Office for
Budget Responsibility

Devolved taxes forecast

November 2017

1 Introduction

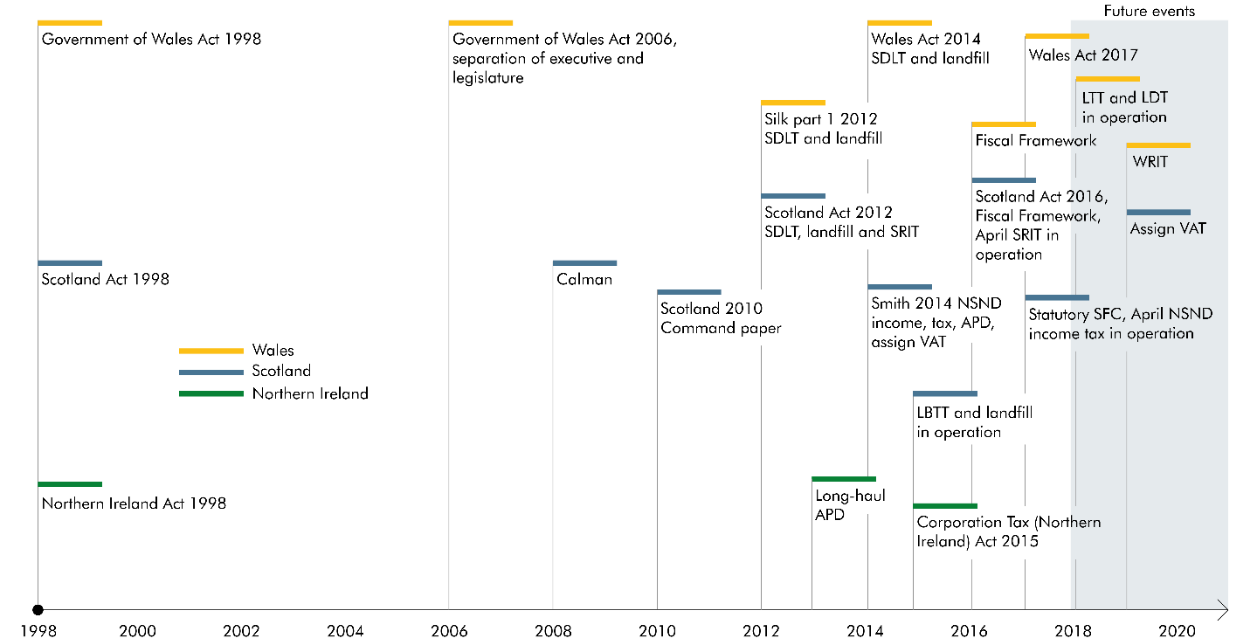
1.1 The Office for Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances. Alongside the UK Government's Budgets and other fiscal statements, we produce forecasts for the economy and the public finances. We publish these in our *Economic and fiscal outlook* (*EFO*).

1.2 Since 2012, we have forecast some tax streams that are devolved to the Scottish Parliament. Since 2014, we have also produced forecasts of taxes that are being devolved to the National Assembly for Wales. These forecasts are published alongside each *EFO* and are consistent with our main UK forecasts.

Devolution of fiscal powers to the Scottish Parliament and the Welsh and Northern Irish Assemblies

1.3 The process of fiscal devolution to Scotland, Wales and Northern Ireland began in 1998 with the passing of a Scotland Act, a Government of Wales Act and a Northern Ireland Act. These set up the Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly. Figure 1.1 shows the timeline of some of the key devolution milestones since then, including some significant recent and forthcoming changes.

Figure 1.1: Fiscal devolution timeline



Scotland

The Scotland Act 2012

1.4 The Scotland Act 2012 gave new powers to the Scottish Parliament relating to taxation and borrowing. The Command Paper: *Strengthening Scotland's Future*[1] – published alongside the Scotland Bill in 2010 – set out our role in providing forecasts of Scottish income tax, landfill tax, stamp duty land tax (SDLT) and aggregates levy receipts.

1.5 In April 2015, SDLT and landfill tax were fully devolved to the Scottish Parliament, which replaced them with the land and buildings transaction tax (LBTT) and the Scottish landfill tax (SLfT). April 2016 saw the introduction of the Scottish rate of income tax (SRIT). This replaced a 10p reduction from each rate of UK income tax, with rates set annually by the Scottish Parliament. The UK Government has legislated to devolve the aggregates levy to the Scottish Parliament, to come into effect after resolution of legal challenges affecting the levy.

The Scotland Act 2016

1.6 The Scotland Act 2016 implemented the recommendations of the 2014 Smith Commission. These included the devolution of:

- more flexible powers over non-savings non-dividend **income tax** than those in the 2012 Act, with effect from April 2017. The Scottish Parliament set rates and thresholds for this for the first time in February 2017 (see Chapter 2);
- **air passenger duty**, which was due to be devolved in April 2018 and replaced with an 'air departure tax' but the precise timing of devolution is now under review;
- the assignment of a share of UK **VAT** receipts to begin in 2019-20;
- **aggregates levy**, although the timing remains uncertain and subject to the conclusion of ongoing legal challenges; and
- some **social security benefits**. We include an illustrative estimate of one of these benefits – carer's allowance – for the first time in Annex A.

1.7 The Act gave the Scottish Government increased borrowing powers. It also set out the OBR's right to information from the Scottish authorities in order to carry out our statutory duties.

Scottish Government fiscal framework

1.8 In February 2016 the Scottish and UK Governments agreed the Scottish Government's fiscal framework. This establishes a mechanism for adjusting the Scottish Government's block grant to reflect the further devolution of tax and spending powers. It will be in place until

[1] *Strengthening Scotland's Future*, November 2010, Cm 7973.

2021 when it is due to be reviewed by the two governments. The Scottish Government's block grant will continue to be determined via the 'Barnett' formula, but then adjusted as set out in the fiscal framework. The OBR has no direct involvement in block grant decisions or adjustments, so we do not discuss any such changes in this document.

Scottish Fiscal Commission

1.9 The Scottish Parliament's Scottish Fiscal Commission Act 2016 established the Scottish Fiscal Commission (SFC). The SFC was initially established in June 2014 to scrutinise the Scottish Government's forecasts of LBTT, Scottish landfill tax and non-domestic rates collected by Scottish local authorities. Since April 2017 the SFC has had a statutory remit to prepare independent forecasts for the Scottish economy and the Scottish Government's tax revenues and devolved social security spending.

1.10 We work closely with the SFC to ensure that we can bring all relevant information to bear in producing our Scottish tax forecasts and have published on our website the principles we use to guide engagement between our two organisations.

Wales

The Wales Act 2014

1.11 The Wales Act 2014 gave new powers to the Welsh Assembly relating to taxation and borrowing. It provided 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 Welsh rates of income tax (WRIT), which would operate in a similar way to the SRIT. The UK Government intends to devolve the aggregates levy too, again subject to the resolution of ongoing legal challenges.

1.12 The Command Paper: *Wales Bill: Financial Empowerment and Accountability*[2] – 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 includes forecasts for SDLT, landfill tax, aggregates levy and the WRIT.

Tax Collection and Management (Wales) Act 2016

1.13 The Tax Collection and Management (Wales) Act 2016 created a new Welsh Revenue Authority, which will oversee the collection of devolved taxes in Wales. The Welsh Government has announced it will replace SDLT with a 'land transaction tax' (LTT) and landfill tax with a 'landfill disposals tax' (LDT). Further details about these taxes were announced as part of the Welsh Government's budget on 3 October 2017.

[2] *Wales Bill: Financial Empowerment and Accountability*, March 2014, Cm 8838.

The Wales Act 2017

1.14 The Wales Act 2017 removed the requirement for a referendum before the WRIT can be introduced. The WRIT will take effect in April 2019. It also increased the Welsh Assembly's borrowing powers and set out the OBR's right to information from the Welsh authorities.

Welsh Government fiscal framework

1.15 In December 2016 the Welsh and UK Governments agreed the Welsh Government's fiscal framework. This establishes a mechanism for adjusting the Welsh Government's block grant to reflect the devolution of tax powers. The block grant will be determined via the 'Barnett' formula plus a new 'needs-based factor' as recommended by the Holtham Commission.[3] The block grant is then adjusted as set out in the fiscal framework. Again, the OBR has no direct involvement in block grant decisions or adjustments, so we do not discuss any such changes in this document.

1.16 We work with the Welsh Government to ensure that we can bring all relevant information to bear in producing our Welsh tax forecasts and have agreed principles to guide our engagement that are available on our website.

Northern Ireland

1.17 In November 2015, the Northern Ireland Executive (NIE) 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 March 2015. The NIE has announced its intention to set a 12.5 per cent rate, to match that in the Republic of Ireland. While legislation has been passed, the final devolution is subject to agreement between the UK Government and the NIE, which has not yet been reached.

1.18 We plan to work with analysts in HMRC and the NIE to incorporate an estimate of the effect of this policy change on UK-wide receipts once agreement has been reached between the NIE and the UK Government. The NIE has estimated that £768 million of UK CT receipts in 2013-14 could be attributed to Northern Ireland, which was higher than HMRC's estimate of £485 million for the same year. HMRC put the amount at £662 million in 2016-17.[4]

1.19 The UK CT rate is due to be 19 per cent in April 2018, 6.5 percentage points higher than the proposed rate in Northern Ireland, with a further cut to 17 per cent due in April 2020. We would anticipate there being important behavioural effects that would need to be taken into account in order to estimate how much our UK-wide receipts forecast would be affected by a reduction in the rate in Northern Ireland. But the pre-behavioural effect on CT receipts

[3] Formally, the 'Independent commission on funding and finance for Wales'.

[4] The differences are likely to be explained by differences in methodology. The NIE'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 'Northern Ireland net fiscal balance report 2012-13 and 2013-14' and 'A disaggregation of HMRC tax receipts between England, Wales, Scotland & Northern Ireland'. HMRC's methodology has been used by the ONS in its 'Country and regional public sector finances' publication.

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.

1.20 Air passenger duty on direct long-haul flights departing from airports in Northern Ireland was devolved to the NIE from January 2013, and has been set to zero.

Forecast methodology and process

1.21 It is not possible to replicate in full the methodology we use to produce our UK-wide forecasts when producing these devolved taxes forecasts. In particular, the macroeconomic data that we would need to produce a Scottish or Welsh macroeconomic forecast and economic determinants are either not available at a devolved level or are only available with a long lag. We are therefore not able to produce a Scottish or Welsh macroeconomic forecast to drive the relevant tax forecasts. These challenges would apply equally to any future forecast of Northern Ireland taxes.

1.22 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 remain close to recent levels, unless available evidence suggests we should make adjustments to ensure our forecasts are central. For example, if a newly announced policy were expected to have a disproportionate impact on a particular tax stream in Scotland or Wales, or there is evidence pointing to different trends in an underlying tax base. The exceptions to this are our LBTT and Scottish landfill tax forecasts, for which we are able to take into account outturns since the devolution of these taxes in April 2015.

1.23 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.

1.24 For the first time we include an aspect of social security spending in Scotland. Confirmation that carer's allowance was to be devolved imminently was received too late in the forecast process for us to produce anything more than an illustrative projection on this occasion. We will look to refine our approach for future forecasts (see Annex A).

Policy costings

1.25 The *Charter for Budget Responsibility* requires the OBR's published forecasts to reflect the impact of "*all Government decisions and all other circumstances that may have a material impact on the fiscal outlook. In particular where the fiscal impact of these decisions and circumstances can be quantified with reasonable accuracy*". The Treasury is responsible for the costing of UK Government policies, which it does by coordinating a process that delegates the analysis to the departments responsible for implementing the policy. Our role is to state publicly whether we believe each costing to be reasonable and central. This involves a detailed process of scrutiny and discussion with the Treasury and relevant departments. We then incorporate these costings (or our preferred ones – something that to date we have not found necessary) in our forecasts.[5]

1.26 The *Charter* also states that "*where the fiscal impact of these decisions and circumstances cannot be quantified with reasonable accuracy, these impacts should be noted as specific fiscal risks*". Where the UK Government has voiced a policy aspiration or ambition but not supported it with precise details, such as the timetable for implementation, we would not include it in our central forecast, but would instead note it as a fiscal risk in our *EFO*. We ask the Treasury to confirm whether or not such aspirations reflect firm Government policy.

1.27 We follow the same approach for our devolved tax forecasts. For UK Government policies that affect a devolved tax, we ask that the relevant effect is estimated with supporting evidence. For a policy change in a devolved tax, we scrutinise a five-year costing and only include it in our forecast if we consider it reasonable and central. We would not include the effects of a devolved tax policy if it was not deemed a firm commitment – for example before it had been presented in sufficient detail to the relevant legislature as part of a formal budget process. We would also not include the effects of a policy until we had sufficient detail on its operation in each specific year of the forecast. Where we cannot include the effects in our central forecast, we note them as a fiscal risk.

Forecast process

1.28 The process for producing this devolved tax forecast has been as follows:

- **HMRC officials and OBR staff produced draft Scottish and Welsh tax forecasts** using our pre-measures UK economy and fiscal forecasts. This took into account the latest available information on LBTT and Scottish landfill tax. The BRC and OBR staff challenged these forecasts with officials from HMRC, the SFC and the Scottish and Welsh Governments at meetings held on 19 and 27 October.

- **In the final week before the Budget, HMRC officials and OBR staff provided a final set of Scottish and Welsh tax forecasts** using our final post-measures UK economy and fiscal forecasts, taking into account Budget policy measures. Due to the confidentiality of the UK Government's policy measures, we were unable to involve the Scottish and Welsh Governments in this stage of the process.

1.29 The Scottish Government produced its most recent five-year receipts forecasts it's Draft Budget in December 2016, following scrutiny by the SFC. The Welsh Government produced its most recent receipts forecasts in its Draft Budget in October 2017, with scrutiny provided by academics at the University of Bangor. The forecasts we present in this document are our own. Differences between our forecasts and those of the Scottish and Welsh Governments are explained in each chapter.

[5] See *Briefing paper No.6: Policy costings and our forecast* for a detailed description of this process.

UK-level economic determinants

1.30 Our fiscal forecasts are based on the economy forecasts presented in Chapter 3 of our *EFO*. Most economic forecasts focus on the outlook for real GDP, but it is nominal GDP – affected both by volumes and prices – that matters most when forecasting the public finances. Tax forecasts are particularly dependent on the profile and composition of economic activity. Tables 1.1 and 1.2 set out the key economic determinants of the devolved taxes forecast and how they have changed since our March forecast.

Table 1.1: Key determinants of the devolved taxes forecast

	Percentage change on previous year, unless otherwise specified						
	Outturn	Forecast					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
GDP							
Real GDP	1.8	1.5	1.4	1.3	1.3	1.5	1.5
Nominal GDP	4.2	3.1	2.8	2.7	3.1	3.4	3.3
Inflation							
RPI (September)	2.1	3.8	3.1	2.8	2.9	2.9	3.0
CPI (September)	1.1	3.0	2.2	1.8	2.0	2.0	2.0
Income tax							
Average earnings	2.9	2.3	2.2	2.4	2.7	3.1	3.1
Employment (millions)	31.8	32.1	32.3	32.5	32.5	32.6	32.7
Property							
Residential property prices	6.1	4.1	2.8	3.0	2.9	3.4	3.6
Residential property transactions (000s)	1156	1230	1263	1287	1310	1328	1349
Commercial property prices	-12.3	1.1	-0.7	1.3	1.8	1.8	1.8
Commercial property transactions	6.5	-0.9	1.5	1.2	1.5	1.6	1.6

Table 1.2: Change in key determinants of the devolved taxes forecast

	Percentage change on previous year, unless otherwise specified				
	Forecast				
	2017-18	2018-19	2019-20	2020-21	2021-22
GDP					
Real GDP	-0.3	-0.2	-0.5	-0.6	-0.5
Nominal GDP	-0.2	-0.2	-0.2	-0.2	-0.2
Inflation					
RPI (September)	-0.1	-0.3	-0.3	-0.2	-0.2
CPI (September)	0.4	-0.1	-0.1	0.0	0.0
Income tax					
Average earnings	-0.3	-0.6	-0.6	-0.8	-0.6
Employment (millions)	0.2	0.2	0.2	0.2	0.2
Property					
Residential property prices	-1.6	-1.3	-1.5	-1.6	-1.3
Residential property transactions (000s)	-50.2	-31.3	-17.8	-4.9	5.3
Commercial property prices	3.9	-2.3	-0.3	-0.1	-0.1
Commercial property transactions	-2.6	-0.1	-0.5	-0.5	-0.4

Summary of forecasts

Tax-by-tax forecasts for Scotland and Wales

1.31 Tables 1.3 and 1.4 detail our forecasts for the Scottish and Welsh taxes.

Table 1.3: Summary of November 2017 Scottish tax forecasts

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Income tax	4,526	11,718	11,995	12,384	12,935	13,595	13,595
LBTT	478	553	601	653	715	780	780
Scottish landfill tax	154	149	122	113	110	109	109
Aggregates levy	53	51	54	54	54	55	55
Air passenger duty	301	316	327	342	359	377	377
Total	5,513	12,786	13,099	13,546	14,174	14,915	14,915

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Table 1.4: Summary of November 2017 Welsh tax forecasts

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Income tax	1,935	1,980	2,011	2,058	2,132	2,209	2,287
SDLT	208	241	252	271	293	315	338
Landfill tax	32	26	23	21	19	18	17
Aggregates levy	39	36	36	36	36	37	37
Total	2,215	2,283	2,322	2,385	2,480	2,579	2,679

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Country-by-country tax forecasts

1.32 Tables 1.5 to 1.9 summarise each of our forecasts by country.

Table 1.5: Income tax on non-savings, non-dividend income

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Whole UK NSND income tax	161,841	166,790	170,456	175,319	181,914	189,076	196,377
of which:							
Scottish income tax (full NSND basis)	11,520	11,932	12,153	12,462	12,943	13,432	13,935
Welsh income tax (WRIT basis)	1,935	1,980	2,011	2,058	2,132	2,209	2,287
UK excluding Scottish income tax	150,321	154,858	158,303	162,856	168,971	175,644	182,442
UK excluding Scottish and Welsh income tax	148,386	152,879	156,292	160,798	166,840	173,435	180,155

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Table 1.6: Property transactions taxes

	£ million						
	Outturn	Forecast					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2023-23
Whole UK property transaction taxes	12,246	13,621	13,890	14,468	15,175	15,985	16,814
of which:							
Scottish LBTT	481	553	581	618	657	703	750
Welsh SDLT / LTT	208	241	252	271	293	315	338
UK excluding Scottish LBTT	11,765	13,068	13,309	13,850	14,519	15,282	16,064
UK excluding Scottish LBTT and Welsh SDLT / LTT	11,557	12,827	13,057	13,580	14,226	14,966	15,725

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Table 1.7: Landfill taxes

	£ million						
	Outturn	Forecast					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Whole UK landfill taxes	991	837	757	687	637	605	573
of which:							
Scottish landfill tax (already devolved)	148	140	123	108	101	95	90
Welsh landfill tax / LDT	32	26	23	21	19	18	17
UK excluding Scottish landfill tax	843	697	634	578	537	510	482
UK excluding Scottish and Welsh landfill taxes / LDT	811	670	611	558	517	492	465

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Table 1.8: Aggregates levy

	£ million						
	Outturn	Forecast					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Whole UK aggregates levy	413	376	378	378	381	386	389
of which:							
Scottish aggregates levy	60	55	55	55	55	56	56
Welsh aggregates levy	39	36	36	36	36	37	37
UK excluding Scottish aggregates levy	353	321	323	323	326	330	333
UK excluding Scottish and Welsh aggregates levy	314	285	287	287	289	293	295

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Table 1.9: Air passenger duty

	£ million						
	Outturn	Forecast					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Whole UK air passenger duty	3,236	3,326	3,499	3,662	3,784	3,921	4,067
of which:							
Scottish duty	282	290	305	317	327	339	352
UK excluding Scottish duty	2,954	3,037	3,194	3,345	3,456	3,582	3,715

Shaded cells represent notional estimates for years when tax devolution has not occurred or been confirmed.

