UK. Moreover, less than 6% of the taxable income in Wales is earned by those earning £100,000 and above, compared with 16% across the UK. Increases in the personal allowance will therefore have drawn disproportionately more Welsh taxpayers out of the Income Tax base than may be the case across the UK as a whole. This can be further illustrated by the fall in the total number of taxpayers in Wales compared with England (figure 4), and the fall in the Welsh Income Tax as a share of all UK Income Tax liabilities since 2010-11 (table 3). If Wales's share of UK Income Tax reduces, the Welsh Government will see a reduction in its budget through the operation of the block grant reduction mechanism regardless of home-grown policy decisions it has made.

Figure 3: Share of taxable income by range of total income in Wales and UK, 2012-13



Source: HMRC

Figure 4: Change in the number of taxpayers in Wales and England (2010-11=100)



Source: HMRC

TABLE 3: Welsh Share of UK Income Tax Liabilities				
	2010-11	2011-12	2012-13	2013-14
10p Welsh Rate as a % of UK Income Tax Liabilities	1.42%	1.37%	1.34%	1.27% (forecast)

Source: OBR Devolved Taxes Forecast, November 2015. Excludes savings and dividend Income Tax liabilities which are not devolved.

Of course, that the UK government raised personal allowances in recent years is no guarantee that such increases will increase in the future. If we speculate that thresholds and allowances remain unchanged in future years (as the OBR does in its forecasts), we can simply assume away the UK policy risk to the Welsh budget. But there are two problems with this approach. First, there is every reason to assume that the current UK government will continue a policy of raising the personal allowance. Among the very first policy pledges of the UK Government's General Election manifesto is the commitment to "increase the tax-free Personal Allowance to £12,500 and the 40p Income Tax threshold to £50,000". Second, this downside risk from increasing thresholds and allowances is one that the Welsh budget was not supposed to bear in the first place.

Drawing from the Holtham Commission's recommendations, the Silk Commission argued that one of the main advantages of the Indexed Deduction method is that it would 'not transfer UK policy risk' to the Welsh Budget. The Commission argued that correct application of the indexed deduction method would mean that any policy changes to the UK tax base that impacts upon the Welsh tax base would automatically be compensated by a corresponding adjustment to the block grant. The report gave the following example:

> *If … the UK Government increased the personal allowance for Income Tax then Welsh tax revenues would fall. However, so would the deduction to the block grant as revenue across the rest of the United Kingdom would also fall as a result of this policy change.*

Concurring with Silk, the Wales Bill 2014 command paper Financial Empowerment and Accountability claimed that the Indexed Deduction method would "automatically incorporate the principle of 'no detriment"', as the block grant adjustment would "reflect decisions made by the UK Government in relation to thresholds, allowances and reliefs".

However, while this would be reasonable in the context of a tax policy that had symmetric effects across the UK, it doesn't account for the distributional differences in the tax bases of Wales and the UK as outlined above. UK tax measures that systematically affect the lower end of the tax base will remove a larger fraction of the Income Tax base from Wales than is true for the UK as a whole. And because Wales' future block grant adjustments will be linked to changes in the UK (not the Welsh) tax base, there is no reason to believe that the Welsh Government's Income Tax losses from UK tax policy will be adequately offset.

The current method proposed for reducing Wales' block grant after tax devolution will therefore not automatically incorporate the principle of 'no detriment': that neither government should gain or lose from the spill-over effects of the other government's decisions. Section 95 (4) (a) of the Smith Commission proposals recommended the following 'no detriment' provision:

> *"Where either the UK or the Scottish Governments makes policy decisions that affect the tax receipts or expenditure of the other, the decision-making government will either reimburse the other if there is an additional cost, or receive a transfer from the other if there is a saving. There should be a shared understanding of the evidence to support any adjustments."*

Although this principle appears straightforward, evidence from the Scottish fiscal framework negotiations has shown "no detriment" to be a minefield (see Bell et al., 2015). The basic principle, that no government should suffer simply because a tax is devolved to it; is fundamentally at odds with a second no detriment principle outlined by the Smith Commission and termed the "taxpayer fairness" principle (see section 4.3)

Notwithstanding the considerable difficulties in implementing 'no detriment' and the implications of the new Barnett Floor on Wales' funding, frequent and transparent reviews of the block grant adjustment will be needed to take account of differential effects of UK Government policies on Income Tax receipts in Wales. Higher and lower income earners are not uniformly distributed across the countries of the UK, which means that the UK Government's reserved powers over Income Tax allowances, thresholds and reliefs will expose the Welsh Budget to downside risk as well as the positive incentive effects that these powers should confer.

As the negotiations in Scotland continue over a fair settlement after tax devolution, and in line with the fairness principles identified by the Silk Commission, there is an urgent need to represent the Welsh interest in ensuring that the future monies available to fund public services are not disproportionately disadvantaged by policy decisions made by another government.

4

Options for adjusting the Welsh Block Grant

This section examines options for adjusting the Welsh block grant, looking at some of the choices facing policy makers. It also takes a hypothetical but revealing look at what impact fiscal devolution would have had on past Welsh budgets.

A recent report by the Institute for Fiscal Studies (Bell et al., 2015) set out options for adjusting the Scottish block grant to account for devolution of tax and welfare powers. In a similar vein, and using a similar methodology and notation, the following discussion examines the adjustment method proposed in the Wales Bill Command Paper (the Indexed Deduction method), as well as a variation of it (the Per Capita Indexed Deduction method). Other considerations are also explored, including the "Levels Deduction" method that appears to be HM Treasury's preferred candidate in the fiscal framework negotiations for Scotland (Aitken 2016).

The discussion here differs from the IFS report in one crucial aspect. Each method outlined index the block grant adjustments to **the UK tax base**, and not **UK tax revenues.** This follows what was originally proposed by the Holtham Commission, and what is outlined in the Wales Bill Command Paper. The tax base, for Income Tax, is defined as the aggregate of all taxable non-savings and non-dividend incomes, after tax allowances, reliefs and exemptions. The UK tax base is used because its growth over time will be equal to the growth of the UK equivalent to the revenues being devolved to Wales, i.e. a 10p share of total taxable NSND income. Indexing to the UK tax base means that any change in UK income has the same effect, regardless of whether it is earned at the lower, higher or additional band. This is symmetrical to the revenues being devolved to Wales - the Welsh Government will only get a 10p share of increases in incomes regardless of the band it is earned at. Conversely, the growth in total UK tax revenue will be different, because income growth in higher tax bands will yield more revenue than in lower bands. The IFS report indexes to UK tax revenues because all NSND Income Tax will be devolved to Scotland (see section 4.3).

