

Office for
**Budget
Responsibility**

Welsh taxes outlook

December 2021

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1 Introduction

Background

- 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 In December 2016 the Welsh and UK Governments agreed the Welsh Government's fiscal framework. This established a mechanism for adjusting the block grant funding that the Welsh Government receives from the UK Government to reflect the devolution of tax powers. The fiscal framework also established a requirement for independent forecasting, stating that "*the Welsh Government will be able to decide whether to use the OBR's forecasts or put in place alternative independent forecasting arrangements*".¹ In the event, the Welsh Government chose to use our forecasts to meet this requirement.²
- 1.3 A Memorandum of Understanding, Terms of Reference and a Financial Framework with the Welsh Government guide our work. In the second half of 2020, we jointly reviewed these arrangements to ensure they reflected any lessons learnt in the first year of forecasting.³ We published our first *Welsh taxes outlook (WTO)* alongside the Welsh Government's 2020-21 Draft Budget in December 2019.
- 1.4 In this *WTO*, published alongside the Welsh Government's 2022-23 Draft Budget, we describe our latest forecasts for three sources of revenue:
- the **Welsh rates of income tax**;
 - **land transaction tax (LTT)**; and
 - **landfill disposals tax (LDT)**.

We also explain how each has changed since the previous forecast.

- 1.5 As set out in Chapter 1 of our 2019 *WTO*, we focus exclusively on these devolved taxes given their role in the fiscal framework. Some areas that are therefore beyond the scope of our role include: a full macroeconomic forecast for Wales; a forecast for Welsh Government spending; and an assessment of any policy proposals (rather than stated policies).

¹ More detailed information on the relevant legislation and governance is available on our website.

² Written statement by the Cabinet Secretary for Finance, *Provision of Welsh tax forecasts by the Office for Budget Responsibility*.

³ The joint review has been published on our website alongside the 2020 *Welsh taxes outlook*.

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- 1.6 These forecasts are consistent with the central forecast for the UK economy and public finances presented in our October 2021 *EFO*. As it explained, the continuing vaccine rollout and booster programme, the possibility of further public health interventions, and the potential long-term implications of the pandemic, all remain areas of uncertainty around the economic outlook. Additionally, there has been an unusual amount of economic news since we closed our latest forecast, but our current assessment is that the implications for our medium-term fiscal forecast are relatively modest, with risks in both directions. We continue to emphasise the unusual degree of uncertainty around our forecasts.
- 1.7 The methodology and the forecasts represent the collective view of the three independent members of the OBR's Budget Responsibility Committee (BRC). We take full responsibility for the judgements that underpin them.
- 1.8 All the charts and tables presented in this document, plus supplementary forecast material, are available in spreadsheet format on our website.

Forecast timetable

- 1.9 In order to produce the forecasts presented in this document:
- Analysts from the Welsh Government and HMRC produced draft Welsh tax forecasts, using determinants published in our October 2021 *EFO*, plus the latest available liabilities and receipts data.
 - These were scrutinised by the BRC in two meetings on 14 and 16 September.
 - Updated LTT and LDT forecasts reflecting the latest receipts and house price data were produced by Welsh Government analysts and scrutinised by the BRC during November.
 - On 23 November, we finalised our Welsh taxes forecast, incorporating the impacts of UK Government policy announcements up to and including the Autumn Budget and Spending Review 2021, as well as updated outturn data published since then.

Structure of the document

- 1.10 The rest of this document is structured as follows:
- **Chapter 2:** income tax on non-savings, non-dividend income from the Welsh rates.
 - **Chapter 3:** land transaction tax.
 - **Chapter 4:** landfill disposals tax.
 - **Annex A:** summary of the forecasts required for the block grant adjustments.

2 Welsh rates of income tax

2.1 This chapter:

- describes the **Welsh rates of income tax** and how they are levied on non-savings, non-dividend income by tax band;
- sets out our **methodology** for forecasting UK income tax liabilities and the Welsh share of this total, before splitting this share by tax band;
- presents our **latest forecasts** for the Welsh rates and for UK income tax liabilities; and
- outlines some of the **risks and uncertainties** around our Welsh rates forecast.

What are the 'Welsh rates of income tax'?

2.2 The Welsh rates of income tax came into effect in April 2019. They are administered and collected by HMRC. There are four important aspects of the design and operation of these rates in Wales that distinguish them from our UK-wide income tax forecasts:

- First, they apply only to Welsh taxpayers, who are defined as **individuals whose main place of residence is in Wales** for the majority of the tax year. Individuals who are classified as Welsh resident are given a 'C' flag on their HMRC tax identifier.
- Second, the Welsh rates represent only the first **10p in the pound for each tax band**. Each year, the Welsh Government is required to set the tax rates for each of the basic, higher and additional tax rates, which replace a 10p reduction in the reserved UK Government element of each tax band. Since 2019-20 these rates have all been set at 10p, such that overall income tax rates paid by Welsh taxpayers remain aligned with those in England and Northern Ireland. The remaining income tax raised from Welsh taxpayers – i.e. 10p in the pound from basic rate payers, 30p from higher rate payers and 35p from additional rate payers – is reserved to the UK Government.
- Third, the Welsh rates are levied on **non-savings, non-dividend (NSND) income**. NSND income accounts for just over 90 per cent of UK-wide income tax liabilities, and around 95 per cent in Wales.
- Finally, the Welsh rates are assessed on a **liabilities basis** rather than a National Accounts basis. This means that our forecast of self-assessment (SA) income tax used for the Welsh rates will differ from the cash basis used in the National Accounts and our UK-wide SA income tax forecast, due to the lag between liabilities being incurred and the associated tax being paid.

2.3 Chart 2.1 illustrates how the current income tax liability of three specimen Welsh taxpayers would be split between the UK and Welsh Governments:¹

- **For a basic rate taxpayer earning £30,000** from one source of employment income, their £3,486 liability would be split equally between the two administrations. This results in an effective income tax rate paid by this individual of 11.6 per cent (lower than the 20 per cent basic rate thanks to the £12,570 tax-free personal allowance).
- **For a higher rate taxpayer earning £60,000**, with £55,000 coming from employment and £5,000 of dividends from company shareholdings, 41 per cent of their £10,407 liability would relate to the Welsh rates and 59 per cent would be reserved to the UK Government, including all the £975 due on their dividend income. The effective income tax rate paid by this individual is 17.3 per cent.
- **An additional rate taxpayer earning £250,000**, with £200,000 from employment income and £50,000 in dividends, would have a total tax liability of £90,802. Of this, only 22 per cent would relate to the Welsh rates, while 78 per cent would go to the UK Government. At this income level a taxpayer would not receive any personal allowance. The higher share for the UK Government reflects two factors: first, all earnings above £37,700 would be taxed at the higher or additional rates where the UK Government share is much larger; and second, the taxpayer has a liability of £18,288 from their dividend income, all of which is retained by the UK Government. The effective income tax rate paid by this individual is 36.3 per cent.