Structure of the document

1.33 The rest of this document is structured as follows:

- **Chapter 2** presents our forecast of income tax on non-savings non-dividend income in Scotland and Wales.
- **Chapter 3** shows our forecast for LBTT in Scotland and LTT in Wales.
- **Chapter 4** discusses our forecasts for landfill taxes in Scotland and Wales, Scottish and Welsh shares of UK aggregates levy and the Scottish share of UK air passenger duty.
- **Annex A** provides an overview of carer's allowance spending in Scotland.

2 Income tax

Scottish Government income tax

2.1 The Scottish Government's income tax is levied on non-savings, non-dividend (NSND) income liabilities. This includes earnings from employment, self-employment, pension income, foreign income, taxable benefits and income from property. Tax liabilities for a particular year 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).

2.2 The Scottish income tax rates must be set every year by the Scottish Parliament. An individual's 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 are defined as a Scottish taxpayer. It is taxpayers' responsibility to tell HMRC their correct address. HMRC has confirmed that the operation of Scottish income tax is on track, including compliance provision for different tax levels in Scotland and the rest of the UK.

2.3 Under the Scotland Act 2012, the existing basic, higher and additional rates of income tax levied by the UK Government were reduced by 10p in the pound for those individuals defined as Scottish taxpayers from April 2016. The Scottish Parliament then levied a new Scottish rate of income tax (SRIT), which applied equally to Scottish taxpayers in all the main UK bands. The Scottish Government chose to maintain the rates at the same level as the rest of the UK for 2016-17.

2.4 The Scotland Act 2016 provides for wider ranging powers over income tax, including the power to vary the three rates – basic, higher and additional – and thresholds separately, as well as creating new bands paying different rates. The Scottish Government does not have the power to classify income as NSND or change the income tax personal allowance, but it could create a similar the effect of increasing the allowance by creating a zero rate band. From 2017-18 onwards the Scottish Government retains full NSND income tax liabilities from taxpayers in Scotland. All other income tax revenues remain reserved.

2.5 As part of its most recent Budget process the Scottish Government announced rates and thresholds for the Scottish NSND income tax for 2017-18. Our forecast includes these, along with an assumption that future rates increase in line with CPI inflation.

Welsh rate of income tax

2.6 The Wales Act 2014 gave the Welsh Assembly the power to set Welsh rates of income tax (WRIT), as levied on NSND income liabilities, subject to a referendum. The Wales Act 2017 removes the need for a referendum prior to the implementation of income tax devolution and, following the publication of the Welsh Government's fiscal framework in December 2016, Welsh rates of income tax will be devolved from April 2019. The income tax levied by the UK Government will be reduced by 10p in the pound for those individuals defined as Welsh taxpayers. The Welsh Assembly will then levy separate Welsh rates for each band of income tax. The new Welsh income tax rates will be set every year by the Welsh Assembly. The block grant from the UK Government to Wales will then be reduced to reflect the fiscal impact of the devolution of these tax-raising powers. An individual will be defined as a Welsh taxpayer if their main residence is in Wales.

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

Methodologies

2.8 We generate a UK forecast for NSND income tax liabilities from the full UK income tax liabilities forecast published in our *Economic and fiscal outlook (EFO)*. The key components of the UK forecast are:

- Total **pay-as-you-earn (PAYE)** liabilities.
- **Self-assessment (SA)** liabilities on NSND income. For this forecast we exclude savings and dividends elements of SA income tax and adjust it to be on a liabilities basis (i.e. when the activity occurred). The full UK forecast is on a receipts basis (i.e. when the cash is received), consistent with the treatment of SA receipts in the public sector finances data.
- **PAYE repayments and repayments to pension providers**, from our income tax repayments forecast.

2.9 We apply the latest estimated Scottish and Welsh shares to the UK total of these forecast components. These historically derived shares are adjusted for factors that can be forecast, such as when a previous policy costing has an asymmetric effect and differences in population growth. We also include deductions in respect of the Scottish and Welsh shares of Gift Aid repayments.

2.10 Finally, we add estimates of the Scottish and Welsh income tax element of new UK Government policies in this Budget.

Scottish and Welsh shares of income tax

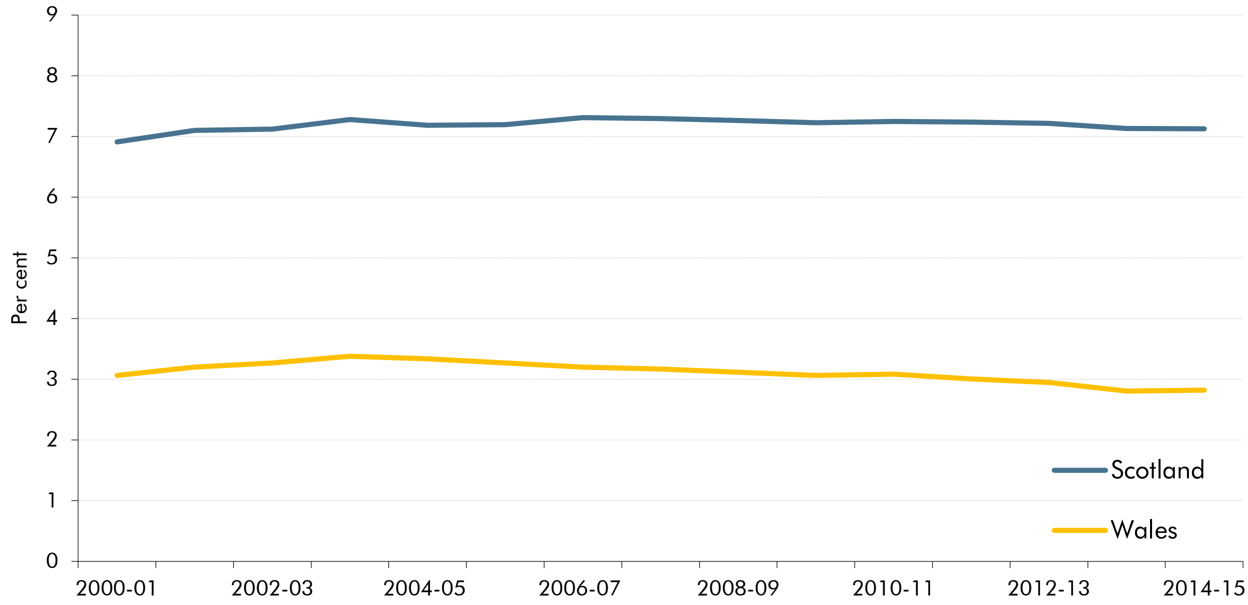
2.11 Our estimates of the Scottish and Welsh shares of UK income tax use historical information from the Survey of Personal Incomes (SPI), an annual survey based on a sample of around 730,000 individuals in contact with HMRC during the course of the year through the PAYE, SA or repayment claim systems. The SPI data are published with a long lag. This forecast is based on the same 2014-15 SPI that we used in March.

2.12 There are some other limitations to using the SPI to generate the respective income tax shares. First, some observations within the SPI are missing location data and in other cases the location can be hard to determine. Second, sampling errors within the SPI could cause bias. While the Scottish- and Welsh-specific errors are unknown, at the UK level we can compare the total receipts captured in the SPI to actual receipts received by HMRC. This error was 0.5 per cent in 2013-14, but increased to 2.0 per cent in 2014-15.

2.13 HMRC continues to develop its real-time information (RTI) reporting for the entire population of PAYE income taxpayers and intends to publish summary information once quality assurance procedures have been completed. We draw on provisional analysis of RTI when preparing our UK and devolved tax forecasts. This suggests that the latest Scottish and Welsh shares may be lower than those derived by projecting forward SPI data. However, the analysis of RTI data remains at an early stage and still subject to significant uncertainty, so for now we note this as a downside risk to our forecast. We hope to make further use of RTI data in our future forecasts.

2.14 Chart 2.1 shows the latest SPI-based estimates of the Scottish and Welsh share of total income tax, including from savings and dividends. The Scottish share has been fairly stable at close to 7.2 per cent in most years, with a slight decline in recent years. The Scottish share of savings and dividend income is lower than its share of total income tax, which means that its share of NSND income is higher. SPI data report that the Scottish share of NSND income in 2014-15 was 7.3 per cent. The Welsh share has been declining since peaking in 2003-04 at 3.4 per cent. It reached 2.8 per cent in 2014-15. In both cases the share is lower than the countries' share of the UK population: in 2014, 8.2 per cent of the UK's population lived in Scotland and 4.8 per cent in Wales.

Chart 2.1: Scottish and Welsh historic share of all income tax receipts



Note: Data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.
Source: HMRC national statistics table 3.11

2.15 The trends in the Scottish and Welsh shares shown in Chart 2.1 will have reflected at least four main factors, some of which we make assumptions about when projecting the shares forward in our devolved taxes forecast. They are: population growth, labour markets trends, the distribution of income and the effect of Government policy decisions.

Population growth

2.16 Trends in population growth differ across the countries of the UK, with the Scottish and Welsh populations assumed to grow more slowly than the rest of the UK. This is explained by lower life expectancy, fertility and net international migration. The latest ONS principal population projections suggest that the gap has narrowed, so we assume higher Welsh and Scottish population shares than we did in March, which increases their shares of income tax liabilities. The respective adult population projections are set out in Table 2.1.

2.17 We continue to use the projection for 'adults aged 16 and over' for this adjustment, but our results are not sensitive to using the 'total' or 'working-age' populations. This is a relatively simple adjustment that we feel will improve our forecast accuracy, but many factors remain that we have not tried to adjust for, such as the knock-on effects from demographic trends to employment rates or wider differences in labour markets or the earnings distribution. These issues will remain under review.

Table 2.1: ONS principal populations for adult population (2016-based)

	Population over 16				
	Millions			Per cent of UK	
	Wales	Scotland	UK	Wales	Scotland
2014-15	2.54	4.44	52.44	4.84	8.46
2015-16	2.54	4.46	52.85	4.81	8.44
2016-17	2.56	4.49	53.26	4.80	8.43
2017-18	2.57	4.51	53.55	4.79	8.42
2018-19	2.58	4.53	53.83	4.79	8.41
2019-20	2.59	4.54	54.11	4.78	8.39
2020-21	2.59	4.56	54.40	4.77	8.38
2021-22	2.60	4.57	54.68	4.76	8.36
2022-23	2.61	4.59	54.99	4.75	8.34

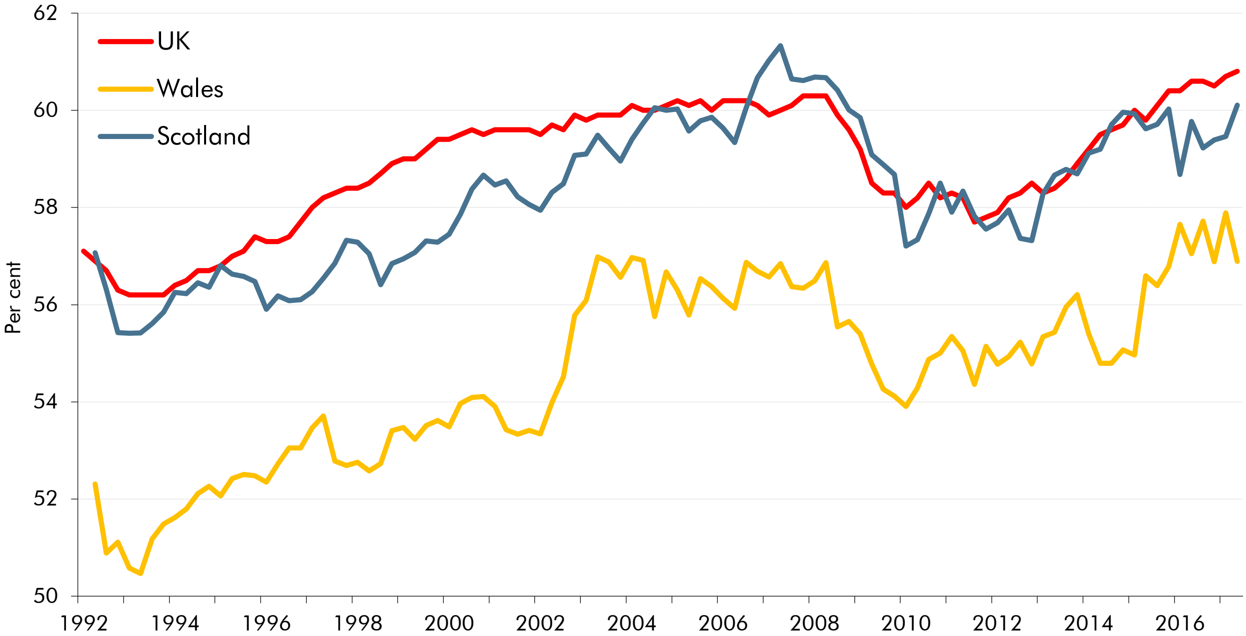
Note: We assume the ONS mid-year population is a reasonable proxy for the population at the start of the financial year.

Labour market trends

2.18 After considering the overall size of the population, the proportion of the population in employment and their productivity will also be key influences on the relative share of NSND income. We continue to assume that employment and output-per-worker in Scotland and Wales grow at the same pace as the UK as a whole – so differences in employment rates and productivity in the base data are held constant across the forecast. Chart 2.2 shows that the employment rate in Scotland has generally been similar to that in the UK as a whole, but it has typically been lower in Wales. Unemployment rates are similar, so the lower Welsh employment rate mainly reflects a higher inactivity rate.

2.19 Since 2014-15, the most recent year covered by the SPI, employment rates in Scotland have been weaker than the UK as a whole while those in Wales have been stronger. For now we have not adjusted our central forecast for these effects since they capture only one factor of the many that determine total income per person. Capturing trends in employment without also capturing potentially offsetting trends in average hours worked or productivity could bias our forecasts. In our recent UK forecasts, we have often seen upside surprises in employment accompanied by downside surprises in output and earnings per worker.

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



Source: ONS

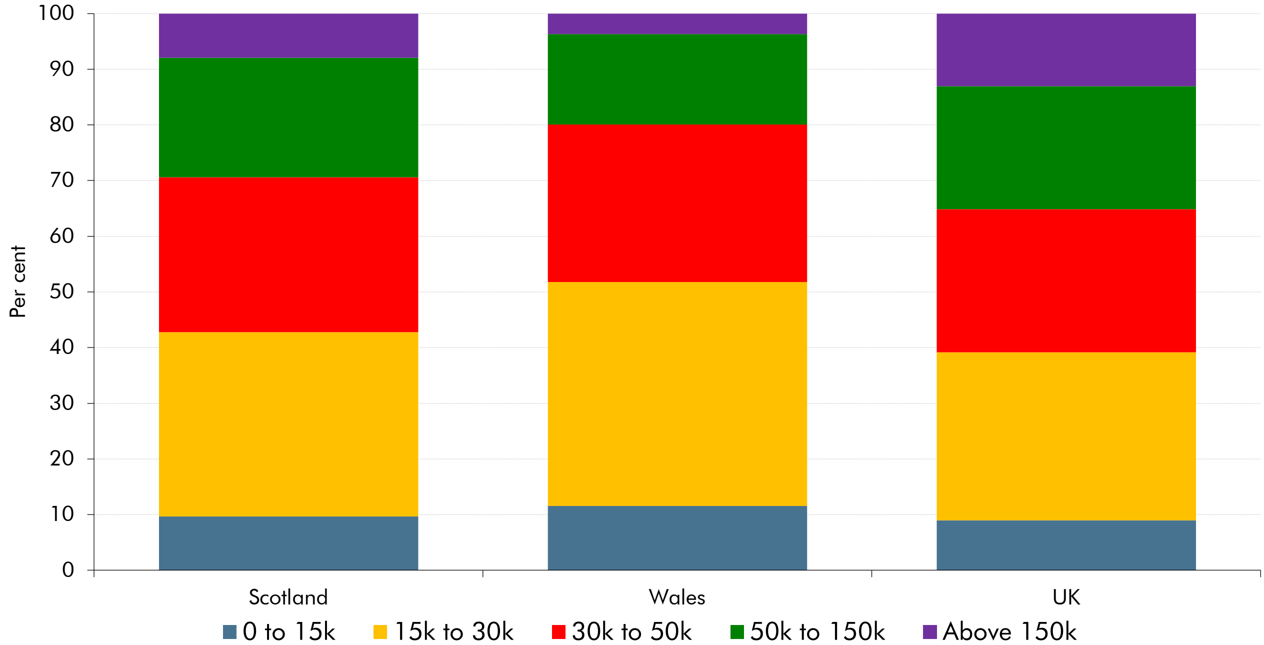
The income distribution

2.20 The income distribution differs between Scotland, Wales and the UK as a whole. While the rates and thresholds of the income tax regime have varied over time, those on higher incomes have always been subject to higher tax rates. Chart 2.3 shows the proportion of total taxpayer income by income bands in the 2014-15 SPI. 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. That pattern is reversed for incomes over £50,000 – and particularly for those over £150,000.