4.1 Indexed Deduction (ID) method

After devolution, in the first year (time period t), a simple block grant adjustment is made to the Welsh block grant equal to the amount of revenue raised through the devolved tax (T_t^W):

$$BGA_t = T_t^W$$

This leaves the size of the Welsh block grant unchanged in the first year of devolution. In subsequent years, the amount deducted will equal the previous year adjustment, plus the annual change in the **equivalent UK tax base** (TB^{UK}). Therefore, in time period t+1:

$$BGA_{t+1} = BGA_t * \frac{TB_{t+1}^{UK}}{TB_t^{UK}}$$

As previously mentioned, the change in the size of the Welsh Government budget here would depend on the relative growth of Welsh Income Tax revenues compared with the tax base growth in the rest of the UK.

It is impossible to forecast with any degree of certainty the medium- or long-term impact of Income Tax devolution on Welsh Government budgets of the future. But it is possible, however, to take a hypothetical, "what if" look at the effects of fiscal devolution on past Welsh budgets, while assuming that Welsh Governments would have kept tax rates the same as across the UK. Under the current system, the block grant (and the resulting sum that Wales has to spend on public services) has been set by the Treasury using the Barnett Formula. But if the new system had applied in previous years, the size of the budget would have also depended on the relative growth of the Income Tax base in Wales and the UK over time.

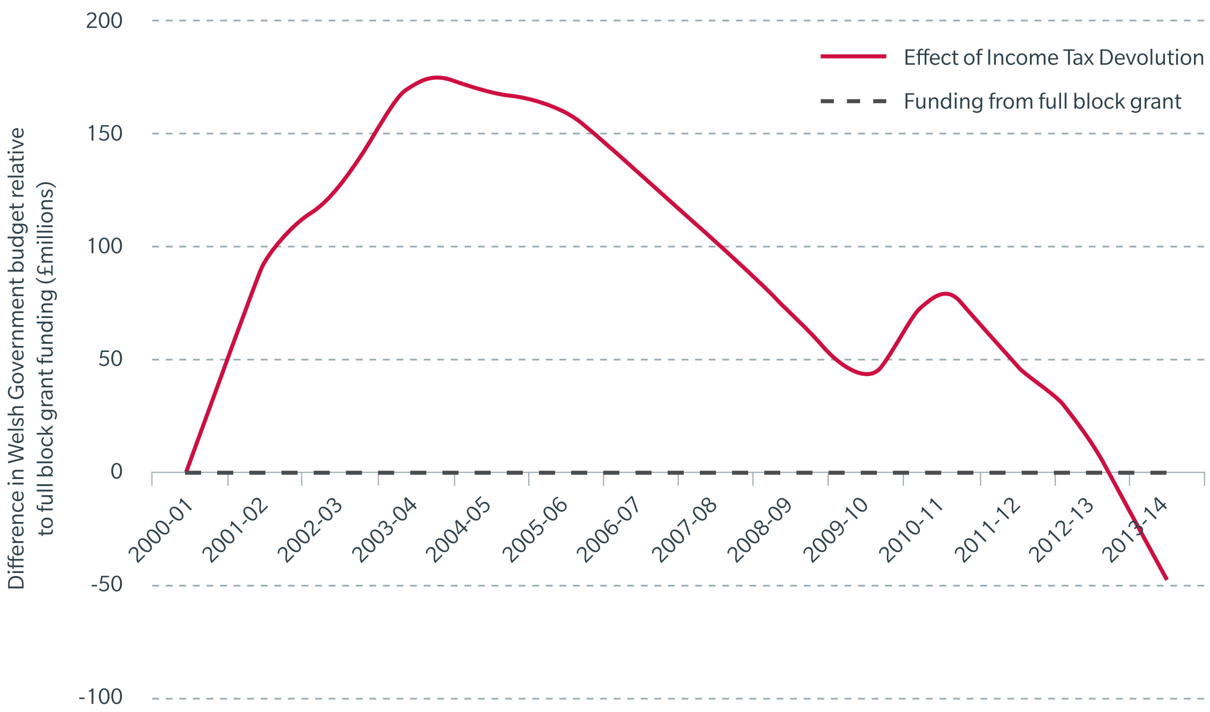
These "what if" scenarios are extremely sensitive to the start year chosen as the index for the analysis: a single year can result in very substantive annual and cumulative differences in the relative performance of tax devolution against full block grant funding. Rather than focusing on estimates of how much greater or smaller the Welsh budget might have been in a single year, the objective here is to highlight overall trends in the performance relative to block grant funding.

A serious obstacle for accurately assessing the effect of Income Tax devolution is a lack of data. There is no available data on the UK Income Tax base, so this data series has been constructed from available data on tax liabilities (see annex for details). More importantly, data on the amount of Income Tax raised in Wales comes from the Survey of Personal Incomes (SPI), and is only available with a substantial lag. Because it was never designed to underpin a system of territorial financing, the sample of Welsh taxpayers in this survey is relatively small, and some of the year-to-year volatility of Welsh Income Taxes could be attributed to this. In the years preceding Income Tax devolution for Wales, each Welsh-domiciled taxpayer will need to be identified individually on HMRC databases. Although laborious, this process will make it possible to determine the Welsh share of UK liabilities with much greater precision and timeliness.

The relatively strong Welsh Income Tax growth in the first years of the 21st century identified in section 2 is here reflected in figure 5, which illustrates the difference to the Welsh Government budget had partial Income Tax devolution started in 2000-01, compared to the full block grant system. If Income Tax had been devolved at the start of the decade, receipts would have totalled over £1.9 billion (in 2014/15 prices) in 2000-01 and this amount would have been deducted from the block grant, leaving the size of the Welsh Government Budget unchanged in the first year. But under a shared tax system, future adjustments to the block grant will affect how the new system would have performed against the old.

