

Office for
**Budget
Responsibility**

Economic and fiscal outlook
Scottish tax forecasts

March 2014

Introduction

The Office for Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances. Twice a year, at the Budget and in the autumn, we produce forecasts for the UK economy and the public finances, which we publish in our *Economic and fiscal outlook (EFO)*. The Government has also asked us to forecast Scottish receipts from a number of taxes, which the Government will devolve to the Scottish Parliament from April 2015 onwards. This request arises from the Scotland Act, which received Royal Assent on 1 May 2012.

The Scotland Act gave new powers to the Scottish Parliament relating to taxation and borrowing. From April 2015, stamp duty land tax and landfill tax will be fully devolved to Scotland. From April 2016, the Scottish Parliament will be asked to set a Scottish rate of income tax, to replace a 10p reduction from each band of income tax.

The Command Paper that was published alongside the Scotland Bill set out our role in providing forecasts of Scottish income tax, landfill tax, stamp duty land tax and aggregates levy receipts.¹ At this stage, HM Treasury notionally assigns these forecast receipts to the Scottish Budget to show how much of what is currently grant funding would be replaced by tax, although the Scottish Budget will not vary as tax receipts vary until the devolution of these taxes is fully implemented.

We publish our forecasts for these taxes alongside each *EFO*, consistent with the main UK forecast it contains. As with our main UK forecasts these are 5-year forecasts. They are based on current Government policy, including the policies announced in the Budget.

We published a methodology note in March 2012 that described how we planned to forecast these Scottish tax receipts.² It explained that it is not possible to replicate the methodology we use to produce the UK forecasts directly. In particular, the macroeconomic data that we would need to produce a Scottish macroeconomic forecast and economic determinants are generally not available at a Scottish level or are only available with a long lag. We are therefore not able to produce a Scottish macroeconomic forecast to drive the Scottish tax forecast. Instead, the methodologies we use, described in more detail in the methodology note, are generally based on Scotland's historic share of the relevant UK tax stream. We then generally assume that this share will continue at its recent average level in the future.

We will consider the case for making adjustments if there is robust evidence of specific factors that may affect the Scottish share of the tax in the future. For example, if a newly announced policy can be expected to have a disproportionate impact on the Scottish share.

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69803/Scotland_Bill_Command_Paper.pdf

² <http://budgetresponsibility.org.uk/wordpress/docs/Forecasting-Scottish-taxes.pdf>

Introduction

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.

We consider these methodologies work-in-progress. The OBR's role in forecasting started three years ahead of the initial devolution of the taxes. This allows us to develop and improve forecasts in the light of experience and the availability of new information sources. The forecasts in this document implicitly assume unchanged policy in both the UK and Scotland. Both the bills for the Land and Buildings Transaction Tax and Landfill Tax have received Royal Assent. Once decisions (e.g. on tax rates and bands) have been made on these new taxes, we will produce forecasts based on the new tax regimes.

Producing the forecasts

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

- HMRC officials produced draft Scottish tax forecasts using a near-final pre-measures UK economic forecast. The BRC and OBR staff discussed these forecasts with HMRC and Scottish Government officials on 10 March; and
- in the final week before the Budget, HMRC officials provided us with a final set of Scottish forecasts using our final post-measures UK economic forecast and taking into account the effect of Budget policy measures. Due to the confidentiality of the measures we were unable to involve the Scottish Government in this stage of the process.

Summary of March 2014 Scottish tax forecasts

	£ million							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Income tax ¹	4,331	4,299	4,271	4,449	4,668	4,974	5,286	5,607
Stamp duty land tax	275	283	367	456	500	541	580	621
Landfill tax	95	100	111	117	109	100	98	101
Aggregates levy	47	43	44	45	46	46	47	48
Total	4,748	4,724	4,793	5,067	5,323	5,662	6,012	6,378

¹ Scottish income tax liabilities from Scottish rate

1 Scottish tax forecasts

1.1 In this section, we set out forecasts for the following Scottish taxes:

- income tax;
- stamp duty land tax;
- landfill tax; and
- aggregates levy.

