

Office for  
**Budget  
Responsibility**

**Economic and fiscal outlook**  
Devolved taxes forecast

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March 2016



# 1 Introduction

- 1.1 The Office for Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances. Alongside the UK Government's Budgets and Autumn Statements, we produce forecasts for the economy and the public finances. We publish these in our *Economic and fiscal outlook (EFO)*.
- 1.2 Since 2012, we have forecast some tax streams that are devolved to the Scottish Parliament, and since 2014 we have also produced forecasts of taxes that are likely to be devolved to the National Assembly for Wales. Our forecasts for devolved taxes are published alongside each *EFO* and are consistent with our main UK forecasts. As with those UK forecasts, these extend over a five-year forecast period – to 2020-21 in this *EFO*.

## Scotland

### The Scotland Act 2012

- 1.3 The Scotland Act 2012 gave new powers to the Scottish Parliament relating to taxation and borrowing. In April 2015, stamp duty land tax (SDLT) and landfill tax were fully devolved to the Scottish Parliament, replaced by the land and buildings transaction tax (LBTT) and the Scottish landfill tax. April 2016 will see the introduction of the Scottish rate of income tax (SRIT), which replaces a 10p reduction from each rate of UK income tax with rates set by the Scottish Parliament.
- 1.4 The Command Paper: *Strengthening Scotland's Future*<sup>1</sup> – published alongside the Scotland Bill in 2010 – set out our role in providing forecasts of Scottish income tax, landfill tax, stamp duty land tax and aggregates levy receipts.

### Smith Commission and the Scottish Government fiscal framework

- 1.5 In September 2014, the Smith Commission recommended the devolution of air passenger duty (APD) to the Scottish Parliament and the assignment of a share of VAT receipts. It also proposed more flexible powers over income tax than those in the 2012 Act. In May 2015, the UK Government committed to implement the Smith Commission recommendations in full, resulting in the Scotland Bill 2015-16.
- 1.6 In February 2016 the Scottish and UK Governments agreed the Scottish Government fiscal framework. This confirmed that the Scottish Parliament will be given full devolved powers over the Smith-defined income tax from April 2017, VAT assignment from 2019-20 and

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<sup>1</sup> *Strengthening Scotland's Future*, November 2010, Cm 7973.

APD from April 2018. It reconfirmed the commitment to devolve aggregates levy once outstanding EU state aid and legal challenges were settled.

- 1.7 The Scottish Government has said it is committed to reducing APD by 50 per cent, and issued a consultation on this in March 2016. Our forecasts will reflect any replacement taxes when details of any changes become sufficiently clear.

## Wales

### The Wales Act 2014

- 1.8 The Wales Act 2014 gave new powers to the Welsh Assembly relating to taxation and borrowing. It provides for the full devolution of SDLT and landfill tax from April 2018. It also stated that the Welsh Assembly will be able to set new rates for a new Welsh rate of income tax (WRIT), which would operate in a similar way to SRIT. In November 2015, the Chancellor announced that devolution of WRIT would no longer be subject to a referendum, as originally specified in the Act. The Government is also intending to devolve aggregates levy, subject to the resolution of current state aid and legal challenges.
- 1.9 The Command Paper: *Wales Bill: Financial Empowerment and Accountability*<sup>2</sup> – published alongside the Wales Bill in 2014 – required us to begin to forecast Welsh taxes alongside Autumn Statement 2014 and twice a year thereafter. This currently includes forecasts for stamp duty land tax, landfill tax, aggregates levy and the Welsh rate of income tax. The Welsh Government's Budget will not be varied in line with fluctuations in tax receipts until the devolution of these taxes has been fully implemented.

### Tax Collection and Management (Wales) Bill

- 1.10 The Welsh Government announced, in its *Tax Collection and Management (Wales) Bill* in July 2015, its intention to replace SDLT with a 'land transaction tax' and landfill tax with a 'land disposals tax'. These were approved by the Welsh Assembly in March 2016, when it also passed legislation to create a new Welsh Revenue Authority, which will oversee the collection of taxes.
- 1.11 The bill now awaits Royal Assent, with a further bill for each of the devolved taxes expected early in the next Assembly term. Once again, our forecasts will reflect any Welsh replacement taxes when details of any changes become sufficiently clear.

## Northern Ireland

- 1.12 In November 2015, the Northern Ireland Executive and the UK Government reached agreement over the implementation of the Stormont House Agreement of December 2014, including the devolution of corporation tax (CT) rates to the Northern Ireland Assembly from April 2018. The Corporation Tax (Northern Ireland) Act 2015 was given Royal Assent in

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<sup>2</sup> *Wales Bill: Financial Empowerment and Accountability*, March 2014, Cm 8838.

March 2015. The Northern Ireland Executive has announced its intention to set a 12.5 per cent rate, to match that in the Republic of Ireland.

- 1.13 We plan to work with analysts in HMRC and the Northern Ireland Executive to incorporate an estimate of the effect of this policy change on UK receipts in our next forecast. The Northern Ireland Executive estimates that £768 million of UK corporation tax receipts in 2013-14 can be attributed to Northern Ireland. HMRC has published a lower estimate of £478 million for the same year.<sup>3</sup>
- 1.14 The UK CT rate is due to be 19 per cent in April 2018, 6.5 per cent higher than the proposed rate in Northern Ireland. There are likely to be some important behavioural effects that would need to be taken into account in order to estimate how much our UK receipts forecast would be affected by this change. But the pre-behavioural effect on CT receipts would simply reflect the difference in the rates, so around a third of what Northern Ireland CT receipts would have been in the absence of a rate cut.

## Methodology

- 1.15 We published a methodology note in March 2012 that described how we planned to forecast Scottish tax receipts.<sup>4</sup> It explained that it is not possible to replicate in full the methodology we use to produce our UK-wide forecasts. In particular, the macroeconomic data that we would need to produce a Scottish macroeconomic forecast and economic determinants were generally not available at a Scottish level or were only available with a long lag. That remains the case. We are therefore not able to produce a Scottish macroeconomic forecast to drive the Scotland tax forecast. These challenges apply equally to forecasting Welsh taxes and would also to any future forecast of Northern Ireland taxes.
- 1.16 Given these challenges, the methodologies we use are generally based on estimating and projecting Scottish and Welsh shares of relevant UK tax streams. We typically assume that the shares will continue at recent average levels, unless available evidence suggests we should adjust those assumptions to ensure our forecasts are central. For example, if a newly announced policy can be expected to have a disproportionate impact on the Scottish or Welsh share of a particular tax, or there is evidence pointing to different trends in an underlying tax base.
- 1.17 The exceptions to this are our LBTT and Scottish landfill tax forecasts, for which we are able to take into account receipts outturns during 2015-16.
- 1.18 As with our UK forecasts, the methodology and the forecasts represent the collective view of the three independent members of the OBR's Budget Responsibility Committee (BRC). The BRC takes full responsibility for the judgements that underpin them.

<sup>3</sup> The differences are likely to be explained by the use of alternative methodologies. The Northern Ireland Executive's estimates are based on the levels of economic activity reported in Office for National Statistics regional accounts data. The HMRC approach matches company tax records with location and employment data to establish the location of taxable profits. Details can be found in their respective publications: <https://www.dfpni.gov.uk/publications/northern-ireland-net-fiscal-balance-report-2012-13-and-2013-14> and <https://www.gov.uk/government/statistics/disaggregation-of-hmrc-tax-receipts>.

<sup>4</sup> *Forecasting Scottish taxes*, March 2012.

1.19 The OBR's role in forecasting started three years ahead of the initial devolution of these taxes in Scotland. This has allowed us to develop and improve forecasts in light of experience and the availability of new information sources. However we consider these methodologies a work-in-progress and will continue to look for further improvements.

## The forecast process

1.20 The process for producing the devolved tax forecasts has been as follows:

- HMRC officials produced draft Scottish and Welsh tax forecasts on our behalf using our near-final pre-measures UK economy and fiscal forecasts. This took into account the latest available information on LBTT and landfill tax in Scotland, which have been in effect since April 2015. The BRC and OBR staff discussed these forecasts with HMRC, Scottish Government, Scottish Fiscal Commission and Welsh Government officials on 2 March; and
- in the final week before the Budget, HMRC officials provided us with a final set of Scottish and Welsh forecasts using our final post-measures UK economy and fiscal forecasts, and taking into account Budget policy measures. Due to the confidentiality of the measures, we were unable to involve the Scottish and Welsh Governments in this stage of the process.

1.21 The Scottish Government produced a 5-year forecast for receipts from LBTT and Scottish landfill tax in its Draft Budget in December 2015. We will continue to work with the Scottish and Welsh Governments, and with the Scottish Fiscal Commission, to ensure that we can bring all relevant information to bear in producing these forecasts. Governance arrangements for that engagement in Scotland will be established in accordance with the requirements of the Scotland Bill once enacted and with the Scottish Government fiscal framework. At this stage, the forecasts we present in this document are our own. Differences between our forecasts and those of the Scottish Government are explained in Chapters 3 and 4.

## Summary of forecasts

1.22 Tables 1.1 and 1.2 detail the forecasts for the Scottish and Welsh taxes.

Table 1.1: Summary of March 2016 Scottish tax forecasts

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Income tax	4722	4902	5139	5399	5638	5920
LBTT	401	509	581	644	707	767
Landfill tax	143	134	121	120	122	124
Aggregates levy	47	44	40	40	41	42
<b>Total</b>	<b>5312</b>	<b>5589</b>	<b>5882</b>	<b>6203</b>	<b>6508</b>	<b>6852</b>

Table 1.2: Summary of March 2016 Welsh tax forecasts

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Income tax	2010	2081	2171	2279	2382	2505
SDLT	165	202	225	244	266	286
Landfill tax	47	44	40	40	41	42
Aggregates levy	30	30	32	32	32	32
<b>Total</b>	<b>2252</b>	<b>2357</b>	<b>2468</b>	<b>2595</b>	<b>2720</b>	<b>2865</b>

## 2 Income tax

### Scottish rate of income tax

- 2.1 Under the Scotland Act 2012, the existing basic, higher and additional rates of income tax levied by the UK Government will, from April 2016, be reduced by 10p in the pound for those individuals defined as Scottish taxpayers. The Scottish Parliament will then levy a new Scottish rate of income tax (SRIT), which will apply equally to Scottish taxpayers in all the main UK bands. The Scottish rate of income tax will need to be set every year by the Scottish Parliament. In its Draft Budget in December 2015 the Scottish Government announced that rates would remain aligned with the rest of the UK for 2016-17.
- 2.2 The Scottish rate of income tax will be paid by Scottish taxpayers, who will be defined as a UK taxpayer either resident in Scotland or whose closest connection is with Scotland. It will be levied on non-savings, non-dividend income liabilities (i.e. earnings from employment, self-employment, pension income, foreign income, taxable benefits and income from property). Tax liabilities for a particular year would include both PAYE (pay-as-you-earn income tax, which is largely paid in the same year as the activity that created the tax liability) and self-assessment (which is usually paid in the year after the activity that took place to create the tax liability).
- 2.3 The Scotland Bill 2015-16 currently progressing through Parliament allows for wider ranging powers over income tax, including the power to vary the three rates – basic, higher and additional – separately, as well as creating new bands. These would still be on a non-savings, non-dividend basis. Full devolution of these powers will commence in April 2017. Until decisions are made by the Scottish Parliament, our forecast continues to assume that rates and thresholds remain aligned to the rest of the UK.