2.21 Higher income individuals have a stronger incentive for tax-motivated incorporation (TMI) given the greater differential between their effective income tax rate and the rate of corporation tax.[1] Our forecast includes a relatively simple adjustment for TMIs in Scotland and Wales, assuming the same propensity to incorporate as in the rest of the UK. The overall TMI adjustment reduces our Scottish forecast by around £80 million in 2017-18 rising to nearly £400 million by 2022-23.

[1] For more information on tax-motivated incorporations see Chapter 5 of our 2017 *Fiscal risks report*.

Chart 2.3: Proportion of total taxpayer income by income bands



Source: HMRC

The effects of Government decisions

2.22 Changes to tax policy can have asymmetric effects in Scotland or Wales relative to the rest of the UK. 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 tapered 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. We have adjusted the Scottish and Welsh shares used in our forecast to reflect the asymmetric effect of policies that have been implemented since the latest available SPI data.

UK forecast

Pre-measures forecast changes

2.23 Table 2.2 shows the UK forecast of tax liabilities on NSND income prior to including the effects of any policy measures in this Budget. It has been revised down in 2015-16 (reflecting 2016-17 tax returns). The forecast is higher between 2016-17 and 2018-19, but lower from 2020-21 onwards. By 2021-22, our forecast for UK tax liabilities on NSND income is £3.7 billion lower than we expected in March.

Table 2.2: Whole UK forecast of tax liabilities on non-savings, non-dividend income

	£ billion								
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March 2017 (excluding March measures) (a)	150.9	155.9	159.2	164.2	168.7	174.8	182.5	192.0	
November 2017 (inc March measures)	151.0	155.5	161.8	166.8	170.3	175.0	181.6	188.6	195.9
November 2017 (excluding March measures) (b)	151.0	155.5	161.8	166.6	170.2	174.8	181.3	188.3	195.6
Forecast difference (b - a)	0.0	-0.4	2.7	2.4	1.5	0.0	-1.2	-3.7	
November 2017 post-measures forecast	151.0	155.5	161.8	166.8	170.5	175.3	181.9	189.1	196.4

2.24 Our pre-measures forecast changes reflect several factors:

- **Receipts outturn**: bonuses in both the financial and non-financial sectors were stronger than anticipated leading to a higher starting point for receipts for 2016-17, which feeds through our forecast. Receipts so far this year have been close to our March expectations. They have been boosted by the higher levels of employment but weighed on by weaker-than-expected earnings growth.

- **Economy forecast changes**: we have revised GDP and earnings growth down in light with our more pessimistic assumptions about productivity growth. This is slightly offset as we have also increased our assumptions about the sustainable rate of employment. Our economy forecasts are set out in more detail in Chapter 3 of our main *EFO*. The overall effect is to weaken our income tax forecast, particularly in the medium term.

- **Recosting of past measures**: we routinely recost the effects of past measures so that they are consistent with our latest forecast assumptions and new information about how measures are performing. The notable recostings for NSND income tax in this forecast include reprofiling revenue from the Budget 2016 measure tackling disguised remuneration, increasing the cost of the married couples tax allowances and delays in HMRC's 'making tax digital' programme. (Described in Annex A of our main *EFO*).

- **Fiscal drag**: income tax thresholds are indexed by CPI inflation, which typically rises more slowly than earnings, increasing the effective tax rate by pushing more income into higher tax bands, and thereby increasing receipts. This is known as 'fiscal drag'. Fiscal drag goes into reverse in 2018-19 (with thresholds rising faster than earnings). Thereafter, slower earnings growth in our latest forecast leads to less fiscal drag than in March.

- The **income distribution**: the strongest earnings growth is likely to be at the bottom end of the income distribution given the commitments to raise the National Living Wage (but will only have a modest effect on receipts). With high-paying sectors such as financial and business services potentially more adversely affected than other sectors by the UK leaving the EU, we have assumed that earnings growth for the top 10 per cent of the distribution will be around ¼ percentage points lower than the average for four years from 2019-20.

UK Government policy measures

2.25 The UK Government has announced a number of policy measures that affect NSND income tax liabilities in this Budget.[2] The largest are:

- **'Patient Capital Review: reforms to tax reliefs to support productive investment'** – a package of measures to the Enterprise Investment Scheme with potentially offsetting effects from the different components. For example HMRC will implement a new 'purpose test' to ensure that investments are in genuine growth projects. This will increase income tax receipts. But the measure also increases the maximum that can be invested, which will reduce income tax.

- **'Avoidance and Evasion: additional compliance resource'** – a package of measures to generate additional revenue from HMRC compliance activity. The various components were combined into the single line of the scorecard. Compliance measures typically target a subset of individuals or companies that are already actively changing their behaviour to avoid or evade tax, so are subject to a high degree of uncertainty.

- **'Dynamic coding-out of debt'** – this introduces in-year 'coding-out' from PAYE income for self-assessment debts – recovering them by alternating an individual's tax code during the year in progress rather than waiting until future tax years.

- **'Air Quality: increase Company Car Tax diesel supplement by 1ppt from April 2018'** – this increases the diesel supplement from 3 to 4 per cent in 2018-19.

- **'NICs: maintain Class 4 NICs at 9% and delay NICs Bill by one year'** – this measure covers the decision not to implement the Class 4 NICs rise announced in March and delays to previously announced measures to abolish Class 2 NICs and to charge employer NICs on termination payments. The Class 4 NICs rise would not have directly changed the NSND income tax regime, but the behavioural response from taxpayers – including incorporating – would have reduced income tax liabilities. The reversal therefore increases income tax liabilities relative to our March forecast.

- **'Making Tax Digital: changing the scope and pace'** – this delays the previously announced HMRC initiative around interacting digitally with taxpayers by introducing software that will design out record-keeping errors in tax returns.

[2] The estimates presented in this chapter are on a liabilities basis whereas the estimates for the UK public finances that are reported in Table 2.1 of the UK Government's Budget document are on a National Accounts receipts basis, so are not directly comparable.

Scottish forecast

Pre-measures forecast

2.26 Our pre-measures Scottish income tax forecast is generated by applying our forecast of the Scottish share to the UK forecast described in the previous section. As Table 2.3 shows, the share has been revised up in all years. This is due to two main factors. First, the latest ONS population projections assume that population growth in Scotland will be slower than that in the UK by a smaller margin than previously assumed. This raises the Scottish share relative to our March forecast, with the effect building across the forecast. Second, the Scottish Government's policy to freeze the higher rate threshold is now included in our pre-measures baseline. The recosting of other previously announced measures slightly lowers the Scottish share. Pre-measure shares do not include the effect of new UK Government policies.

Table 2.3: Pre-measures Scottish share of income tax

	Per cent of UK total for non-savings, non-dividend liabilities								
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	2.94	2.91	2.88	7.15	7.14	7.12	7.11	7.10	
November forecast	2.94	2.91	2.89	7.26	7.25	7.24	7.23	7.22	7.21
Change	0.00	0.00	0.00	0.11	0.11	0.12	0.12	0.12	
of which:									
Population growth	0.00	0.00	0.01	0.04	0.06	0.07	0.07	0.08	
Previously announced measures	0.00	-0.01	-0.01	0.06	0.05	0.05	0.04	0.04	
Index relative population growth (2014-15 = 100)	*100.00*	*99.77*	*99.63*	*99.52*	*99.38*	*99.21*	*99.03*	*98.84*	*98.59*

Scottish Government policy

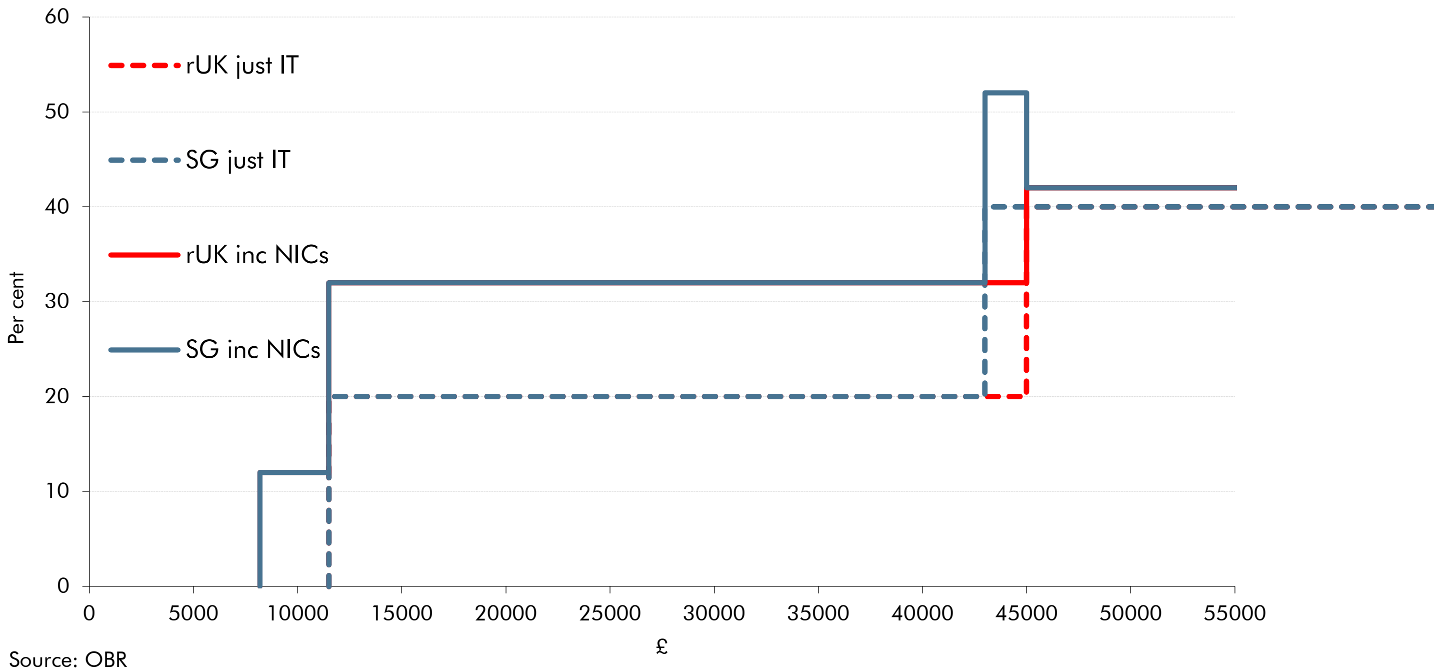
2.27 Our latest estimate of the revenue raised from the Scottish Government's decision to freeze the higher rate threshold remains similar to our estimate in March at around £130 million in 2017-18. The Scottish Government will announce future rates and thresholds in its draft budget on 14 December. We will include these in our next forecast. For now, we assume the personal allowance (PA) and higher rate threshold will increase by CPI, while all other income tax parameters are held constant. Our assumed rates and thresholds are set out in Table 2.4, while Charts 2.4 and 2.5 depict the income tax regimes in Scotland and the rest of the UK in 2017-18.

2.28 Powers over the PA have not been devolved but the Scottish Government can raise the 'effective PA' by introducing a zero per cent band of income tax. The Scottish Government has a stated policy intention to use a zero-rate band to raise the effective PA to £12,750 in 2021-22 if the PA in the rest of the UK were below that. Our current forecast for CPI inflation suggests the PA will reach £12,590 in that year. As we did in March, we note the Scottish Government's policy intention as a risk rather than incorporating it in our central forecast. It relies on two other factors for it to take effect: the level of CPI inflation and as-yet unspecified UK Government policy decisions. The UK Government also has an intention to reach a £12,500 in 2020-21. This is also not included in our central forecast as we explain in our main *EFO*.

Table 2.4: NSND income tax parameters

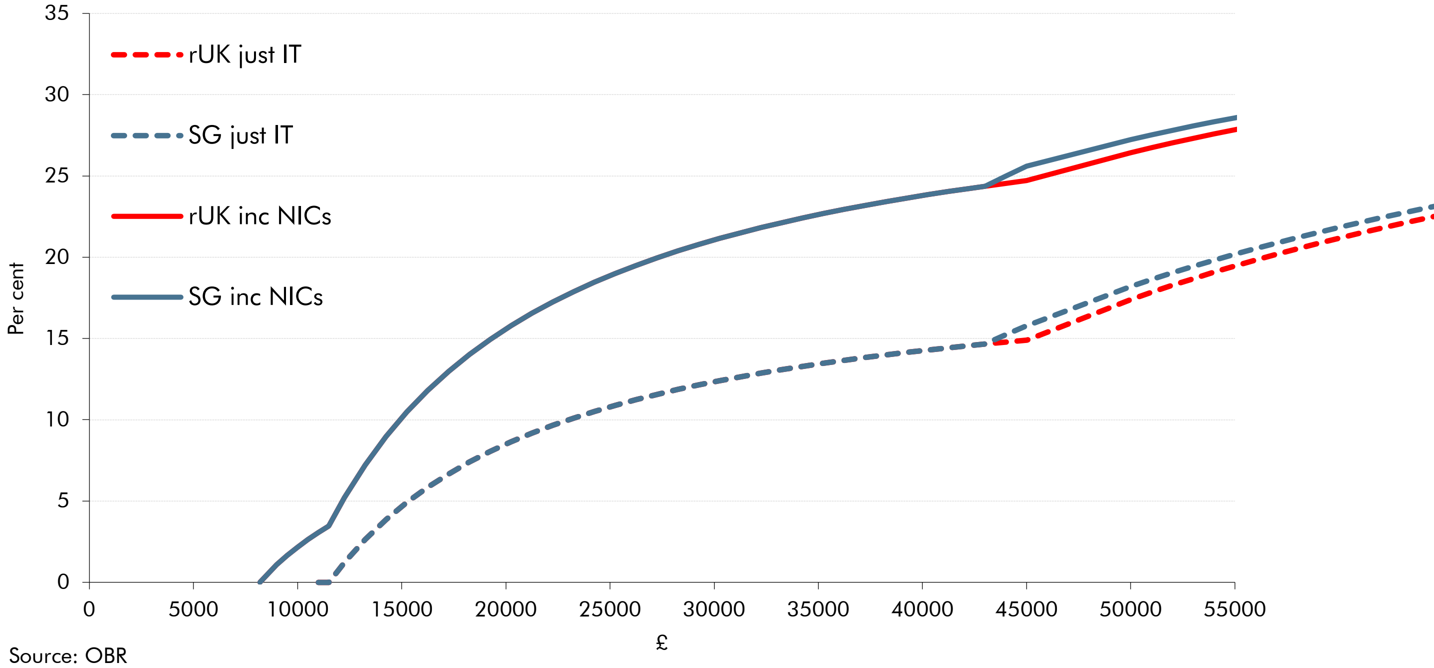
	£ unless otherwise stated					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Basic rate (per cent)	20	20	20	20	20	20
Higher rate (per cent)	40	40	40	40	40	40
Additional rate (per cent)	45	45	45	45	45	45
Personal allowance						
Scottish Government	11,500	11,850	12,110	12,340	12,590	12,850
UK Government	11,500	11,850	12,110	12,340	12,590	12,850
Difference	*0*	*0*	*0*	*0*	*0*	*0*
Higher rate threshold						
Scottish Government (NSND)	43,000	44,273	45,237	46,062	46,985	47,923
UK Government	45,000	46,350	47,410	48,340	49,390	50,450
Difference	*2000*	*2077*	*2173*	*2278*	*2405*	*2527*
Personal allowance taper	100,000	100,000	100,000	100,000	100,000	100,000
Additional rate threshold	150,000	150,000	150,000	150,000	150,000	150,000

Chart 2.4: Marginal NSND income tax rates in the UK and Scotland



Source: OBR

Chart 2.5: Effective tax rates on employee earnings in the UK and Scotland



Source: OBR

Effect of UK Government policy measures

2.29 There are UK Government policy measures in this Budget with an impact on Scottish income tax that is greater than £3 million, thereby meeting the convention the Treasury uses on its scorecard for reporting measures individually rather than considering them 'negligible'. For most, we assume that their effect on Scottish income tax is proportional to our pre-measures forecast of total UK NSND income tax or self-assessed income tax. In both cases this is around 7 per cent of the UK total. The exceptions are:

- **'Avoidance and Evasion: additional resource to combat'** – this measures includes numerous components. For some we have assumed a standard share based on our pre-measures forecast, but for others we have used a lower share for the effect on Scottish income tax based on advice from HMRC. For example, HMRC estimates that 4 per cent of avoidance users who submit information to HMRC's Disclosure of Tax Avoidance Schemes (DOTAS) live in Scotland. For some elements, such as those targeting the hidden economy or criminals, the level of uncertainty for the main costing is already very high and any geographic breakdowns would be even more so.

- **'Air Quality: increase Company Car Tax diesel supplement by 1ppt from April 2018'** – HMRC holds administrative data specific to car and car fuel benefits. These were used to estimate the Scottish share, which was broadly in line with the overall Scottish share.

- **'NICs: maintain Class 4 NICs at 9% and delay NICs Bill by one year'** – our estimate of the Scottish share is based mostly on self-employed income but also includes an effect via the tax-motivated incorporations model used in our full receipts forecast.

Table 2.5: Effect of UK Government policy changes on Scottish income tax since March

	£ million					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Pre-measures forecast	11932	12150	12442	12924	13410	13907
Total UK Government policy change	neg	neg	21	19	22	28
of which:						
Patient Capital Review: reforms to tax reliefs to support productive investment	neg	neg	6	4	neg	neg
Avoidance and Evasion: additional compliance resource	neg	neg	9	15	15	18
Dynamic coding-out of debt	neg	neg	4	neg	neg	neg
Air Quality: increase Company Car Tax diesel supplement by 1ppt from April 2018	neg	4	neg	neg	7	5
NICs: maintain Class 4 NICs at 9% and delay NICs Bill by one year	neg	-4	neg	6	19	30
Making Tax Digital: only apply above VAT threshold and for VAT	neg	neg	neg	-7	-21	-25
Post-measures forecast	11932	12153	12462	12943	13432	13935

Final post-measures Scottish income tax forecast

2.30 Table 2.6 sets out our new forecast for Scottish income tax liabilities, taking into account the pre-measures revisions to the Scottish share and new measures announced by the UK Government. These are based on the full devolution of NSND income tax liabilities that came into effect this year. The SRIT only operated in 2016-17.