Income tax

Scottish rate of income tax

1.2 Under the Scotland Act, the existing basic, higher and additional rates of income tax levied by the UK government will be reduced by 10p in the pound for those individuals defined as Scottish taxpayers from April 2016. The Scottish Parliament will then levy a new Scottish rate of income tax, which will apply equally to Scottish taxpayers in all of the main UK bands. The new Scottish income tax rate will need to be set every year by the Scottish Parliament. The block grant from the UK government to Scotland will then be reduced to reflect the fiscal impact of the devolution of these tax-raising powers.

1.3 The Scottish rate of income tax will be paid by Scottish taxpayers, 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 (i.e. earnings from employment, self-employment, pension income, taxable benefits and income from property). Tax liabilities for a particular year would include both PAYE (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).

1.4 We take a Scottish share of UK tax liabilities on non-savings, non-dividend income. References to a Scottish share are for liabilities specifically for the Scottish rate. We have assumed a 10p rate is levied in each year.

Forecast methodology

1.5 We build a UK forecast for non-savings, non-dividend income from the projections that are included in the receipts forecasts 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 forecast for SA in the *EFO* is on a receipts basis (i.e. when the cash is received). This is adjusted to be on a liabilities basis and to exclude the savings and dividend elements of SA; and
- PAYE repayments and repayments to pension providers, as included in our income tax repayments forecast.

1.6 We then apply the Scottish share to the total of these forecast components and finally add on the Scottish element of policy measures announced at Budget 2014.

UK forecast

1.7 Table 1.1 shows the UK forecast of tax liabilities on non-savings, non-dividend income. To aid comparison with the previous forecast, we have constructed a March forecast that excludes Autumn Statement 2013 measures. Compared with December, the UK forecast is higher in each year from 2014-15 onwards.

Table 1.1: UK forecast of tax liabilities on non-savings, non-dividend income (prior to Budget 2014 measures)

	£ billion							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Budget 14:								
Post AS 2013 measures	142.0	142.3	147.5	153.4	163.2	173.4	184.4	195.2
Pre AS 2013 measures (a)	142.0	142.3	147.5	152.5	163.2	173.5	184.6	195.5
Autumn Statement 2013 (pre-measures) (b)	142.1	142.1	147.8	151.9	162.2	171.8	182.4	194.3
Change (a-b)	0.0	0.2	-0.3	0.5	1.0	1.7	2.1	1.2

Sources: HMRC, OBR

1.8 The PAYE element of the UK forecast has been revised up throughout the forecast period. PAYE receipts have been modestly stronger than expected since the December forecast and these stronger receipts have been pushed through the forecast. The forecast for PAYE receipts has also been boosted by the upward revision to the level of employment in each year of the forecast.

1.9 Payments of SA relating to 2012-13 liabilities were made at the end of January 2014. Forecasts for SA receipts have been subject to large errors in recent years. However, the forecast for 2013-14 receipts (relating to 2012-13 liabilities) was very close to our December estimate. We have revised down 2013-14 UK SA liabilities reflecting revised modelling of the effect on non-savings, non-dividend income of forestalling related to the reduction in the additional rate of income tax to 45p. Towards the end of the forecast period, SA liabilities are expected to be stronger than our December forecast. We expect self-employment income and property income to be a little stronger than previously assumed.

- 1.10 PAYE repayments and repayments to pension providers are little changed from our December forecast.