2.4 These examples illustrate the relative importance of higher earners for tax receipts, but that this is much less the case for the Welsh rates. The higher rate taxpayer earns twice as much as the basic rate taxpayer and has an overall tax liability that is three times greater, but their Welsh rates liability is only a little over twice as large. The additional rate taxpayer earns four times as much as the higher rate taxpayer and has a tax liability that is more than eight times greater, but their Welsh rates liability is somewhat less than five times greater. The UK Government's tax revenues are therefore more sensitive to changes in high-earners' incomes than the Welsh Government's revenues are.

¹ In addition to the income tax parameters reported in Table 2.2, this also reflects the personal allowance taper that withdraws £1 of personal allowance for every £2 of earnings above £100,000; the dividend allowance of £2,000; and tax rates on dividend earnings of 7.5 per cent for basic rate taxpayers, 32.5 per cent for higher rate taxpayers and 38.1 per cent for additional rate taxpayers. These specimen examples are illustrative and do not include all aspects of the income tax regime, for example the use of reliefs to lower liability.

Chart 2.1: Illustrative splits between Welsh and UK Government income tax liabilities



2.5 The December 2016 fiscal framework agreement between the Welsh and UK Governments detailed how the Welsh rates would operate.² In doing so it placed a requirement on us to forecast income tax liabilities in Wales, and in England and Northern Ireland combined, split by tax band. This was not something that had previously been necessary (or possible).³

Methodology

2.6 Our Welsh income tax forecasts are produced on a 'top-down' basis.⁴ The main steps are:

- First, we establish the **whole of the UK NSND income tax liabilities** forecast.
- Next, we calculate the **share of NSND income tax liabilities subject to the Welsh rates**, taking into account the relevant tax base in Wales and how this maps onto the announced tax regime. Much of our analysis first looks at the total share of income tax from Wales – including amounts paid by Welsh taxpayers but reserved to the UK Government – before estimating the proportion that is subject to the Welsh rates. We have also calibrated this to the outturn share for the Welsh rates in 2019-20, based on the first year of outturn data for Welsh income tax liabilities, which HMRC published in July. We evaluate our forecasts for the Welsh rates in 2019-20 in Box 2.1.
- Finally, we add our estimates of the effect of **new policies** announced since our previous forecast on Welsh rates liabilities.

² HM Government and Welsh Government, *The agreement between the Welsh Government and the United Kingdom on the Welsh Government's fiscal framework*, December 2016.

³ For more on our approach, see Mathews, P. *Working paper No.14: Devolved income tax: forecasting by tax bands*, September 2018.

⁴ For more detail on our forecast methodology see Chapter 2 of our December 2019 *Welsh taxes outlook* and the 'Welsh tax forecasts' page of our website.

Pre-measures UK-wide forecast

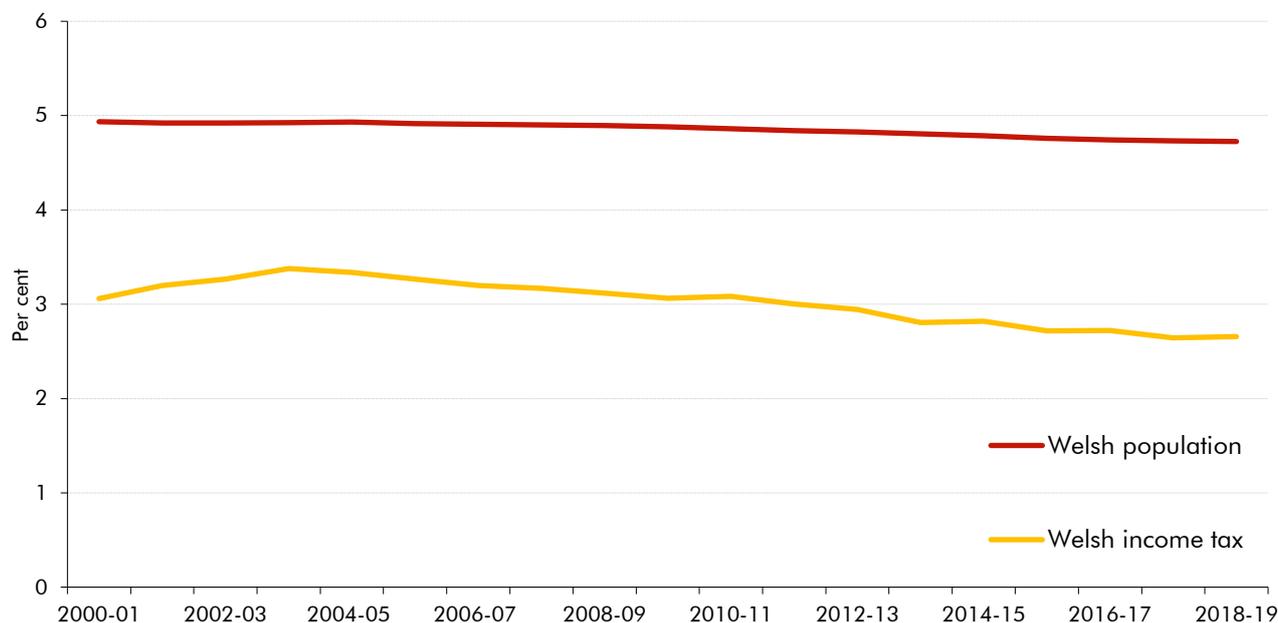
- 2.7 We use HMRC's latest published UK-wide NSND income tax liabilities outturn for the previous tax year (currently 2019-20) as the starting point for our pre-measures forecast. To project liabilities between that outturn year and the year in progress, we produce an in-year estimate based on HMRC's most recent monthly tax receipts data.
- 2.8 We forecast growth in the UK income tax base in line with our wider economy forecast. The key determinants are employment and average earnings growth, which determine the amount of labour income that can be taxed, and CPI inflation, which is used to uprate tax thresholds in the absence of other stated policies. (In our latest forecast, CPI inflation has little effect because thresholds are frozen at the UK level until 2025-26.)
- 2.9 We forecast income tax at the UK level according to the different methods by which HMRC collects the tax. PAYE income tax accounts for over 80 per cent of revenue, with nearly all the remainder collected via the SA system. PAYE income mainly represents the earnings of employees plus some pensions income, while SA income includes profits from self-employment and income from dividends, land and property, and savings.