2.31 The table shows that the change in the relative population growth in Scotland has boosted our forecast, but that our weaker UK NSND forecast from 2019-20 onwards first partly and then more than offsets the higher Scottish share.

Table 2.6: Changes in Scottish NSND income tax since March

	£ million							
	Outturn	Forecast						
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	10893	11160	11313	11718	11995	12384	12935	13595
November forecast	10894	11138	11520	11932	12153	12462	12943	13432
Change	**1**	**-22**	**207**	**214**	**159**	**78**	**7**	**-163**
of which:								
Scottish population growth	0	19	46	72	97	117	135	152
UK NSND forecast	2	-28	192	178	107	-1	-86	-270
Other (including gift aid estimates and recosting previous measures)	0	-13	-31	-35	-48	-58	-61	-67
UK Government policy measures	0	0	0	neg	neg	21	19	22
November forecast SRIT [1]	*4389*	*4474*	*4526*	-	-	-	-	-
March forecast SRIT [1]	*4389*	*4455*	*4597*	-	-	-	-	-

[1] SRIT will only operate in 2016-17.

Comparison with Scottish Government forecasts

2.32 The Scottish Government's most recent 5-year forecast was published in February 2017, as part of the Draft Budget process, ahead of our March forecast. Our March forecast was lower than the Scottish Government's in all years, which remains the case now. The Scottish Fiscal Commission (SFC) will publish its first forecast in December 2017.

2.33 Factors that will contribute to the differences reported in Table 2.7 and that are likely to remain relevant when comparing our latest forecast with the SFC's first forecast include:

- **Timing and data**: Our forecasts take place at different times with different economic and receipts input data.
- **Policy baselines**: We do not include Scottish Government policies until they have been formally announced. The SFC may face similar issues with UK Government measures. Policy measures are usually formally announced alongside our respective forecasts. This makes it hard to compare forecasts on a like-with-like policy basis.
- **Modelling differences**: The Scottish Government and SFC employ a more 'bottom-up' micro-simulation forecast, while we use a more 'top-down' estimate building up the forecast from specific receipts streams (i.e. PAYE, SA, repayments) with additional components estimated from HMRC's micro-simulation model. As well as these different modelling approaches, we have incorporated different judgements into our models. This leads to many differences, which might work in both directions.

Table 2.7: Income tax forecast comparison

	£ million, unless otherwise stated					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Scottish Government February forecast	11857	12320	12943	13681	14595	n/a
OBR November forecast	11932	12153	12462	12943	13432	13935
Difference	-75	167	481	738	1163	
Difference (per cent)	*-0.6*	*1.4*	*3.7*	*5.4*	*8.0*	

Welsh forecast

2.34 Table 2.8 shows our forecast for the Welsh share of income tax. We apply population adjustments in the same way we did for Scotland. The Welsh share is adjusted to reflect growth in the adult population in Wales relative to the UK as a whole. As with Scotland population growth in Wales is now relatively stronger, although remaining weaker than the UK as a whole in absolute terms. This is offset by recostings of previous measures, the net effect of which is to reduce our forecast of income tax from Wales. The recostings that have had the largest effect include the transferable marriage allowance, while some anti-avoidance measures have a relatively limited effect in Wales.

Table 2.8: Welsh share of income tax

	Per cent of UK total for non-savings, non-dividend liabilities								
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	1.26	1.23	1.22	1.21	1.20	1.20	1.19	1.19	
November forecast	1.26	1.23	1.22	1.21	1.20	1.20	1.19	1.19	1.19
Change	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
of which:									
Welsh share - change in population growth	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	
Previously announced measures	0.00	0.00	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	
Index relative population growth (2014-15 = 100)	*100.00*	*99.49*	*99.20*	*99.10*	*98.95*	*98.77*	*98.55*	*98.35*	*98.09*

2.35 Table 2.9 provides a forecast for Welsh income tax liabilities on NSND income. These are the liabilities specifically for the Welsh rate. It assumes that a 10p rate is implemented by the Welsh Assembly. As with our Scottish income tax forecast we assume a proportional impact of measures in line with our pre-measures forecast.

Table 2.9: Welsh income tax forecast

	£ million					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Welsh income tax liabilities (pre-measures)	1980	2010	2054	2129	2204	2281
Total UK Government policy change	neg	neg	4	neg	5	5
of which:						
NICs: maintain Class 4 NICs at 9% and delay NICs Bill by one year	neg	neg	neg	neg	3	5
Making Tax Digital: only apply above VAT threshold and for VAT	neg	neg	neg	neg	-3	-4
Net effect of other measures	neg	neg	4	3	5	5
Welsh income tax liabilities (post-measures)	1980	2011	2058	2132	2209	2287

2.36 Table 2.10 provides a breakdown of the other changes in the Welsh income tax forecast since March. As with the Scottish forecast, there is an upward revision to Welsh income tax in the shorter term due to the new population projections and higher UK NSND income tax forecast. The forecast is then weaker in later years due to the decreases in NSND income tax that eventually offsets the effect of the higher Welsh share.

Table 2.10: Changes in Welsh income tax since March

	£ million							
	Outturn	Forecast						
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	1873	1896	1907	1950	1993	2056	2143	2248
November forecast	1873	1887	1935	1980	2011	2058	2132	2209
Change	**0**	**-9**	**29**	**29**	**18**	**2**	**-11**	**-40**
of which:								
Welsh population growth	0	3	9	18	26	32	38	44
UK NSND forecast	0	-5	32	30	18	0	-14	-45
Other (including gift aid estimates and recosting previous measures)	0	-7	-12	-18	-26	-30	-35	-39
UK Government policy measures	0	0	0	neg	neg	4	neg	5

3 Taxes on property transactions

Introduction

3.1 From April 2018 there will be three different property transactions tax systems operating in the UK: stamp duty land tax (SDLT) in England and Northern Ireland; land and buildings transaction tax in Scotland (LBTT) and the newly announced land transaction tax (LTT) in Wales. This chapter compares their structures and sets out our latest forecast for each.

Scottish land and buildings transaction tax

3.2 In April 2015, the 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**, changing the tax calculation from being due on the entire value of the transaction to one applying different rates to different bands within the total price – similar to income tax.
- The **requirement to pay LBTT prior to registration of the title**, intended to encourage prompt payment.
- The introduction of a 3 per cent **supplement on additional dwellings** (such as second homes and buy-to-let properties) from April 2016, matching the surcharge introduced by the UK Government in the same month.

Residential property

3.3 The LBTT rates and thresholds for residential property 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's 3 per cent additional dwellings supplement (ADS) applies to all transactions from £40,000, even those that would otherwise be exempt from LBTT. For example, a £100,000 purchase of a buy-to-let property would be subject to the 3 per cent ADS but would not be liable to LBTT if purchased as a primary residence. Taxpayers can claim a refund from the ADS if they sell their main residence within 18-months – half the refund period under SDLT.

Commercial property

3.5 The LBTT 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;
- 4.5 per cent on the portion above £350,000.

3.6 The LBTT rates for Scottish commercial property applied to leases in terms of the net present value of the rent are:

- 0 per cent on property leases with a net present value up to £150,000; and
- 1 per cent on the portion above £150,000.

Welsh land transaction tax

3.7 The Land Transaction Tax and Anti-avoidance of Devolved Taxes (Wales) Act 2017 replaces SDLT in Wales with LTT from April 2018. On 3 October 2017 the Welsh Government announced in its draft budget details of the tax rates and thresholds for LTT.

3.8 LTT maintains broadly the same features as SDLT, with a marginal 'slice' schedule of rates and a 3 per cent surcharge on additional residential properties, with a 36-month refund period for main residences. It also has broadly the same structure of reliefs and exemptions as SDLT. Two key differences are in its effective tax rates, which are higher, and its collection, which will be undertaken by a new Welsh Revenue Authority rather than by HMRC. Previously our Welsh SDLT forecast has been calculated as a proportion of UK SDLT receipts. This document presents our first LTT forecast.

Residential property

3.9 The LTT rates and thresholds for residential property are:

- 0 per cent on transactions up to £150,000;
- 2.5 per cent on the portion above £150,000 up to £250,000;

- 5 per cent on the portion above £250,000 up to £400,000;
- 7.5 per cent on the portion above £400,000 up to 750,000;
- 10 per cent on the portion above £750,000 up to £1.5 million; and
- 12 per cent on the portion above £1.5 million.

Commercial property

3.10 The LTT rates and threshold for commercial property are:

- 0 per cent on property transactions up to £150,000;
- 1 per cent on the portion above £150,000 up to £250,000;
- 5 per cent on the portion above £250,000 up to £1 million; and
- 6 per cent on the portion above £1 million.

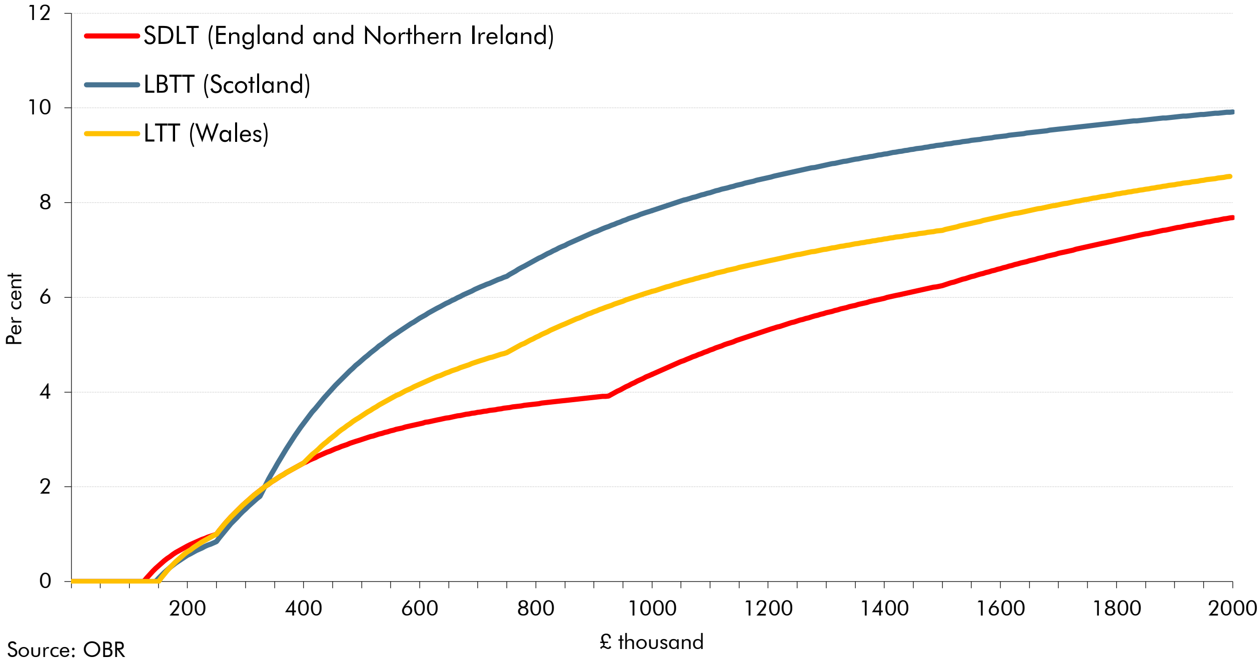
3.11 The LTT rates and thresholds for Welsh commercial property applied to leases in terms of their net present value based on their rent are:

- 0 per cent on property leases with a net present value up to £150,000;
- 1 per cent on the portion above £150,000 up to £2 million; and
- 2 per cent on the portion above £2 million.

Comparison of the tax regimes

3.12 Chart 3.1 shows the tax schedule for the main rates on residential property in SDLT, LBTT and LTT. Compared to SDLT both LTT and LBTT are more progressive, with higher effective tax rates on more expensive transactions. This has several implications for our forecast. Since the thresholds for all three are fixed in cash terms, house price inflation will lead to transactions moving into higher tax bands, increasing the overall cost of the transaction. This is known as 'fiscal drag', which we would expect to lead to receipts rising faster than house prices over time. When compared to SDLT the more progressive nature of LTT and LBTT will lead to greater fiscal drag as higher marginal rates apply at lower prices.

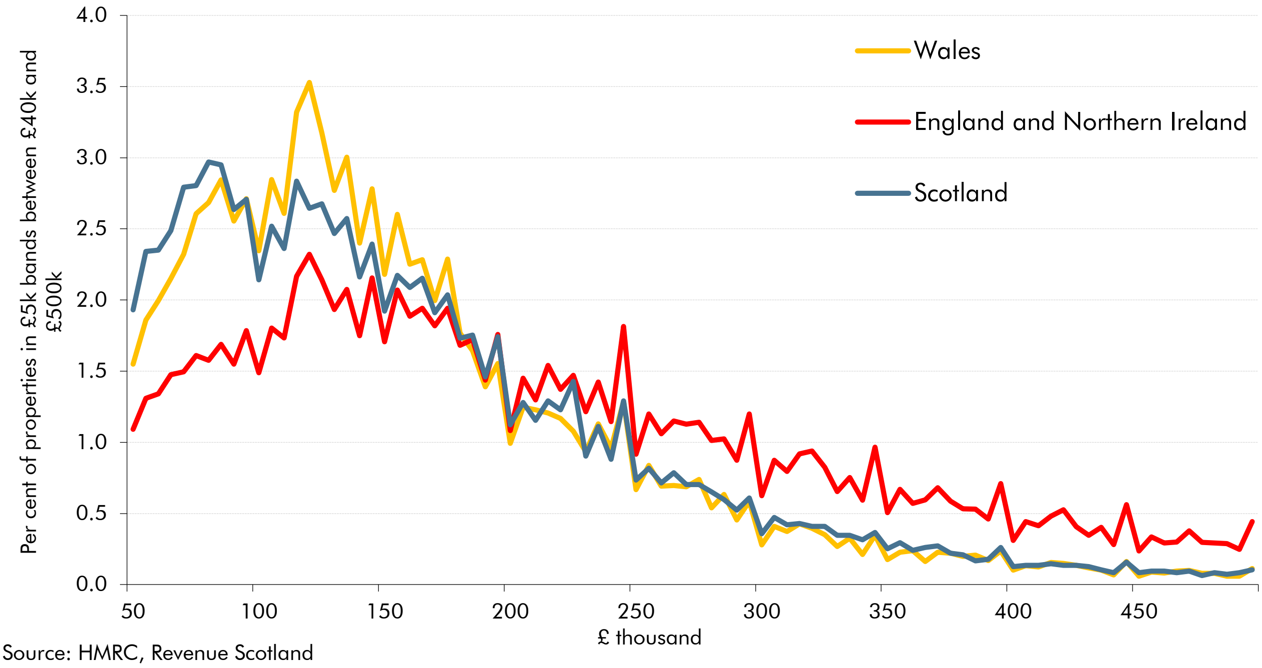
Chart 3.1: Residential property effective tax rates in the UK: main rates



Source: OBR

3.13 Chart 3.2 compares the price distribution of residential sales in 2016-17 in Scotland and Wales with those in England and Northern Ireland combined. In all three areas transactions tend to cluster at 'round numbers', while in Scotland and Wales a greater proportion of transactions (around half) are below the first tax threshold (£145,000 or £150,000). This compares to around a quarter of transactions in the rest of the UK being below the £125,000 threshold. This has further forecast implications. First, many transactions are only taxable if they are subject to the 3 per cent surcharge on additional purchases. The proportion of residential receipts from the surcharge in 2016-17 was greater in Wales (36 per cent) and Scotland (nearly 30 per cent) than in the rest of the UK (20 per cent). Second, the distribution increases the potential for fiscal drag in Wales and Scotland, as many transactions that are currently not liable to tax could become so due to house price inflation.

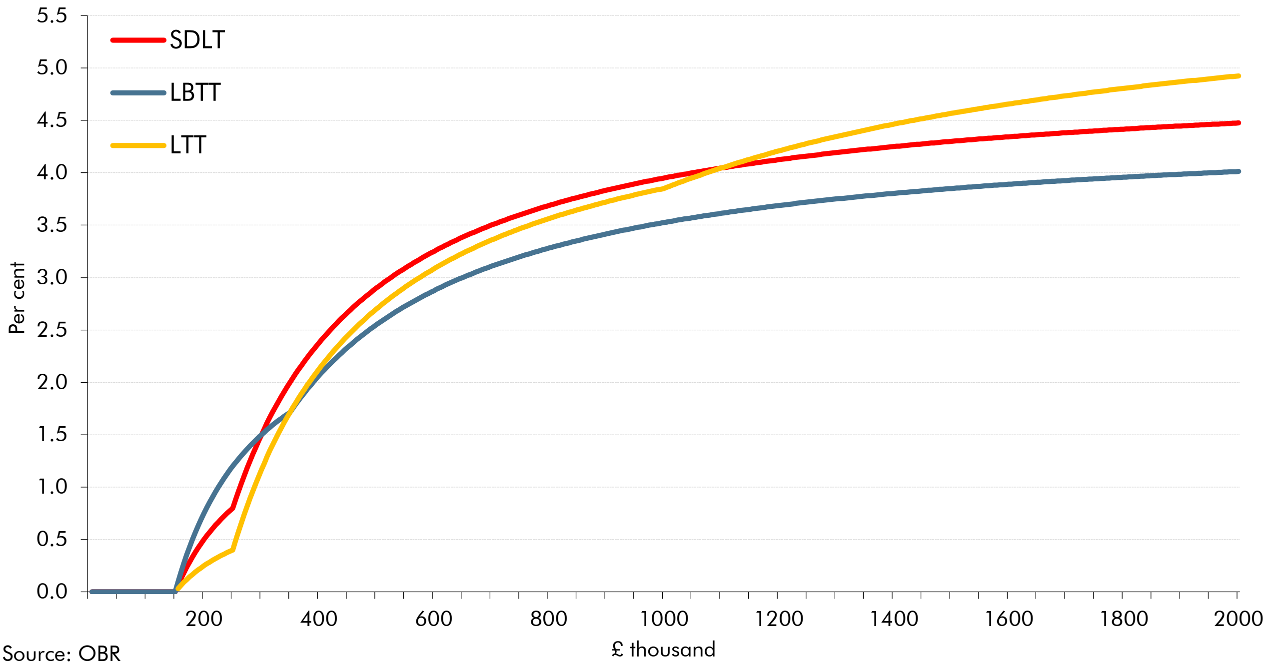
Chart 3.2: Distribution of residential transactions in 2016-17



Source: HMRC, Revenue Scotland

3.14 Chart 3.3 shows the effective tax rates for commercial property, where the differences are considerable smaller across the three tax regimes.