Scottish share

- 1.11 The Scottish share of income tax liabilities is currently based on the Survey of Personal Incomes (SPI), an annual HMRC survey based on a large sample of individuals drawn from HMRC's PAYE, SA and claims systems. This is only available with a long lag. In the run up to the devolution of income tax, HMRC will be able to identify each individual taxpayer as Scottish or not and flag them appropriately on their PAYE and SA systems. Once this has been done, it will be possible to determine the Scottish share of UK liabilities with a high level of precision.
- 1.12 The 2011-12 SPI was published in January 2014 and suggests that the Scottish share was 3.08 per cent in 2011-12. This was higher than the 3.03 per cent assumed for the Scottish share in 2011-12 in our December forecast, but down from 3.15 per cent in 2010-11. Movements in the Scottish share can be due to the effect of different Scottish economic trends or policy measures that have different exchequer effects in Scotland and the UK as a whole. We have not adjusted the Scottish share for different Scottish economic trends but have made adjustments for the asymmetric effect of policy measures.
- 1.13 Scotland has a lower proportion of higher and additional rate taxpayers than the UK as a whole. In recent years, revenue-raising policies have generally targeted the top end of the income distribution such as the additional rate of income tax for incomes over £150,000, the withdrawal of personal allowances above £100,000, freezes in the basic rate limit and higher rate tax threshold and anti-avoidance measures. In contrast, tax reductions such as raising the personal allowance to £10,500 from 2015-16 would have a larger proportional effect on Scotland. Both of these effects would lower the Scottish share.
- 1.14 UK liabilities for both PAYE and SA have been affected by forestalling activity related to the additional rate of income tax. The introduction of the 50p rate prompted high-income earners to bring forward income to minimise tax, while the reduction to 45p led to shifting income forward for the same reason. We have allowed for an effect on the Scottish share from this forestalling behaviour. With a smaller proportion of additional rate taxpayers in Scotland, such behaviour will affect the Scottish share.
- 1.15 Table 1.2 shows our latest estimates of the Scottish share of income tax. The effect of the higher 2011-12 share persists through the forecast.

Table 1.2: Scottish share of income tax

	Fiscal Year; per cent							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
December 2013	3.03	3.01	2.88	2.88	2.87	2.87	2.87	2.87
March 2014	3.08	3.05	2.92	2.92	2.92	2.92	2.92	2.92

Sources: HMRC, OBR

Forecast of Scottish income tax liabilities from Scottish rate

1.16 Table 1.3 provides a forecast for Scottish income tax liabilities on non-savings, non-dividend income. As noted earlier, these are income tax liabilities specifically for the Scottish rate. Prior to a decision in the Scottish Parliament on the new Scottish income tax rate for the 2016-17 tax year, the forecast assumes that a 10p Scottish rate would be levied.

Table 1.3: Scottish income tax forecast

	£ million							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Scottish income tax liabilities (pre-measures)	4,331	4,299	4,267	4,437	4,713	5,010	5,326	5,637
Budget 2014 measures	0	0	4	11	-45	-37	-40	-30
Scottish income tax liabilities (post-measures)	4,331	4,299	4,271	4,449	4,668	4,974	5,286	5,607

Sources: HMRC, OBR

1.17 The main measures affecting income tax in Budget 2014 were:

- the rise in the personal allowance to £10,500 in 2015-16;
- the reforms related to pension withdrawals; and
- HMRC anti-avoidance measures, in particular the accelerated payments measure.

1.18 The overall effect of Budget 2014 measures is to lower Scottish income tax receipts. This is more than accounted for by the rise in the personal allowance to £10,500 in 2015-16. As was the case with previous personal allowance measures, we expect it to have a larger proportional effect on Scotland. The reforms related to pension withdrawals are assumed to have a similar effect in Scotland and the UK as a whole. The accelerated payments measure is assumed to have its greatest effect on high earners, so we have assumed a smaller proportional effect on Scotland.

1.19 Table 1.4 provides a breakdown of the change in the Scottish income tax forecast since December. Scottish income tax liabilities are higher in each year from 2011-12 onwards, reflecting the higher Scottish share and the stronger UK forecast from 2014-15. These offset the reduction in yield from the Budget 2014 measures and an adjustment related to the treatment of gift aid repayments. Gift aid repayments are likely to be excluded from the definition of Scottish income tax liabilities. As a result, we have made a deduction for the Scottish share of such repayments from the forecast.