The share of UK-wide income tax liabilities subject to the Welsh rates

The overall Welsh share of UK-wide income tax liabilities

- 2.10 Armed with our forecast for UK NSND income tax liabilities, we then need to calculate the share that will be subject to the Welsh rates and apply this to the UK forecast. This is done in two steps. First, we calculate the overall Welsh share of income tax as captured by HMRC's survey of personal incomes (SPI). This is an annual survey based on a sample of around 768,000 individuals in contact with HMRC. It is published with a long lag, with the 2018-19 SPI being the latest year currently available. This pre-dates the Welsh rates coming into effect, so it refers to all income tax paid by Welsh taxpayers.
- 2.11 Chart 2.2 compares the Welsh share of UK income tax liabilities with the Welsh share of the UK population. Both have been declining – the Welsh share of income tax more rapidly. Perhaps the two most striking features of the chart are how much lower the Welsh share of income tax is compared with the Welsh share of the population (2.7 versus 4.7 per cent in 2018-19) and the difference in the relative rate of decline in the Welsh share of income tax compared with the share of population (13.2 versus 4.3 per cent since 2000-01). On this basis, income tax liabilities per person in Wales in 2018-19 were 44 per cent lower than in the UK as a whole (£1,579 versus £2,808).

Chart 2.2: Welsh share of UK income tax liabilities and population

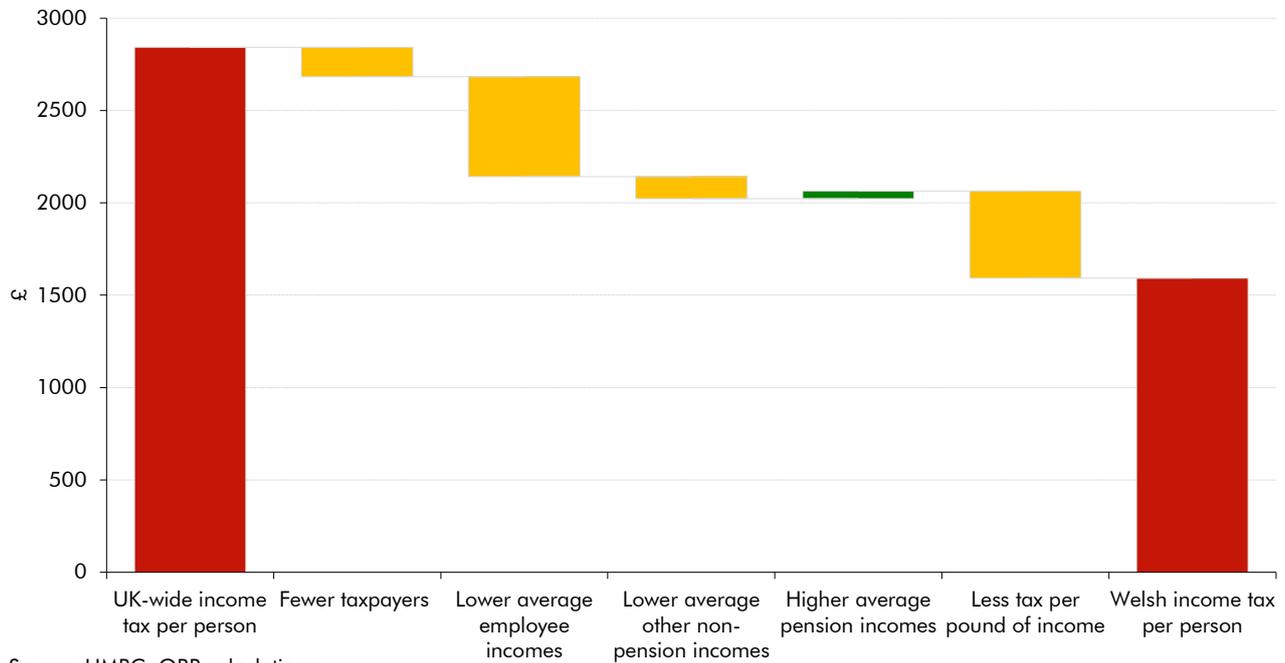


Note: Tax data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.

Source: HMRC, ONS

- 2.12** We can readily incorporate differences in expected population growth in our forecasts as the ONS publish these, but understanding why tax per person in Wales is lower than in the UK and declining in relative terms, and how it has evolved over the past, can help inform other assumptions we make about the future Welsh tax share. In order to accommodate some of this observed difference, in this forecast we have included share updates based on in-year real time information (RTI) to adjust the SPI-based shares. This should provide us with more up-to-date share values for our forecast and help us capture some of these more recent dynamics. A more thorough investigation of these differences will be presented in a working paper on devolved income tax that we intend to publish in 2022.
- 2.13** In Chart 2.3 we use the latest SPI data to show how the difference in tax liabilities per person can be attributed to three underlying factors: the proportion of the population that are taxpayers; the average incomes of those taxpayers (split into three different sources); and the amount of tax paid per pound of income (i.e. the effective tax rate (ETR)). Analysing the difference in this way facilitates any forecast judgements we may wish to make about how the Welsh share of income tax will evolve.