Because Welsh tax revenues outgrew the UK tax base the extra revenue from Income Tax devolution would have exceeded the opposing increases in the block grant adjustment. This means that until 2013-14 (and – importantly – assuming a start date for the scenario in 2000-01), Welsh ministers would have had more to spend on education, health and other public services under partial Income Tax devolution, sometimes in excess of £100 million per year (in 2014-15 prices).

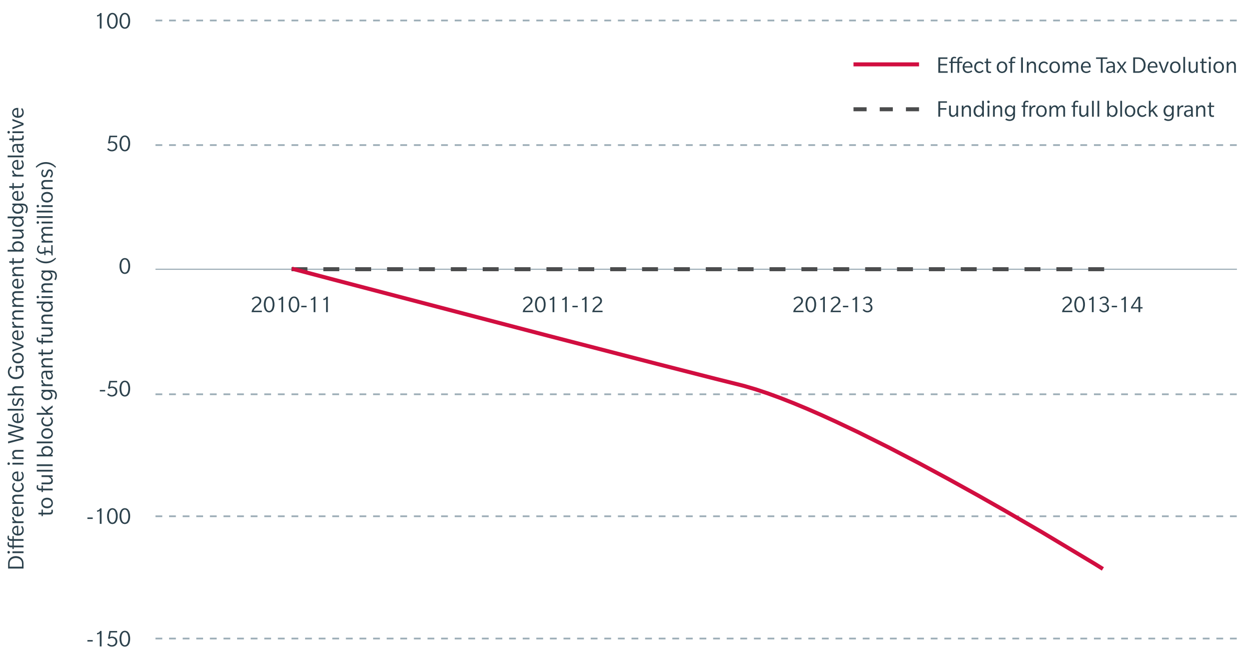
Figure 5: Scenario 1 - Income Tax devolution from 2000-01 (real terms, 2014-15 prices)



Source: HMRC and OBR, author's calculations

Taking a different start year in order to explore the effects of the issues described in section 3 and 4 however, figure 6 assumes Income Tax devolution began in 2010-11. If tax devolution had commenced in 2010-11, in the first year the Welsh Government budget again remains unchanged for the reasons noted previously. But after 2010-11, the extra revenue from devolved Income Tax fails to keep pace with the amounts deducted from the Welsh block grant, reducing the size of the Welsh Government budget compared to the old full block grant system. **This shortfall would have amounted to £121 million per year by 2013-14.** Cumulatively, and again taking into account the critical assumption of the start date chosen for this scenario, this represents a large loss to the Welsh Budget.

Figure 6: Scenario 2 - Income Tax devolution from 2010-11 (real terms, 2014-15 prices)



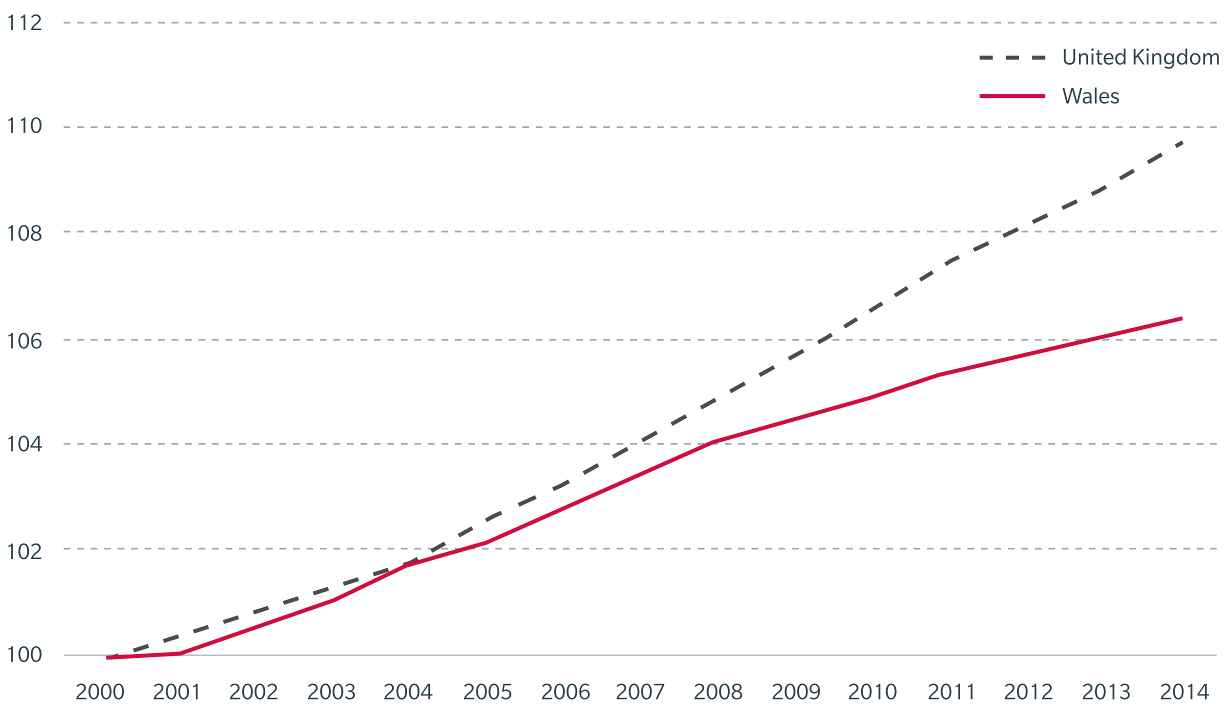
Source: HMRC and OBR, author's calculations. 2013-14 calculated from HMRC and OBR forecasts