### Welsh rate of income tax

- 2.4 The Wales Act 2014 included provision for a referendum to determine whether the Welsh Assembly will be able to introduce a Welsh rate of income tax (WRIT). It would also be levied on non-savings, non-dividend income liabilities. In Autumn Statement 2015, the Chancellor announced that a referendum would no longer be required. The income tax levied by the UK Government would be reduced by 10p in the pound for those individuals defined as Welsh taxpayers. The Welsh Assembly would then levy separate Welsh rates for each band of income tax. The new Welsh income tax rates would need to be set every year by the Welsh Assembly. The block grant from the UK Government to Wales would then be reduced to reflect the fiscal impact of the devolution of these tax-raising powers.



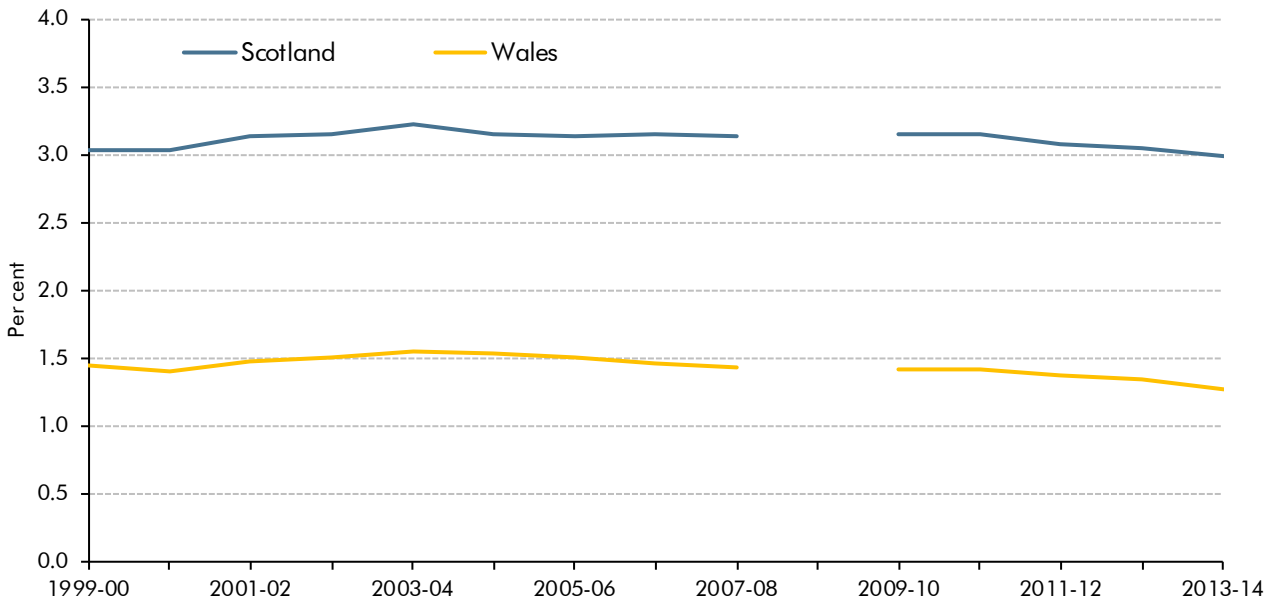
- 2.5 The forecasts presented in this document assume that the Welsh Assembly levies a 10p rate across all the income tax bands in every year.

## Methodology

- 2.6 We generate a UK forecast for non-savings, non-dividend income tax liabilities from the full UK income tax liabilities forecast published in our *EFO*. The key components of the UK forecast are:
- total **pay-as-you-earn (PAYE)** liabilities;
  - **self-assessment (SA)** liabilities on non-savings, non-dividend income. The UK forecast for SA in the *EFO* is on a receipts basis (i.e. when the cash is received). For this forecast it is adjusted to be on a liabilities basis (i.e. when the activity occurred) and to exclude the savings and dividend elements of SA; and
  - **PAYE repayments and repayments to pension providers**, from our income tax repayments forecast.
- 2.7 We apply the latest estimated Scottish and Welsh shares to the UK total of these forecast components. We then include deductions in respect of the Scottish and Welsh shares of Gift Aid repayments. Finally, we add estimates of the Scottish and Welsh income tax element of new policy measures announced in this Budget.
- 2.8 Information on the share of UK income tax in Scotland and Wales is derived from the Survey of Personal Incomes (SPI), an annual survey based on a sample of about 700,000 individuals in contact with HMRC during the course of the year through the PAYE, SA or repayment claim systems. This is only available with a long lag, with data currently only available up to 2013-14.
- 2.9 An individual's Scottish taxpayer status is determined by the location of their main place of residence for the majority of the tax year. If this is in Scotland, they will be a Scottish taxpayer. It will be the responsibility of taxpayers to tell HMRC their correct address. In the run-up to its April 2016 introduction, HMRC has been working to raise awareness of the SRIT, including among people who live in Scotland but do not appear on HMRC's current records with a Scottish address.
- 2.10 The Scottish and Welsh shares can be affected by a number of factors. These include:
- **different economic trends** between Scotland/Wales and the UK as a whole;
  - **different movements in the income distribution** between Scotland/Wales and the UK; and
  - **different effects of policy measures.**

2.11 The Scottish share was very stable from 2001-02 to 2010-11 – with the share close to 3.15 per cent in most years – but has fallen since. The share in Wales has been more uneven but it has been on a downward trend since 2003-04. Chart 2.1 shows the estimates of the Scottish and Welsh share from the SPI.

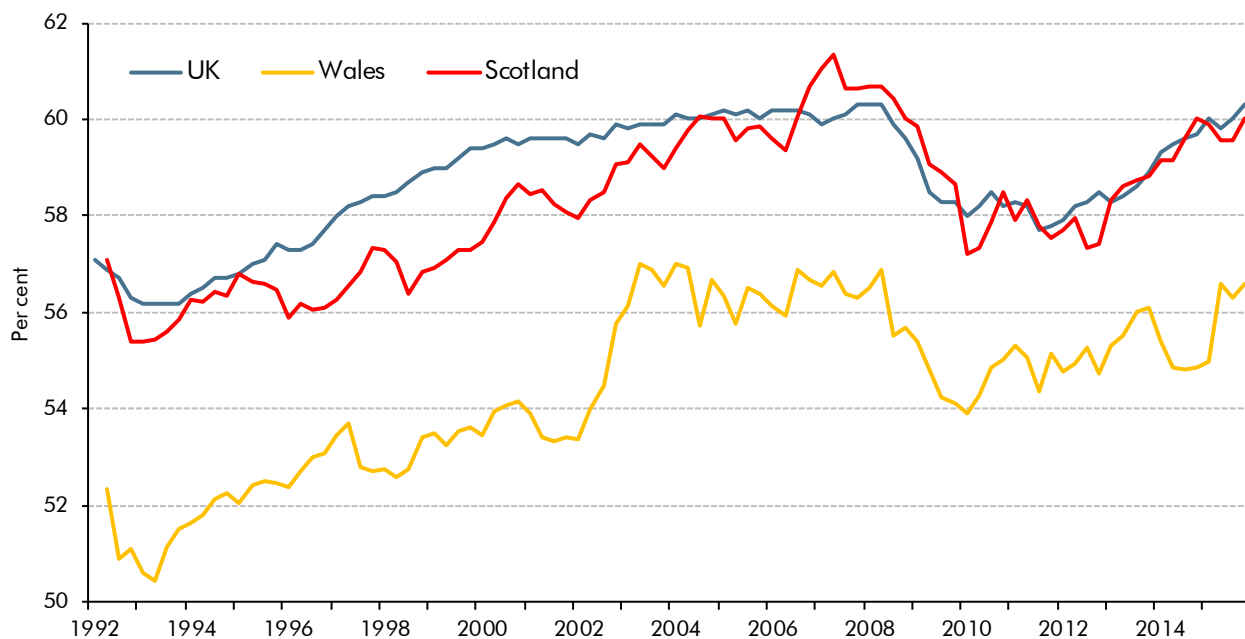
Chart 2.1: Scottish and Welsh historic income tax shares



Note: Data unavailable for 2008-09.  
Source: HMRC

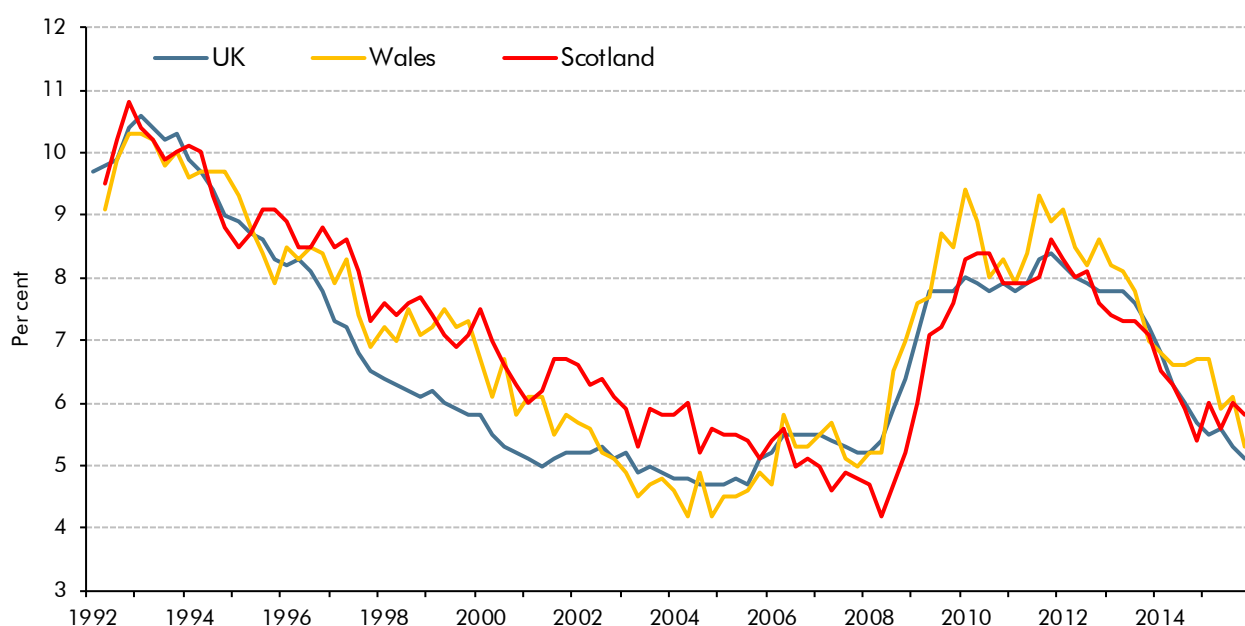
2.12 These different shares of UK income tax can partly be explained by different labour market trends in Wales and Scotland relative to the rest of the UK. Charts 2.2 and 2.3 show that employment and unemployment trends in Scotland have generally been more similar to the UK as a whole than has been the case in Wales. In particular, the employment rate has typically been lower in Wales, mainly reflecting a higher inactivity rate. The latest unemployment rate in Wales is 5.3 per cent; in Scotland it is 5.8 per cent. Both are higher than the current unemployment rate of 5.1 per cent in the UK as whole.