Chart 2.3: Welsh and UK income tax liabilities per person in 2018-19

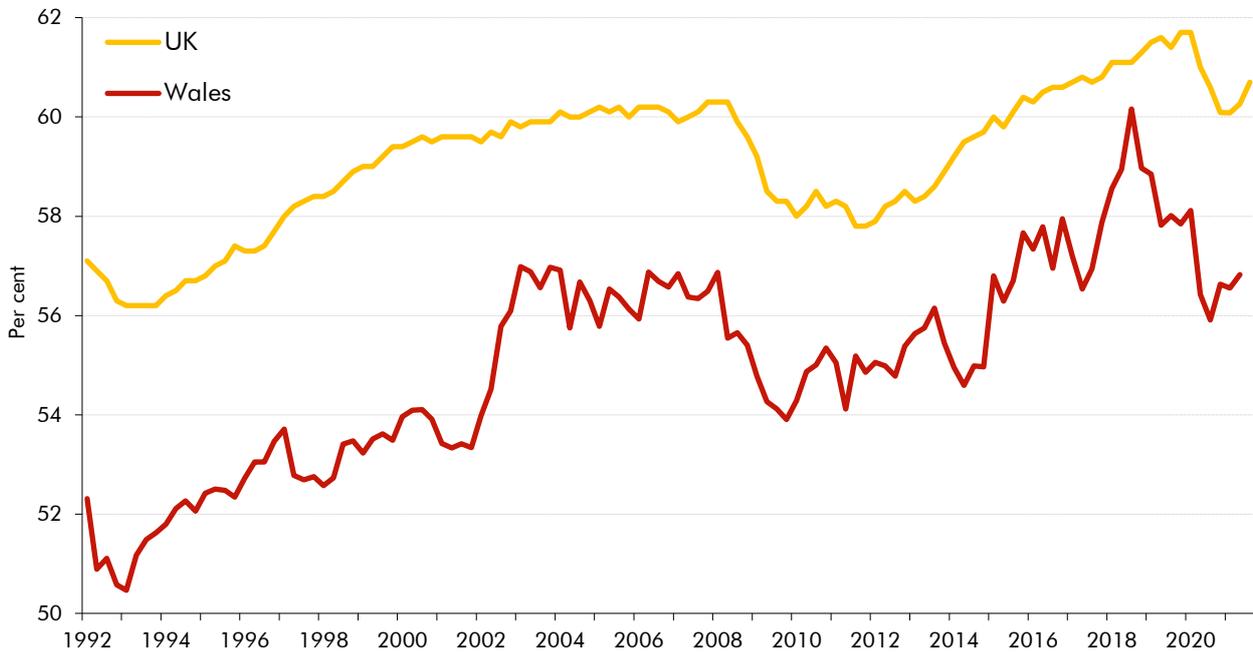


The proportion of the population that pay income tax

- 2.14** The likelihood of an individual paying income tax is lower in Wales than it is in the UK as a whole. According to the 2018-19 SPI, 47 per cent of the Welsh population paid income tax, compared to 50 per cent of the UK’s population, accounting for around 13 per cent of the gap between Welsh and UK income tax liabilities per person.
- 2.15** There are two main factors that are likely to explain the lower proportion of taxpayers in the population in Wales. First, the employment rate in Wales is lower than in the UK as a whole. Chart 2.4 shows that the employment rate in Wales has been consistently below that in the UK in recent years.⁵ On average since 1992, the rate in Wales has been 4.1 percentage points lower than that in the UK as a whole. In 2018-19 it was 2.1 percentage points lower. The employment rate in Wales has also been around twice as volatile as in the UK as a whole, leading to greater sensitivity to employment shocks. In 2020 the employment rate fell by 2.3 percentage points in Wales, compared to 1.1 percentage points in the UK as a whole, as a result of the pandemic, but it has recovered more quickly so far in 2021.

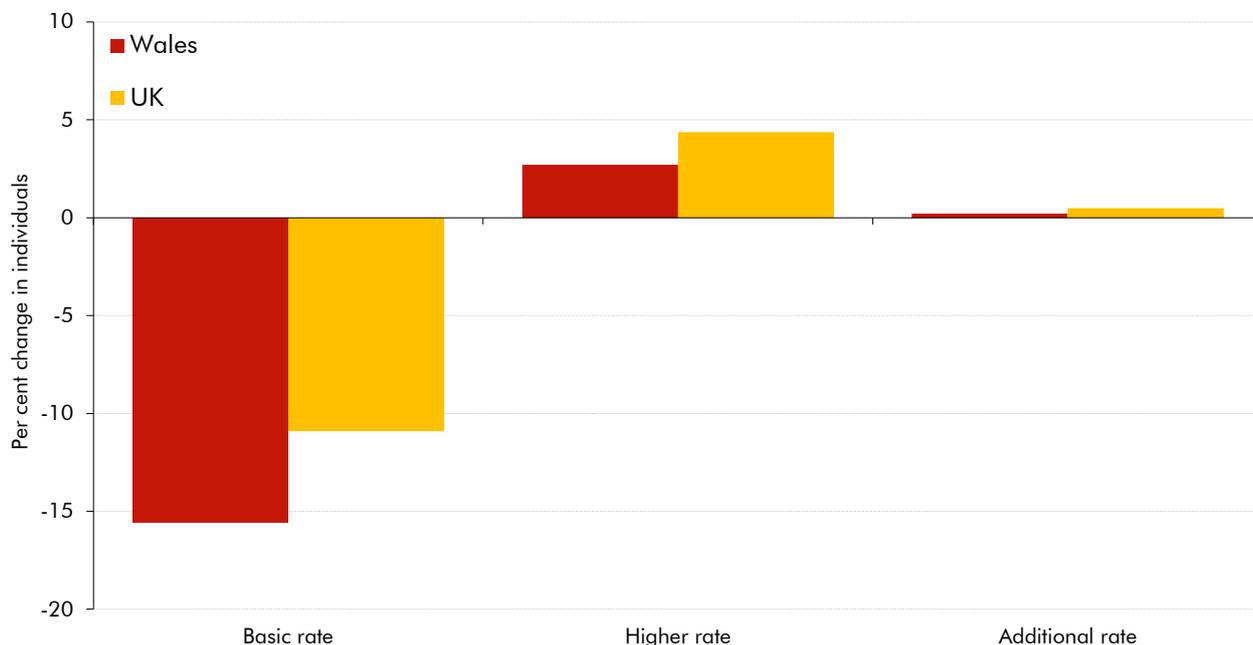
⁵ The employment rate here is the proportion of people aged 16 and over who are in paid work.

Chart 2.4: Employment rate for the UK and Wales



2.16 Second, successive rises in the tax-free personal allowance – from £6,475 in 2010-11 to £11,850 in 2018-19 (and further to £12,570 in 2021-22) – are likely to have taken proportionately more Welsh residents out of income tax altogether due to differences in the earnings distribution between Wales and the UK as a whole. Chart 2.5 shows the relative change in the number of taxpayers in each tax band between 2010-11 and 2018-19. The significantly larger decline in basic rate taxpayers in Wales (nearly one and a half times that in the UK), reflects the greater concentration of the tax base in this band and the resulting disproportionate effect of raising the personal allowance. Conversely, the Welsh increase in the other two bands is around half that of the UK as a whole. This points to the greater decline in basic rate taxpayers in Wales being due to taxpayers dropping out of the basic rate rather than moving up into the two higher bands. This helps explain why the number of taxpayers grew by 1 per cent in the UK between 2010-11 and 2018-19, but dropped by 6 per cent in Wales, despite increases in the population and employment rates in both.

