
DEVOLVING STAMP DUTY AND LANDFILL TAX TO WALES:

Mitigating the Budget Risks
after “Switching On” Wales’
First Home-Grown Taxes

July 2016



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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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Introduction

From April 2018, the UK-wide Stamp Duty Land Tax and the Landfill Tax will be “switched off” in Wales. The Welsh Government will introduce two devolved taxes to replace them, the Land Transactions Tax and the Landfill Disposals Tax, and these taxes will directly form part of the Welsh Government budget. Administrative preparations are already underway and proposals on stamp duty policy featured in political party manifestos in the recent election.

However, the ultimate success or failure of the devolution of these minor taxes will be determined by how Wales’ block grant will be changed as a result of their introduction. Similar issues apply to the partial devolution of income tax, the subject of another Wales Governance Centre paper.¹ While Stamp Duty and Landfill Tax yield less revenue than income tax, their devolution could have even greater proportionate effects on the size of the Welsh budget, depending on how the block grant is adjusted. Particularly in the case of Stamp Duty, there is a very significant difference in the amount of revenues per head collected annually through this tax in Wales and the rest of the UK, a discrepancy which could result in a large negative impact on the Welsh budget under one method that could be chosen to implement the tax after April 2018.

Similarly to the Scottish Fiscal Framework agreed in early 2016, these issues will be determined by upcoming negotiations between HM Treasury and the Welsh Government. This briefing aims to highlight some of the issues and underline the potential implications for the funding of Welsh public services. It demonstrates scenarios for the Welsh budget under four different methods for implementing Wales’ first home-grown taxes, and proposes a decoupling of the London and South East England property market from the block grant adjustment calculation as a potential option for mitigating the more extreme budget consequences after devolution.

¹ Wales Governance Centre (2016). *Income Tax and Wales*. Available at: <http://sites.cardiff.ac.uk/wgc/files/2016/04/Income-Tax-and-Wales.pdf>

Adjusting the Welsh Block Grant

Under current funding arrangements, the Welsh Government receives an annual block grant from the UK Government to pay for devolved services, set annually by the Treasury primarily using the Barnett Formula. After the devolution of Stamp Duty and Landfill Tax to Wales, a downward adjustment will be made to the block grant to compensate the Treasury for the tax revenue they will no longer receive. In the first year, this adjustment is straightforward: it can simply equal the amount of revenue immediately being devolved to Wales, leaving the overall size of the Welsh Government budget unchanged. What happens to this adjustment in subsequent years will be the subject of forthcoming negotiations.

In principle, the block grant adjustment should reflect the ongoing opportunity cost of devolution for the Treasury, i.e. the amount of revenue the UK Government would have collected in Wales had devolution not occurred. However, in the years following devolution, it is impossible to know exactly what this sum would have been, as devolved Welsh Government tax policy may change the amount of revenue collected and also influence the underlying tax base. This means that the opportunity cost of devolution for the Treasury will need to be estimated or approximated using available indicators.

One option is to index the block grant adjustment (BGA) to changes in revenues in the rest of the UK. For instance, under the Indexed Deduction method (also known as the Holtham method after the namesake Commission report), if revenues in the rest of the UK grew by 10%, the BGA (the amount taken off the block grant) would also grow by 10%. Growth in Welsh revenues would also need to grow by 10% if the shortfall were to be made up. In effect, the Welsh Government would therefore be rewarded if its revenues grew relatively quickly, and penalised if revenues grew relatively slowly. Such an approach is appropriate if it is thought the growth in revenues in the rest of the UK is a good predictor of what the growth in Welsh revenues would have been without devolution.

However, when recommending the devolution of Stamp Duty, the Holtham Commission recommended against indexation in this case. Instead, it recommended that a fixed deduction be made to the block grant, which would grow in line with inflation. Taking into account the historic growth rate of Welsh receipts and its significant volatility, the Commission suggested a deduction of around 111% of receipts in the first year of devolution as an example of how the tax could be priced. Given trends in Welsh and UK property markets, it was said that indexing the deduction to UK receipts of the tax would be “unattractive” for Wales.² The Silk Commission also noted that “as SDLT is a small tax” they “did not think that the indexed deduction approach is appropriate.”³ It similarly recommended a fixed deduction be made to the block grant, with its value taking into account the volatility of the tax and forecast revenue in Wales.

In the 2014 Wales Bill command paper outlining plans for fiscal devolution, the UK Government accepted the recommendations of the Holtham and Silk commissions that the block grant adjustment for Stamp Duty should not be indexed against the corresponding UK tax base. It did note however that it “is not straightforward to identify the precise nature (or size) of such an adjustment that both governments agree is likely to be equitable in the longer term.”⁴

In contrast, during the Scottish Fiscal Framework negotiations, the Treasury’s position was that all taxes should be indexed to corresponding UK revenues over time. Various ways of doing so were discussed in the negotiations. The agreed framework will treat all taxes devolved to the Scottish Government in the same way, with the indexing method applied to each one. Given the potential precedent of the Scottish negotiations, it is possible the Treasury will seek to implement a similar arrangement for Wales.