Table 1.4: Changes in Scottish income tax since March

	£ million							
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
December 2013	4,310	4,275	4,250	4,377	4,652	4,918	5,218	5,551
March 2014	4,331	4,299	4,271	4,449	4,668	4,974	5,286	5,607
Change in income tax	21	23	21	71	15	56	68	56
of which:								
Scottish share	65	62	68	69	76	78	80	84
Previous measures	0	0	2	21	4	15	17	22
Gift Aid repayments	-43	-44	-44	-46	-48	-50	-53	-55
Budget 2014 measures	0	0	4	11	-45	-37	-40	-30
UK forecast	-1	5	-10	16	28	50	63	36

Sources: HMRC, OBR

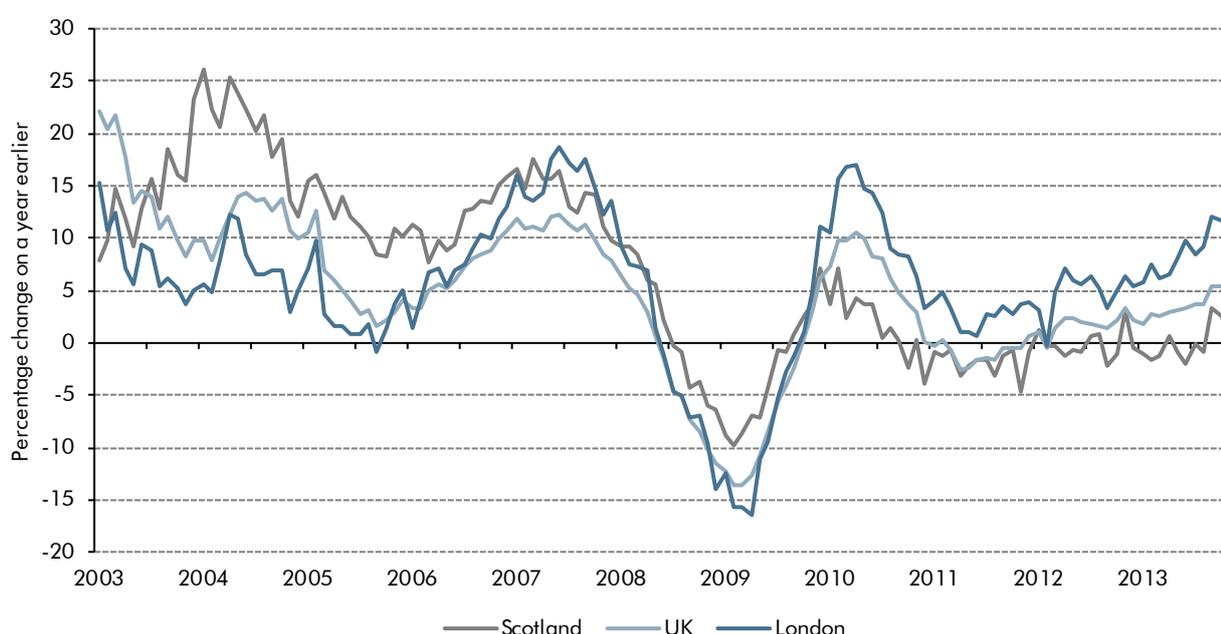
- 1.20 A pick-up in Scottish income tax receipts in 2014-15 will only bring the level of receipts just above their 2010-11 level. Thereafter, we expect more rapid growth in receipts. This reflects stronger growth in average earnings and rises in employment as the economy continues to recover. In addition, after 2015-16, the forecast assumes that tax thresholds and allowances are uprated with inflation. Above-inflation earnings growth then lifts receipts via 'fiscal drag', as people find more of their income above the tax threshold.

Stamp duty land tax

- 1.21 The Scotland Act provides for stamp duty land tax (SDLT) to be entirely devolved to Scotland in April 2015. A Land and Building Transaction Tax (Scotland) Bill (LBTT Bill) received Royal Assent on 31 July 2013.
- 1.22 In April 2015, the LBTT will replace the current UK-wide stamp duty land tax within Scotland. The main changes are:
- modifications to the structure of the tax from a slab structure to a slice structure;
 - 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.
- 1.23 The Scottish Government has not yet announced specific tax rates and bands, which are necessary for us to be able to produce a forecast of LBTT receipts. Therefore, our Scottish forecast effectively assumes that the current system of SDLT would remain after the tax is fully devolved. Once tax rates and bands are known, we will generate forecasts for the new tax.
- 1.24 Up until our December forecast, we typically made an assumption that receipts remained constant as a share of overall UK SDLT receipts. We are now taking into account recent