Chart 2.5: Change in taxpayers by tax band between 2010-11 and 2018-19



Source: HMRC, OBR

Average income per taxpayer

- 2.17 The most important reason for the gap between UK and Welsh tax per person as recorded in the SPI is that Welsh taxpayers had lower average incomes. This explains around half the shortfall in tax per person in 2018-19.
- 2.18 Table 2.1 displays different sources of income averaged across all income taxpayers. It shows that the vast majority of taxpayer income in both the UK and Wales comes from employee jobs, so it is not surprising that this represents the largest source of difference in tax liabilities per taxpayer (as shown in Chart 2.3 above). It also shows that the SPI implied average income in Wales is 18 per cent lower than in the UK as a whole, with the difference particularly marked in self-employment and other non-pension income (including savings and dividends). By contrast, the average income from pensions is 9 per cent higher in Wales. The higher proportion of the Welsh population that are of pension age (21 per cent in 2018 versus 18 per cent in the UK as a whole), and the higher proportion of public sector workers in Wales, will both contribute to this difference.

Table 2.1: Average incomes in 2018-19 by type

	UK	Wales	Difference	
	£ per taxpayer		£s	Per cent
Employee income	24,873	20,368	-4,506	-18
Self-employment and other non-pension income	3,108	2,625	-483	-16
Pension income	4,905	5,346	441	9
Total income	35,443	29,044	-6,399	-18

- 2.19 Table 2.2, which focuses just on employee income, shows that this large gap in average earnings is also reflected in other sources of labour income data. The coverage of each

differs so they are not fully comparable, which explains why the level of average earnings reported by each is different. But even so, they tell a consistent story of average employee incomes in Wales being considerably lower than those for the UK as a whole.⁶

Table 2.2: Different measures of average employee earnings in 2018-19

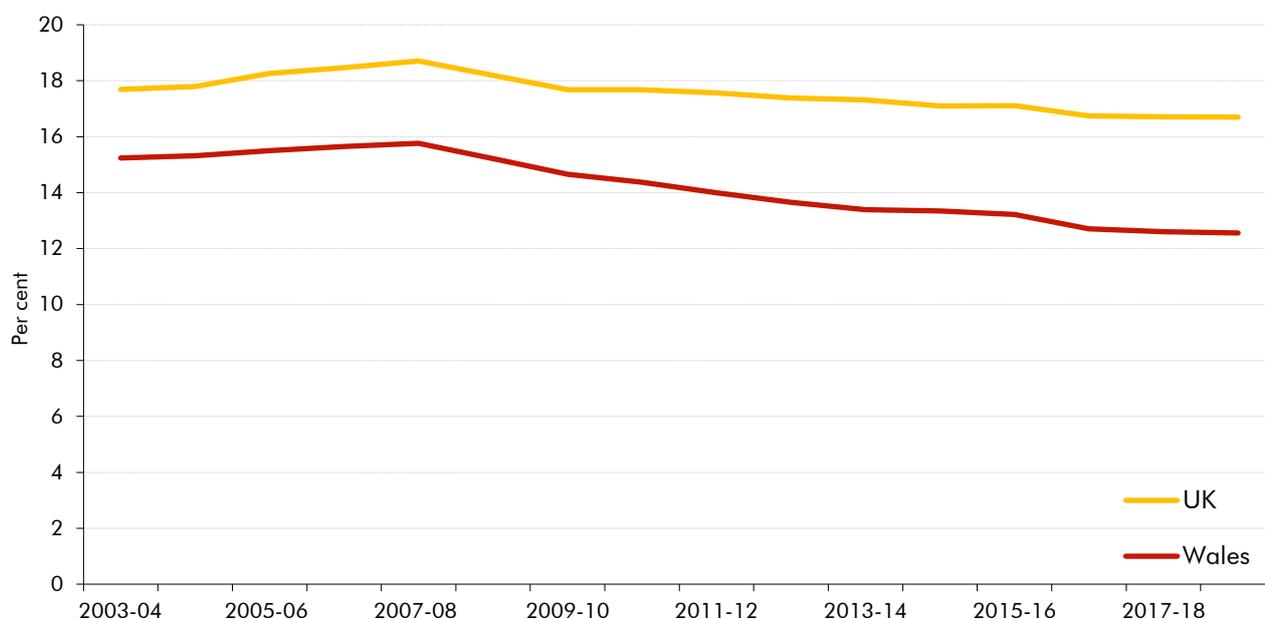
	UK	Wales	Difference	
	£ per employee		£s	Per cent
HMRC Survey of personal incomes	32,614	27,157	-5,457	-17
HMRC Real-time information	29,156	24,250	-4,906	-17
ONS Annual survey of hours and earnings	29,077	25,013	-4,064	-14
ONS Labour force survey	32,446	28,240	-4,206	-13

Average amounts of tax paid per pound of income

2.20 Even once we have accounted for differences in the number of taxpayers per person and the average income per taxpayer, income tax per person in Wales falls well short of that in the UK because less tax is paid per pound of income. This lower effective tax rate explains over a third of the difference.

2.21 Chart 2.6 shows that the effective income tax rate in Wales has been considerably lower than that in the UK across the past decade. It has also declined somewhat faster, by around 3 percentage points between the peak in 2007-08 and 2018-19 compared with around 2 percentage points in the UK as a whole.

Chart 2.6: Effective income tax rates in Wales and the UK



Note: Data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.