2 See page 163 of Commission on Funding & Fairness for Wales (2010). *Fairness and accountability: a new funding settlement for Wales*. Available at: <http://gov.wales/funding/financereform/reports/fairness/?lang=en>

3 See page 61 of Commission on Devolution in Wales (2012). *Empowerment and Responsibility: Financial Powers to Strengthen Wales*. Available at: <http://webarchive.nationalarchives.gov.uk/20140605075122/http://commissionondevolutioninwales.independent.gov.uk/files/2013/01/English-WEB-main-report1.pdf>

4 Wales Bill: Financial Empowerment and Accountability 2014 (Cm 8838),

In February 2016, the then-Welsh Government Finance Minister, Jane Hutt argued that some methods suggested by HM Treasury for Scotland (particularly the “Levels deduction” method – see below), if applied to the devolved taxes in Wales, would have significant and negative implications for Welsh funding. She stressed that the Welsh Government “would not be able to accept those terms and was not the basis upon which the Assembly agreed the devolution of stamp duty and landfill tax to Wales.”⁵ After the conclusion of the Scottish Fiscal Framework negotiations, the economist Gerald Holtham raised concerns that indexation could introduce a whole new “Barnett squeeze” effect, and suggested the Welsh Government could use the “nuclear option” of refusing the devolution of Stamp Duty.⁶

It is evident therefore that this issue could potentially disrupt the planned devolution of taxes to the National Assembly. The next section discusses some of the different methods considered during the Scottish negotiations and the potential effects on the Welsh Government budget. It will argue that indexation of block grant adjustments to revenues in the rest of the UK may prove detrimental to the Welsh Government budget, and the block grant adjustments would likely far exceed the opportunity cost of devolution to the Treasury. The subsequent section suggests a possible alternative method which may mitigate some of this effect.

5 BBC News, 2016. *Crucial tax and funding talks ahead, says Jane Hutt*, BBC.
Available at: <http://www.bbc.co.uk/news/uk-wales-politics-35661779>

6 Holtham, G. (2016). *Wales should play hard ball with the Treasury*. *Clickonwales*.
Available at: <http://www.clickonwales.org/2016/03/wales-should-play-hard-ball-with-the-treasury/>

Indexation options

There are different ways in which block grant adjustments could be indexed to comparable UK revenues. Each would have different likely effects on the Welsh Government budget. More detailed information on the methods can be found in the annex of this paper.

The simple **Indexed Deduction (ID)** approach, as previously mentioned, changes the block grant adjustment according to the percentage change in revenues in the rest of the UK. The change in the size of the Welsh Government budget would therefore depend on the relative growth of Welsh revenues compared to growth in the rest of the UK.

In the Scottish negotiations, one of the main points of contention was whether to account for Scotland’s lower rates of population growth, which would negatively impact the likely growth in revenues over time. Diverging population trends in recent years between Wales and the rest of the UK suggests this should be an important consideration for Wales too.⁷ The **Per-Capita Indexed Deduction (PCID)** method takes relative population growth into account in calculating Block Grant Adjustments. 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. However, if Welsh population growth is lower than that of the UK, then the BGA is reduced; the reverse is the case when Welsh population growth rates are higher than those of the UK. This would protect the Welsh Government budget from the effects of relatively slower population growth, though it would also prevent it from gaining from the effects of relatively faster population growth.

Another method of adjustment discussed in the Scottish negotiations was the **Levels Deduction** method. This method would calculate the change in the block grant adjustment as a **population share of the absolute change in revenues in the rest of the UK**. If for example, revenues in the rest of the UK grew by £1 billion, then Wales’ BGA would increase by a population share, or close to £50 million. This was understood to be the Treasury’s preferred method in the Scottish negotiations. This method is arguably symmetrical to the population-based Barnett calculations that determine devolved expenditure changes. It has also been claimed this method best satisfies the so-called “taxpayer fairness” principle (as set out by the 2014 Smith Commission in Scotland), where increases in tax revenues in the rest of UK should not lead to unmerited increases in expenditure levels in Scotland.⁸

However, an acute problem with this method of adjustment is that Wales has far lower levels of revenues per capita than the rest of the UK. This means that, were this method to be adopted, Welsh revenues would need to grow much faster in percentage terms to reach a population share of changes in UK revenues. The fact that Welsh revenues would be required to grow at a probably impossible rate to avoid large cuts to the Welsh budget would appear to be in conflict with the “no detriment” principle. This principle, which was also set out by the Smith Commission, states that neither government should lose out simply as a result of the decision to devolve a tax.

A letter published by the Chief Secretary to the Treasury late in the Scottish negotiations introduced a fourth method of adjusting the Scottish block grant.⁹ The Treasury’s **Comparable Model** addressed the concern over the effect of differences in per capita revenues under Levels Deduction, as outlined above. It introduced a “comparability factor”, which would reflect the difference between per capita revenues in Wales and the rest of the UK. The change in the BGA would be a population share of the absolute change in UK revenues, multiplied by this comparability factor.

Under the Scottish fiscal framework, the Comparable Model will be used to calculate block grant adjustments; however, an annual reconciliation payment will be made every year until 2020-21 to substitute the result for the outcome achieved under the Per Capita Indexed Deduction method. This unusual arrangement may reflect a desire on the part of the Treasury to retain the comparable model for the next round of negotiations in 2020-21.