developments in regional house prices. Over the past year, the UK housing market has seen a significant pick-up in prices, but much of this has been concentrated in the South East of England and London in particular. London accounted for over 40 per cent of residential SDLT receipts in 2012-13, since more SDLT is paid on expensive properties and London has a disproportionate share of these. In the year to December 2013, house price growth, as measured by the ONS, was 12.3 per cent in London against 0.5 per cent in Scotland. In our previous forecast, the Scottish share of residential SDLT was adjusted from 3.5 per cent in 2012-13 to 3.3 per cent in 2013-14. We then held the share constant at 3.3 per cent over the rest of the forecast period.

Chart 1.1: House price growth in the UK, Scotland and London



Source: ONS, OBR

- 1.25 The indications are that the London housing market will continue to outpace other areas of the UK during 2014-15. We have therefore adjusted the Scottish share of residential SDLT to 3.1 per cent in 2014-15 and to 3.0 per cent in 2015-16. Thereafter, we assume housing market developments will be more evenly spread through the UK and hold the share at 3.0 per cent.
- 1.26 For commercial SDLT, we previously used a three-year average of the Scottish share and projected this forward. A share of 6.8 per cent was used throughout the forecast period in December. Based on in-year data for 2013-14, we have reduced the Scottish share for commercial SDLT to 5.9 per cent and used this in each year of the forecast.
- 1.27 Table 1.5 shows the UK forecasts for SDLT from both residential and commercial property. After upward revisions to UK SDLT receipts in the December forecast of £1.1 billion in 2013-14 and £3.5 billion by 2017-18, we have made further substantial upward revisions in our March forecast. Our projections for UK SDLT were raised by a further £0.6 billion in 2013-14 and by between £1.3 billion and £1.9 billion in each subsequent year. Much of

the increase reflects a rise in receipts from residential property. UK house prices are now expected to rise by 8.6 per cent in 2014-15 and remain strong in 2015-16. The profile for our residential property transactions forecast has been revised, bringing more of the growth in transactions into the early years of the forecast and reducing growth rates in the later years of the forecast. The level of transactions remains close to our December forecast by 2018-19.

Table 1.5: UK forecasts of Stamp Duty Land Tax

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Residential SDLT	4,912	7,063	10,146	11,734	12,828	13,807	14,936
Commercial SDLT	1,996	2,395	2,558	2,692	2,862	3,032	3,164
Total SDLT	6,907	9,458	12,704	14,426	15,689	16,840	18,100

Sources: HMRC, OBR

1.28 Policy measures announced in Budget 2014 and at recent Budgets will generally only affect the top end of the residential property market. Previous measures include the 7 per cent SDLT rate on residential properties over £2 million and measures to reduce avoidance on residential properties through enveloping and the 'subsale' rules. Budget 2014 announced measures to extend enveloping charges to properties between £500,000 and £2 million and accelerated payments in some SDLT cases where the tax is in dispute. For these measures, we have used a lower Scottish share than for SDLT excluding these measures. HMRC have estimated that only around 2 per cent of the residential SDLT yield for properties between £500,000 and £2 million can be attributed to Scotland. Table 1.6 shows the forecasts for Scottish SDLT.

Table 1.6: Forecasts of Scottish Stamp Duty Land Tax

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Residential SDLT	171	225	305	341	372	401	434
Commercial SDLT	112	142	151	159	169	179	187
Total SDLT	283	367	456	500	541	580	621

Sources: HMRC, OBR

1.29 Table 1.7 provides a breakdown of the changes in the Scottish SDLT forecast since our December forecast. Scottish SDLT is a little higher near term, but is lower from 2017-18 onwards. This reflects the lower Scottish shares adopted in the March forecast. Bringing more of the growth in residential property transactions into 2014-15 helps to explain stronger Scottish SDLT in that year.