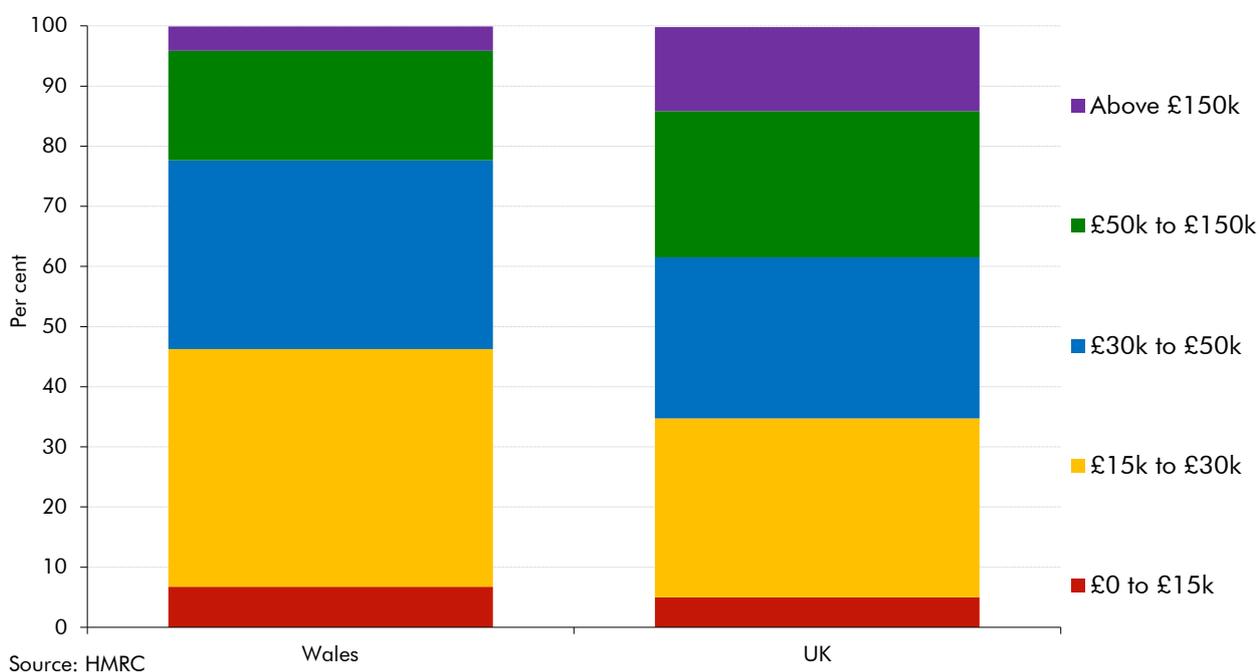
Source: HMRC

⁶ The difference in the SPI average between Tables 2.1 and 2.2 is because the latter is only averaging across those individuals with employment income, while the former is doing so across all individuals. This explains why the average is lower in Table 2.1, since it includes some individuals, for example pensioners, with no employment income.

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2.22 In part this reflects the progressive income tax structure interacting with lower average incomes – for example, all else equal there will be a higher share of tax paid at the basic rate in Wales than there is in the UK as a whole. But it also reflects the shape of the income distribution. Chart 2.7 compares total taxpayer income grouped by income bands between Wales and the UK as a whole, as recorded in the 2018-19 SPI. It shows that taxpayers earning over £50,000 account for around 40 per cent of total taxpayer income in the UK as a whole, nearly double the equivalent share for Wales. This is reflected in the share of total tax paid at each income band, with nearly 65 per cent of total tax paid in the UK coming from those earning over £50,000, compared with around 40 per cent in Wales.

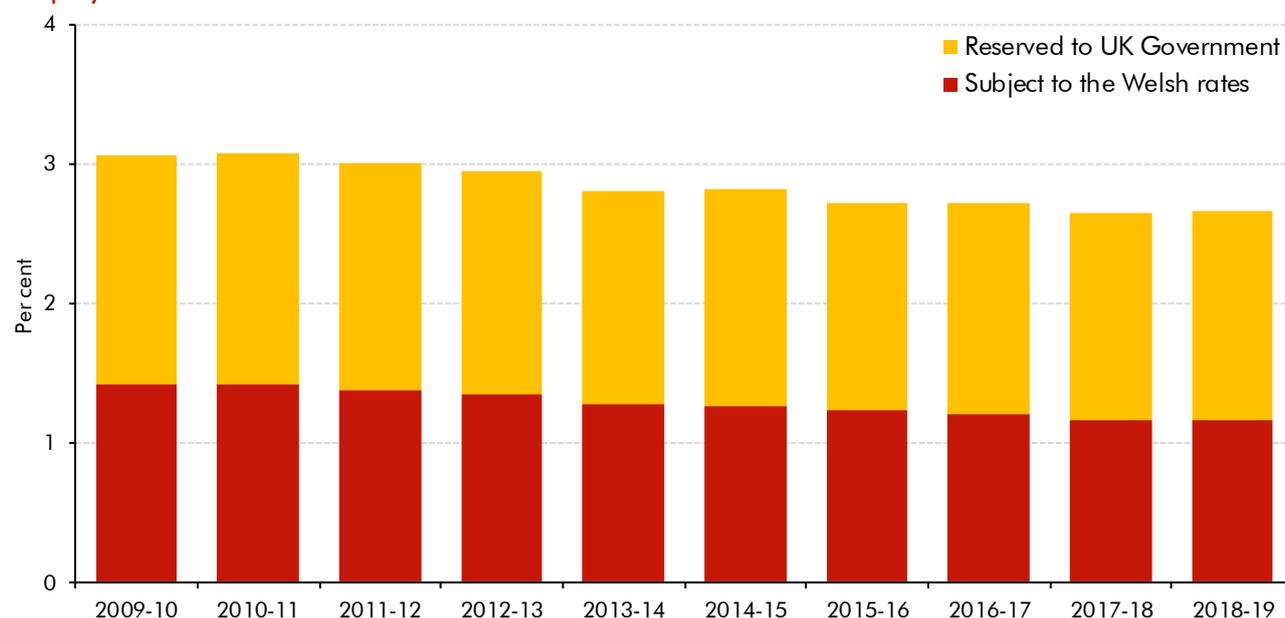
Chart 2.7: Proportion of total taxpayer income in the UK and Wales by income band



The share of Welsh income tax liabilities subject to the Welsh rates

2.23 The final step in estimating the share of UK income tax liabilities that will be subject to the Welsh rates is a mechanical one. We estimate the share of Welsh NSND income that will be taxed in each tax band and then calculate the relevant fraction of it that would be covered by the first 10p – i.e. 50 per cent for income taxed at the basic rate, and so on. Chart 2.8 shows all the income tax collected from Welsh taxpayers as a proportion of total UK income tax (2.7 per cent in 2018-19) and compares it to the amount actually devolved – i.e. the share that would be subject to the Welsh rates (1.2 per cent in 2018-19).