7 See page 17 of Wales Governance Centre, 2016. *Income Tax and Wales*. Available at: <http://sites.cardiff.ac.uk/wgc/files/2016/04/Income-Tax-and-Wales.pdf>

8 See Bell, D., Eiser, D., and Phillips, D. (2015). *Adjusting Scotland’s Block Grant for new Tax and Welfare Powers: Assessing the Options*. Institute for Fiscal Studies. Available at: <http://www.clickonwales.org/2016/03/wales-should-play-hard-ball-with-the-treasury/>

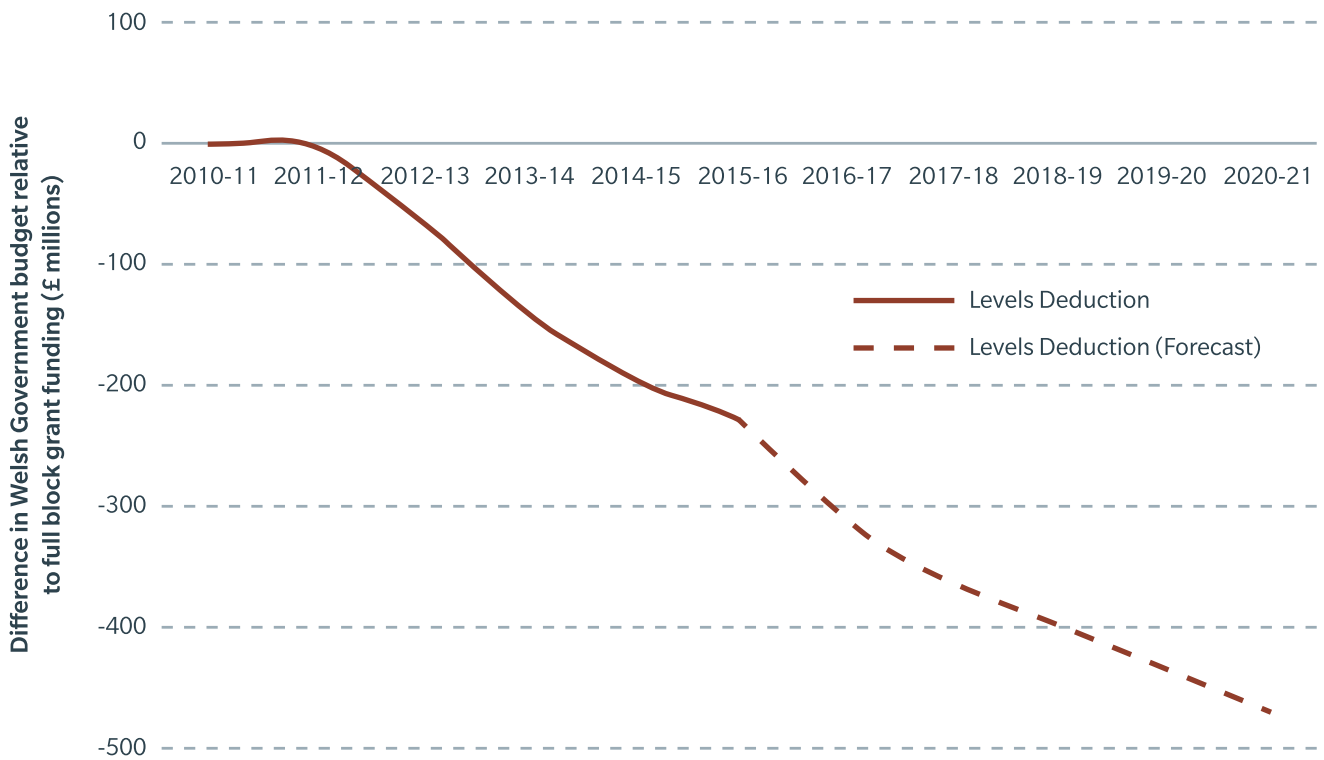
9 Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/500284/CST_response_SAC.pdf

To demonstrate the potential impact of these different adjustment options we can take a hypothetical look at what the effect of tax devolution would have been on the Welsh Government budget had devolution taken place at some point in the past. For the purposes of comparison under these various “what if” scenarios, we assume that both Stamp Duty Land Tax and Landfill Tax were devolved from 2010-11. It is important to note that these scenario analyses are particularly sensitive to the start year chosen. Although a number of years could have been used, we use 2010-11 because combined with forecast data, it allows for a decade of trend analysis. As well as being the start of a decade and the start of a new UK government term of office, it also avoids the years before and immediately after the 2007-08 financial crisis, providing a more stable period of analysis of revenue trends. Forecasts from the Office for Budget Responsibility (OBR) are used for years after 2014-15.¹⁰ In each case, block grant adjustments are indexed to changes in revenues from the rest of the UK (rUK).¹¹ We also assume the Welsh Government would have matched the tax policies of the UK Government.

In the first year of devolution in 2010-11, the Stamp Duty Land Tax would have raised £115 million, while the Landfill Tax would have raised £48 million. After devolution, a corresponding £163 million downward adjustment would have been made to the Welsh block grant, leaving the Welsh Government budget unchanged. In subsequent years, the net effect of devolution varies significantly with the method of adjustment applied.

Figure 1 shows the projected effect on the Welsh Government budget under Levels Deduction indexation in the years to 2020-21.