Chart 3.3: Commercial property effective tax rates in the UK



Source: OBR

Methodology

3.15 As we set out in our 2017 *Forecast evaluation report* we have reviewed and updated our LBTT and SDLT models. We now factor in a negative effect on transactions from fiscal drag that reduces revenues at the top-end of the price distribution.

3.16 Our Welsh LTT forecasts use the same microsimulation model as is used for our SDLT forecasts. This is run on our behalf by HMRC. The microsimulation applies the appropriate tax schedules for LTT and SDLT to a full sample of transactions from a given base year, which are grown in line with our property price and transactions forecasts. Our new residential LBTT model uses mean and median price data from Registers for Scotland to calculate a log-normal distribution for the Scottish housing market rather than a microsimulation. This is the same method as used by the Scottish Fiscal Commission (SFC), which has published analysis showing that such a distribution provides a relatively good fit to outturn data from Revenue Scotland.[1] The base data for all our residential models are from 2015. Choosing a representative base year is not straightforward because multiple policy changes in recent years have distorted the pattern of distributions.[2]

3.17 We use separate models to forecast the additional property surcharges in each regime. Recent outturns are grown in line with prices and volumes, which are added to the main residential forecast. This approach is unchanged from March.

3.18 We have changed our forecast model for commercial LBTT from a microsimulation approach to growing recent outturns in line with prices and transactions. This is similar to the SFC's approach. We forecast commercial SDLT and LTT receipts with a microsimulation model based on 2016-17 data.

3.19 We assume that Scottish and Welsh prices and transactions grow in line with those for the UK as a whole, and that the ratio of mean to median residential prices remains constant in the LBTT log-normal distribution.

3.20 We add any effects from new policy measures to produce the post-measures forecast.

3.21 Table 3.1 shows how the Scottish and Welsh shares of UK property transaction tax receipts have evolved since 2009-10. All data relate to SDLT except for Scottish LBTT in 2015-16 and 2016-17. UK-wide receipts grew rapidly from the depth of the crisis low to surpass this level in 2014-15. Scottish and Welsh shares of were generally declined. In 2016-17 that trend was reversed in residential property receipts, largely due to the introduction of the different additional property surcharges. This may also reflect weakness in the top-end of the London property market weighing on England's share of UK receipts.

[1] Scottish Fiscal Commission (2017) *Forecast Evaluation Report*.
[2] For more information see Working Paper No.10: Forestalling ahead of property tax changes (2016), available on our website.

Table 3.1: Historical Scottish and Welsh shares of property transaction tax receipts

	£ million							
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
UK	4885	5960	6130	6907	9273	10738	11090	12245
of which:								
Residential	3290	4040	4220	4905	6450	7500	7510	8895
Commercial	1595	1920	1910	2002	2823	3238	3580	3350
	Totals							
Scotland	**250**	**330**	**275**	**283**	**390**	**475**	**410**	**480**
of which:								
Residential	135	165	155	170	215	270	200	305
Commercial	115	165	120	113	175	205	210	175
Wales	**100**	**115**	**125**	**105**	**150**	**172**	**150**	**210**
of which:								
Residential	55	65	65	70	90	105	80	140
Commercial	45	50	60	35	60	70	70	70
	Per cent of UK total							
Scotland								
Residential	4.1	4.1	3.7	3.5	3.3	3.6	2.7	3.4
Commercial	7.2	8.6	6.3	5.6	6.2	6.3	5.9	5.2
Wales								
Residential	1.7	1.6	1.5	1.4	1.4	1.4	1.1	1.6
Commercial	2.8	2.6	3.1	1.7	2.1	2.2	2.0	2.1

UK SDLT forecast

3.22 SDLT receipts are forecast to increase from £11.8 billion in 2016-17 to £15.7 billion in 2022-23. This rise reflects both tax base effects – mainly rising prices – as well as a rising effective tax rate caused by fiscal drag.

3.23 Relative to our March forecast, SDLT receipts in 2016-17 were £350 million higher than expected, largely due to higher-than-expected receipts from the additional properties surcharge. Despite this higher starting point, we have revised down SDLT receipts from 2018-19 onwards. This reflects a significantly weaker forecast for house price inflation, in turn reflecting the productivity-driven downward revision to household income growth, combined with the modelling changes described above. We have revised up commercial property receipts in 2017-18, which feeds through to a higher forecast for later years. From 2018-19 onwards, the SDLT forecast no longer includes receipts from transactions in Wales.

3.24 The £280 million higher-than-expected revenue from additional properties in 2016-17 reflected stronger performance in the winter months, where we had expected to see a seasonal dip that did not occur. The higher starting point feeds through later years. There is continued uncertainty over the proportion of receipts that will ultimately be refunded within the 36-month window. We will not have full outturns for any cohort for some time. We have raised our assumption from steady-state refunds from 15 to 20 per cent of the original value, but will keep this under review. Our forecast is based on net receipts, after subtracting refunds and repayments, consistent with how SDLT receipts are recorded in the public sector finances data. To aid comparison, Table 3.3 shows our forecasts on both a liabilities and National Accounts basis.

3.25 We have made a small adjustment to our SDLT forecast in 2017-18 to account for forestalling ahead of the introduction of Welsh LTT.

3.26 The main UK Government Autumn Budget measure affecting our SDLT forecast is the introduction of a permanent relief for first-time buyers of properties for less than £500,000. This costs over £600 million a year by the end of the forecast. We discuss this policy in more detail in Box 4.3 of our main *EFO*. Other measures that affect SDLT at this Budget have relatively small effects. There is a small cost from the increase in capital gains tax on non-residents' commercial property. This reduces the value and turnover of commercial property and so reduces SDLT. This is slightly offset by HMRC's anti-avoidance and evasion package, although only a fraction of the planned new activity is expected to raise SDLT receipts.

Table 3.2: SDLT forecast

	£ billion						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total SDLT							
March forecast	11.4	12.9	13.8	14.6	15.7	16.8	
November forecast	11.8	13.1	13.1	13.6	14.2	15.0	15.7
Change	0.4	0.3	-0.2	-0.5	-0.9	-1.2	
Residential SDLT (excluding additional properties)							
March forecast	6.9	8.1	8.7	9.4	10.2	11.1	
November forecast	6.9	7.8	7.7	8.1	8.5	9.0	9.6
Change	0.0	-0.2	-0.5	-0.8	-1.1	-1.4	
Additional properties							
March forecast	1.4	1.7	1.8	1.8	1.9	2.0	
November forecast	1.7	1.9	1.8	1.9	2.0	2.1	2.2
Change	0.3	0.2	0.1	0.0	0.0	0.0	
Commercial SDLT							
March forecast	3.1	3.1	3.3	3.4	3.5	3.7	
November forecast	3.2	3.4	3.5	3.6	3.7	3.9	4.0
Change	0.1	0.4	0.2	0.2	0.2	0.2	

Table 3.3: Additional properties surcharge forecast

	£ billion						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Liabilities	1.4	1.7	1.8	1.9	2.0	2.1	2.2
National Accounts 'cash'	1.7	1.9	1.9	1.9	2.0	2.1	2.2

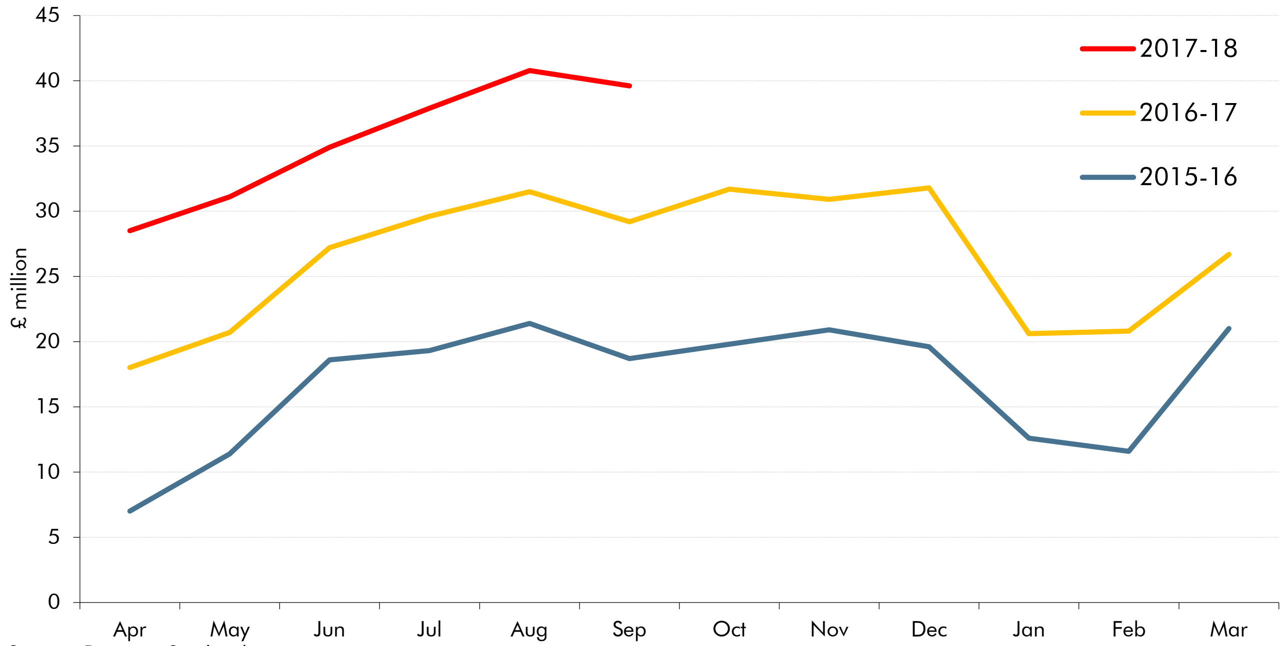
Land and buildings transaction tax

Latest LBTT outturn data

3.27 The latest LBTT receipts data published by Revenue Scotland are presented in Charts 3.4 to 3.7.[3] Receipts increased from £416 million in 2015-16 to £481 million in 2016-17, largely due to £90 million of revenue from the ADS.

3.28 Chart 3.4 shows the monthly profile of residential receipts. This was distorted by forestalling in both 2015-16 and 2016-17. A large number of high-value residential transactions were brought forward before the April 2015 introduction of LBTT. This boosted SDLT receipts in March 2015 at the expense of LBTT receipts in the following months. The same behaviour was observed at the end of 2015-16, when buyers moved transactions forward to avoid the ADS from April 2016.

Chart 3.4: Residential LBTT including initial ADS payments but excluding refunds

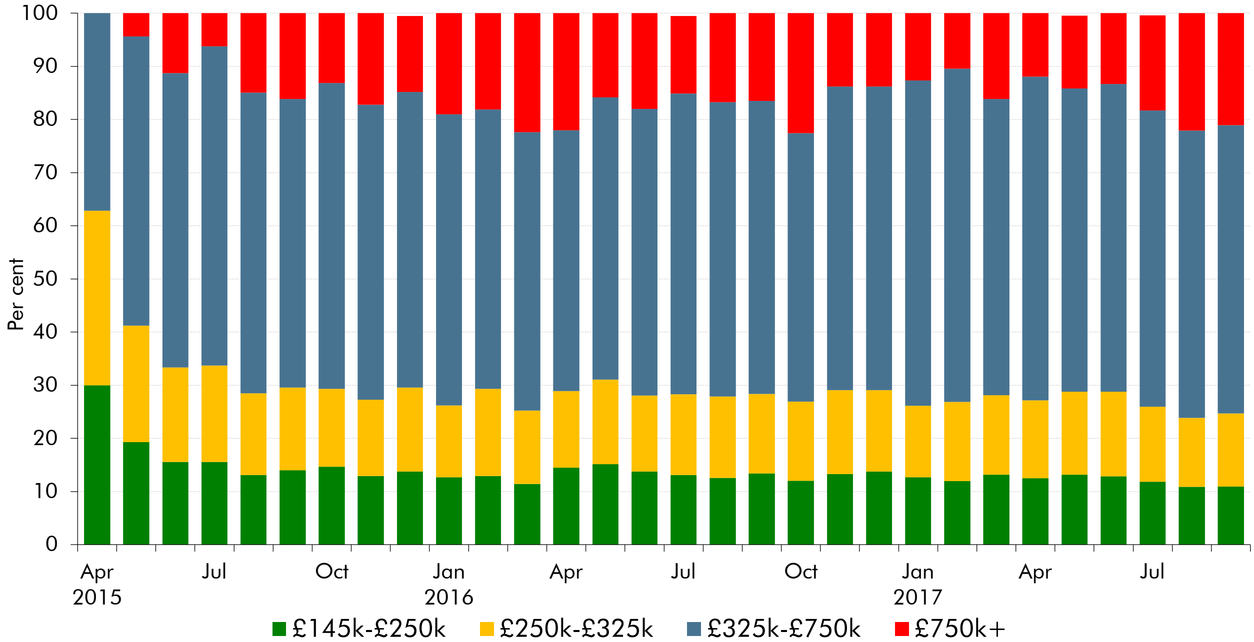


Source: Revenue Scotland

3.29 Chart 3.5 shows the proportional distribution of revenue from the main residential rates. Recent months have seen a greater proportion of revenue from the top two bands, though the variation across months is not large. We would expect some increase in the proportion of transactions in the higher brackets over time as a result of house price inflation.

[3] A small amount of revenue from the additional dwelling supplement is reported in Revenue Scotland statistics as occurring from commercial transactions. We include this revenue within commercial outturn for these charts, but it is contained within residential transactions for our forecast. See paragraph 3.35 for the accounting treatment of the forecast and these receipts.

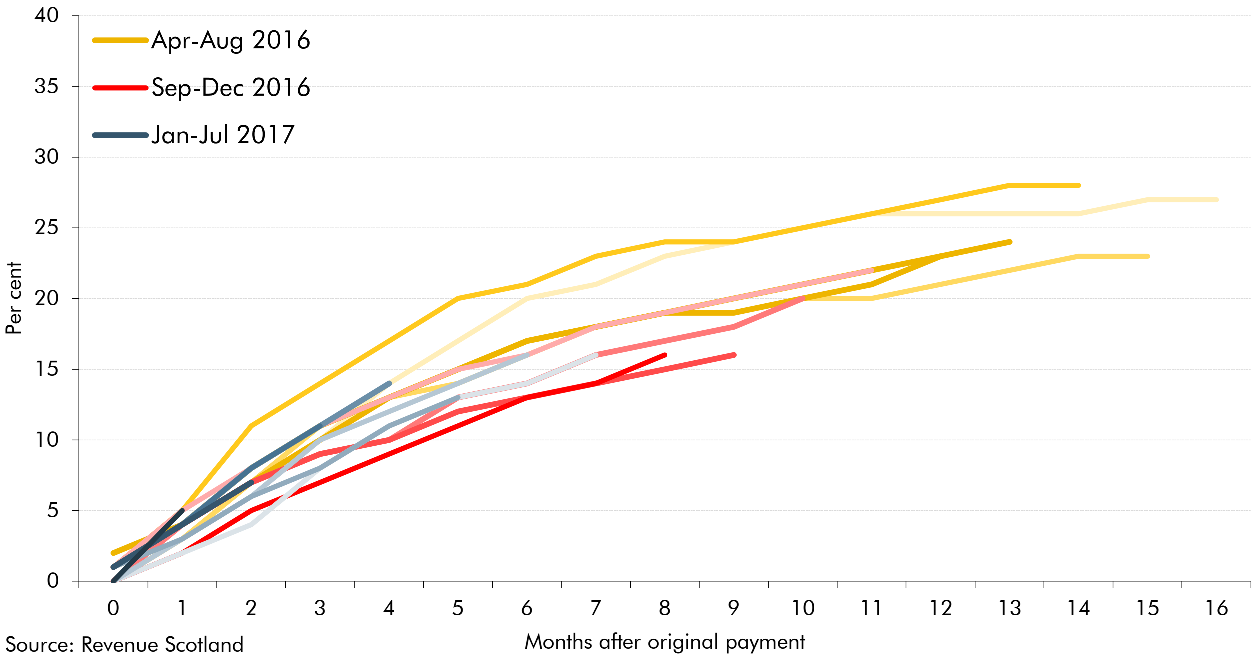
Chart 3.5: LBTT residential revenue excluding the ADS by price band



Source: Revenue Scotland

3.30 Receipts from the ADS have been rising. The level of subsequent refunds for the replacement of a main residence has also been rising. Revenue Scotland publishes cohort specific information on refunds, which is shown in Chart 3.6. This shows that some early cohorts will ultimately see refunds in excess of 25 per cent. We believe this may overstate the steady-state refund percentage given the forestalling that took place during this period.