Chart 2.8: Welsh shares of total UK income tax liabilities: all tax from Welsh taxpayers versus the Welsh rates of income tax



Source: HMRC

Forecasting the share of income tax liabilities subject to the Welsh rates

2.24 From these starting points, we adjust our forecast for the overall Welsh share in three ways:

- **RTI earnings:** we fill in the period between 2018-19 and 2021-22 using HMRC's estimate of outturn Welsh income tax liabilities in 2019-20 and more timely RTI data on the Welsh share of total pre-tax employee earnings (i.e. the product of employee numbers and average earnings) since then. In the absence of timely information on other forms of NSND income, we assume that the RTI earnings data are representative of the total. Applying this approach in our Scottish income tax forecasts has suggested that it provides a reasonable guide to movements in NSND income shares.
- **Population:** beyond 2021-22, we factor in relative population growth rates based on the most recent ONS principal population projections, which pre-date the pandemic. These show the Welsh share of the UK population continuing to decline, and we would expect this to reduce the Welsh share of income tax payers.⁷ We adjust for this using an index of the Welsh share of the UK's adult population.
- We include adjustments for **gift aid and those previously announced policies** that have been or will be implemented between the SPI base year (2018-19) and the end of our forecasts and that are expected to affect the Welsh share.

2.25 Finally, we calculate the share of all Welsh income tax subject to the Welsh rates. For the forecast years this is done via HMRC's 'personal tax model', which is based on outturn SPI

⁷ See Box A.2 in Annex A of our 2018 *Fiscal sustainability report* for a discussion of the fiscal risks that might be associated with demographic trends in the constituent nations of the UK.

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data, and follows the same methodology as has been used to estimate the share subject to Welsh rates in outturn.

New policy costings

- 2.26** Our post-measures forecast is produced by adding the effects of new policies announced since our previous forecast. The introduction of the Welsh rates and the associated terms of the fiscal framework have meant that we now need to assess the effect of new policies on the individual bands of income tax rather than simply their overall cost or yield.
- 2.27** Many of the general sources of uncertainty around policy costings that we routinely highlight in our forecast publications are likely to be amplified as we disaggregate costings by geography and tax band. For that reason, we believe a relatively simple approach that makes sufficient allowance for asymmetric effects across countries and bands, while not seeking spurious precision, is appropriate.

Latest forecast

UK income tax forecast

- 2.28** As set out in Chapter 1, our latest forecast for UK NSND income tax is based on the economic forecast published in our October 2021 *Economic and fiscal outlook (EFO)*. Table 2.3 reports the UK and Welsh rates and thresholds that we have used in this forecast. The UK Government has frozen each of the three tax thresholds between 2021-22 and 2025-26. In 2026-27 the personal allowance and higher rate thresholds rise in line with CPI inflation, but the additional rate threshold remains fixed in cash terms.

Table 2.3: UK Government and Welsh income tax parameters

	Per cent					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
UK Government tax rates for Welsh taxpayers						
Basic rate	10	10	10	10	10	10
Higher rate	30	30	30	30	30	30
Additional rate	35	35	35	35	35	35
Welsh rates of income tax						
Basic rate	10	10	10	10	10	10
Higher rate	10	10	10	10	10	10
Additional rate	10	10	10	10	10	10
Total income tax rates						
Basic rate	20	20	20	20	20	20
Higher rate	40	40	40	40	40	40
Additional rate	45	45	45	45	45	45
£						
Tax thresholds (reserved to the UK Government)						
Personal allowance	12,570	12,570	12,570	12,570	12,570	12,830
Higher rate	50,270	50,270	50,270	50,270	50,270	51,330
Additional rate	150,000	150,000	150,000	150,000	150,000	150,000

Note: Shaded cells represent policy baselines assumed for forecasting purposes. We assume that Welsh rates will remain unchanged until the Welsh Government states otherwise.

- 2.29** Table 2.4 sets out the forecast for UK NSND income tax liabilities that underpins our Welsh rates forecast. Despite the sharp fall in nominal GDP in 2020-21, UK-wide NSND income tax liabilities actually rose modestly (by £4.4 billion) as incomes were supported by pandemic-related schemes. Revenues are expected to rise modestly in 2021-22, then more steadily from 2022-23 onwards.
- 2.30** Relative to our March 2021 forecast, liabilities were higher than expected in 2020-21, after which they have been revised up more significantly (by an average of £23 billion or 11 per cent). This revision is largely thanks to a faster recovery so far this year, a downward revision to the degree to which we expect real GDP to be scarred by the pandemic (from 3 to 2 per cent), and higher and more sustained inflation boosting nominal GDP. This all results in substantial upward revisions to the income tax base. We have also revised up the expected yield from the income tax threshold freezes announced in the UK Government's March 2021 Budget, as significantly higher inflation increases the amount raised relative to the pre-measures position in which thresholds increased with CPI inflation. On a liabilities basis, the yield in 2025-26 has been revised up by £15.5 billion.
- 2.31** The effects of individual UK Government policies in its October 2021 Budget on NSND income tax liabilities were dominated by the (largely indirect) consequences of two measures whose direct effect is outside the NSND tax base:
- A 1.25 percentage point increase in the rate of NICs on employees, employers and the self-employed for 2022-23 only, which is then replaced by a **new 1.25 per cent health and social care levy** on the same terms from 2023-24 onwards. This reduces income tax via both its indirect effects on wages and the increased incentive to incorporate that it generates. We assume that 80 per cent of the economic incidence of the levy is passed through by firms to lower nominal wages within two years (with the other 20 per cent passed through to consumers via higher prices, while profits absorb some of the cost in the first year). This leaves nominal wages 0.5 per cent lower from 2023-24 onwards. In addition, increased marginal tax rates for those who are employed or self-employed strengthen the incentive to set up as a company to pay corporate taxes instead of income tax. In total, these effects reduce UK NSND income tax liabilities by amounts rising from £2.2 billion in 2022-23 to £3.9 billion in 2025-26.
 - The **1.25 percentage point increase in tax rates levied on dividend income**, which affects NSND income tax liabilities by reducing the incentive for individuals to incorporate. This increases UK NSND income tax liabilities by £0.1 billion in 2023-24, rising to £0.4 billion by 2025-26, partly offsetting the effects of the levy.
- 2.32** In addition, the October 2021 Budget and Spending Review announced a material discretionary fiscal loosening, which boosts the level of nominal GDP by 0.4 per cent in 2022-23, with growth slightly weaker thereafter as the direct effect of discretionary easing fades. In isolation, this raises NSND income tax liabilities by a maximum of £4.8 billion in 2022-23 and declining amounts thereafter. From 2024-25 onwards, the NSND income tax losses associated with the health and social care levy outweigh the gains from other sources.