FIGURE 1: Effect of Stamp Duty and Landfill Tax devolution from 2010-11, with Levels Deduction, 2010-11 to 2020-21



10 Office for Budget Responsibility (2016). *Economic and fiscal outlook: Devolved taxes forecast (March 2016)*. Available at: http://budgetresponsibility.org.uk/docs/dlm_uploads/Devolved-taxes-forecast.pdf

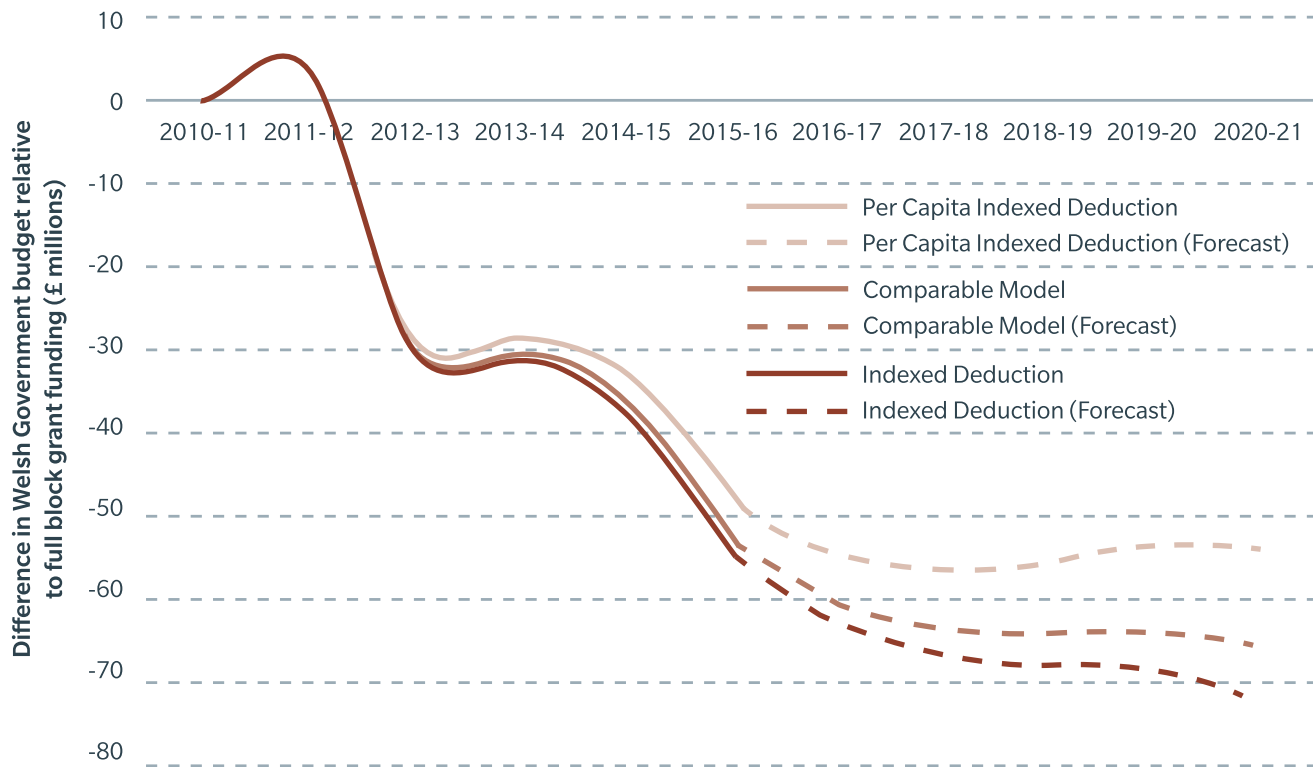
11 Revenues from Scotland have been subtracted from the rest of the UK revenues, as the taxes were devolved to Scotland in 2015-16.

Under **levels deduction**, the adjustments to the block grant would have rapidly outpaced devolved revenues growth, meaning that by 2015-16, the Welsh budget would have been around £228 million lower compared with full block grant funding. Ten years after devolution, using projections from the OBR, this shortfall would have grown to £468 million by 2020-21.

It is evident therefore that because of the vast difference in per capita revenues between Wales and the rest of the UK, devolution of these taxes under Levels Deduction would be unworkable and would in all likelihood lead to very substantial cuts in the Welsh Government budget. In fact, when SDLT is devolved in 2018, Welsh revenues would need to grow more than 330% faster than rUK revenues just to maintain the same level of funding that would have been provided through full block grant funding. As previously mentioned, the Levels Deduction would appear to be in direct conflict with the "no detriment" principle, as the Welsh Government would almost certainly see its budget cut as a result of the decision to devolve. The block grant adjustments would far outgrow the Treasury's supposed opportunity cost of devolution, or the amount of revenue it would have collected in Wales without devolution.

The other methods of indexing discussed in the Scottish Fiscal Framework negotiations would not have had as deleterious an effect on Welsh finances, although the Welsh budget would have been reduced as compared with full block grant funding. Figure 2 shows the projected effect on the Welsh Government budget under the other methods, again assuming devolution from 2010-11. Note that the scale for the Difference in Welsh Government budget axis in figure 2 has been changed from figure 1.