Chart 2.2: Employment rates in the UK, Scotland and Wales



Source: ONS

Chart 2.3: Unemployment rates in the UK, Scotland and Wales



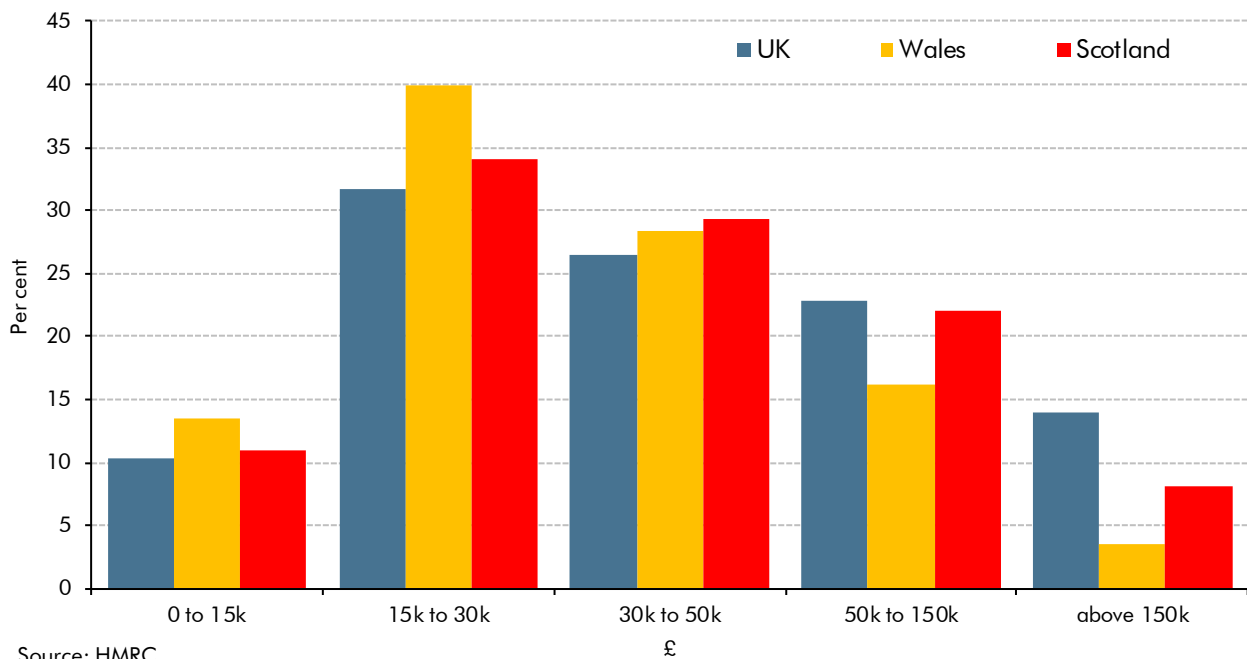
Source: ONS

**2.13** The main factors behind the drops in Scottish and Welsh shares of income tax since 2009-10 are likely to be the asymmetric effects of policy measures. In recent years, revenue-raising policies have generally affected the top end of the income distribution. These include the additional rate of income tax that applies to incomes over £150,000, the withdrawal of personal allowances over £100,000, freezes in the basic rate limit and higher rate thresholds and a number of anti-avoidance measures. In contrast, tax cuts, most notably the

successive increases in the personal allowance, have had more of an effect at the lower end of the income distribution.

2.14 Chart 2.4 shows the proportion of total taxpayer income by income bands. Compared to the UK, the proportion of taxpayer income attributable to individuals with incomes below £30,000 is higher in Scotland, and particularly so in Wales. We have therefore made adjustments to the Scottish and Welsh share to account for recent policy measures that are not yet reflected in the SPI data.

Chart 2.4: Proportion of total taxpayer income by income bands (2013-14)



Source: HMRC

2.15 The final step in our forecast process is to add the estimated Scottish and Welsh share of newly announced policy measures to generate the post-measures forecast.

## UK forecast

2.16 Table 2.1 shows the UK forecast of tax liabilities on non-savings, non-dividend income. To aid comparison we present both the current and previous forecasts before the effect of policy measures announced in November. The UK forecast is lower in each year of the forecast. By 2020-21, our forecast for UK tax liabilities on non-savings, non-dividend income is £9.8 billion lower than we forecast in November.

2.17 The lower forecast for PAYE receipts accounts for around £8.8 billion of the shortfall by 2020-21. PAYE receipts in 2015-16 are expected to be £0.6 billion lower than we assumed in November. This can be more than explained by the recent slowdown in earnings growth. PAYE receipts in 2015-16 have been boosted by an extra £0.2 billion of tax from pension withdrawals (related to the pensions flexibility measure) and £0.4 billion from lower than expected take-up of the transferable marriage allowance.

2.18 We now expect earnings growth to be lower in each year of the forecast. This reflects our judgement that trend productivity growth will be around 0.2 percentage points lower each year, which lowers real (and nominal) wage growth by a similar amount. We had assumed that trend productivity growth would return to its pre-crisis average rate of 2.2 per cent by the end of the forecast period. We have now put more weight on the post-crisis weakness in productivity and revised our trend assumption down to 2.0 per cent by the end of the forecast. Lower earnings growth takes over £5 billion off the PAYE forecast by 2020-21.

Table 2.1: UK forecast of tax liabilities on non-savings, non-dividend income

	£ billion								
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015 (exc November measures) (a)	141.5	148.8	155.4	164.3	173.3	184.5	194.9	205.4	217.5
March 2016 (inc November measures)	141.6	148.6	154.7	162.9	169.8	180.5	189.8	197.7	208.2
March 2016 (exc November measures) (b)	141.6	148.6	154.7	162.9	169.5	179.8	189.0	197.3	207.8
Difference (b) - (a)	0.0	-0.2	-0.7	-1.5	-3.8	-4.7	-5.9	-8.1	-9.8

2.19 Our forecast for SA liabilities is also lower in each year of the forecast than in November. Payments relating to 2014-15 liabilities were made at the end of January 2016. On a non-savings, non-dividend basis, SA liabilities were £0.7 billion lower in 2014-15 than previously assumed. This is partly due to lower SA from the Construction Industry Scheme (which will have already appeared in PAYE receipts) and may also reflect lower than expected receipts from the Budget 2013 and Autumn Statement 2013 measures on partnerships. Preliminary data from SA returns suggest partnership income did not grow as strongly as expected. The weaker initial level of SA receipts is pushed through the forecast and there is an additional downward effect from slower growth in self-employment income (again related to our updated assumption on trend productivity).

2.20 We expect growth in UK liabilities of non-savings, non-dividend income to average just over 5 per cent a year between 2015-16 and 2020-21. PAYE receipts will be boosted in the final years of the forecast by earnings growth outpacing inflation-linked rises in thresholds and allowances. This will drag more income into higher tax brackets. SA receipts will be boosted by a range of measures announced at recent Budgets and Autumn Statements. These include the accelerated payments measure, changes in non-domicile rules, HMRC compliance and 'making tax digital' measures, and restrictions on residential landlords' deductions from taxable income.

2.21 A number of policy measures that affect non-savings, non-dividends income tax receipts have been announced in this Budget:

- the rise in the personal allowance to £11,500 from April 2017;

- the **rise in the higher rate threshold** to £45,000 from April 2017;
- the **reductions in the basic and main rates of capital gains tax** to 10 per cent and 20 per cent, excluding property and carried interest, which increases the incentive to convert income into capital gains; and
- **anti-avoidance measures** such as tackling historic and new disguised remuneration schemes and the reform of the treatment of performance awards for asset managers.

## Scottish forecast

2.22 Table 2.2 shows our latest forecast of the Scottish share of income tax. Data from the 2013-14 SPI became available in February 2016 and suggest that the Scottish share in 2013-14 was 2.99 per cent, compared with 3.04 per cent in 2012-13. This was a less steep fall than the 0.13 percentage point decline assumed in our November forecast between the two years. The smaller decline could reflect sampling issues in the SPI between years, as well as the likelihood of differences between the actual asymmetric effect of measures and forestalling related to the reduction in the additional rate of income tax to 45p and our estimates of them. In particular, there was a large rise in the personal allowance from £8,105 in 2012-13 to £9,400 in 2013-14. The reduction to 45p was expected to boost UK liabilities in 2013-14 as taxpayers with high incomes moved some income into that year to benefit from the lower rate. Since Scotland has a lower share of additional rate taxpayers, this was expected to have a bigger effect outside Scotland and reduce the Scottish share.

2.23 The higher 2013-14 Scottish share is largely pushed through the forecast. We still expect some further fall in the Scottish share over the forecast period due to the asymmetric effect of policy measures in recent years, in particular the continued above-inflation rises in the personal allowance.

Table 2.2: Scottish share of income tax

	Per cent of UK total for non-savings, non-dividend liabilities								
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	3.04	2.91	2.91	2.89	2.88	2.87	2.87	2.87	2.87
<b>March 2016</b>	<b>3.04</b>	<b>2.99</b>	<b>2.98</b>	<b>2.96</b>	<b>2.94</b>	<b>2.94</b>	<b>2.94</b>	<b>2.94</b>	<b>2.94</b>

2.24 Table 2.3 provides our forecast for Scottish income tax liabilities on non-savings, non-dividend income. These are the liabilities specifically for the Scottish rate. The Scottish Government announced that a 10p Scottish rate would be levied in 2016-17 and we have assumed that will continue to be the case over the forecast period. Prior to any decisions by the Scottish Parliament on their greater powers to vary income tax rates and thresholds from April 2017, we have assumed that a 10p rate would be levied in each tax band and that thresholds would be the same as for the UK as a whole.

2.25 The Budget announcements on income tax reduce receipts both at the UK and Scottish levels. The effect on Scottish receipts is proportionately greater, reflecting that asymmetric effect of the rise in the personal allowance in 2017-18 (a giveaway to those earning above

the current personal allowance but below the top of the personal allowance taper, which starts at £100,000 and the anti-avoidance measures (takeaways that targets those at the top-end of the income distribution).

Table 2.3: Scottish income tax forecast

	£ million							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Scottish income tax liabilities (pre-measures)	4393	4539	4722	4903	5213	5487	5713	6010
New measures	0	0	0	-1	-74	-88	-75	-90
<b>Scottish income tax liabilities (post-measures)</b>	<b>4393</b>	<b>4539</b>	<b>4722</b>	<b>4902</b>	<b>5139</b>	<b>5399</b>	<b>5638</b>	<b>5920</b>

2.26 Table 2.4 provides a breakdown of the change in the Scottish income tax forecast since November. The higher Scottish share raises receipts throughout the forecast, but is more than outweighed in most years by the effect of Budget measures and from the lower UK forecast for non-savings, non-dividend liabilities.

Table 2.4: Changes in Scottish income tax since November

	£ million							
	Outturn		Forecast					
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	4288	4449	4649	4900	5226	5521	5802	6148
<b>March 2016</b>	<b>4393</b>	<b>4539</b>	<b>4722</b>	<b>4902</b>	<b>5139</b>	<b>5399</b>	<b>5638</b>	<b>5920</b>
Change in income tax	105	90	73	2	-86	-123	-164	-228
<i>of which:</i>								
Scottish share	112	114	115	114	122	132	139	145
Other (including previous measures)	0	-3	0	0	5	7	11	4
New measures	0	0	0	-1	-74	-88	-75	-90
UK forecast	-7	-21	-43	-111	-139	-173	-239	-287

## Welsh forecast

2.27 Table 2.5 shows our forecast for the Welsh share of income tax. The 2013-14 SPI data published in February 2016 indicated a Welsh share of 1.28 per cent, close to the 1.27 per cent we assumed in November. The share fell from 1.34 per cent in 2012-13, which is likely to reflect the asymmetric effect of the big rise in the personal allowance in 2013-14 and the differential effect between Wales and the rest of the UK from the deferrals of income related to the reduction in the additional rate of income tax to 45p. As with the Scottish share, we expect a further fall in the share over the forecast period given the continued above-inflation increases in the personal allowance.