Table 1.7: Changes in Scottish SDLT since December

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
December 2013	283	361	432	491	539	589	646
March 2014	283	367	456	500	541	580	621
Change in SDLT	0	5	25	9	3	-9	-24
of which:							
Scottish share	0	-23	-44	-59	-64	-68	-73
Budget 2014 measures	0	0	1	3	3	2	2
UK forecast	0	27	67	65	63	57	46

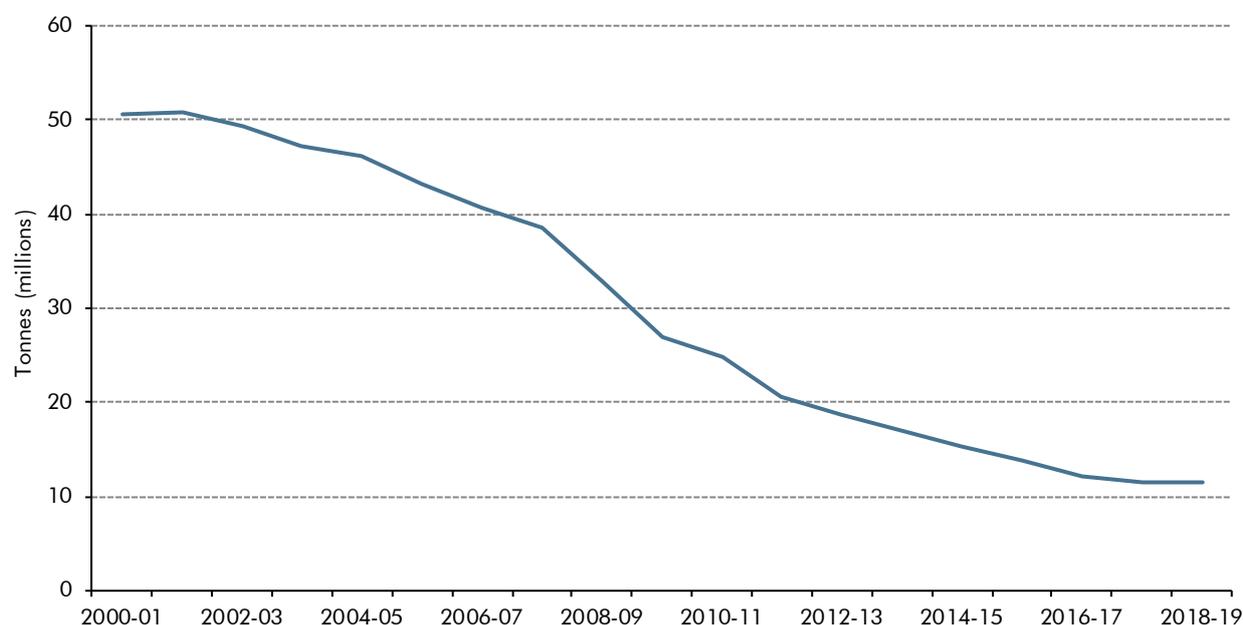
Sources: HMRC, OBR

- 1.30 Although the rise in Scottish SDLT is not as strong as that for SDLT in the UK as a whole, the forecast still assumes that receipts will double between 2012-13 and 2017-18. This reflects a number of factors. Firstly, the expected pick up in house prices in Scotland. Secondly, although property transactions have picked up recently, they remain well below their long-run trend, providing scope for further growth. Finally, the combination of higher house prices and fixed nominal tax thresholds in the UK system will have a ‘fiscal drag’ effect with a higher proportion of transactions becoming subject to higher stamp duty bands.

Landfill tax

- 1.31 The Scotland Act provides for landfill tax to be entirely devolved to Scotland in April 2015. The Landfill Tax (Scotland) Bill received Royal Assent on 21 January 2014.
- 1.32 As with SDLT, until decisions have been made by Scottish Ministers on the proposed new tax rates, the Scottish landfill tax forecast assumes that the current system of landfill tax remains after the tax is fully devolved in 2015. Once firm details of the tax rates are available, we will generate forecasts based on the new tax.
- 1.33 Scottish landfill tax is forecast using a constant Scottish share of UK landfill tax based on an average of the last three years. The latest Scottish share available is for 2011-12 and is 8.9 per cent. The three-year average is also 8.9 per cent which has not changed since December.
- 1.34 The Department for the Environment, Food and Rural Affairs (Defra) has recently updated its model for forecasting waste sent to landfill, the outputs of which are provided to HMRC and OBR as part of the UK landfill tax forecast. The forecast now better captures the trend decline in local authority waste sent to landfill. This reflects less waste being generated and increases in the recycling and incineration of waste. We have incorporated the steeper decline in both the UK and Scotland forecasts. Chart 1.2 shows outturns over the last decade and projections for tonnages for landfill charged at the standard rate.