FIGURE 2: Effect of Stamp Duty and Landfill Tax devolution on Welsh Government budget, 2010-11 to 2020-21



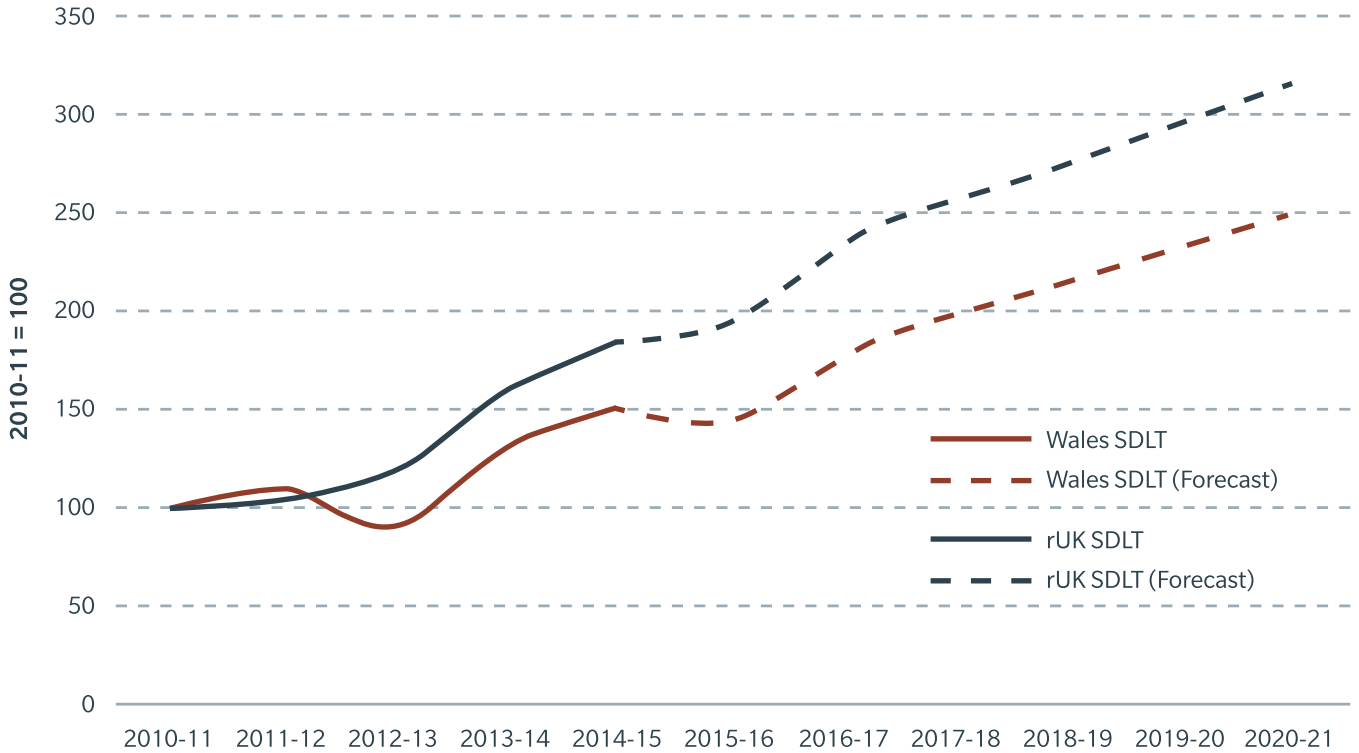
The effects of the three methods shown in figure 2 are relatively similar, varying slightly in how they factor in Wales' slower population growth.

Under the **indexed deduction** method, which would not factor in Wales' slower population growth, by 2015-16 the block grant adjustment would have been £267 million, compared with devolved revenues of £212 million, meaning a shortfall of £55 million. Ten years after devolution, this shortfall compared with full block grant funding would have amounted to £72 million. Taking into account relative population growth under the **per capita indexed deduction** method, this shortfall would have been £49 million in 2015-16, staying relatively constant for the rest of the forecast period.

As the population share in the calculations for the comparable model is updated every year, this method also mitigates some of the effect of slower population growth, but not to the same degree. Under this indexation method, the funding shortfall compared with full block grant funding would have been £54 million by 2015-16, growing to £66 million by the end of the forecast period.

Driving these large hypothetical impacts on the Welsh budget is the fact that SDLT revenue in Wales has grown and is projected to grow much more slowly than across the UK as a whole. These trends are shown in figure 3.

FIGURE 3: Growth in Stamp Duty Land Tax revenue in Wales and UK, 2010-11 to 2020-21



Source: Office for Budget Responsibility

Given the highly imbalanced nature of the UK housing market, these trends highlight the problems of indexing block grant adjustments to revenue growth in the rest of the UK in the case of Stamp Duty. As has been noted elsewhere, these trends are very unlikely to change in the future, whatever responsibilities might notionally lie with the Welsh Government.¹²

The Welsh Government may find these funding shortfalls a price worth paying for control of the tax, for instance if it wished to reform particular elements or adjust the tax to suit Welsh housing market conditions. The Holtham Commission noted that the old “slab” structure was “odd and inferior”, and that Welsh Government ministers may find it attractive to forgo some revenue in order to introduce a better system.¹³ However, this may no longer be the case following the UK-level reforms to the tax announced in December 2014.