Table 2.5: Welsh share of income tax

	Per cent of UK total for non-savings, non-dividend liabilities								
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	1.34	1.27	1.27	1.26	1.25	1.25	1.25	1.25	1.25
<b>March 2016</b>	<b>1.34</b>	<b>1.28</b>	<b>1.28</b>	<b>1.26</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>

2.28 Table 2.6 provides a forecast for Welsh income tax liabilities on non-savings, non-dividend income. These are the liabilities specifically for the Welsh rate. It assumes that a 10p rate is implemented by the Welsh Assembly. Budget measures, particularly on the personal allowance increase in 2017-18, reduce receipts.

Table 2.6: Welsh income tax forecast

	£ million								
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Welsh income tax liabilities (pre-measures)	1876	1937	2010	2081	2210	2325	2422	2552	
New measures	0	0	0	-1	-39	-46	-40	-47	
<b>Welsh income tax liabilities (post-measures)</b>	<b>1876</b>	<b>1937</b>	<b>2010</b>	<b>2081</b>	<b>2171</b>	<b>2279</b>	<b>2382</b>	<b>2505</b>	

2.29 Table 2.7 provides a breakdown of the changes in the Welsh income tax forecast since November. Receipts are down in each year of the forecast, reflecting the lower UK forecast for non-savings, non-dividend liabilities and the effect of Budget measures.

Table 2.7: Changes in Welsh income tax since November

	£ million								
	2013-14	2014-15	Forecast						
			2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
November 2015	1868	1940	2023	2124	2267	2400	2528	2681	
<b>March 2016</b>	<b>1876</b>	<b>1937</b>	<b>2010</b>	<b>2081</b>	<b>2171</b>	<b>2279</b>	<b>2382</b>	<b>2505</b>	
Change in income tax	9	-3	-13	-44	-96	-121	-146	-176	
<i>of which:</i>									
Welsh share	11	7	5	3	-1	-5	-9	-11	
Other (including previous measures)	0	-1	1	1	3	3	4	4	
New measures	0	0	0	-1	-39	-46	-40	-47	
UK forecast	-3	-9	-18	-47	-59	-73	-101	-122	



## 3 Taxes on property transactions

### Scottish land and buildings transaction tax

- 3.1 The Scotland Act 2012 provided for stamp duty land tax (SDLT) to be entirely devolved to Scotland in April 2015, which included the power to change the tax system as well as tax rates. The system was changed through the Land and Buildings Transaction Tax (Scotland) Act 2013, which received Royal Assent on 31 July 2013.
- 3.2 In April 2015, the land and buildings transaction tax (LBTT) replaced UK-wide SDLT in Scotland. Prior to that there were also reforms to the UK SDLT tax system that took place in December 2014. The main changes that have affected the taxation of property transactions in Scotland are:
- on 4 December 2014, **the UK residential SDLT regime moved from a 'slab' to a 'slice' system**. As a result, between December 2014 and March 2015 property transactions in Scotland were taxed under the new UK SDLT regime, before moving to the LBTT regime in April 2015. The UK changes were discussed in detail in our December 2014 *EFO*;
  - a **requirement to pay LBTT prior to registration of the title**, intended to encourage prompt payment; and
  - **modifications to reliefs and exemptions**, including the withdrawal of sub-sale relief arrangements.

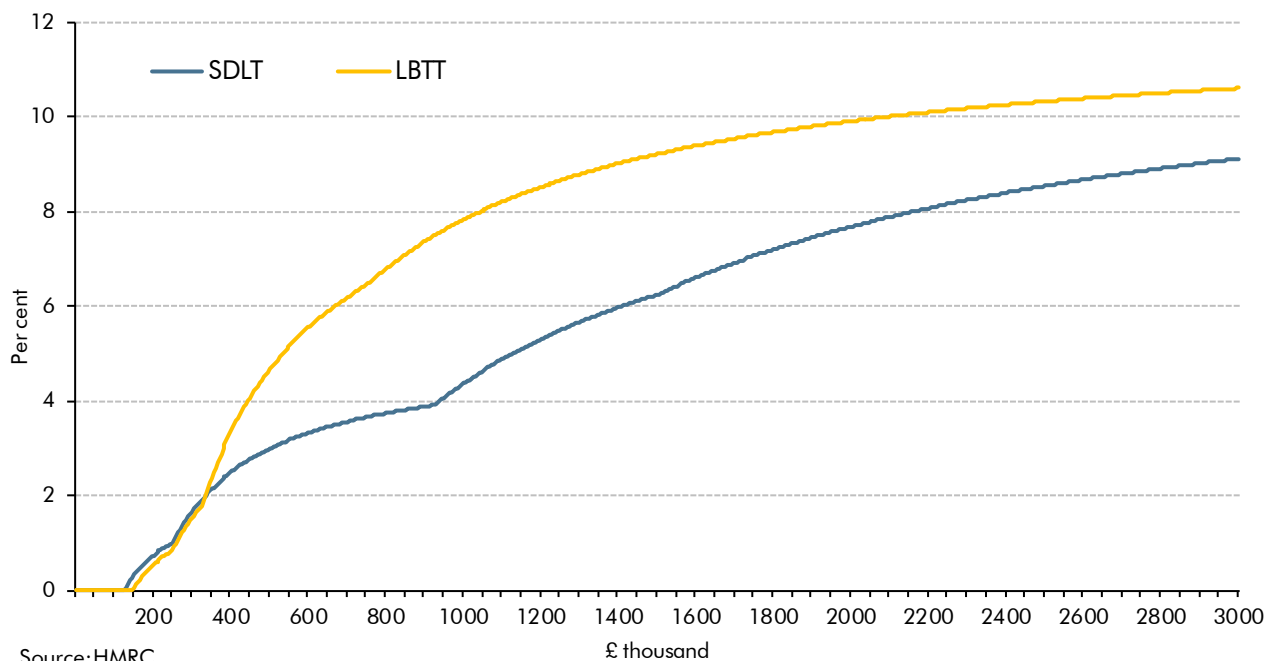
### Residential property

- 3.3 The Scottish Government announced LBTT rates and bands for 2016-17 in its December 2015 Draft Budget. For residential property the rates are:
- 0 per cent on transactions up to £145,000;
  - 2 per cent on the portion above £145,000 up to £250,000;
  - 5 per cent on the portion above £250,000 up to £325,000;
  - 10 per cent on the portion above £325,000 up to £750,000; and
  - 12 per cent on the portion above £750,000.

3.4 The Scottish Government also announced in December a new LBTT policy – a 3 per cent supplement for purchases of additional properties, such as buy-to-let and second homes. The 3 per cent applies to all properties so, for example, a £100,000 purchase of a buy-to-let property would be subject to LBTT whereas it would be exempt if purchased as a primary residence. This measure matches that announced by the UK Government in November’s Autumn Statement.

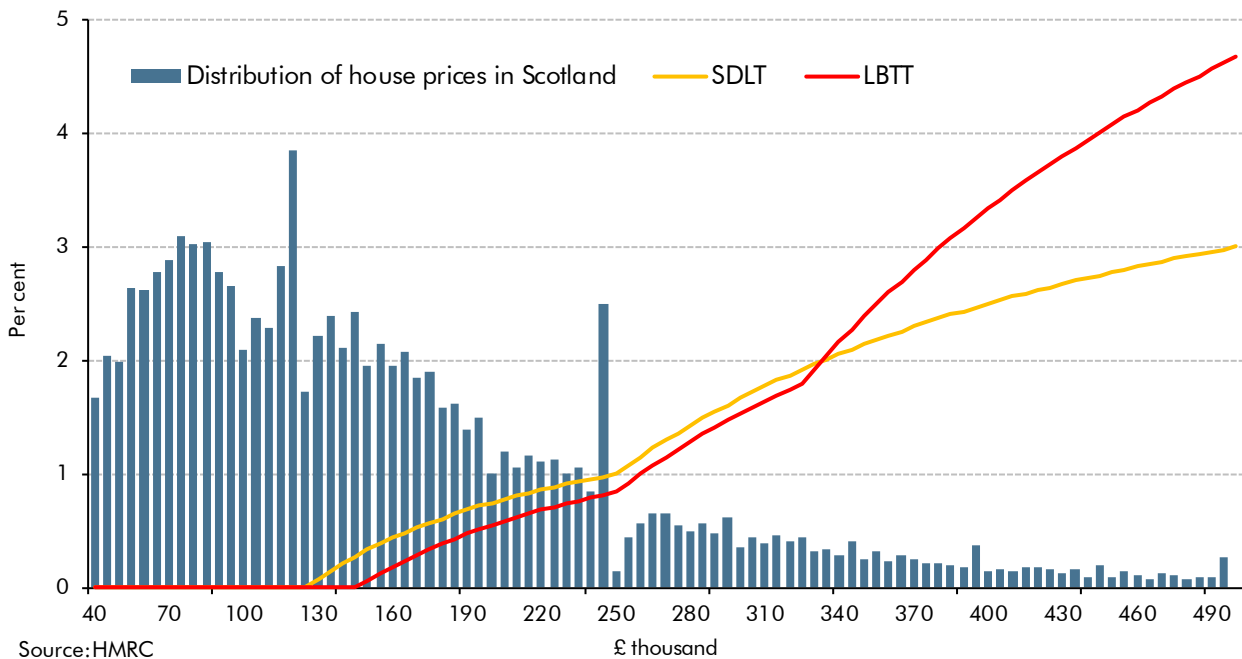
3.5 Chart 3.1 shows how the amount of tax paid on transactions at different property prices differs between the UK SDLT regime and the Scottish LBTT system. It shows that there are substantial differences at some prices. For example, the purchaser of a £260,000 house – just above the 2 per cent threshold in both systems – would pay £400 less tax in Scotland. By contrast, the purchaser of a £1.5 million house would pay £45,000 more tax under the Scottish system.

Chart 3.1: UK SDLT and Scottish LBTT tax schedules for residential property



3.6 Chart 3.2 shows LBTT and SDLT tax schedules for property transactions up to £500,000 against the distribution of house prices in Scotland. From this it is clear that for the majority of properties in Scotland there would be a zero rate under either system. It is also clear that a significant proportion is likely to face a lower rate under LBTT than SDLT. A relatively small proportion would be subject to the higher rates under LBTT and few properties in Scotland would be subject to the 10 and 12 per cent LBTT rates.

Chart 3.2: Distribution of house prices in Scotland under LBTT and SDLT, 2014-15



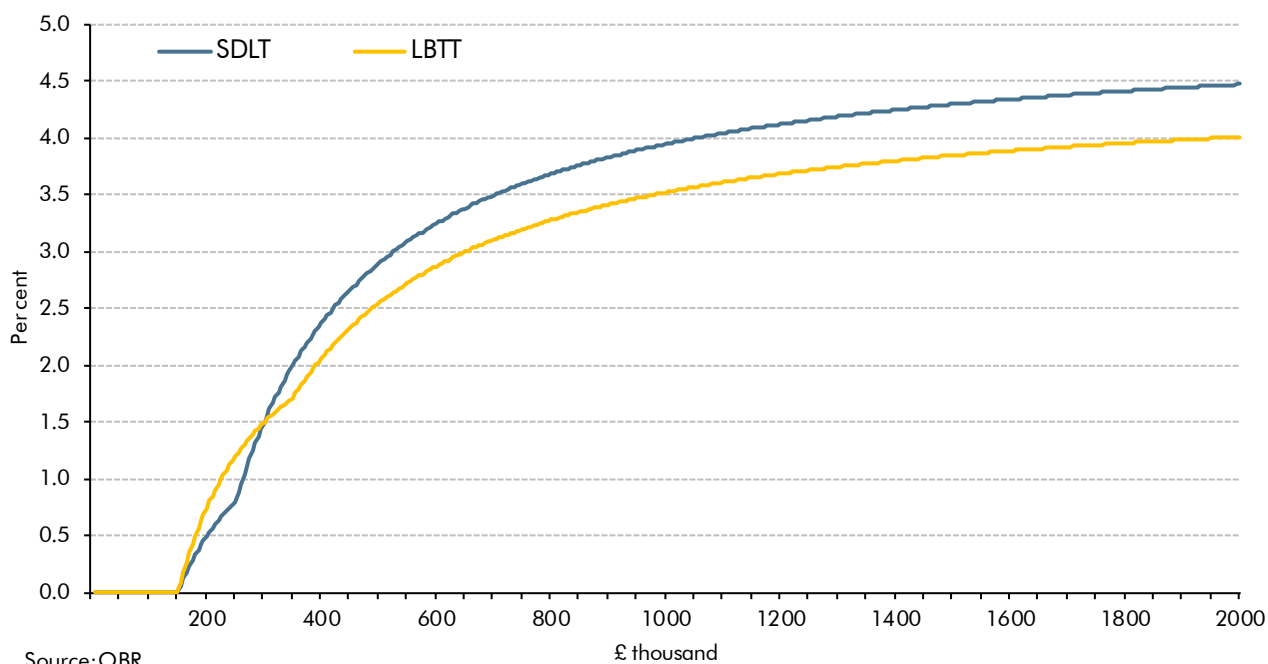
## Commercial property

3.7 The rates for Scottish commercial property are:

- 0 per cent on property transactions up to £150,000;
- 3 per cent on the portion above £150,000 up to £350,000; and
- 4.5 per cent on the portion above £350,000.