4.2 Per Capita Indexed Deduction (PCID) method

In the continuing debate over the appropriate way of adjusting Scotland's Block Grant, one of the main points of contention has been whether to account for relative population growth. Under the Indexed Deduction method outlined in section 4.1, the devolved government would likely gain extra revenues if its population grew relatively quickly, but would also lose out if its population growth failed to keep pace with the rest of the UK. In the Welsh context, this might be considered desirable as it would encourage the Welsh Government to attract and retain income taxpayers in Wales; requiring the Welsh Government to take economic responsibility for any population effects from its policies. However, it is unclear exactly how much impact the Welsh Government has on the Welsh population growth, as immigration policy – a key factor in population growth – will be reserved to Westminster. Hence exposing the Welsh Government to population growth differentials might be deemed unfair.

Figure 7 displays the population growth of Wales and the UK since the year 2000. While Welsh population growth kept pace with the UK for the early part of the last decade, a significant divergence has occurred in more recent years, especially since 2008. Whereas the UK population grew by 4.5% from 2008 to 2014, Welsh population growth in this period was less than half that, at 2.2%. Scotland's relatively slow population growth is well documented and features prominently in debates over its future fiscal devolution. Figure 7 suggests population divergences should also be an important consideration in the Welsh case.

Figure 7: Population growth in Wales and the UK (2000 = 100)



Source: Office for National Statistics

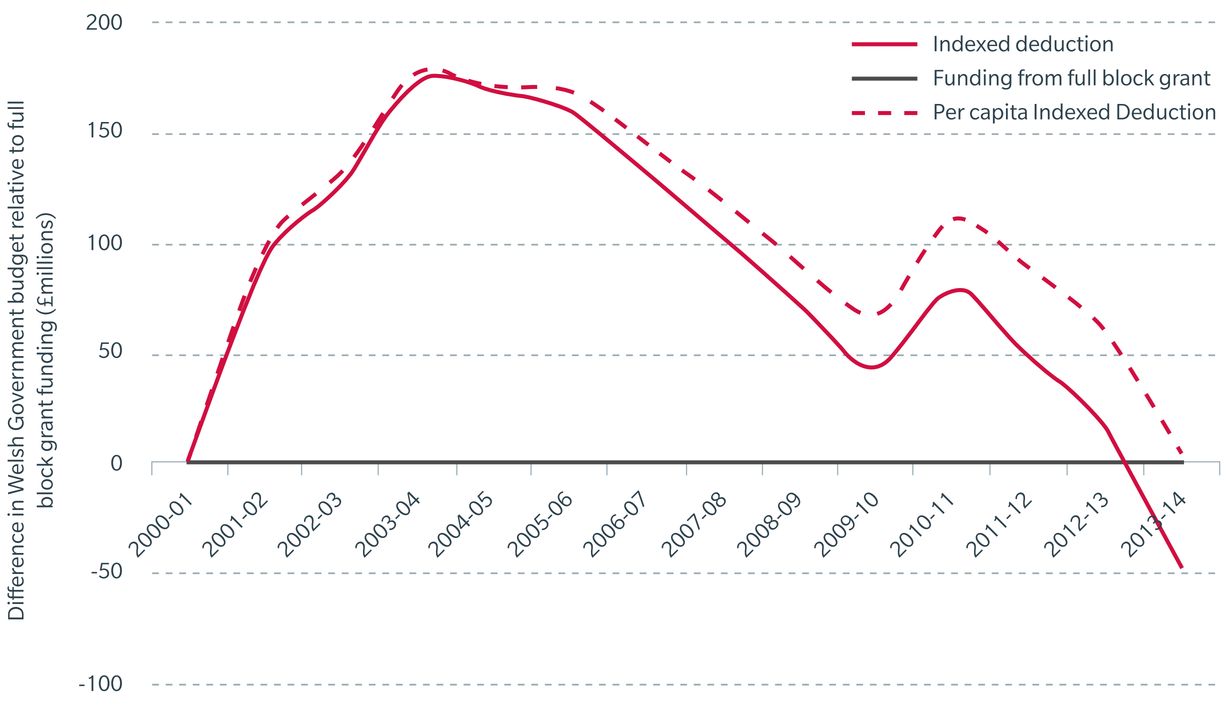
A variant of the Indexed Deduction (ID) method in the Scottish negotiations has therefore been the **Per Capita Indexed Deduction (PCID)** method, which would take relative population growth into account in calculating the Block Grant Adjustment. Where P^{UK} denotes the population of the UK, and P^{W} is the population of Wales, the PCID can be calculated as:

$$BGA_{t+1} = BGA_{t} * \frac{TB^{UK}_{t+1}}{TB^{UK}_{t}} * \frac{P^{UK}_{t}}{P^{UK}_{t+1}} * \frac{P^{W}_{t+1}}{P^{W}_{t}}$$

If population growth is the same for Wales and the rest of the UK, then the PCID method gives the same result as the ID method (the last two terms of the equation will cancel each other out). However, if Welsh population growth is lower than that of the UK, then the block grant adjustment is reduced, and vice versa. This would protect the Welsh Government budget from the effects of relatively slower population growth, though it would prevent it from gaining from the effects of relatively faster population growth also.