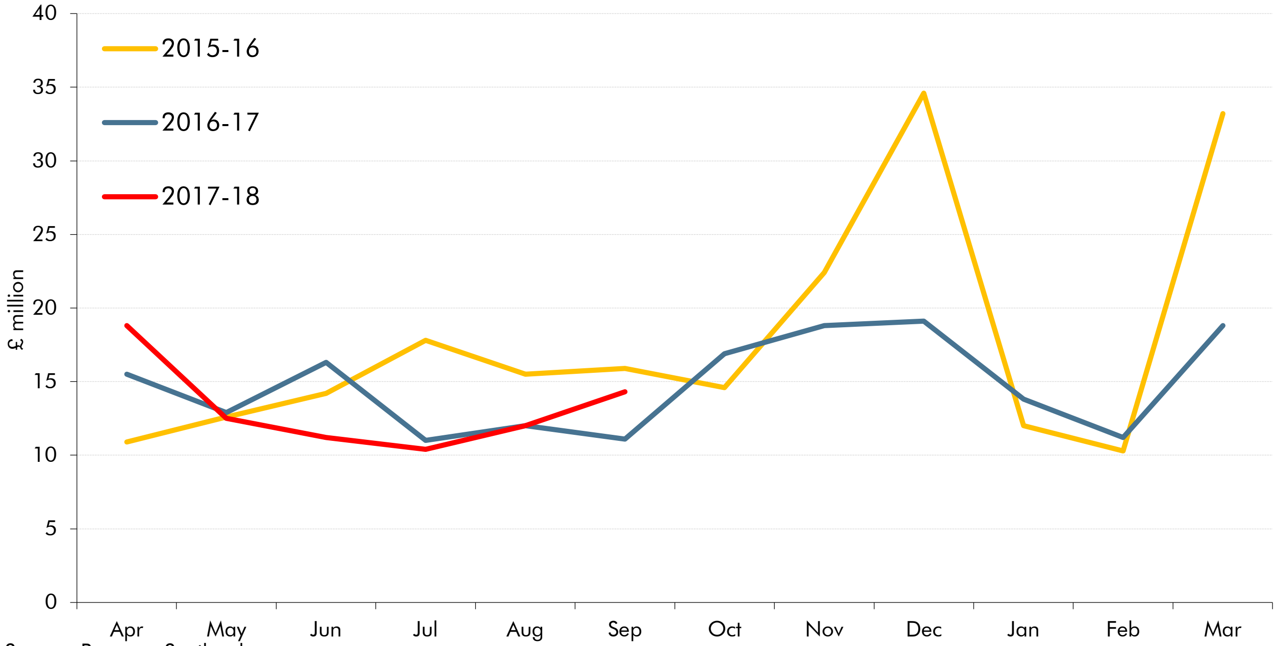
Chart 3.6: LBTT ADS refunds by cohort



Source: Revenue Scotland

3.31 Chart 3.7 shows the monthly profile of commercial LBTT receipts. So far in 2017-18 these are very similar to the same point last year, which is substantially weaker than we had forecast in March. The monthly profile can be distorted by individual very large transactions.

Chart 3.7: Commercial LBTT



Source: Revenue Scotland

LBTT forecast

3.32 Table 3.4 shows our latest forecasts for residential and commercial LBTT. Relative to March the overall forecast is slightly higher in 2017-18 but then progressively lower thereafter. We have revised up ADS receipts in every year. By 2022-23 we expect total LBTT receipts to be 56 per cent higher than in 2016-17. Given the progressive rate structure of the residential LBTT regime, price increases lead to rapid growth in receipts, so that residential receipts excluding ADS double between 2016-17 and 2022-23.

3.33 For our commercial LBTT forecast the weaker-than-expected outturns in 2017-18 combined with lower forecasts for price and volumes growth leads to much more subdued revenue growth than for residential LBTT. Receipts are only expected to rise by 12 per cent between 2016-17 and 2022-23.

Table 3.4: Land and buildings transaction tax forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total LBTT							
March forecast	478	552	601	654	715	780	
November forecast	481	553	581	618	657	703	750
Change	3	1	-20	-36	-58	-77	
Residential LBTT (excluding ADS)							
March forecast	213	274	311	351	397	447	
November forecast	214	276	299	326	354	388	427
Change	1	2	-12	-25	-43	-59	
ADS							
March forecast	82	85	88	93	98	103	
November forecast	90	99	102	108	113	118	125
Change	8	14	14	15	15	15	
Commercial LBTT							
March forecast	183	193	202	210	220	230	
November forecast	177	179	180	183	190	195	196
Change	-6	-14	-22	-27	-30	-35	

3.34 Table 3.5 sets out the changes in our residential LBTT forecast since March. The largest comes from weaker house price inflation, with the effect increasing over the forecast period. This is offset in the early years of the forecast by stronger-than-expected receipts so far in 2017-18, largely due to the ADS. The switch to using a log-normal model rather than the microsimulation used in March has slightly increased receipts, though by the end of the forecast period this is largely offset by the assumed behavioural response to fiscal drag.

Table 3.5: Changes in residential LBTT since March

	£ million					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	295	359	399	444	495	550
November forecast	304	375	401	433	466	506
Change	**9**	**16**	**2**	**-11**	**-29**	**-44**
of which:						
Receipts outturn main residential	1	29	29	29	29	29
Receipt outturn ADS	8	14	14	14	14	14
House prices		-22	-37	-53	-74	-93
Property transactions		-13	-9	-5	-1	5
Modelling fiscal drag		0	-1	-2	-4	-6
Other changes		7	5	6	6	7

3.35 Those affected by the ADS are entitled to reclaim the supplement if the property was purchased to replace their main residence and they sell their previous main residence within 18 months, so it is likely that some of the receipts so far this year will be refunded over time. The level and precise timing of such refunds is uncertain. In the absence of full data, we continue to assume that in steady-state 25 per cent of all ADS revenue will be refunded, which has been split 18 per cent within 12 months of the transaction and 7 per cent in the subsequent six months. This assumption is slightly higher than in our UK SDLT forecast on the basis that Scotland has a relatively smaller private-rental sector, so a higher share of transactions are likely to be main residences that could claim a refund. ADS also has a shorter refund window of 18 months versus 36 months in SDLT, which could affect the level and the timing of refund claims. The Scottish Government announced it will increase eligibility for refunds slightly. We will adjust our LBTT forecast once sufficient details of any changes are available.

3.36 Table 3.6 breaks down the revisions to our commercial LBTT forecast since March. The main changes are from weaker-than-expected receipts and lower-than-expected commercial property transactions.

Table 3.6: Changes in commercial LBTT since March

	£ million					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	183	193	202	210	220	230
November forecast	177	178	180	184	190	197
Change	**-6**	**-15**	**-22**	**-26**	**-30**	**-33**
of which:						
Receipts outturn and modelling	-6	-14	-17	-18	-21	-23
Property prices		3	-1	-1	-1	-2
Property transactions		-4	-5	-6	-7	-8

Comparison with Scottish Government and SFC forecasts

3.37 The Scottish Government published its last LBTT forecast in December 2016. Our latest forecast is more pessimistic about commercial receipts, but more optimistic about residential receipts. In April 2017 responsibility for producing the LBTT forecasts was transferred to the SFC. It will be publishing its first official forecast in December 2017. We will work with the SFC to explain differences between our forecasts.

3.38 Most of the modelling changes we have made in this forecast align our approach more closely to that used by the SFC.[4] Nevertheless our forecasts will be based on different outturn data and policy baselines and we may still make different assumptions and judgements. For example, our UK house price forecast is linked to many components of our economy forecast, in particular household income growth. And while our starting point is for different Scottish house prices, we assume that they will grow at the same rate as house prices in the rest of the UK. Given the importance of house prices for LBTT receipts, differences in this key input to our respective forecasts are likely to be important.

3.39 The Autumn Budget contains no UK Government policies that have a significant impact on our LBTT forecast. Capital gains tax applies to the disposal of Scottish properties and the increase in this tax for non-residents' commercial property slightly lowers commercial LBTT

[4] Scottish Fiscal Commission (2017) *Approach to Forecasting*

receipts, but by very small amounts. We assume there is no effect in Scotland from the first-time buyer's relief in England and Northern Ireland or the expansion in Help to Buy.

Table 3.7: Difference between Scottish Government and OBR forecasts

	£ million				
	2017-18	2018-19	2019-20	2020-21	2021-22
Scottish Government December 2016	507	543	570	597	623
OBR November 2017 forecast	553	581	618	657	703
Difference	**46**	**38**	**48**	**60**	**80**
of which:					
Residential	92	91	105	121	145
Commercial	-46	-53	-58	-62	-65

3.40 Another key difference between the forecasts is the accounting treatment. The Scottish Government's forecasts were based on when the taxable liability was incurred (i.e. the completion of a property transaction). Our forecast is consistent with the National Accounts treatment, referring to net receipts, after subtracting refunds and repayments. The two approaches previously produced similar results as the lag between liability and payment was quite short. This has changed with the introduction of refunds from the 3 per cent supplements – under the Scottish Government's approach the refunds were time-shifted back, but that is not the case in the National Accounts. The ONS has signalled that it may review the way SDLT receipts are recorded. If it decides to record SDLT on a liabilities basis, the distinction would largely disappear. To aid comparison we have included our ADS forecast on both a receipts and liabilities basis in Table 3.8.

Table 3.8: ADS forecast under different accounting treatments

	£ milion						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Liabilities	78	97	102	107	112	117	124
National Accounts 'cash'	90	99	102	107	112	118	125

Welsh SDLT and LTT forecasts

3.41 Our Welsh residential SDLT and LTT forecasts are both produced using a microsimulation model and our UK-wide property price and transactions forecasts. The base year for the residential forecast is unchanged from March, but we have updated our commercial base inputs to 2016-17. We have also included a behavioural response to fiscal drag, as in the main SDLT forecast. We initially produce a Welsh forecast assuming that the same structure as applies under SDLT, then adjust it for the new LTT rates and thresholds, and finally for the effects of UK Government policy changes.

3.42 SDLT in Wales will be affected by the UK Government's new first-time buyers' relief in 2017-18, but there are no UK Government policies in this Autumn Budget that are expected to have substantial effects on Welsh LTT. As in Scotland there is a small effect on commercial property in Wales from expanding the capital gains tax base to non-residents. We have not assumed that the Welsh Government would automatically choose to replicate the UK

Government's policies. On the assumptions underpinning our forecast, therefore, some first-time buyers might bring their transaction forward to take advantage of the UK relief before LTT is introduced. This effect is expected to be very small, reducing LTT receipts in 2018-19 by less than £0.5 million.

3.43 Our overall forecasts for Welsh SDLT and LTT is set out in Table 3.9.

Table 3.9: Welsh SDLT and LTT forecasts

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total SDLT/LTT							
March	203	243	263	282	311	343	
November	208	241	252	271	293	315	338
Change	5	-2	-11	-11	-18	-28	
Residential (excluding additional properties)							
March	96	126	140	154	176	203	
November	89	106	112	123	136	154	171
Change	-6	-21	-28	-31	-40	-49	
Additional properties							
March	44	53	54	57	60	63	
November	51	55	54	57	59	62	65
Change	7	2	0	0	-1	-1	
Commercial							
March	64	64	69	71	76	78	
November	69	80	86	91	97	99	103
Change	5	16	17	20	22	21	

Shaded cells represent notional estimates for years when SDLT devolution has not occurred.

3.44 Table 3.10 shows changes in our residential forecast from March. So far this year receipts have been weaker than expected, which we assume will lower receipts in future years. Slower house price growth reduces receipts by progressively larger amounts through the forecast. For the additional properties surcharge we have assumed the same refund profile for Welsh LTT as for SDLT in the rest of the UK at 20 per cent of the initial value. Relative to England, the private-rental sector in Wales is proportionately smaller, which could point to greater refunds. But in many areas of Wales there are relatively high levels of second 'holiday home' ownership, which could point to fewer refunds. As with our other additional property forecasts, we will keep the 20 per cent assumption under review.

Table 3.10: Changes in residential Welsh SDLT and LTT since March

	£ million					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	140	179	194	211	236	266
November forecast	140	161	167	180	195	216
Change	0	-18	**-28**	**-31**	**-40**	**-49**
of which:						
Receipts outturn		-10	-11	-13	-15	-18
House prices		-7	-10	-15	-22	-27
Property transactions		-4	-3	-2	0	1
WG policy - LTT rates and bands		3	-3	0	1	2
UKG policy		-4	0	0	0	0
Other modelling		4	0	-1	-3	-7

Shaded cells represent notional estimates for years when SDLT devolution has not occurred.

3.45 Table 3.11 shows our Welsh SDLT/ LTT additional properties forecast on both a liabilities and a National Accounts basis.

Table 3.11: Additional properties forecast under different accounting treatments

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Liabilities	40	51	53	56	59	61	65
National Accounts 'cash'	51	55	54	57	59	62	65

3.46 To estimate the effect of the introduction of LTT from April 2018, we first estimated a static costing by applying the new LTT rates to the existing taxpayer distribution in our baseline forecast. We then adjusted for behavioural effects using our standard elasticities for the effect of tax changes on house prices and transactions.[5] We assume that the increased tax is passed through to the seller of property, so that the higher tax paid under LTT will lead to lower sale prices. We also assume that as the tax increases transaction costs, it leads to fewer transactions. We assume a symmetrical effect for tax cuts.

3.47 As the Welsh Government announced the new tax rates five months ahead of them coming into effect we also add a forestalling effect in 2017-18 and 2018-19. For a one percentage point tax increase at a given price we assume that 8 per cent of transactions from the following year would be brought forward if faced with a tax increase, and, again symmetrically, some transactions that would pay less tax would be delayed from 2017-18. The net effect is to increase SDLT receipts in 2017-18 by just under £3 million and reduce LTT receipts in 2018-19 by £3 million.

3.48 The estimated effect on receipts of moving from the residential SDLT rates and thresholds to the LTT ones is set out in Tables 3.12. It shows that the effects are relatively small. The Welsh Government has informed us that the Welsh Revenue Authority is expected to be fully operational from 1 April 2018 to collect the new tax.

[5] We published updated property transaction tax behavioural elasticities on our website alongside our 2017 *Forecast evaluation report*.

Table 3.12: Receipts effect of introducing residential LTT in Wales

	£ million					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Static costing	0	2	3	4	6	8
Price and transactions effect	-	-2	-4	-4	-4	-5
Forestalling effect	3	-4	-	-	-	-
Post-behaviour costing	**3**	**-3**	**neg**	**neg**	**neg**	**3**

Shaded cells represent notional estimates for years when SDLT devolution has not occurred.

3.49 Table 3.13 shows the changes in our Welsh commercial SDLT forecast since March. Receipts so far in 2017-18 have been considerably stronger than expected, in line with our SDLT forecast but unlike commercial LBTT. Our weaker forecast for the commercial property market offsets some of this increase. Receipts from commercial LTT are likely to be fairly volatile due to the potential for large individual transactions.

Table 3.13: Changes in commercial Welsh SDLT and LTT since March

	£ million					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
March forecast	64	64	69	71	76	78
November forecast	69	80	86	91	97	99
Change	**5**	**16**	**17**	**20**	**22**	**21**
of which:						
Receipts outturn	5	17	20	20	22	22
Property market determinants		-5	-8	-9	-10	-10
WG policy - LTT rates and bands		3	0	4	4	5
UKG policy		0	0	0	0	-1
Other modelling		1	5	5	6	6

3.50 We use the same approach as set out above to estimate the receipts effect from introducing commercial LTT in April 2018, but the behavioural elasticities are somewhat larger than for residential property. The costing is set out in Table 3.14.

Table 3.14: Receipts effect of introducing commercial LTT in Wales

	£ million					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Static costing	-	7	7	7	7	8
Price and transactions effect	-	-3	-3	-3	-3	-3
Forestalling effect	3	-3	-	-	-	-
Post-behaviour costing	**3**	**0**	**4**	**4**	**5**	**5**

Shaded cells represent notional estimates for years when SDLT devolution has not occurred.

Comparison with the Welsh Government LTT forecast

3.51 The Welsh Government published its own forecasts that have been subjected to independent scrutiny by academics at Bangor University.[6] In broad terms, the Welsh Government has used similar modelling techniques to those that we employ. When modelling the residential and commercial distributions it aggregated transactions within relatively small price bands, calculating the tax due from each then projecting each forward in line with forecasts for prices and transactions.

3.52 There are several other differences between the forecasts produced by the Welsh Government and our own. First, the Welsh Government's forecast drew on our March 2017 forecast for some economy and receipts inputs. In this forecast we have revised up our overall estimate of receipts in 2017-18, but have revised down property market variables. Second, the Welsh Government's forecast used different behavioural judgements, namely our previous estimates of property market elasticities that have since been updated. We have also included an estimate of the effects of forestalling. The Welsh Government focused on the impact of the tax change on spending power and assumed that the SDLT from transactions brought forward into 2017-18 would be offset by a block grant adjustment. Finally, the Welsh Government's forecast is on a liability basis whereas ours is consistent with the treatment of these receipts in the National Accounts.

Table 3.15: Comparison between Welsh Government and OBR LTT forecasts

	£ million			
	2018-19	2019-20	2020-21	2021-22
Welsh Government forecast	266	291	318	347
OBR November forecast	252	271	293	317
Difference	14	20	25	30

[6] Jones *et al* Bangor University (2017) *Independent scrutiny and assurance of devolved tax forecasts for Wales: final report*.

4 Environmental and transport taxes

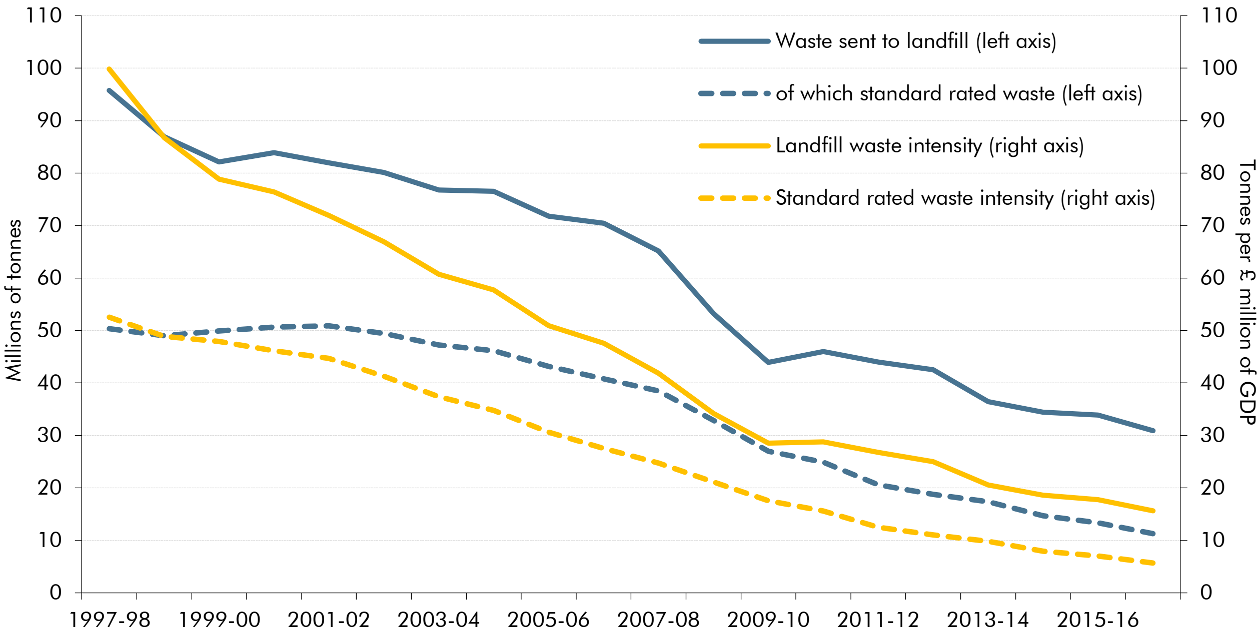
Landfill tax

Trends in UK landfill tax receipts

4.1 Landfill tax was introduced in 1996. It applies to all waste disposed of by way of landfill at a licensed 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 rates, but also by the composition of waste sent to landfill as there are two different rates). Both elements represent sources of uncertainty.