3.8 In this Budget, the UK Government has announced reforms to commercial SDLT, moving that too from a slab to a slice system. The 0 per cent rate applies to transactions up to 150,000, there is then a 2 per cent rate on the portion between £150,000 up to £250,000 and a 5 per cent rate on the portion above that. Chart 3.3 shows the comparison with LBTT. A commercial property transaction at £275,000 would pay £500 more under LBTT than SDLT whereas a transaction at £480,000 would pay £1650 more under SDLT.

Chart 3.3: UK SDLT and Scottish LBTT tax schedules for commercial property



## Welsh property transactions tax

3.9 The Welsh Government announced, in its *Tax Collection and Management (Wales) Bill* in July 2015, its intention to replace SDLT with a ‘land transaction tax’. The bill was approved by the Welsh Assembly in March 2016, and now awaits Royal Assent, with a further bill for detailing the new tax expected early in the next Assembly term. Our forecasts will reflect the new tax when details of any changes become sufficiently clear.

## Methodology

3.10 The forecast for residential LBTT and the share of Welsh residential SDLT uses the HMRC residential ‘stamp duty plus model’ (SDM+). This is a microsimulation model that allows us to apply the tax schedules for LBTT and SDLT to a 100 per cent sample of transactions from a given year and grow them in line with our price and transactions forecasts for the residential property markets. This is a change from previous forecasts, which have relied on a representative 10 per cent sample. We assume that Scottish and Welsh prices and transactions grow in line with those for the UK as a whole from 2015-16 onwards.

3.11 The forecast for commercial LBTT and the Welsh share of commercial SDLT is modelled using HMRC’s commercial stamp duty plus model, which works in a similar way to the residential SDM+. Again, we assume that Scottish and Welsh prices and transactions grow in line with those for the UK as a whole from 2015-16 onwards.

3.12 Table 3.1 shows how the Scottish and Welsh shares of SDLT receipts have evolved since 2007-08. It shows that they have generally been on a declining path, which has reflected the relative strength of London prices over the period. UK SDLT receipts fell sharply in 2008-

09 and only returned to their pre-crisis levels in 2014-15. Scottish and Welsh residential SDLT receipts in 2014-15 were still 21 and 19 per cent below their 2007-08 levels. Commercial SDLT receipts in Scotland in 2014-15 were 9 per cent below the 2007-08 level while they were 13 per cent lower in Wales.

3.13 We add any additional effect from new policy measures to produce the post-measures forecast.

Table 3.1: Historical Scottish and Welsh shares of SDLT receipts

	£ million							
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>UK:</b>	<b>9958</b>	<b>4796</b>	<b>4885</b>	<b>5960</b>	<b>6130</b>	<b>6907</b>	<b>9273</b>	<b>10738</b>
<i>of which</i>								
Residential	6680	2950	3290	4040	4220	4905	6450	7500
Commercial	3278	1846	1595	1920	1910	2002	2823	3238
	<b>Totals</b>							
<b>Scotland:</b>	<b>565</b>	<b>320</b>	<b>250</b>	<b>330</b>	<b>275</b>	<b>283</b>	<b>390</b>	<b>475</b>
<i>of which:</i>								
Residential	340	185	135	165	155	170	215	270
Commercial	225	135	115	165	120	113	175	205
<b>Wales:</b>	<b>210</b>	<b>115</b>	<b>100</b>	<b>115</b>	<b>125</b>	<b>105</b>	<b>150</b>	<b>172</b>
<i>of which:</i>								
Residential	130	55	55	65	65	70	90	105
Commercial	80	60	45	50	60	35	60	67
	<b>Per cent of UK total</b>							
<b>Scotland:</b>								
Residential share	5.1	6.3	4.1	4.1	3.7	3.5	3.3	3.6
Commercial share	6.9	7.3	7.2	8.6	6.3	5.6	6.2	6.3
<b>Wales:</b>								
Residential share	1.9	1.9	1.7	1.6	1.5	1.4	1.4	1.4
Commercial share	2.4	3.3	2.8	2.6	3.1	1.7	2.1	2.1

## UK SDLT forecast

3.14 Stamp duty land tax (SDLT) receipts are forecast to increase from £10.7 billion in 2015-16 to £17.4 billion in 2020-21.<sup>1</sup> This strong rise reflects both tax base effects – rising prices and, to a lesser extent, transactions – as well as a rising effective tax rate, as rising house prices drag a greater proportion of the value of residential transactions into higher tax brackets. It also reflects announcements in Autumn Statement 2015 (raising the stamp duty on second homes and buy-to-let properties) and in this Budget (the move to a ‘slice’ system for SDLT on commercial property). These measures add around £1.1 billion to SDLT receipts in 2016-17, rising to £1.6 billion by the end of the forecast.

<sup>1</sup> SDLT is no longer paid in Scotland, where property transactions tax has been devolved and the Scottish Government introduced a land and buildings transactions tax (LBTT) in April 2015.

- 3.15 Compared with November, SDLT receipts in 2015-16 have been revised down by £0.5 billion. This is despite house prices being a little stronger than expected in recent months and property transactions close to forecast. The effective tax rate therefore appears to have fallen, reflecting the weaker top end of the residential property market. Pushing the weaker 2015-16 receipts through the forecast (plus modelling changes) takes over £1 billion off receipts by 2020-21. In particular, SDLT receipts are weaker because transactions among properties worth at least £2 million have fallen. While the 9 per cent year-on-year drop over the first ten months of 2015-16 represents only around 390 fewer transactions, each transaction pays a very large amount of SDLT. Assuming an average transaction price in this bracket of £4 million would imply a £150 million drop in receipts.
- 3.16 There are three measures in this Budget that are expected to raise SLDT receipts by a combined £0.7 billion a year by the end of the forecast. The individual costings are discussed below.

## Scottish forecast

### LBTT receipts outturn

- 3.17 At the time we closed this forecast, ten months of LBTT receipts outturn had been published by Revenue Scotland. These are shown in Table 3.2. For the year to date, total receipts were £340 million, with £169 million from residential transactions and £171 million from commercial transactions.
- 3.18 The pattern of receipts from April to June suggests people responded to changes in the tax system by shifting the timing of property transactions – an effect known as ‘forestalling’ that is often important when estimating the effect of policy changes that are pre-announced. Residential properties purchased for more than £335,000 are subject to a lower rate under UK SDLT than LBTT, as shown in Chart 3.2. It appears that a material number of such purchases were brought forward so that they took place before the April 2015 introduction of LBTT.
- 3.19 Residential LBTT receipts were low in April 2015, then jumped 63 per cent in May and a further 62 per cent in June. The number of residential transactions increased by 14 per cent from April to May and a further 28 per cent from May to June. Some of this is explained by the seasonal pattern of property transactions – transactions in Scotland tend to rise from April to June before remaining relatively flat across the summer months – but the high growth does suggest some forestalling behaviour. That can be seen more clearly when looking at the amount of LBTT paid per residential transaction. It almost doubled between April and June – from £1,017 in April to £1,460 in May and £1,844 in June. This suggests sales of higher value properties might have been depressed in the early months of LBTT, again consistent with forestalling behaviour shifting those transactions forward to before the introduction of LBTT.
- 3.20 The outturns suggest there may also have been some forestalling with commercial transactions, though the month-on-month growth is less pronounced.

Table 3.2: Land and buildings transaction tax outturn

	£ million										
	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Jan 16	
Total	18	24	32	38	37	34	35	43	54	25	
of which											
Residential	7	11	19	19	21	19	20	21	20	13	
Commercial	11	13	14	18	16	16	15	22	35	12	
	Transactions										
Total	7490	8620	10980	10910	10440	10010	10640	10510	10740	6930	
of which											
Residential	6880	7810	10020	9940	9530	9040	9680	9380	9620	6000	
Commercial	610	810	950	970	900	970	960	1130	1120	920	

## LBTT forecast

3.21 Our forecast for Scottish LBTT is based on the LBTT rates for residential property announced in December 2015. Table 3.3 shows our latest forecasts for residential and commercial LBTT. We have increased our residential LBTT by an average of 11 per cent over the forecast period and reduced our commercial forecast by almost the same amount, leaving overall LBTT up by an average of 2 per cent over the forecast period. Residential LBTT receipts are forecast to grow by 143 per cent across the forecast period compared to growth for commercial LBTT of 37 per cent.

Table 3.3: Land and buildings transaction tax forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total LBTT</b>						
November 2015	397	496	557	628	700	769
March 2016	401	509	581	644	707	767
Difference	4	14	24	16	7	-2
<b>Residential LBTT</b>						
November 2015	178	253	302	360	418	473
March 2016	206	292	352	404	454	500
Difference	28	39	51	44	36	27
<b>Commercial LBTT</b>						
November 2015	220	243	255	268	282	296
March 2016	195	217	229	241	253	266
Difference	-25	-26	-27	-28	-29	-30

3.22 Table 3.4 shows the individual changes in our residential LBTT forecast since November. Firstly the modelling changes we described earlier have lowered receipts across the forecast, peaking at £59 million in 2020-21. We have made an upward adjustment to reflect stronger than expected 2015-16 receipts, and this effect is pushed through to later years. Table 3.2 shows that receipts in the year to January are already higher than we forecast for the whole year in November, so we have increased them in line with the typical pattern of transactions shown in Chart 3.4. There is also a positive effect from the upward revision in our UK house price forecast, though this is mostly offset by the effect of a reduction in our