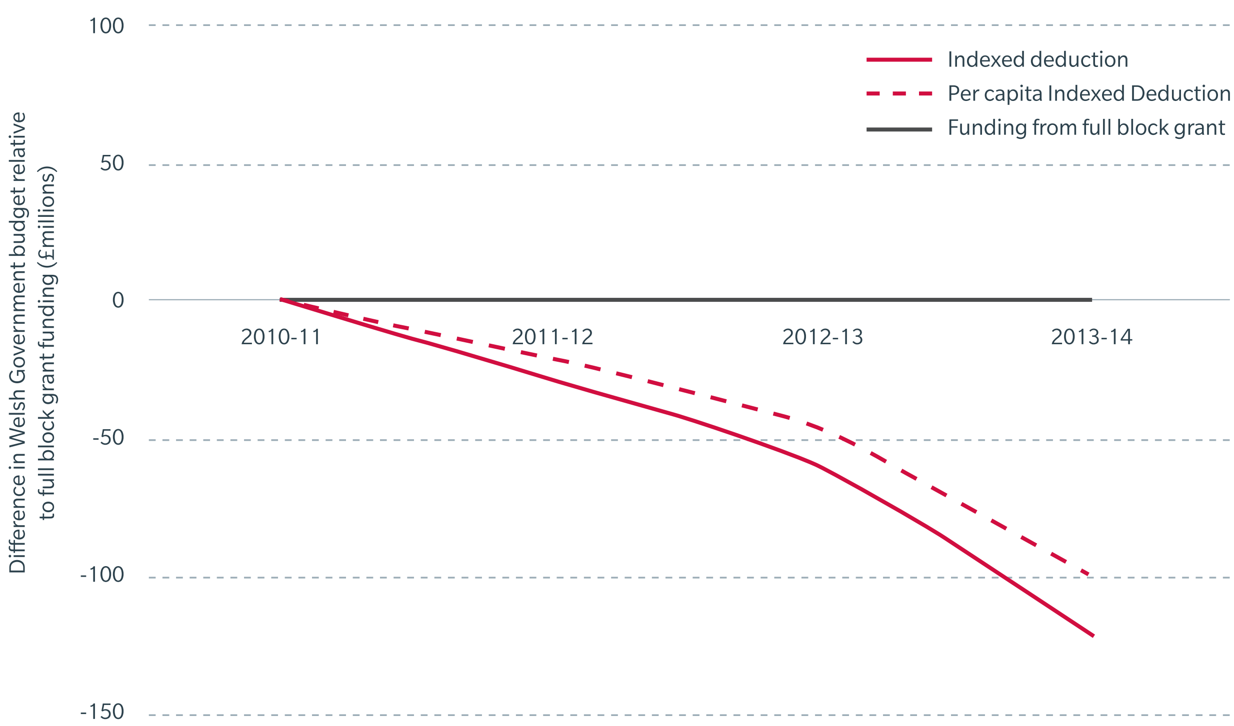
Figure 8 and 9 recreate scenarios 1 and 2 explored earlier, demonstrating the difference made by applying a PCID adjustment instead of an ID adjustment. As figure 8 shows (using scenario 1 of Income Tax devolution from 2000-01), as population growth for Wales and the UK were broadly equal from 2000 to 2005, the PCID and ID adjustments are initially similar. However, as population trends begin to diverge, the PCID adjustments to the Welsh block grant become smaller, meaning the Welsh budget would be affected by less than it would have been under the unadjusted indexed deduction method.

Figure 8: Scenario 1 - Income Tax devolution from 2000-01 (real terms, 2014-15 prices)



Source: HMRC and OBR, author's calculations

Figure 9: Scenario 2 - Income Tax devolution from 2010-11 (real terms, 2014-15 prices)



Source: HMRC and OBR, author's calculations. 2013-14 calculated from HMRC and OBR forecasts

In scenario 2, showing how Income Tax devolution would have performed since 2010-11, a PCID adjustment would have reduced some of the losses to the Welsh budget, as it factors in the relatively slower population growth seen in Wales in this period. However, even with a PCID adjustment, the Welsh Government would have been worse off with Income Tax devolution than under the prevailing full block grant funding.

Again, although the potential for such losses naturally come with the increased responsibility and accountability of Income Tax powers, the losses described here are at least partly attributable to UK Government tax policy changes identified in section 3.[4]

4.3 Levels Deduction (LD) method

Alongside the ID and PCID adjustment methods, Bell et al. (2015) also explore what they term as a **Levels Deduction (LD)** method of adjusting the Scottish Block grant. This approach is quite different from Indexed Deduction (the Holtham method) and its PCID variant. LD would calculate the change in the block grant adjustment as a population share of the change in UK tax revenues. That is, if UK Income Tax revenues increased by £10 billion, then the Welsh block grant would be adjusted according to the Welsh population share of this increase – approximately £500m.

The Levels Deduction method has emerged from a second no detriment principle set out by the Smith Commission that has subsequently been referred to as the "taxpayer fairness" principle in the Scottish negotiations. Recall that unlike the current tax devolution proposals for Wales, the Scotland Bill 2015-16 intends to devolve the entire Non-Savings and Non-Dividend Income Tax base to the Scottish Government. The "taxpayer fairness" principle proposes that changes to tax rates in the rest of the UK, for which responsibility in Scotland has been devolved, should only affect public spending in the rest of the UK. For example, if the UK Government raised Income Tax rates in order to increase spending in a devolved policy area such as health, Scotland should not receive an automatic budget enhancement through the Barnett Formula as it would under existing mechanisms. As previously mentioned, this principle can only be satisfied by indexing the Block Grant Adjustment to tax revenues in the rest of the UK, as tax revenues reflect changes in tax rates, whilst the tax base does not. Bell et al. (2015) note that because it is based on a population share of a cash terms change, the Levels Deduction method would work symmetrically with existing spending adjustments as calculated by the Barnett Formula.

Although we analyse the hypothetical impact of Levels Deduction to the Welsh budget in this section, and whatever its suitability in the Scottish case, we argue that the "taxpayer fairness" principle should not apply to Wales because the Welsh Income Tax base will only be partially devolved. Any increase in tax rates by the UK Government will also increase the non-devolved Income Tax rates in Wales. Welsh taxpayers will still contribute fully towards any increase in spending financed by increased UK tax rates by way of the non-devolved share of their Income Tax liabilities.