Chart 1.2: Landfill charged at the standard rate



Source: HMRC, OBR

1.35 The steeper decline in tonnages sent to landfill explains the fall in the UK and Scottish forecasts for landfill towards the end of the forecast period as seen in Table 1.8. However, the near-term forecasts are up compared to December. This reflects stronger than expected UK landfill tax receipts for 2013-14. The rise in landfill tax receipts in both 2013-14 and 2014-15 reflects the pre-announced rises in the standard rate of landfill tax of £8 per tonne in both years, which more than offset the fall in tonnages sent to landfill. Thereafter tax rates will be uprated in line with inflation, which will generally be insufficient to offset the declining trend in tonnages.

Table 1.8: UK and Scottish forecasts of landfill tax

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
UK forecast	1,116	1,246	1,304	1,220	1,118	1,090	1,127
Scottish forecast	100	111	117	109	100	98	101

Sources: HMRC, OBR

1.36 We have also incorporated Budget 2014 measures to uprate the lower rate of landfill tax by inflation in each year from 2015-16 and the reduction in the Landfill Communities Fund. Table 1.9 shows the changes in the Scottish landfill tax forecast since December.

Table 1.9: Changes in the Scottish landfill tax since December

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
December 2013	99	96	99	104	104	108	110
March 2014	100	111	117	109	100	98	101
Change in landfill tax	0	15	17	6	-4	-10	-9
of which:							
Scottish share	0	0	0	0	0	0	0
Budget 2014 measures	0	0	0	1	1	1	1
UK forecast	0	14	16	5	-5	-11	-10

Sources: HMRC, OBR

Aggregates levy

- 1.37 The Command Paper commits the Government to keeping the devolution of aggregates levy to Scotland under review and states the intention, subject to the resolution of a legal challenge in the European Courts, of devolving this tax in the future. In the interim, the Treasury will assign aggregates levy receipts to Scotland in the same way as the other three taxes that are forecast.
- 1.38 We forecast Scottish aggregates levy by using a Scottish share of the UK total, based on the latest outturn share. The Scottish share for 2011-12 is 16.6 per cent, which is the same as assumed in our December 2013 forecast.
- 1.39 Table 1.10 shows the UK and Scottish aggregates levy forecast and Table 1.11 the changes in the Scottish aggregates levy since December. With no change in the Scottish share and very little change in the UK forecast, the forecast is very similar to December. Budget 2014 announced that the aggregates levy would be frozen at £2 in 2014-15, rather than rising in line with RPI inflation. This takes £1 million off the Scottish forecast for the aggregates levy.
- 1.40 The aggregates levy forecast is expected to rise from £44 million in 2013-14 to £48 million by 2018-19. Aggregates extraction is expected to decline modestly over the forecast period, in line with recent trends. This is offset by the assumption that duty rates are uprated with inflation from 2015-16 onwards.

Table 1.10: UK and Scottish forecasts of aggregates levy

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
UK forecast	261	267	280	283	287	293	298
Scottish forecast	43	44	45	46	46	47	48

Sources: HMRC, OBR

Table 1.11: Changes in the Scottish aggregates levy forecast since December

	£ million						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
December 2013	43	44	47	47	48	49	50
March 2014	43	44	45	46	46	47	48
Change in aggregates levy	0	0	-1	-2	-2	-2	-2
<i>of which:</i>							
Scottish share	0	0	0	0	0	0	0
Budget 2014 measures	0	0	-1	-1	-1	-1	-1
UK forecast	0	0	0	0	0	0	-1

Sources: HMRC, OBR