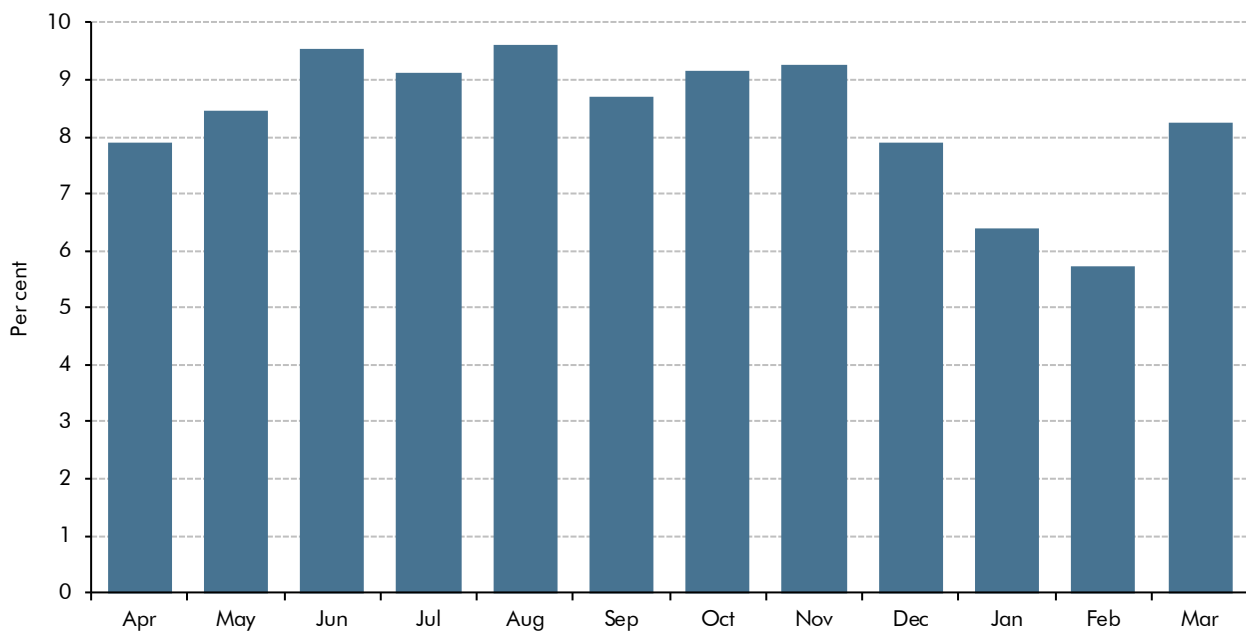
## Taxes on property transactions

forecast for UK residential property transactions. Finally there is a positive effect from the Scottish Government's additional homes policy measure, for which we have taken on their published costing.

Table 3.4: Changes in residential LBTT since November

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Change in residential LBTT	28	39	51	44	36	27
of which:						
Receipts outturn	42	41	38	35	32	29
House prices	9	18	18	18	18	16
Property transactions	2	-9	-8	-10	-11	-13
Policy measures	6	23	43	47	51	54
Modelling changes	-30	-34	-40	-46	-53	-59

Chart 3.4: Scottish residential property transactions by month, 5-year average



Source: HMRC

**3.23** Table 3.5 shows the individual changes in our commercial LBTT forecast since November. The main factor here is a downward adjustment on the back of lower than expected receipts outturn, which is pushed through the remainder of the forecast. There are also small downward revisions from our commercial property prices and transactions forecasts, from a lower net present value and some modelling changes.



Table 3.5: Changes in commercial LBTT since November

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Change in commercial LBTT	-25	-26	-27	-28	-29	-30
of which:						
Receipts outturn	-20	-20	-20	-20	-20	-20
Property prices	-1	-1	0	0	0	0
Property transactions	0	-1	-3	-4	-5	-6
Net present value	-2	-2	-2	-2	-3	-3
Modelling changes	-2	-2	-1	-2	-2	-2

- 3.24 Our revised forecast for residential LBTT receipts is similar to the Scottish Government's estimate, though they are based on quite different methodologies. Whereas we use a microsimulation model, the Scottish Government's estimates are based a log-normal model. We have considered the use of a log-normal model for our residential UK SDLT forecast but preliminary results showed it performed worse than the microsimulation model, mainly because it was unable to satisfactorily deal with the high-end London property market.
- 3.25 Our commercial forecast is extremely close to the Scottish Government's. Their forecast rises from £220 million in 2016-17 to £260 million on 2020-21. Our residential forecast is also close – there is only a £3 million difference in 2016-17 – though by 2020-21 our forecast is £45 million lower.

## Welsh forecast

- 3.26 As described above, the Welsh residential SDLT forecast has been estimated using HMRC's residential SDM+ and our UK-wide house price and residential transaction forecasts. Welsh commercial SDLT has been forecast using HMRC's SDM+ model and our UK forecast for commercial property prices and transactions. We then include the assumed Welsh share of SDLT policy measures in order to produce a final post-measures forecast. There are three Budget policy measures that affect the UK SDLT forecast:
- 'stamp duty land tax for non-residential property: reform freehold and leasehold premium regime to slice and increase leasehold rate over £5m';
  - 'capital gains tax: reduce basic rate to 10% and main rate to 20% excluding residential property and carried interest'; and
  - 'stamp duty land tax on additional properties: exemptions'.
- 3.27 Table 3.6 shows that we expect Welsh SDLT to increase by 73 per cent between 2015-16 and 2020-21. Relative to our November forecast, both Welsh residential and commercial SDLT has been revised up in all years.

Table 3.6: Welsh SDLT forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Total SDLT</b>						
November 2015	163	184	204	227	251	273
March 2016	165	202	225	244	266	286
Difference	2	18	21	17	15	13
<b>Residential SDLT</b>						
November 2015	84	100	115	134	153	170
March 2016	87	110	127	141	158	173
Difference	3	11	11	7	5	3
<b>Commercial SDLT</b>						
November 2015	79	84	88	93	98	103
March 2016	78	91	98	103	107	113
Difference	-1	7	10	10	10	10

3.28 Table 3.7 shows there are three factors that push up the forecast and two that lower it. The largest increase comes from the Welsh share of policy measures – not only those mentioned above, but also revisions to the costings of previous measures, the largest of which is the additional homes supplement announced in November. There is a positive effect from our upward revision to UK house prices and also from stronger than expected current year receipts. The main sources of downward revision are the modelling changes outlined above, with a smaller effect from our downward revision to UK property transactions.

Table 3.7: Changes in Welsh residential SDLT forecast since November

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Changes to residential SDLT	3	11	11	7	5	3
<i>of which:</i>						
Receipts outturn	7	7	6	5	4	3
House prices	3	6	6	6	6	5
Property transactions	1	-3	-3	-3	-4	-4
Policy measures	5	14	17	16	17	18
Modelling changes	-13	-13	-15	-16	-18	-19

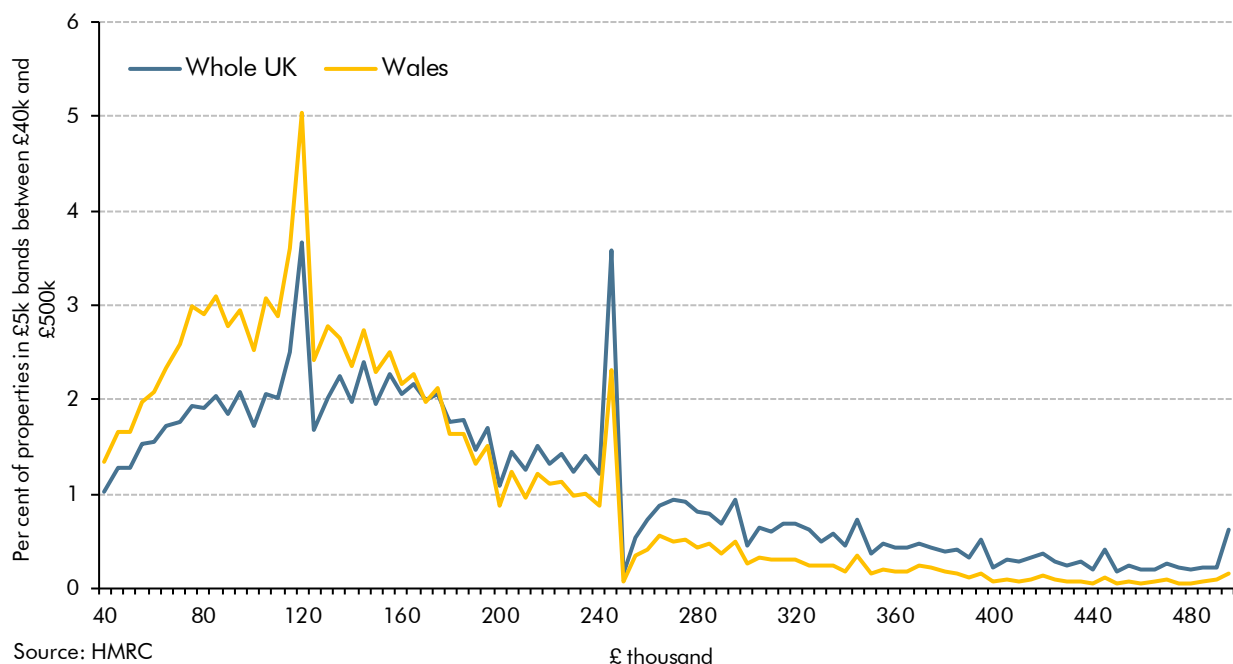
3.29 Table 3.8 shows that changes in the Welsh commercial SDLT forecast are dominated by the Budget measures described above.

Table 3.8: Changes in Welsh commercial SDLT forecast since November

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Changes to commercial SDLT	-1	7	10	10	10	10
of which:						
Receipts outturn	0	0	0	0	0	0
Property prices	0	0	0	0	0	0
Property transactions	0	0	-1	-1	-1	-2
Net present value	0	-1	-1	-1	-1	-1
Policy measures	0	8	11	12	12	13
Modelling changes	0	0	0	0	0	0

3.30 The proportion of transactions in Wales close to the 2 per cent threshold in the new UK SDLT regime (£125,000) is relatively high, as shown in Chart 3.5. This creates greater fiscal drag in Wales in the SDM+ modelling of Welsh SDLT receipts than was implied under the old slab regime, which encouraged bunching below thresholds because of the substantial impact on the amount of tax paid when moving from below to above a threshold. The change to a slice system in December 2014 means that transactions at prices just below the threshold are more likely to move up into the SDLT regime over time.

Chart 3.5: Distribution of house prices in Wales compared to the UK, 2014-15



# 4 Environmental taxes

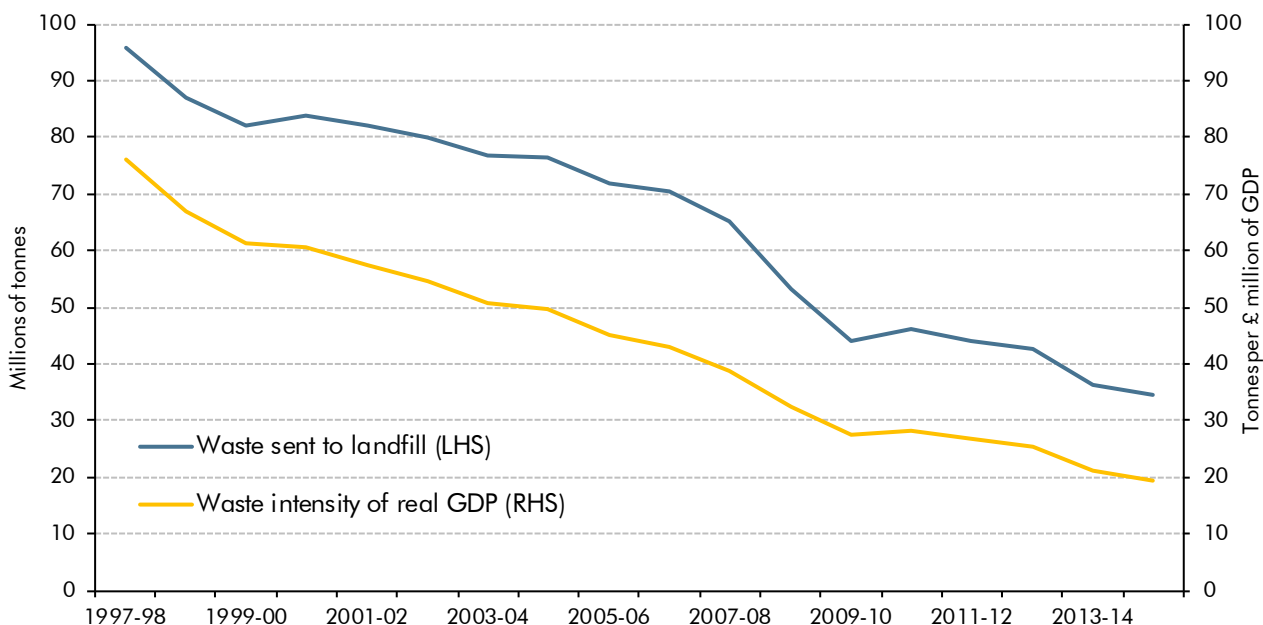
## Landfill tax

### Trends in UK landfill tax receipts

4.1 Landfill tax was introduced in 1996. It is a tax that applies to all waste disposed of by way of landfill at a licensed landfill site unless the waste is specifically exempt. Our forecast for UK landfill tax is driven by the tax base (the amount of waste sent to landfill) and the effective tax rate that will be paid (largely driven by policy decisions on the rates paid, but also by the composition of waste sent to landfill as there are two different tax rates). Both elements represent sources of uncertainty in the forecast.