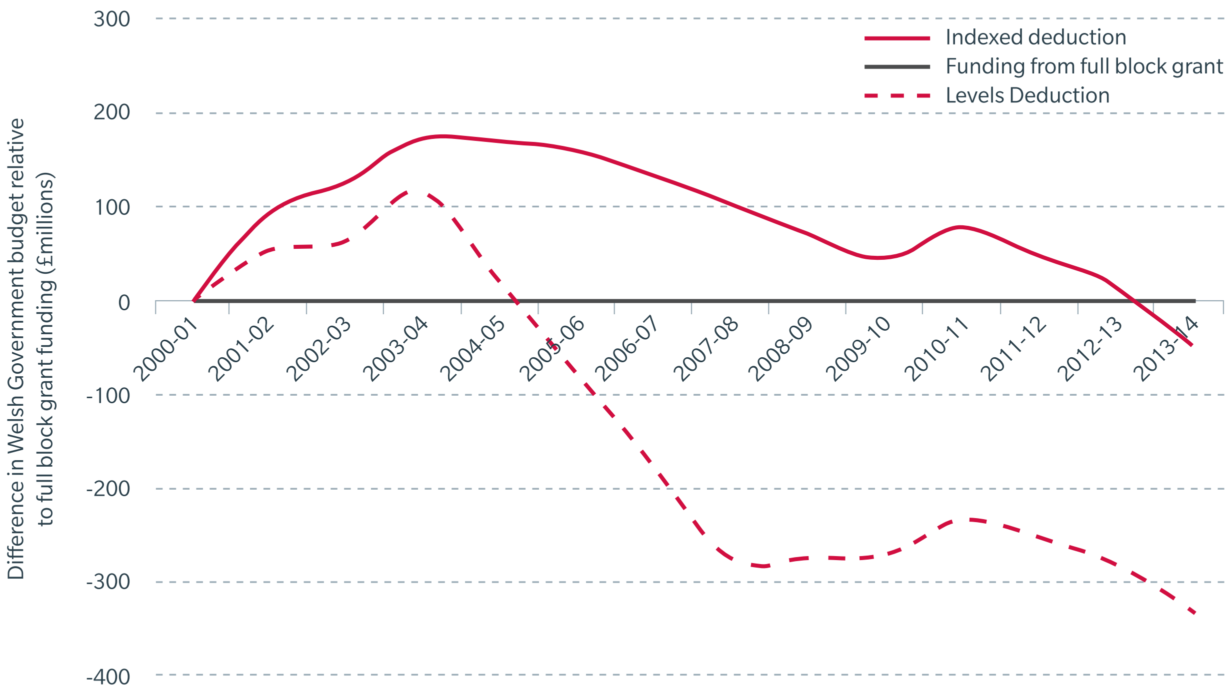
Not only is LD an unsuitable method on principle in the Welsh case, but the method would also place the Welsh budget under very significant and unjustifiable strain over the medium to long term. Even if Welsh tax revenues grew as fast (in percentage terms) as comparable UK revenues, the Levels Deduction method would cut the Welsh Government budget compared with full block grant funding. This is because Wales' devolved Income Tax as a share of total comparable UK revenues is only 3.5%, but Wales' population as a share of the rest of the UK is 5.1%. This gap in fact means that under the Levels Deduction method, Welsh revenues would need to grow 46% faster than comparable UK revenues just in order to maintain the same level of funding.

Figure 10 again illustrates a scenario of Income Tax devolution becoming operational in 2000-01, but this time with the Levels Deduction method of adjustment being applied. To do this, we calculate comparable UK revenues i.e. a 10p share of taxable NSND income at each tax band, the UK equivalent to the revenue being devolved to Wales.

4 Limitations in the available Survey of Personal Incomes data make it challenging to exactly quantify the various components explaining differences in performance between Welsh and UK income taxes; for example, tax policy, population changes, income per capita changes, or GVA.

In the first three years of this period, Welsh revenues outgrew comparable UK revenues by such an extent that they would have increased the level of funding available for the Welsh Government even under the Levels Deduction method. However, the significance of the gap between Wales' UK population share and its share of UK Income Tax revenues manifests itself in a rapid change in fortunes after 2003-04, when UK revenues start increasing rapidly (see also figure 1). The average annual growth in comparable UK Income Tax revenues from 2004-05 to 2007-08 was 8.2%. Although devolved Welsh revenues also grew quickly in these years (averaging 7.1%), the block grant adjustments under Levels Deduction would have grown so substantially as to result in large losses to the Welsh budget. Under the Levels Deduction method, Welsh Income Tax revenues would have had to increase annually by an average of around 11.3% during these years just in order to maintain the 2003-04 level of funding.

Figure 10: Scenario 1 - Income Tax devolution from 2000-01 (real terms, 2014-15 prices)