4.2 As Chart 4.1 shows, the volume of waste sent to landfill has been on a declining trend, both in absolute terms and per unit of real GDP (a proxy for the activity that generates waste). The volume of standard-rated waste,[1] which is subject to a much higher rate and accounts for over 95 per cent of receipts, has fallen too. In 2016-17, less than half the waste sent to landfill was subject to the standard rate.

Chart 4.1: UK landfill waste tonnage relative to economic activity

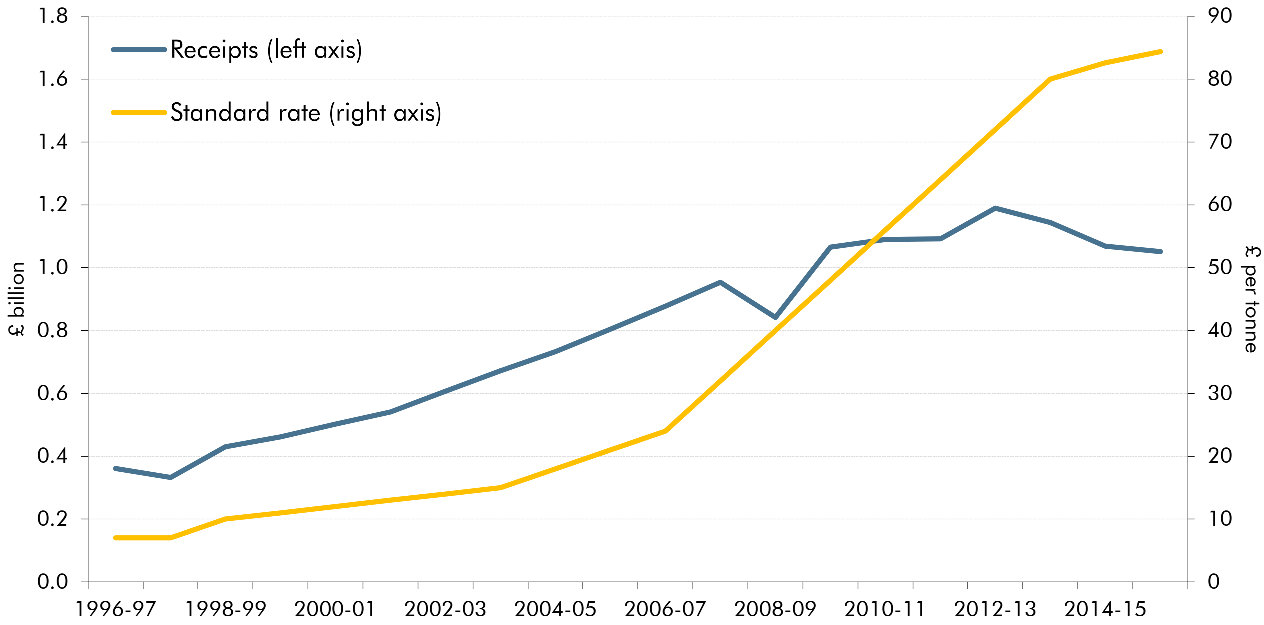


Source: HMRC, Revenue Scotland, ONS, OBR

[1] The standard rate is the default category for waste sent to landfill. Lower rated and exempt waste is broadly 'low polluting and non-hazardous' waste such as rocks, sands and other low activity inorganic materials.

4.3 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 31 million in 2016-17, which is in part due to the increasing levels of tax. Chart 4.2 shows landfill tax revenue collected by HMRC and Revenue Scotland between 1997-98 and 2016-17. The standard rate has risen from £7 a tonne in 1997-98 to £84.40 for 2016-17, with the same rates levied in both Scotland and the rest of the UK. So despite a declining tax base, receipts increased significantly for the first 15 years. But receipts have fallen in the past two years, reflecting smaller increases in the standard rate, while the tax base has continued to decline.

Chart 4.2: UK landfill taxes standard rate and receipts



Source: HMRC, Revenue Scotland

Scottish rate

4.4 Having been fully devolved in April 2015, Scottish landfill tax has replaced the UK equivalent in Scotland. The Scottish Government has so far set rates to match those in the rest of the UK. Contributions to the Scottish landfill communities fund are slightly more generous than those for the equivalent fund in the rest of the UK, but the effect of this is small.

Welsh rate

4.5 Landfill tax in Wales will be replaced with landfill disposals tax from April 2018. In October 2017 the Welsh Government announced that it intends to match the UK rates for the first two years of the tax, while also introducing a new tax rate for waste disposed of at illegal sites, known as the 'unauthorised disposals rate'. This will be charged at 150 per cent of the standard rate.

4.6 The Welsh Government will also operate a landfill communities fund, but this will operate as a grant rather than the tax credit system currently used by the UK Government.

Methodology

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

4.8 As we set out in our *Forecast evaluation report* in October, we have updated our UK landfill tax forecast model. We forecast the volume of standard-rated waste sent to landfill and multiply it by the appropriate tax rate. Adjustments are then made for receipts from lower-rated waste. Previously we linked our forecast for total waste to economic activity, but this has led to over-forecasting the total. We now link total waste growth to population growth. To get from total waste to the taxable element sent to landfill we use DEFRA's latest projections of waste that is exported or incinerated rather than sent to landfill. These changes lower our receipts forecast. As we set out in March, recent data show that the recycling rate has remained flat in England and we maintain that throughout the forecast.

4.9 The tax rates are assumed to be raised in line with RPI inflation each year, consistent with the UK Government's default indexation assumption. The precise form of this policy assumption was changed in this Budget, with a very small effect on the forecast.

4.10 We use current year Scottish receipts to set the starting level of our Scottish forecast, but there are no readily available administrative data on the Welsh share of landfill tax receipts, since landfill operators submit returns that cover sites across England, Wales and Northern Ireland. The Welsh share of receipts in the current year is therefore inferred from data collected by Natural Resources Wales on waste sent to landfill in Wales.

4.11 We add the effect of any new policy measures to produce our post-measures forecast.

UK forecast

4.12 Table 4.1 shows our latest forecast for UK Government landfill tax receipts. On a like-for-like basis it has been revised down by progressively larger amounts over the forecast period, mainly reflecting the lower forecast for total waste. But in-year receipts have also been weaker than expected, which reduces the forecast for this year and feeds through to future years. The in-year estimate is subject to greater uncertainty than usual due to changes to the relevant HMRC accounting system, which has affected the monthly profile of payments. The introduction of the Welsh land disposals tax in 2018-19 reduces UK Government landfill tax receipts by around £20 million a year from then onwards.

4.13 There is one measure in the Autumn Budget that affects landfill tax receipts. It provides additional resources and powers for HMRC and the Environment Agency to tackle waste crime, modestly increasing landfill tax receipts. We consider it to be subject to high uncertainty. It only affects the collection of landfill tax in England and Northern Ireland.

Table 4.1: UK Government landfill tax forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	862	747	680	633	616	606	
November forecast	843	697	611	558	517	492	465
Difference	-19	-50	-69	-75	-99	-114	
of which:							
In-year receipts	-19	-20	-20	-20	-20	-20	
Modelling		-30	-50	-72	-92	-109	
Determinants		0	0	-1	-3	-4	
Welsh LDT		0	-23	-21	-19	-18	
UK Government policy		0	24	39	35	37	33

Scottish landfill tax receipts in 2017-18

4.14 Revenue Scotland publishes quarterly receipts data. Receipts in 2016-17 were £6 million lower than we assumed in March, while receipts in the first quarter of 2017-18 were down 5 per cent on the same period last year at £37 million. Landfill tax receipts are normally evenly spread across each quarter, so we would expect this to provide a reasonable guide to receipts for 2017-18 as a whole.

Scottish forecast

4.15 Table 4.2 sets out our forecast for Scottish landfill tax receipts, which has been revised down since March. The assumption that receipts in Scotland will follow the same year-on-year path as in the rest of the UK from 2018-19 is subject to risks in both directions. Information produced by the Scottish Government in its December 2016 Draft Budget suggests the pace at which alternative waste infrastructure will come on line could be slower than in the rest of the UK. Conversely, recycling rates in Scotland have risen faster than in England.

4.16 Our forecast does not make any allowance for the Scottish Government's aspiration to reduce landfill tonnage at a faster pace than in England (consistent with the approach to policy changes set out in Chapter 1). The Scottish Government has legislated a ban on biodegradable municipal waste being landfilled from January 2021. At this stage, we do not have sufficient information on how the ban will be enforced to quantify its effect. As soon as that is possible, it will be reflected in our forecasts. If the Scottish Government announces further policies detailing how reductions in landfill tonnage are to be achieved, backed by robust evidence, we would factor that into our forecast too. For now, we note that the Scottish Government's aspiration and the forthcoming ban represent downside risks to this forecast.

4.17 There are no UK Government policy measures in the Autumn Budget that affect Scottish landfill tax. We have not assumed that the waste crime measure above lead to more waste being sent to landfill and taxed in Scotland.

Table 4.2: Scottish landfill tax forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	154	149	122	113	110	109	
November forecast	148	140	123	108	101	95	90
Difference	-6	-9	1	-5	-10	-13	

Welsh forecast

4.18 Our November 2016 *Devolved taxes forecast* publication described a large downward revision to the starting point of our Welsh forecast that was based on Welsh Government analysis of data held by Natural Resources Wales covering 2015-16. The Welsh Government has updated this analysis for 2016-17. It suggests that the Welsh share of UK receipts remained fairly flat in 2016-17. We have used the average share from 2015-16 and 2016-17 (3.8 per cent) as the basis for this forecast. Table 4.3 sets out our forecast for landfill tax receipts in Wales in 2017-18 and for land disposal tax (LDT) receipts thereafter.

4.19 There are risks around our central forecast. We have not adjusted the forecast for the higher rate on unauthorised disposals given lack of information on the tax base and how the new Welsh Revenue Authority will police compliance. This could present an upside risk via receipts from unauthorised disposals or if it diverts waste to authorised sites where it would be taxed at the standard rate. But the Welsh Government did not include any additional revenue from this measure in its Budget. Potential downside risks include trends in recycling rates, which have improved faster in Wales than in England, and the Welsh Government's aspiration to eliminate landfill as far as possible. The LDT forecast could also be more volatile than our UK-wide forecast given the relatively smaller size of the tax base, which means that the completion of waste treatment infrastructure sites could lead to proportionately larger drops in the profile of receipts than is the case for the UK as a whole. We have assumed that the waste crime measure announced in the Autumn Budget will not lead to more waste being sent to landfill and taxed in Wales.

Table 4.3: Welsh share of landfill tax and LDT forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	33	28	25	23	22	22	
November forecast	32	26	23	21	19	18	17
Difference	-1	-2	-2	-3	-3	-4	

Shaded cells represent notional estimates for years when tax devolution has not occurred.

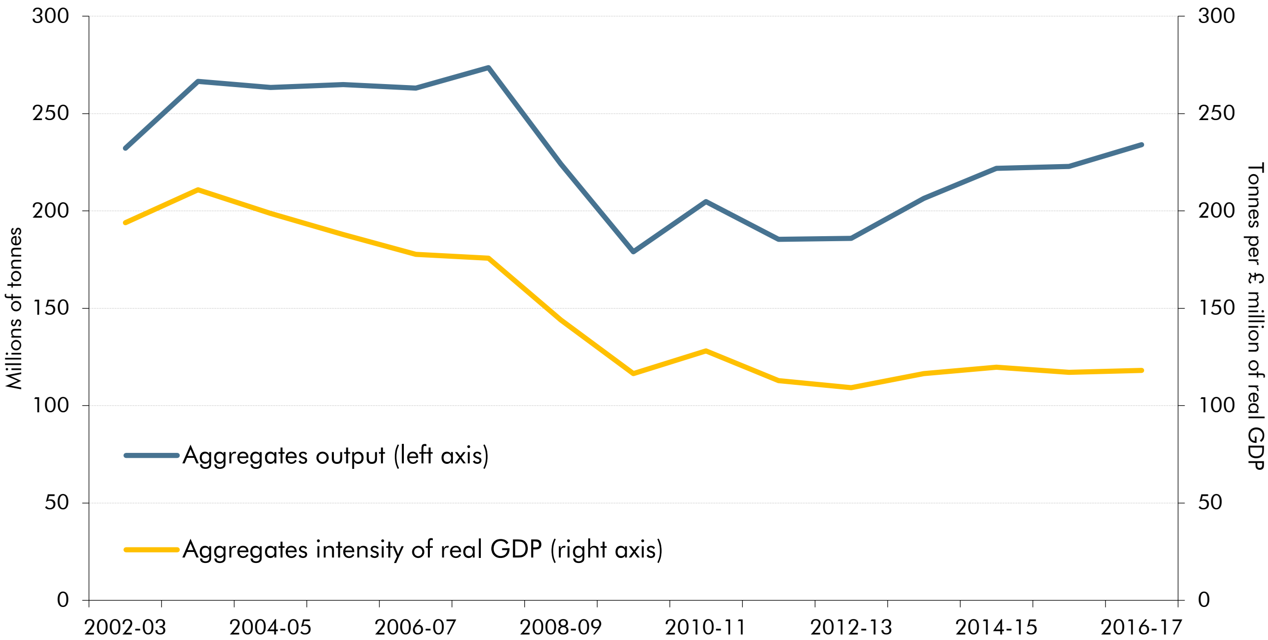
Aggregates levy

Trends in UK aggregates levy receipts

4.20 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 receipts 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, while the levy rate is subject to policy risk.

4.21 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 the latest data suggest it has picked up since then.

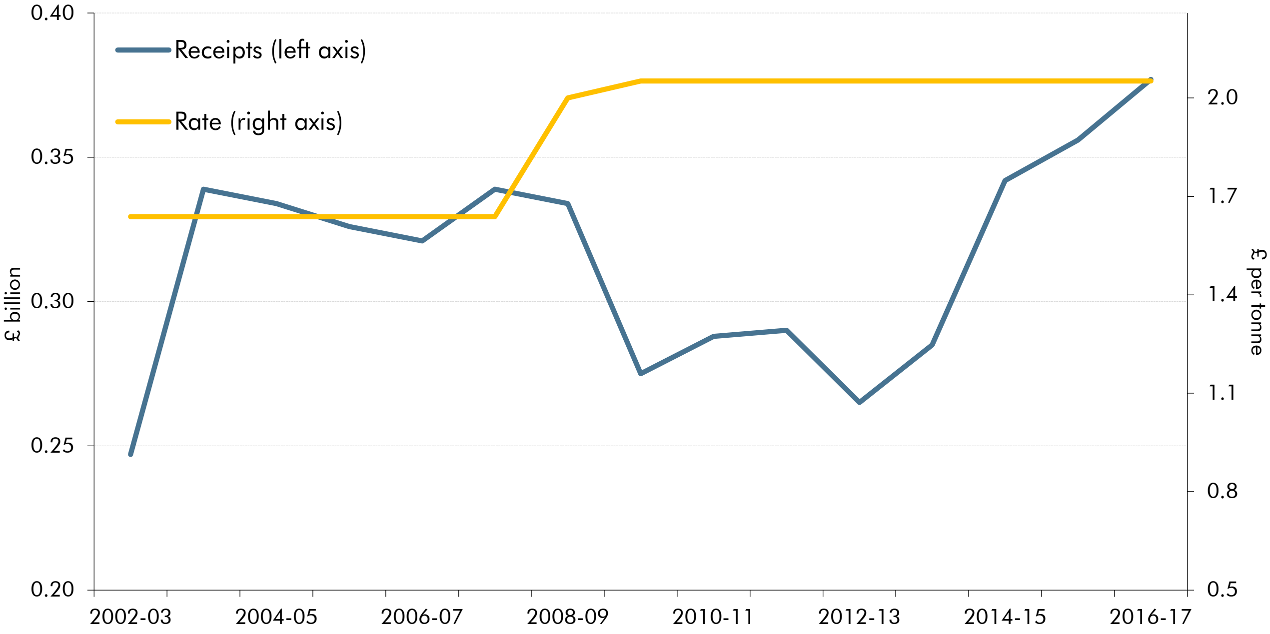
Chart 4.3: UK aggregates output relative to economic activity



Source: HMRC, ONS, OBR

4.22 As Chart 4.4 shows, aggregates levy receipts fell significantly after 2008-09 but have now risen above their pre-crisis levels in cash terms. 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. While the UK Government's stated indexation policy is to increase the aggregates levy rate each year by RPI inflation, it has actually been frozen at £2 per tonne since 2009-10. Indeed, in the 16 years since its inception the rate has only been increased twice. It has been frozen once again in this Budget.

Chart 4.4: UK aggregates levy rate and receipts



Source: HMRC, OBR

Scottish and Welsh rates

4.23 The UK Government has legislated to devolve the aggregates levy to Scotland and has committed to keeping devolution of the aggregates levy to Wales under review. The levy is currently subject to a legal challenge in the European courts. Devolution will not take place until this has been resolved. Our forecasts are therefore illustrative since we do not know when devolution will actually take place.