It could be argued that linking BGAs to rUK revenues will provide a strong incentive for the Welsh Government to promote growth in the Welsh housing market, but this would require an extraordinary change in UK housing market trends for the Welsh Government to have any chance of succeeding in growing its budget.¹⁴

12 Holtham, G. (2016)

13 See page 163 of Commission on Funding & Fairness for Wales (2010)

14 Holtham, G. (2016)

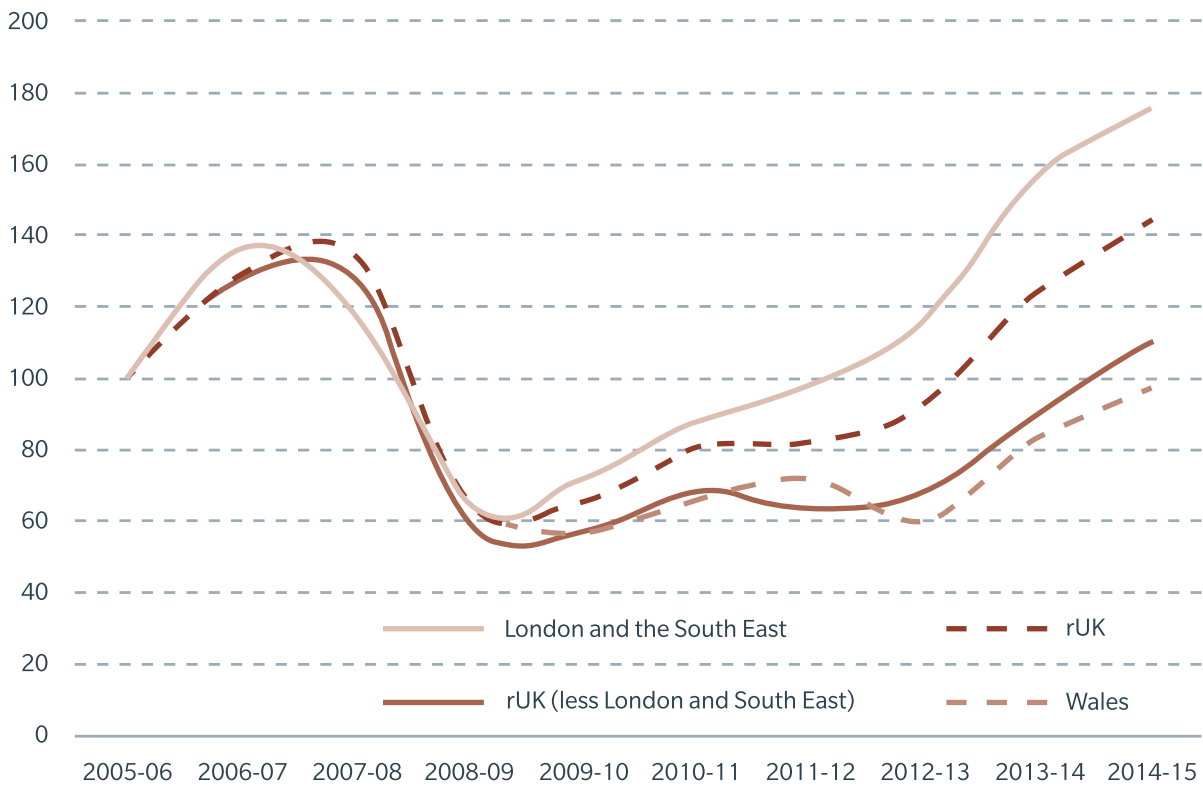
There would be some benefits of indexation to revenues in the rest of the UK, which may not be the case with other methods, such as a fixed deduction. It would mean the Welsh Government budget would be protected from UK-wide housing market crashes, such as after the financial crisis of 2007-08. As Welsh devolved revenues would fall, the Welsh Government budget would be protected because revenues in the rest of the UK, and hence the BGA, would also fall. Indexation also means that changes in UK government policy would be automatically reflected in the BGA. In principle, this should be the case, because changes in UK Government policy would impact the Treasury's opportunity cost of devolution, or the amount of revenue that would have been raised in Wales without devolution.

However, none of the indexation methods described above is likely to reflect the Treasury's opportunity cost of devolution. They would tend to lead to BGAs far above the revenue that would have been raised in Wales without devolution.

Alternative indexation option for Stamp Duty: Exclude London and South East England revenues

In many ways, the property market of London and the South East is detached and distinct to that of the rest of the UK. Revenues from London and the South East accounted for 59% of all UK Stamp Duty revenue in 2014-15. In the same year, the Parliamentary constituency of Kensington generated over twice as much in Stamp Duty revenue than the whole of Wales. As a result, growth in revenues in London and the South East considerably influences the overall growth in UK revenues. Using HMRC data, figure 4 shows a comparison in growth rates in revenues in the rest of the UK, including and excluding London and the South East. Growth in Welsh receipts has been relatively similar to growth in revenues in the rest of the UK, excluding London and the South East.

FIGURE 4: Growth trends in Stamp Duty Land Tax revenues from 2005-06 (2005-06 = 100)