4.2 Since waste is largely a by-product of economic activity, we would expect growth in the tax base to be associated with GDP growth. And since the tax is paid on the volume of waste (per tonne), the relationship should be with real GDP. As Chart 4.1 shows, that relationship has been one of declining volumes of waste per unit of real GDP. Indeed, since landfill tax was introduced, there has been a clear downward trend in the amount of waste sent to landfill in the UK, falling from 96 million tonnes in 1997-98 to 34 million tonnes in 2014-15.

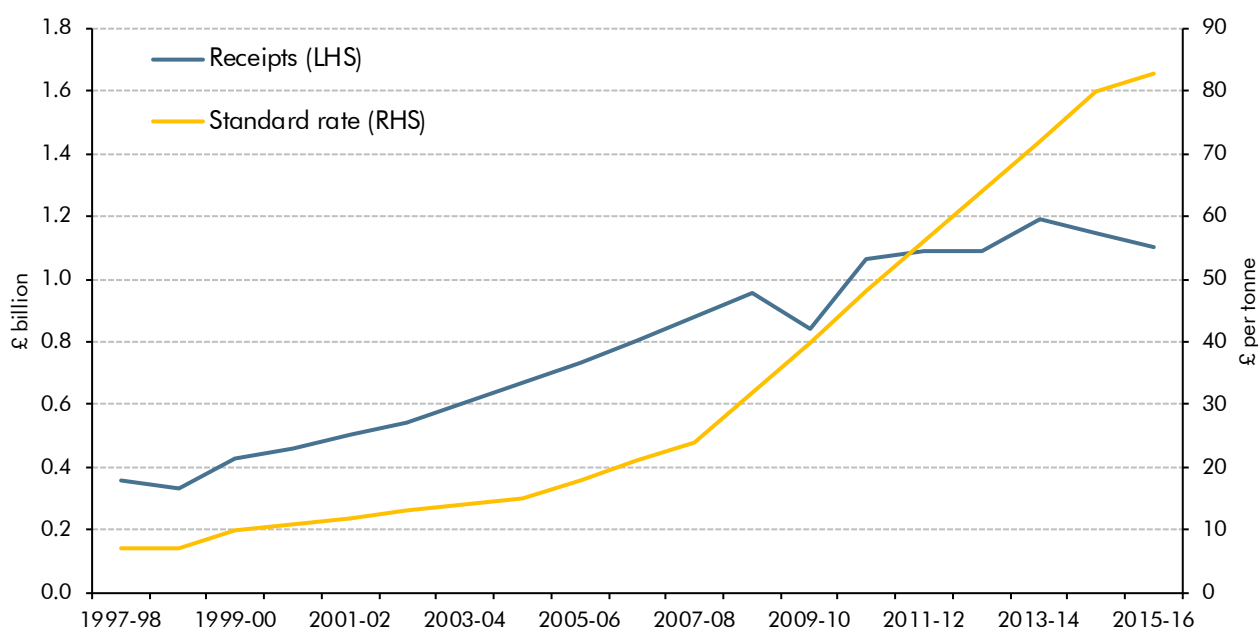
Chart 4.1: UK landfill waste tonnage relative to economic activity



Source: HMRC, ONS, OBR

4.3 As Chart 4.2 shows, despite a declining tax base, landfill tax receipts rose significantly for the first 15 years, mainly due to large increases in the duty rate. The standard rate has been raised from £7 a tonne in 1997-98 to £80 a tonne in 2014-15 and £82.60 since April 2015. This has more than offset the reduction in the effective tax rate due to a steady decline in the proportion of waste sent to landfill that is subject to the standard rate – itself partly due to HMRC losing a court case that led to a narrowing of the scope of the standard rate. Chart 4.2 also shows receipts have been relatively flat over the past five years.

Chart 4.2: UK landfill tax standard rate and receipts



Source: HMRC, OBR

## Scottish rate

4.4 Landfill tax was fully devolved to the Scottish Government in April 2015. In the Scottish Government's December 2015 Draft Budget, it set rates to match those in the rest of the UK, as it had done the previous year.

## Welsh rate

4.5 The Welsh Government announced, in its *Tax Collection and Management (Wales) Bill* in July 2015, its intention to replace SDLT with a 'land disposals tax'. The bill was approved by the Welsh Assembly in March 2016, and now awaits Royal Assent, with a further bill detailing the new tax expected early in the next Assembly term. Our forecasts will reflect the new tax when details of any changes become sufficiently clear.

## Methodology

4.6 The Scottish and Welsh landfill tax forecasts are produced by applying an assumption about the path of the Scottish and Welsh share of landfill tax to the UK forecast. The Scottish landfill tax forecast also takes into account the latest receipts outturn from Revenue Scotland.

- 4.7 As noted above, the UK forecast is compiled using a forecast for the tonnage of waste sent to landfill, which is multiplied by the appropriate tax rate. The tonnage forecast is generated from separate Department for Environment, Food and Rural Affairs (DEFRA) projections of municipal solid waste, and commercial and industrial waste, sent to landfill. The expected amount of municipal waste sent to landfill is estimated by comparing the cost of alternative waste treatment options. DEFRA’s detailed models cover England, so are scaled up to get to a UK-wide forecast. The split between standard and lower tax rates is based on historical trends. The tax rates are assumed to be uprated in line with RPI inflation, consistent with the default uprating assumption set by the Government.
- 4.8 Data on Scottish landfill tax are still limited, as only two quarters of outturn data have been published by Revenue Scotland. The Welsh share of landfill tax receipts is not currently available either, since landfill operators submit data returns that cover sites across all of England, Wales and Northern Ireland. The shares are therefore estimated from various data sources on landfill tonnages. The Scottish share uses data from the Scottish Environment Protection Agency that covers only Scotland. The Welsh share is calculated using data from Natural Resources Wales. This is a detailed dataset that offers comprehensive coverage of the amount of waste sent to landfill in Wales. Data for Northern Ireland are sourced from the Department of the Environment Northern Ireland to allow us to complete the picture for total UK landfill tonnage and calculate the Scottish and Welsh shares.
- 4.9 We add the effect of any new policy measures to produce our post-measures forecast.

## UK forecast

- 4.10 The latest available landfill tonnage data are shown in Table 4.1. As in our November forecast, 2013-14 remains the latest year of available data and shows a continuation in the downward trend. The UK total has fallen by 37 per cent since 2006-07, while there have been steeper declines in both Scotland (43 per cent) and Wales (44 per cent).

Table 4.1: Landfill tonnage in the UK

	Tonnes (million)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
England	63.9	59.0	51.4	43.9	43.8	44.0	41.6	41.1
Scotland	7.1	7.0	5.7	4.7	4.6	4.6	4.4	4.1
Wales	3.8	3.1	2.8	2.5	2.3	2.2	2.2	2.1
Northern Ireland	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
UK	76.3	70.5	61.2	52.2	51.8	51.8	49.1	48.2
	Per cent of UK total							
Scotland	9.4	9.9	9.4	8.9	8.8	8.9	8.9	8.4
Wales	5.0	4.4	4.6	4.7	4.4	4.2	4.4	4.4

- 4.11 The UK landfill tax forecast in Table 4.2 has been revised up in the near term since November. This reflects slightly higher than expected 2015-16 outturn and updated DEFRA projections of local authority waste sent to landfill. We have made a downward adjustment

in 2019-20 and 2020-21 to reflect our view that landfill tonnage is unlikely to rise at the pace we previously expected.

- 4.12 There are two measures in this Budget that affect landfill tax receipts. ‘Landfill tax: tackling waste crime’ is an HMRC measure tackling non-compliance – it is expected to raise £5 million in 2017-18 rising to £30 million in 2020-21. ‘Package recycling targets: reform’ is a DEFRA measure implementing statutory EU recycling targets. Changes in recycling will affect the amounts of waste sent to landfill. The measure actually lowers recycling targets for plastics from 2016-17 to 2019-20, which increases landfill receipts by £10 million in the early years of the forecast. From 2018-19 to 2020-21 it increases recycling targets for glass which eventually leads to an overall cost of £5 million in 2020-21.

Table 4.2: UK landfill tax forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	1077	1006	925	924	979	1081
March 2015	1099	1039	945	941	959	977
Difference	21	32	20	17	-20	-105

### Scottish landfill tax receipts outturn

- 4.13 Revenue Scotland has now published two quarters of 2015-16 receipts outturn for Scottish landfill tax (monthly data are unavailable). Receipts were £38 million in the April-to-June quarter and £37 million in the July-to-September quarter. Landfill receipts do not fluctuate greatly through the year, so we would expect a similar pattern across the remainder of 2015-16.

### Scottish forecast

- 4.14 The forecast for Scottish landfill tax in Table 4.3 is similar to our forecast in November. We have very slightly increased our forecast for 2015-16, which pushes through to the remainder of the forecast. There is a drop off in the final years due to the same judgement on landfill tonnages described above. Our forecast implies a larger share of receipts for Scotland in 2015-16 (13 per cent) than the overall share of waste tonnage sent to landfill in 2013-14 that is shown in Table 4.1.
- 4.15 The Scottish Government produced its first 5-year forecast in December and it is very close to ours in the initial years. In later years it diverges as the Scottish Government’s forecast makes an allowance for its waste reduction targets. By 2025, these seek to reduce total waste generated to 85 per cent of their 2011 level and total disposals to landfill to 5 per cent of total waste generated.
- 4.16 Our forecasts only take policy targets into account when the details of policies to deliver them have been announced and are accompanied with relevant supporting analysis and costings. Otherwise we consider them to be policy aspirations, and note them as fiscal risks.

In this instance, if waste sent to landfill was to fall faster than we assume, in accordance with the Scottish Government's targets, Scottish landfill tax receipts would be lower.

Table 4.3: Scottish landfill tax forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	140	131	120	120	127	140
<b>March 2016</b>	<b>143</b>	<b>134</b>	<b>121</b>	<b>120</b>	<b>122</b>	<b>124</b>
Difference	3	3	1	0	-5	-17

## Welsh forecast

4.17 The Welsh landfill tax forecast in Table 4.4 moves in line with our UK forecast. The forecast Welsh share is 4.3 per cent compared to the 4.4 per cent in 2013-14 shown in Table 4.1. Relative to our November forecast, total receipts are 2.2 per cent lower, with the main impact in the final two years, peaking at £5 million in 2020-21. They fall from £47 million in 2015-16 to £40 million in 2018-19 before rising slightly to £42 million in 2020-21. Applying the estimated Welsh share of the two policy measures described above adds £1 million a year to our Welsh landfill tax forecast by 2020-21.