Methodology

4.24 The UK forecast is generated from a projection of the tax base that is multiplied by the tax rate. An econometric model relates the duty rate, seasonal effects and a time trend, allowing for recycled aggregates to increase over time and for substitution away from the extraction of primary aggregates. The tax rate is assumed to be uprated by RPI inflation, consistent with the UK Government's default indexation policy. As noted, this represents a source of policy risk since the rate has in fact been frozen every year since 2009-10.

4.25 The Scottish and Welsh shares of aggregates levy are not directly available from tax data, since taxpayers submit returns that cover all their operations across the UK. We use HMRC's estimates of relevant aggregates production in Wales and Scotland, which are based on data from the 'UK minerals yearbook' (set out in Table 4.4). The latest available information relates to 2014-15. Aggregates tonnage across the UK fell 27 per cent between 2007-08 and 2014-15, with the decline greater in Scotland (41 per cent) and Wales (38 per cent).

4.26 There are small differences between the total UK tonnage reported in the yearbook and that in HMRC's statistics based on tax returns, but it appears to be the best data source available. The Scottish Government bases its estimates on data from the yearbook in its

'Government Expenditure and Revenue Scotland' (GERS) publication. To produce the Scottish and Welsh forecasts, we apply the latest estimated share to the UK forecast.

Table 4.4: Aggregates tonnage in the UK as reported in the UK minerals yearbook

	Tonnes (million)							
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
England	140.1	136.8	106.2	95.4	104.8	95.9	99.1	113.3
Scotland	37.2	32.3	28.4	28.6	27.5	24.8	22.2	24.9
Wales	20.8	18.0	12.2	12.6	13.6	12.3	13.0	16.4
Northern Ireland	6.7	5.3	4.8	3.9	20.0	18.4	17.9	16.8
UK	**204.8**	**192.5**	**151.6**	**140.5**	**165.9**	**151.4**	**152.3**	**171.4**
	Per cent of UK total							
Scotland	18.2	16.8	18.7	20.3	16.6	16.4	14.6	14.5
Wales	10.2	9.4	8.1	9.0	8.2	8.1	8.5	9.6

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

UK forecast

4.28 Table 4.5 shows that we have revised up our UK forecast since March. Receipts in 2016-17 were significantly higher than expected, but this increase was due to HMRC's new accounting system and the timing of payments from one large trader, so not all the effect is assumed to persist through the forecast period. The remaining increase is due to higher aggregates production and a lower proportion of relieved aggregates. These increases are partly offset by lower RPI inflation, which leads to lower duty rates on the basis of stated indexation policy. As with landfill tax, the in-year estimate is subject to greater uncertainty than usual due to changes to the relevant HMRC accounting system.

4.29 In this Budget, the rate for 2018-19 has again been set at £2 per tonne rather than applying the RPI-linked indexation policy assumption. This is the ninth consecutive year that the rate has been frozen. As stipulated by the UK Parliament, our forecasts are based on the default indexation parameters that are detailed at each Budget in the Treasury's *Policy costings document*. The tax base is projected to decline, so the rise in receipts over the forecast period is due to duty rate rising in line with the Government's policy assumption. This would take the rate to £2.32 per tonne in 2022-23. If this were not to take place receipts would be around £50 million lower in 2022-23.

Table 4.5: UK aggregates levy forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	369	351	375	370	374	380	
November forecast	413	376	378	378	381	386	389
Difference	45	25	3	8	7	6	
of which:							
Pre-measures forecast	45	25	15	19	19	17	
Measures		0	-12	-12	-12	-12	-12

Scottish forecast

4.30 Table 4.4 showed that the Scottish share of UK aggregates tonnage is relatively high, but that it has been on a declining path. According to the most recent data currently available it was 14.5 per cent in 2014-15. We assume that the share remains constant at that level, meaning our Scottish forecast moves in line with the UK forecast. For simplicity, we have assumed that the timing effect that boosted 2016-17 receipts at the UK level would have had a proportionately equal effect in Scotland.

Table 4.6: Scottish aggregates levy forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	53	51	54	54	54	55	
November forecast	60	55	55	55	55	56	56
Difference	6	4	0	1	1	1	

Welsh forecast

4.31 We hold the Welsh share of aggregates levy constant throughout the forecast at the latest available level of 9.6 per cent. The Welsh forecast therefore follows that for the UK too, meaning we have revised it up slightly relative to our March forecast.

Table 4.7: Welsh aggregates levy forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	35	33	36	35	36	36	
November forecast	39	36	36	36	36	37	37
Difference	4	2	0	1	1	1	

Air passenger duty

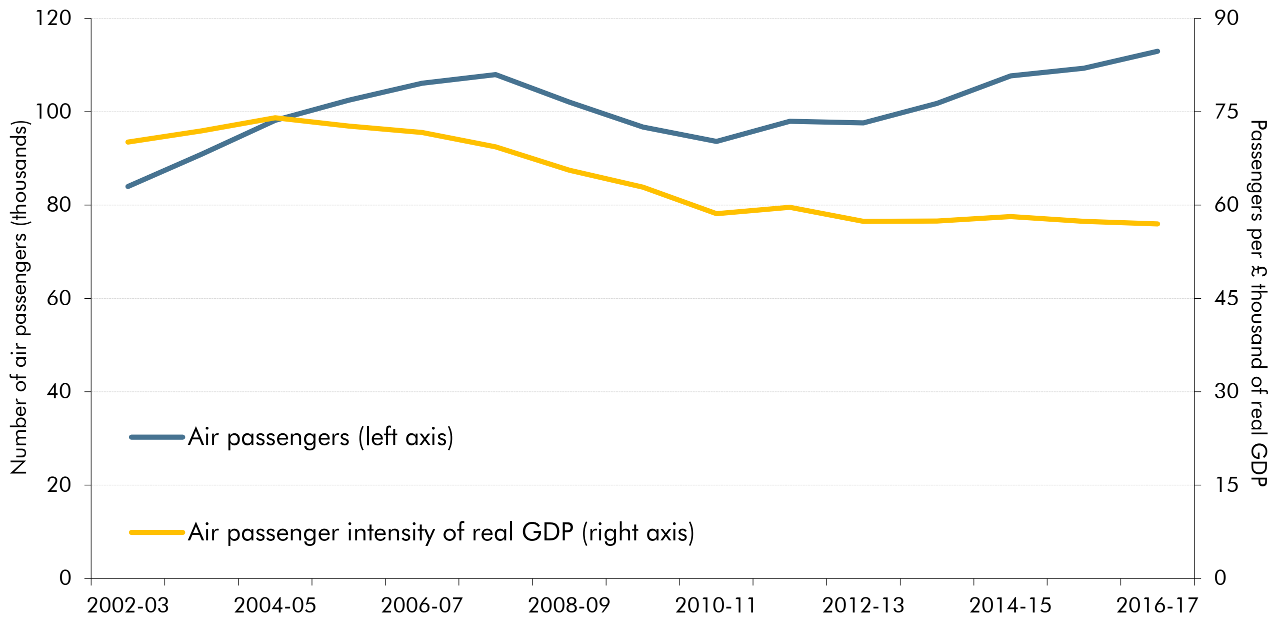
4.32 As set out in Chapter 1, the Scotland Act 2016 includes provisions for the devolution of air passenger duty (APD) to Scotland in April 2018. At the time we closed our forecast, this timing was under review. Our Scottish APD forecast is therefore illustrative.

Trends in UK air passenger duty

4.33 APD is an excise duty that applies to all non-exempt passengers on flights leaving UK airports, with the level of tax determined by the final destination and class of travel. Destinations fall into two bands based on flight distance from London, with the highest duty rate applying to flights of more than 2,000 miles. As APD applies to the final destination, interconnecting flights are exempt. It was introduced in 1994 and has been through numerous policy changes, with the most recent significant change coming in April 2015 when the three long-haul bands were consolidated into one, reducing the total number of bands from four to two.

4.34 As Chart 4.5 shows, the number of air passengers departing UK airports fell sharply during the late 2000s recession and has steadily recovered since then, exceeding pre-recession levels in 2015-16. Our APD forecast assumes air travel is correlated with broader economic activity, so we expect the change in passenger numbers to be associated with GDP growth. Since the tax is paid on the number of passengers, the relationship is with real GDP and, as Chart 4.5 shows, this relationship has been fairly stable since 2010-11.

Chart 4.5: UK passenger numbers relative to economic activity



Source: HMRC, ONS, OBR

4.35 Table 4.8 shows that UK receipts have increased steadily since the recession, although they fell in 2015-16 following the change to the long-haul bands that reduced the effective duty rate. The table also shows the estimated proportion of APD attributable to Scotland using methodologies developed by HMRC and the Scottish Government. Both methodologies have been revised since our March forecast:

- The **HMRC approach** uses unpublished data from the Civil Aviation Authority (CAA) on the number and destination of passengers departing from UK airports, with adjustments based on CAA international air passenger route analysis and the ONS international passenger survey for flight bands and exemptions for interconnecting passengers. The Scottish share based on this approach has fluctuated – HMRC's latest estimate shows an increase, from 8.4 per cent in 2011-12 to 9.6 per cent in 2016-17.[2]

- The **Scottish Government approach** is presented in its GERS publication. This uses published CAA data, but makes different assumptions about the composition of flights by band and interconnecting passengers. The share on this basis has been revised down more substantially, although it still rises in recent years. In 2016-17, the Scottish Government estimate is 1.3 percentage points lower than the HMRC estimate.

Table 4.8: Air passenger duty receipts

	£ million							
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Total UK	1,856	2,155	2,607	2,791	3,013	3,175	3,077	3,183
HMRC estimates of Scottish APD								
October 2016	166	180	214	229	269	300	296	
November 2017	169	184	219	235	257	285	274	306
GERS estimates of Scottish APD								
August 2016	153	185	228	244	270	290	275	
Augugst 2017	153	168	197	213	225	243	247	264
	Per cent of total UK							
HMRC estimates of Scottish APD								
October 2016	9.0	8.4	8.2	8.2	8.9	9.5	9.6	
November 2017	9.1	8.5	8.4	8.4	8.5	9.0	8.9	9.6
Revision	0.1	0.2	0.2	0.2	-0.4	-0.5	-0.7	
GERS estimates of Scottish APD								
August 2016	8.2	8.6	8.7	8.7	9.0	9.1	8.9	
Augugst 2017	8.2	7.8	7.6	7.6	7.5	7.6	8.0	8.3
Revision	0.0	-0.8	-1.2	-1.1	-1.5	-1.5	-0.9	

Scottish tax rates

4.36 As noted above, the timing of APD devolution to Scotland remains uncertain. When it is devolved, the Scottish Government has a stated policy intention to reduce the rates by 50 per cent and eventually to abolish the tax. But we do not yet have specific details or a timescale for how and when these cuts will be implemented. When such details become sufficiently clear we will reflect them in our forecast.

4.37 For now, our forecast illustrates the potential revenue to Scotland on the basis of maintaining APD rates in line with those set by the UK Government. If rates in Scotland were to differ from those in the rest of the UK, estimating the effect on receipts would not be

[2] These latest HMRC estimates are lower in the most recent two years than those published in its 'Disaggregation of tax receipts' publication in October 2017. This reflects further analysis suggesting the Scottish share should be adjusted downwards to account for the exemption for child passengers.

straightforward as there might be significant behavioural effects that we would need to take into account as passengers chose to use different airports and flight routes.

Methodology

4.38 Our forecast for UK APD is driven by the estimated number of passengers across the different bands, to which the appropriate tax rate is applied. The UK Government's stated indexation policy is to raise APD rates in line with RPI inflation each year. The precise form of this policy assumption was changed in this Budget, with a small effect on our receipts forecast. We adjust our forecast to allow for the upward trend in the share of passengers using low-cost operators.

4.39 We continue to use the mid-point between HMRC and the Scottish Government approaches to estimating the Scottish share of APD receipts to produce our central forecast. For this forecast we have averaged the past two years rather than using only the latest year given the volatility in the estimates. On this basis, the Scottish share of APD receipts has been revised down from 9.4 to 8.7 per cent. We assume it remains constant across the forecast.

4.40 We add the Scottish element of any policy measures to produce the post-measures forecast.

UK and Scotland forecasts

4.41 Table 4.9 sets out our APD forecast for the UK, which we have revised down since March. This primarily reflects weaker real GDP growth, which we assume would lead to progressively lower passenger numbers over the forecast period. A slightly lower RPI inflation forecast also leads to lower duty rates.

4.42 Our methodology means the Scottish forecast moves in line with the UK forecast, so it has been revised down too. But the scale of the downward revision to our Scottish forecast is larger than the revision to our UK forecast. In 2021-22, UK receipts are 3.5 per cent lower than we forecast in March, but Scottish receipts are 10 per cent lower. This is mainly due to the latest estimates of the Scottish share having been revised down.

4.43 There is one policy measures in this Budget that affects our APD forecast. The Government has increased the long-haul business class rate but frozen the long-haul economy rate. The net effect is a modest increase in receipts. Based on data from HMRC and the SFC we have assumed that a higher proportion of Scottish passengers take short-haul flights – including domestic ones – meaning a lower proportion will be affected by the measure. On this basis, the effect of the policy in Scotland would be around £2 million a year.

Table 4.9: UK air passenger duty forecast

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	3219	3373	3499	3651	3833	4026	
November forecast	3236	3326	3499	3662	3784	3921	4067
Difference	17	-46	0	-12	-72	-129	
of which:							
Lower passenger numbers		-18	-26	-47	-77	-106	
UK Governmet policy		0	0	23	23	24	27
Other factors	17	-29	25	35	5	-23	

Table 4.10: Scottish air passenger duty forecasts

	£ million						
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
March forecast	301	316	327	342	359	377	
November forecast	282	290	305	317	327	339	352
Difference	-19	-26	-23	-25	-31	-38	
of which:							
Due to lower Scottish share	-18	-19	-20	-21	-21	-22	
Due to lower UK forecast	-1	-7	-3	-4	-10	-16	
UK Government policy		0	0	2	2	2	2

A Social security spending

Devolution of social security expenditure

A.1 The Scotland Act 2016 makes provision for several social security benefits to be devolved to the Scottish Parliament. Most are benefits for people who are disabled, in ill-health or for people who care for them.[1] The Scottish Parliament also has new powers to create top-up benefits and change some aspects of universal credit. The precise timetable for social security devolution is yet to be agreed between the UK and Scottish Governments.

A.2 Currently the only benefit that the Treasury has asked us to forecast at a devolved level is carer's allowance. Ahead of producing a fully considered forecast, this annex presents an illustrative projection. Social security is already separately administered in Northern Ireland, so we focus here on social security spending that is administered by the Department for Work and Pensions (DWP) in Great Britain and that is subject to the forthcoming devolution.

Carer's allowance

Background

A.3 Carer's allowance was introduced in 1976. It supports individuals providing full-time care for others. The rate in 2017-18 is £62.70 a week and is uprated in line with CPI inflation. Eligibility is contingent on both the carer and the recipient of care meeting a number of conditions. The recipient of care must already receive a qualifying benefit.[2] The carer must provide care for at least 35 hours a week and earn less than £116 a week after tax. Carer's allowance is also subject to various overlapping benefit rules. For example, claimants are not able to receive the state pension and carer's allowance at the same time.

Scottish carer's allowance

A.4 The Scottish Government intends to increase the generosity of carer's allowance and wishes to take over its administration from the DWP. At this stage, we do not have sufficient information on either change to quantify their effects. We will work closely with the Scottish Fiscal Commission to ensure that we can bring all relevant information to bear when incorporating these changes in our forecasts.

[1] The fiscal frameworks set out the following benefits: attendance allowance, carer's allowance, disability living allowance, personal independence payment, industrial injuries disablement allowance, severe disablement allowance, cold weather payment, funeral payment, sure start maternity grant, winter fuel payment and discretionary housing payments. The Scotland Act 2016 also provides for other areas to be devolved to the Scottish Parliament including payments made under the Scottish Welfare Fund, Healthy Start Vouchers and employability programmes.
[2] Disability living allowance, personal independence payment, attendance allowance, constant attendance allowance (subject to certain criteria) or armed forces independence payment.

An illustrative projection

A.5 Since eligibility for carer's allowance is related to receipt of other benefits, our forecasts are sensitive to changes in those related forecasts. Our carer's allowance forecast has been affected by the upward revisions to our disability benefits forecasts in recent years. And since carer's allowance cannot be claimed alongside the state pension, spending is also sensitive to changes in the age structure of the eligible population. This has shifted toward people of working age in recent years, placing further upward pressure on spending. These trends were discussed in our October 2016 *Welfare trends report*.

A.6 Table A.1 sets out the in-payment caseload of carer's allowance in Great Britain and in Scotland in recent years (i.e. the caseload excluding those who are eligible but do not receive a payment due to the overlapping benefit rules). The caseload in Scotland has been relatively stable at 8.7 to 8.8 per cent of the total since 2012-13. This is slightly higher than Scotland's 8.5 per cent share of the Great Britain population.

Table A.1 Carer's allowance in-payment caseload in Great Britain and Scotland

	Carer's allowance in-payment caseload (thousands)							
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Great Britain	521	553	584	618	653	698	760	798
Scotland	47	50	52	54	57	61	66	70
	Per cent of Great Britain total							
Scotland	9.1	9.0	8.9	8.8	8.7	8.7	8.7	8.8

A.7 Table A.2 shows DWP's estimates of carer's allowance expenditure, which similarly shows the Scottish share being relatively stable at 8.7 to 8.8 per cent in recent years.

Table A.2 Carer's allowance expenditure in Great Britain and Scotland

	Carer's allowance expenditure (£ millions)							
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Great Britain	1495	1572	1733	1927	2088	2319	2545	2667
Scotland	135	141	153	169	182	203	222	234
	Per cent of Great Britain total							
Scotland	9.1	8.9	8.8	8.8	8.7	8.7	8.7	8.8

A.8 To produce an illustrative projection for carer's allowance spending in Scotland, we have applied a constant share of 8.75 per cent to our Great Britain forecast, as shown in Table A.3. There are many refinements that would be possible in generating a Scottish carer's allowance forecast. For example, taking into account differences in population growth and any Scotland-specific trends in the driver caseloads or the propensity to claim.

Table A.3 Carer's allowance spending

	£ million						
	Estimated	Forecast and projection					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Great Britain	2,685	2,898	3,167	3,377	3,553	3,733	3,932
Scotland	235	254	277	295	311	327	344