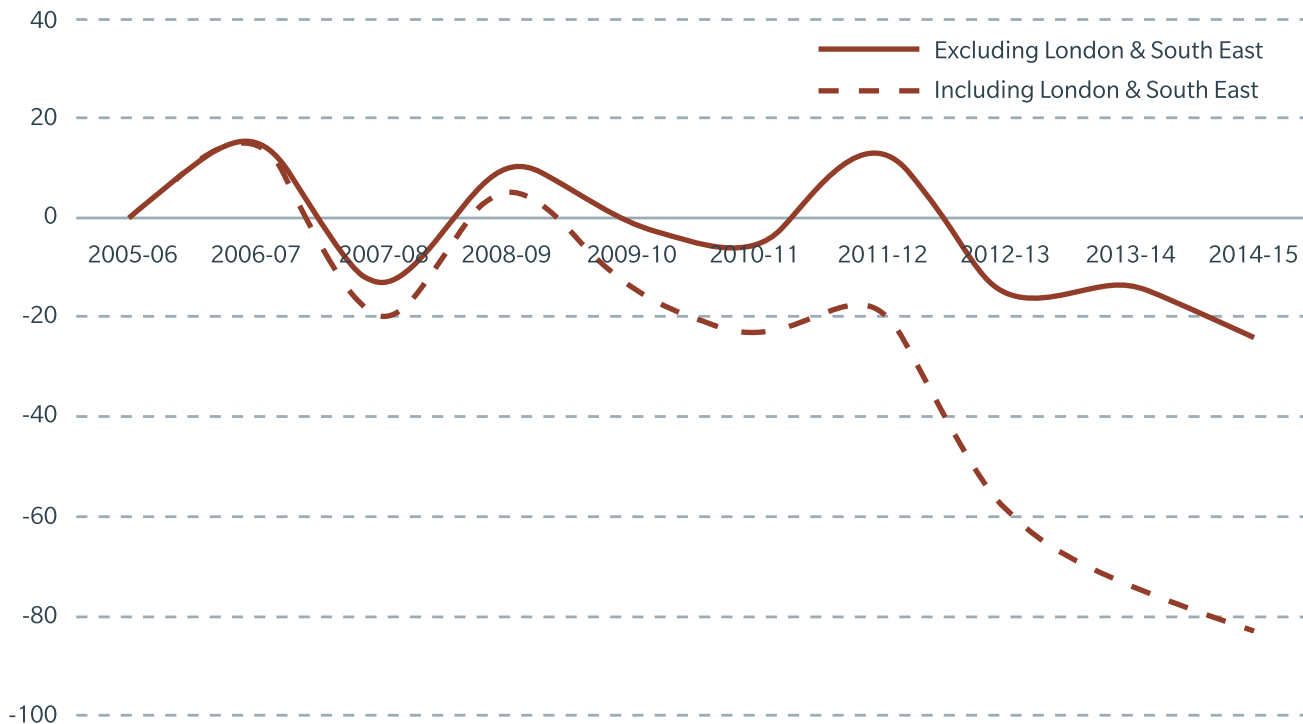


Therefore, one possible option would be to index the block grant adjustments to the growth in revenues in the rest of the UK, excluding London and the South East. This option may prove to be more palatable for the Welsh Government, leaving it with an incentivising target, but a more realistic goal.

Figure 5 provides a further hypothetical scenario of the effect of Stamp Duty devolution, if BGAs were indexed to revenues in the rest of the UK, both including and excluding London and the South East. It assumes that Stamp Duty was devolved from 2005-06 onwards, using the geographical breakdown of Stamp Duty receipts available from HMRC.¹⁵

¹⁵ HMRC (2015). *UK Stamp Tax Statistics 2014-15*. HM Revenue & Customs. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/464298/AnnualStampTaxes-Release-Sep15.pdf

FIGURE 5: Effect of Stamp Duty Devolution with Indexed Deduction method applied, 2005-06 to 2014-15



In the first years of this period, the two approaches yield similar effects on the Welsh Government budget. These years illustrate the advantages of some form of indexation to revenues in the rest of the UK. As shown in figure 4, there was a sharp downturn in Welsh Stamp Duty revenues in these years, from £240 million in 2006-07 to £100 million in 2009-10. Without indexation, the Welsh Government would have been fully exposed to this volatility. Under an indexed deduction however, because UK-wide revenues also fell significantly during this period, the BGA would also have fallen and the Welsh Government budget would have been protected from this UK-wide trend.

However, from 2008-09 onwards, including London and the South East in the indexed deduction method calculations would have seen the BGAs outpace Welsh revenues, leading to cuts in Welsh Government funding compared with full block grant funding. By 2014-15, the Welsh Government budget would have been £83 million below what it would have been under full block grant funding. Conversely, excluding revenues from London and the South East means BGAs would not have grown as quickly, and hence the funding available to the Welsh Government would have fallen only slightly relative to full block grant funding. Such an adjustment would seem to correspond more closely with the opportunity cost of devolution to the Treasury.

Conclusion

When devolved Welsh taxes are introduced in April 2018, the method chosen for adjusting the Welsh Block Grant will determine what risks and incentives the Welsh Government will face for the first time. These risks and incentives should be in proportion with the powers available to the Welsh Government. In the case of Stamp Duty devolution, some of the proposed methods of adjusting the block grant would leave the Welsh Government powerless to prevent large reductions in its budget. Indexing block grant adjustments to revenue growth in the rest of the UK exposes the Welsh Government to the deep-rooted differences in UK housing market conditions. However, excluding revenues from London and the South East from the indexing calculations may alleviate some (although not all) of these concerns.

The method of block grant adjustment will be the subject of forthcoming discussions between the Welsh Government and HM Treasury. The agreement reached after the Scottish Fiscal Framework negotiations treated all taxes in a consistent, 'one size fits all' way. While arguably good for simplicity and transparency, this approach neglects the fact that each devolved tax bears different levels of likely growth, risks and volatility. This is the reason why the Holtham Commission argued that the method for introducing devolved taxes should be independently considered for each tax:¹⁶ a method that works for one tax may not work for another. The indexed deduction method of adjusting the block grant after devolution was not originally suggested as a general approach, and was deemed suitable only in certain cases. Similarly, differences in trends and relative levels of devolved powers mean that precedents agreed for Scotland may not be appropriate for Wales. These factors will need to be reflected in the agreement eventually reached for Wales.