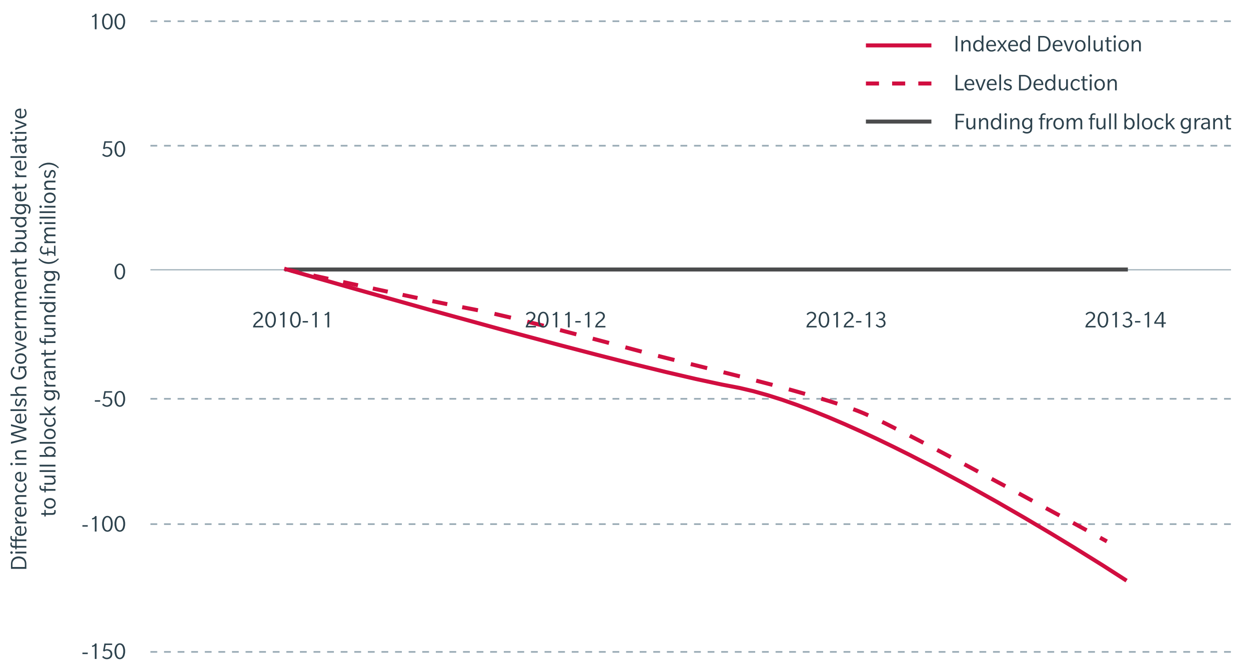


Source: HMRC and OBR, author's calculations

Conversely, when UK Income Tax revenues decline, as they did during the recession, under the Levels Deduction method the block grant reduces by a population share of the absolute drop in comparable UK revenues. This, in essence, reverses the relative position for Wales under the LD method. During periods of declining UK tax revenues, even if Welsh revenues were to fall faster (in % terms) than UK revenues, the Welsh budget could increase because LD would reduce the block grant adjustment by an even greater amount. This is the reason for the halt in the downward trend line in figure 10 from 2007-08, even though Welsh revenues (in % terms) were falling faster than the UK revenues during this period.

The period after 2010-11 was also characterised by slow or negative growth in comparable UK revenues. Figure 11 illustrates the effect of Income Tax devolution had it been operational since 2010-11. Although comparable UK revenues were decreasing slightly, the much larger reductions in devolved Welsh Income Tax (for reasons described in earlier sections) would also have generated losses to the Welsh budget. Interestingly however, because of the reversal in the relative position for Wales under Levels Deduction when UK revenues are decreasing, the hypothetical losses to the Welsh budget would have been similar to those under the Indexed Deduction method.

Figure 11: Scenario 2 - Income Tax devolution from 2010-11 (real terms, 2014-15 prices)



Source: HMRC and OBR, author's calculations. 2013-14 calculated from HMRC and OBR forecasts

These two scenarios illustrate that although the LD method would not necessarily have had deleterious effects for the Welsh Budget in times of negative or slow growth in UK revenues, the method has the potential to lead to large losses to the Welsh budget worth hundreds of millions of pounds during periods of growth. The Levels Deduction method would place the Welsh budget under significant and unjustifiable strain over the medium to long term if UK Income Tax revenues were to increase at a relatively rapid rate, which would be likely to occur if the UK economy were to revert to a period of sustained growth.

4.4 Other options and considerations

4.4.1 Alternative block grant adjustment mechanisms

Although it does not feature in Bell et al.'s (2015) IFS paper, Cuthbert (2015b) proposes an alternative block grant adjustment method that could avoid the UK policy risk to the Welsh budget from Indexed Deduction and PCID. This option, which Cuthbert terms "absolute indexation", would involve the setting of a target for growth in the devolved tax base rather than setting a indexing relative to changes in the UK tax base as a whole. This would circumvent the problem of the Welsh Government failing to match the growth in the UK tax base through no fault of its own (see sections 2 and 3), while giving the Welsh government a policy incentive to exceed the growth rate target. The policy incentive to grow the Welsh tax base would be retained because any Income Tax growth above the target could be kept as an enhancement to the Welsh budget under this method. However, Cuthbert notes several challenges that would need to be considered, not least the pro-cyclical aspect of this method: the devolved budget "will be penalised by the indexation arrangements on those regular occasions when the overall economic cycle turns adverse" (Cuthbert 2015b: 5). As a result, there would need to be a procedure for regular review of the growth target to ensure that it remains a reasonable target given prevailing economic conditions.

4.4.2 Divergent Treatment of the Higher Rate and Additional Rate Thresholds in Scotland and Wales

Although the partial Income Tax devolution intended by the Wales Act 2014 might appear as a halfway house that somewhat insulates Wales from the risks of greater fiscal autonomy, in practice the Welsh budget will face risks from changes to tax thresholds over which the Welsh Government will have no control. Although the tax-free personal allowance will remain reserved to Westminster in the Scottish case, if it were faced with a major revenue shortfall the Scottish Government could adjust the devolved higher (40p) and additional rate (45p) thresholds as well as rates to compensate for the impact of Treasury measures that would otherwise be detrimental to the Scottish budget. Conversely, because it will have no control over the higher rate and additional rate thresholds, the Welsh Government will have more limited room for manoeuvre.

For example, assume the Welsh Government were to set different rates for each of the three different bands, for example, by maintaining a 10p basic Welsh rate but reducing the higher Welsh rate from 10p to 5p. The cost of this lower tax rate will not be a constant, but will instead vary with the taxpayer income level at which the UK Government sets the higher rate threshold. A reduction in the higher rate threshold would draw more Welsh taxpayers into paying 5p rather than 10p to the Welsh Government, increasing the cost of the tax cut to the Welsh budget.

Once the Welsh Government sets differential rates for each band, the overall cost of Welsh tax cuts (or budget enhancements from tax increases) will therefore depend on UK Government policy on the higher and additional rate thresholds. Not only is Wales' economic profile considerably further from UK averages than is Scotland to the UK on relevant characteristics (with the associated potential for greater downside budget risk), but because thresholds will not be under devolved control, partial Income Tax devolution will present unique risks that might potentially be compensated for under a system of full Income Tax devolution.

4.4.3 The Barnett Floor

Alongside the November 2015 announcement shelving the referendum requirement for Income Tax devolution, the Chancellor additionally announced that the UK Government would implement a floor underneath Wales' relative per capita funding. This proposal is designed to prevent the amount of funding allocated to Wales through the Barnett formula from falling below a certain per capita level in comparison with England, protecting the Welsh Budget from the "Barnett Squeeze" (see for example Holtham, 2009: 21). Due to the lack of published information on how the proposed Barnett Floor will be implemented, this report has not been able to explore in detail how a floor might interact with Income Tax devolution and subsequent block grant adjustments.