4.18 Once again, this forecast does not make allowance for the Welsh Government's aspiration to reduce landfill tonnage at a faster pace than in England. If specific policies are announced that would be expected to lead to faster declines in landfill tonnage, we would consider them when producing our forecast. For now it is noted as a potential downside risk to this forecast.

Table 4.4: Welsh landfill tax forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	46	44	40	40	42	47
<b>March 2016</b>	<b>47</b>	<b>44</b>	<b>40</b>	<b>40</b>	<b>41</b>	<b>42</b>
Difference	1	1	0	0	-2	-5

## Aggregates levy

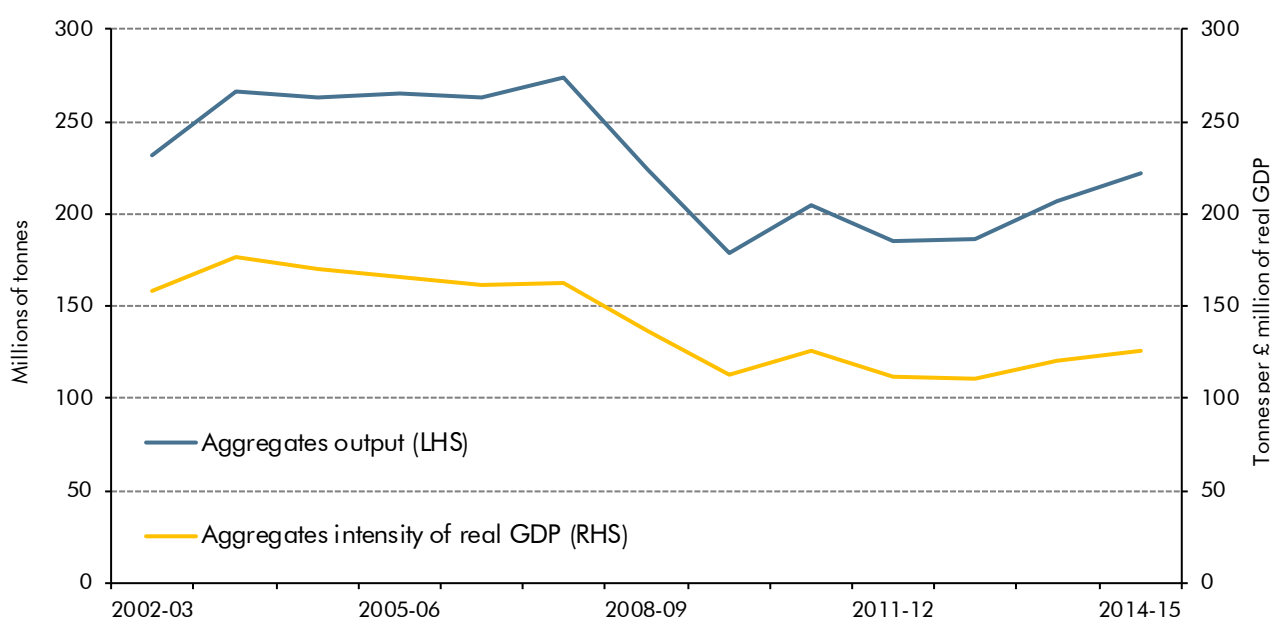
### Trends in UK aggregates levy receipts

4.19 The aggregates levy is a tax on the commercial exploitation in the UK of rock, sand and gravel. It is due from any business that quarries, dredges or imports these products. The levy came into effect in 2002. Our forecast for UK aggregates levy is driven by the tax base (the volume of aggregates exploited) and the effective tax rate that will be paid (largely driven by policy decisions on the rates paid, but also by the composition of the tax base as some aggregates are relieved or exempt from the levy). The tax base represents the main source of uncertainty in the forecast.



4.20 Since aggregates are largely an input into broader economic activity, we would expect the growth in the tax base to be associated with GDP growth. And since the tax is paid on the volume of aggregates (per tonne), the relationship should be with real GDP. As Chart 4.3 shows, that relationship has been one of relatively stable volumes of aggregates per unit of real GDP, with a shift in the level during the late 2000s recession that has persisted. Since the aggregates levy was introduced, output in absolute terms was relatively stable during the pre-crisis period, and then fell sharply in 2009-10. It was relatively stable again until 2012-13, but recently updated data suggest it has picked up again since then.

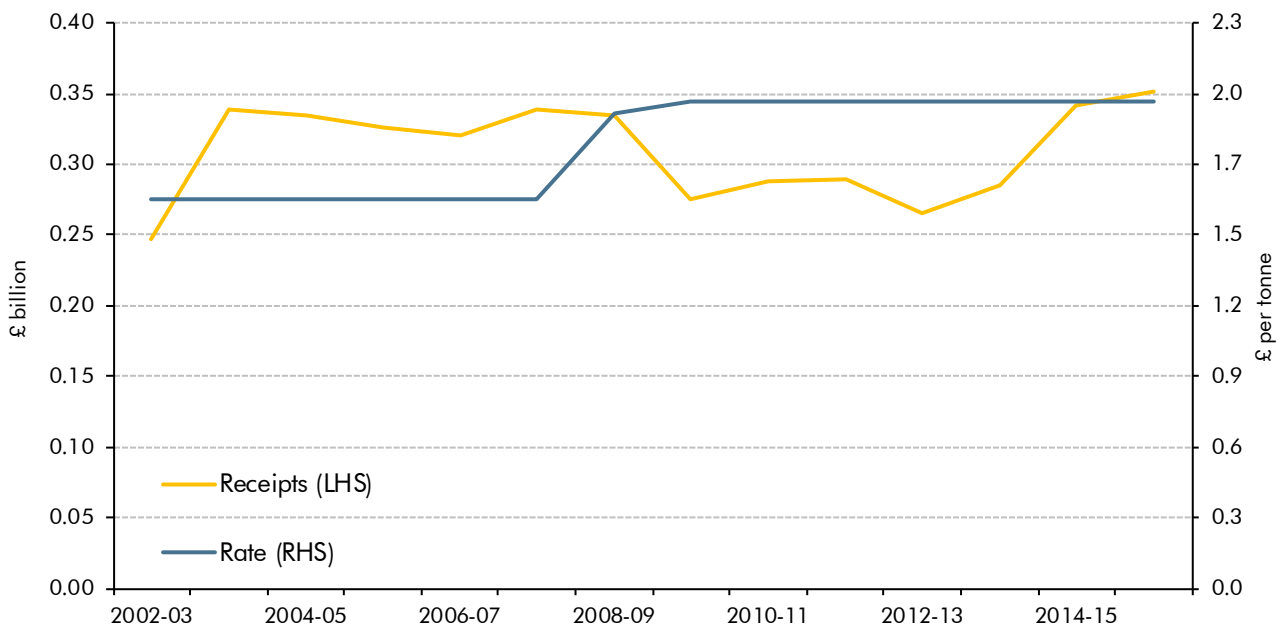
Chart 4.3: UK aggregates output relative to economic activity



Source: HMRC, ONS, OBR

4.21 As Chart 4.4 shows, aggregates levy receipts fell significantly after 2008-09 but have now returned to their pre-crisis levels. The increases in the rate per tonne in 2008-09 and 2009-10 were not sufficient to offset the fall in the tax base in 2009-10. With the rate per tonne frozen in recent years, receipts have been lifted by the pick-up in economic activity.

Chart 4.4: UK aggregates levy rate and receipts



Source: HMRC, OBR

### Scottish and Welsh rates

4.22 The Government has committed to keeping the devolution of aggregates levy to Scotland and Wales under review. Subject to the resolution of a legal challenge in the European courts, it intends to devolve this tax in the future.

### Methodology

4.23 The UK forecast is generated from a projection of the tax base multiplied by the tax rate. An econometric model relates the sales of primary aggregates to construction sector growth. The model also allows for use of recycled aggregates to increase over time and for substitution away from the extraction of primary aggregates. The tax rate is assumed to be uprated in line with RPI inflation, consistent with the default uprating assumption set by the Government.

4.24 To produce Scottish and Welsh aggregates levy forecasts, we apply our assumptions for their respective shares to the UK receipts forecast. These shares are estimated using data on the Scottish and Welsh share of aggregates production from the United Kingdom Mineral Yearbook 2013, which are shown in Table 4.5.

Table 4.5: Aggregates tonnage in the UK

	Tonnes (million)						
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
England	140.1	136.8	106.2	95.4	104.8	95.9	97.9
Scotland	37.2	32.3	28.4	28.6	27.5	24.8	22.1
Wales	20.8	18.0	12.2	12.6	13.6	12.3	12.9
Northern Ireland	6.7	5.3	4.8	3.9	20.0	18.4	18.4
<b>UK</b>	<b>204.8</b>	<b>192.5</b>	<b>151.6</b>	<b>140.5</b>	<b>165.9</b>	<b>151.3</b>	<b>151.3</b>
	Per cent of UK total						
Scotland	18.2	16.8	18.7	20.3	16.6	16.4	14.6
Wales	10.2	9.4	8.1	9.0	8.2	8.1	8.5

4.25 Finally, we add the Scottish and Welsh element of any policy measures to produce the post-measures forecast.

## UK forecast

4.26 Table 4.5 shows that aggregates tonnage across the UK has fallen 27 per cent since 2007-08. The decline has been significantly greater in Scotland (41 per cent) and Wales (38 per cent). An important element of the UK forecast is the result of a European Commission ruling that permitted the reinstatement of aggregates levy exemptions from 2015-16. Those exemptions help to explain a drop in receipts between 2014-15 and 2015-16. Relative to our November forecast, stronger than expected outturn receipts have led to a higher estimate for 2015-16, which is also reflected in subsequent years of the forecast. There is one aggregates levy policy measure in this Budget – ‘aggregates levy: freeze rates’ – that has a cost of £5 million a year from 2016-17 onwards.

Table 4.6: UK aggregates levy forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	334	343	368	363	366	370
<b>March 2016</b>	<b>351</b>	<b>352</b>	<b>375</b>	<b>371</b>	<b>374</b>	<b>377</b>
Difference	17	9	8	8	8	7

## Scottish forecast

4.27 Table 4.5 shows that the Scottish share of UK aggregates tonnage is relatively high at around 15 to 20 per cent of the UK total. For this forecast we have held the Scottish share constant at 14.6 per cent, reflecting the latest view on the Scottish share of receipts. Movements in the Scottish forecast therefore follow the UK forecast very closely. The measure described above lowers receipts by less than £1 million from 2016-17 onwards. Receipts rise from £51 million in 2015-16 to £55 million in 2017-18, and remain relatively flat thereafter.

Table 4.7: Scottish aggregates levy forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	49	50	54	53	53	54
<b>March 2016</b>	<b>51</b>	<b>51</b>	<b>55</b>	<b>54</b>	<b>55</b>	<b>55</b>
Difference	2	1	1	1	1	1

## Welsh forecast

4.28 Table 4.5 shows that the Welsh share of UK aggregates tonnage is also relatively high at around 8 to 10 per cent. For this forecast we have held the Welsh share constant at 8.5 per cent, reflecting the latest view on the Welsh share of receipts. The Welsh forecast therefore also follows the UK forecast very closely. The measure described above lowers receipts by less than £1 million from 2016-17 onwards. Receipts rise from £30 million in 2015-16 to £32 million in 2017-18, and remain flat thereafter.

Table 4.8: Welsh aggregates levy forecast

	£ million					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
November 2015	29	29	31	31	31	32
<b>March 2016</b>	<b>30</b>	<b>30</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>
Difference	1	1	1	1	1	1