16 Independent Commission on Funding and Finance for Wales (2010)

Methodology Annex

There are different ways in which block grant adjustments could be indexed to comparable UK revenues. Each would have different likely effects on the Welsh Government budget. As argued in the main report, the comparable UK revenues used in the calculations could be amended, for example to exclude London and the South East. This would likely make a better predictor of future growth in Welsh revenues, and hence better reflect the ongoing opportunity cost of devolution to the Treasury.

Indexed deduction (or the Holtham method)

After devolution, in the first year (time period t), a simple block grant adjustment (BGA_t) 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, multiplied by the annual percentage change in the equivalent UK tax (T^{UK}). Therefore, in time period $t+1$:

$$BGA_{t+1} = BGA_t * \frac{T_{t+1}^{UK}}{T_t^{UK}}$$

The change in the size of the Welsh Government budget here would depend on the relative growth of Welsh revenues compared to comparable growth in the rest of the UK.

Per-Capita indexed deduction

In the Scottish negotiations, one of the main points of contention was whether to account for Scotland's lower rates of population growth, which would negatively impact the likely growth in revenues over time. Diverging population trends in recent years between Wales and the rest of the UK suggests this should be an important consideration for Wales too.¹⁷ Lower population growth in Wales means the amount of revenue that would have been collected in Wales without devolution, and hence the Treasury's ongoing opportunity cost, would also be lower.

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

$$BGA_{t+1} = BGA_t * \frac{T_{t+1}^{UK}}{T_t^{UK}} * \frac{P_t^{UK}}{P_{t+1}^{UK}} * \frac{P_{t+1}^W}{P_t^W}$$

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.

¹⁷ See page 17 of Wales Governance Centre, 2016. *Income Tax and Wales*. Available at: <http://sites.cardiff.ac.uk/wgc/files/2016/04/Income-Tax-and-Wales.pdf>

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.

This became the preferred method of the Scottish Government in its negotiations with the Treasury.

Levels deduction

Another method of adjustment discussed in the Scottish negotiations was the Levels deduction method. This method would calculate the change in the block grant adjustment as a population share of the absolute change in revenues in the rest of the UK. Therefore:

$$BGA_{t+1} = BGA_t + \frac{P_t^W}{P_t^{UK}} (T_{t+1}^{UK} - T_t^{UK})$$

If, for example, revenues in the rest of the UK grew by £1 billion, then Wales' BGA would increase by a population share of close to £50 million. If Wales had the same level of tax revenues per person as the rest of the UK, then this method would lead to the same adjustments as indexed deduction. This was understood to be the Treasury's preferred method in the Scottish negotiations. It has been argued that this method is symmetrical to the population-based Barnett calculations that determine devolved expenditure changes. It was also claimed this method best satisfies the so-called "taxpayer fairness" principle, where increases in revenues in the rest of the UK would only change expenditure in the rest of the UK.¹⁸

A problem with this method of adjustment is that Wales has much lower levels of revenues per capita than the rest of the UK. This means that reaching a population share of changes in UK revenues would require a much higher percentage change in Welsh revenues than the corresponding percentage change in UK revenues. That is, in the example above, a £1 billion increase in UK revenues would be a growth of 10%, whereas a £50 million increase in Welsh revenues (a population share of the UK change) would be a 29% increase. Therefore, were this method to be adopted, Welsh revenues would need to grow much faster (in percentage terms) to reach a population share of changes in UK revenues. The fact that Welsh revenues would need to grow at a probably impossible rate to avoid large cuts to the Welsh budget would appear to be in conflict with the "no detriment" principle. This principle, as set out by the Smith Commission, states that neither government should lose out simply as a result of the decision to devolve a tax.

Comparable model

A letter published by the Financial Secretary to the Treasury late in the Scottish negotiations introduced a fourth method of adjusting the Scottish block grant. This method addressed the concern over the effect of differences in per capita revenues under Levels deduction, as outlined above.

This method introduces a "comparability factor" (CF), which would reflect the difference between per capita revenues in Wales and the rest of the UK. For instance, if revenue per head in the rest of the UK for a particular tax is £100, but the equivalent figure for Wales was £89, then the comparability factor would be 89%.¹⁹ Therefore, the change in the BGA would be a population share of the absolute change in UK revenues, multiplied by the comparability factor:

$$BGA_{t+1} = BGA_t + \left(\frac{P_t^W}{P_t^{UK}} (T_{t+1}^{UK} - T_t^{UK}) CF \right)$$

For Landfill Tax, Wales' comparability factor would have been 91% in 2014-15. For Stamp Duty, Wales' comparability factor would have been only 34% in 2014-15, reflecting the very significant difference in the amount of revenues per head collected annually through this tax.

18 See Bell, D., Eiser, D., and Phillips, D. (2015). *Adjusting Scotland's Block Grant for new Tax and Welfare Powers: Assessing the Options*. Institute for Fiscal Studies. Available at: <http://www.clickonwales.org/2016/03/wales-should-play-hard-ball-with-the-treasury/>

19 We assume that the Comparability Factor is held constant at the level at the point of devolution.

Under the Scottish fiscal framework, the Comparable Method will be used to calculate block grant adjustments; however, an annual reconciliation payment will be made every year until 2020-21 to substitute the result for the outcome achieved under the Per Capita Indexed Deduction method. This unusual arrangement may reflect a desire on the part of the Treasury to retain the comparable model for the next round of negotiations in 2020-21.