This work is of critical importance to the implementation of Income Tax devolution because, as argued persuasively elsewhere, there is a "serious tension between a commitment to a Barnett floor and a reduction in the block grant, at least if the system is to be introduced with any degree of transparency and accountability" (Trench 2015). If the floor is applied before adjustment of the Welsh block grant to permit variation in the Welsh budget based on Income Tax performance, then Wales' per capita funding might fall below a nominal floor level during periods of slower tax growth in Wales (such as in the scenarios that assume devolution became operational in 2010-11). Conversely, if the funding floor is applied after the block grant adjustment, it could potentially shield the Welsh budget from the risks described in this report but would contradict the primary justification for Income Tax devolution in the first place - that is, increasing the accountability of the Welsh Government and linking the Welsh budget to the performance of the Welsh tax base in a transparent way. The absence of clear proposals for implementing the Barnett Floor therefore increases the likelihood of a negotiated settlement that blurs the proposed lines of accountability between the performance of home-grown Welsh taxes and the monies available to fund Welsh public services.

5

Conclusion

The devolution of substantial revenue raising powers to Wales is intended to deliver a more balanced and transparent foundation from which future Welsh budget decisions will be made. It will help to align the democratic institutions of Wales more closely with the basic principle that governments should be required to raise at least some of the revenue they spend.

However, this report has argued that there are a number of practical issues that need to be addressed regarding the partial devolution of Income Tax. Increased accountability will be achieved if the Welsh Government reaps the rewards or bears the costs of its *own* actions and policy choices, through increases or decreases in its budget. However, the proposed methods of adjusting the block grant open up the possibility of the Welsh Government Budget being cut significantly as a result of UK Government policy changes to thresholds, allowances and reliefs that have a disproportionate impact in Wales.

As Wales' tumultuous experience with the Barnett Formula should tell us, the devil in funding mechanisms is in the details. Trying to establish a complex adjustment formula in advance of tax devolution may appear neat, but any such formula could subject the Welsh budget to risks that run counter to the UK Government's objective to improve the Welsh Government's accountability and responsibility. As students of the Barnett Formula will instantly recognise, a short term solution or temporary fix can quickly become institutionalised. Yet this report has demonstrated that likely results from partial Income Tax devolution will vary substantially with the different methods for adjusting the Welsh block grant.

This suggests that the Welsh Block Grant Adjustment will need to be frequently reviewed to take account of the impact of UK Government policy changes. However, periodic reviews of this nature with HM Treasury will be extremely difficult for the Welsh Government to achieve in the heat of the UK budget and spending review process. An independent adjudication commission should therefore be an essential component in the UK's emerging fiscal framework. A 2015 report by the Bingham Centre for the Rule of Law recommended the establishment of an independent body to advise HM Treasury about devolution finance and particularly about grant matters. This body could be modelled on the Australian Commonwealth Grants Commission and named the UK Finance Commission. The Bingham Centre report also proposed that this body or another independent body be responsible for adjudication in the event of disputes between governments that cannot be resolved through joint ministerial processes.

Given the magnitude and difficulty of these outstanding issues, and in the absence of a concrete timeline for partial Income Tax devolution, discussions on changing tax rates and policy during the forthcoming Assembly elections should be regarded as premature. Over the five years of an Assembly term, the choice of block grant adjustment method could represent a cumulative hundreds of millions of difference to the Welsh budget. That the method is likely subject to lengthy negotiation makes it impossible to begin to calculate potential aggregate impacts of any changes to the Income Tax rates themselves.

The analysis presented in this report necessitates that Welsh Income Tax devolution be treated differently from Scotland. Due to differences in tax bases and differences in the extent of devolution, whatever block grant adjustment method is proposed for Scotland should not automatically apply to Wales, especially the "Levels Deduction" approach that is understood to be HM Treasury's first preferred option for Scotland. Given the risks and rewards from tax devolution, it is important that that the likely consequences of any decision are understood and that an open discussion takes place about how tax devolution should work for Wales. And once fiscal devolution is implemented, officials in the new Welsh Treasury, ministers and politicians from all parties will need to be alert to how reserved UK tax policy may impact the size of the Welsh budget, through no action or fault of decision-makers in Wales.

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Annex

Annex: Estimating the UK Non-Savings Non-Dividend (NSND) Tax Base

A direct estimate of the Non-Savings Non-Dividend (NSND) Tax Base is not available, so we make a series of estimations to derive an implied tax base.

To calculate a historic estimate of the Welsh Rate of Income Tax, we can derive an approximate estimate of the share of UK NSND Liabilities that would be raised by the Welsh Rate of Income Tax (10p from each band in Wales) from the OBR's Devolved Taxes forecasts. Table 2.1 on page 7 in the November 2015 release provides Scottish and Welsh historic NSND Income Tax shares as a percentage. We then apply the OBR's historic Welsh NSND percentages to *HMRC Survey of Personal Incomes* data on total UK NSND Liabilities.

Under the Indexed Deduction method (the Holtham method), the block grant adjustment under tax devolution is based on changes in the UK NSND tax base rather than the Welsh base. The HMRC publication also presents all UK NSND tax liabilities at the Basic, Higher and Additional rate. The tax liabilities at each rate are then divided by the corresponding tax rate, to produce an estimate of the underlying UK NSND Income Tax base. An example of this calculation, for the year 2012-13, is shown in table A1.

TABLE A1: Calculations for UK NSND Income Tax Base, 2012-13

	NS-ND Tax liabilities (£m)	Applicable tax rate	Implied Tax Base (£m)
Basic rate:	84,900	20%	424,500
Higher rate:	39,300	40%	98,250
Additional rate:	20,900	50%	41,800
TOTAL:	145,100		564,550

Source: HMRC: Survey of Personal Incomes (SPI), author calculations

In the first year of both scenarios, the Block Grant Adjustment equals to the estimated devolved revenues. In subsequent years, the adjustment is indexed to the growth in the constructed UK NSND Income Tax base series.

The effect of Income Tax devolution compared to full block grant funding is calculated by subtracting the Block Grant Adjustment for each year from the corresponding devolved revenue estimate.