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Table 2.4: Whole UK forecast of tax liabilities on non-savings, non-dividend income

	£ billion							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast restated	174.9	177.7	178.9	190.8	198.0	212.5	225.0	
December forecast	176.8	182.0	198.0	212.0	223.7	233.8	248.1	261.8
Change	1.9	4.4	19.1	21.2	25.7	21.3	23.1	
<i>of which:</i>								
UK NSND outturn alignment		4.6	4.9	5.2	5.5	5.8	6.2	
Pre-measures forecast		-0.2	14.1	13.5	18.0	15.7	19.0	
Effects of UK Government policies		0.0	0.1	2.6	2.3	-0.1	-2.0	
<i>of which:</i>								
Health and social care levy		0.0	0.0	-2.2	-3.0	-3.1	-3.9	
Dividend tax rate increase		0.0	0.0	0.0	0.1	0.3	0.4	
Other direct effects		0.0	0.0	0.0	0.4	0.4	0.5	
Other indirect effects		0.0	0.0	4.8	4.7	2.2	1.0	

Share subject to the Welsh rates

2.33 Outturn data for 2019-20 published by HMRC in July 2021 show the Welsh share to have been very close to our March 2021 forecast. In our March forecast we included a temporary uplift to the Welsh share reflecting in-year RTI data for 2020-21. We have replaced this adjustment with updated Welsh shares based on the latest RTI data for 2020-21 and the first four months of 2021-22. This change results in modest reductions in our forecast for the Welsh share between 2020-21 and 2021-22, as shown in Table 2.5.

Table 2.5: Share of pre-measures liabilities subject to the Welsh rates

	Per cent of UK total for non-savings, non-dividend liabilities							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast (pre-measures)	1.16	1.18	1.18	1.17	1.17	1.17	1.17	
December forecast	1.15	1.17	1.16	1.17	1.18	1.18	1.17	1.17
Change	0.00	-0.01	-0.02	0.00	0.01	0.00	0.00	
<i>Memo: Population index</i>		100.0	99.4	99.2	99.1	98.9	98.7	98.5
<i>Memo: RTI index (2017-18 = 100)</i>		100.8	100.8	100.8	100.8	100.8	100.8	100.8
<i>Memo: Combined index</i>		100.8	100.1	100.0	99.8	99.7	99.5	99.3

Latest forecast for the Welsh rates of income tax

2.34 Table 2.6 sets out our latest forecast for the Welsh rates of income tax and a breakdown of the changes since March, while Table 2.7 shows the forecast by tax band. We have revised the forecast up by £217 million (9 per cent) on average, close to three-quarters of which relates to the improved outlook for UK NSND receipts. Aligning our forecast to the latest UK income tax outturn data boosts the forecast by £60 million a year on average, with the adjusted Welsh share providing only a small offset in most years.

2.35 As with UK-wide liabilities: the introduction of the new health and social care levy reduces liabilities (by amounts rising from £28 million in 2023-24 to £39 million in 2025-26); the higher dividend tax rate lifts liabilities modestly (by £2 million a year on average); and the wider boost to the tax base from the discretionary fiscal easing raises liabilities (particularly in 2022-23 and 2023-24, by £56 million and £55 million respectively). The net effect is positive up to 2024-25 but turns negative thereafter.

Table 2.6: Welsh rates of income tax forecast

	£ million							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast restated	2,027	2,093	2,113	2,233	2,315	2,495	2,643	
December forecast	2,041	2,127	2,301	2,478	2,629	2,748	2,911	3,063
Change	14	34	188	245	315	253	268	
<i>of which:</i>								
Welsh share modelling		-17	-37	-12	0	-11	-14	
UK NSND outturn alignment		53	57	60	64	67	72	
UK NSND forecast and other changes		-2	168	158	210	184	223	
Effects of UK Government policies		0	1	38	41	12	-12	
<i>of which:</i>								
Health and social care levy		0	0	-17	-28	-28	-39	
Dividend tax rate rise		0	0	0	1	3	4	
Other direct effects		0	0	0	13	12	11	
Other indirect effects		0	0	56	55	26	11	

Table 2.7: WRIT forecast of tax liabilities on NSND income by tax band

	£ million							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
December forecast	2,041	2,127	2,301	2,478	2,629	2,748	2,911	3,063
<i>of which:</i>								
Basic rate	1,762	1,818	1,953	2,098	2,208	2,292	2,412	2,528
Higher rate	233	260	292	318	346	375	415	445
Additional rate	45	50	57	61	75	82	84	90
	Per cent							
Basic rate	86.3	85.4	84.9	84.7	84.0	83.4	82.9	82.5
Higher rate	11.4	12.2	12.7	12.8	13.1	13.6	14.3	14.5
Additional rate	2.2	2.4	2.5	2.5	2.9	3.0	2.9	2.9

Key uncertainties

2.36 There are several sources of uncertainty around our forecast for income tax liabilities subject to the Welsh rates. We summarise some of the most important ones here.

Coronavirus pandemic

2.37 Our forecast for the Welsh rates, like our UK income tax forecast, remains subject to increased uncertainty due to the coronavirus pandemic. Both are dependent on the outlook for labour income and the level of employment, which in turn reflect our assumptions about the degree to which underlying productivity and the labour market will be scarred in the medium term by the pandemic.⁸ While there has been a faster rollout of more effective than expected vaccines, this is partly counterbalanced by the emergence of the more transmissible Delta variant. Key uncertainties remain in terms of the path of the virus through this winter, with the risk that a stronger than expected seasonal spike could require the reintroduction of restrictions – which the continued vaccine booster programme could mitigate.

2.38 Further uncertainties relate to the impact of the pandemic on longer-term internal and international migration flows, and thus the relative size of the Welsh population versus the UK as a whole, as well as how the recovery from the pandemic continue to play out across different sectors of the economy and different parts of the income distribution.

Brexit

2.39 Another key macroeconomic uncertainty relates to Brexit and the future course of the relationship between the UK and the EU. The Trade and Cooperation Agreement (TCA) negotiated between the UK and the EU ensures tariff- and quota-free trade, subject to meeting relevant 'rules of origin' and other requirements. The UK Government has announced that the introduction of full customs checks on goods arriving from the EU will be delayed by a further six months to 31 December 2021. And the UK Government's 21 July 2021 Command Paper stated its intention to renegotiate several aspects of the existing Northern Ireland Protocol that it agreed with the EU and ratified in 2020. These include the full customs and sanitary and phytosanitary measures that are currently applied to all goods entering Northern Ireland from Great Britain, regardless of final destination. There remains significant uncertainty around the longer-term operation of the protocol, and the Government has not ruled out unilateral measures via the protocol's Article 16 safeguard mechanism. The ultimate arrangements to be put in place and shape of the future relationship with the EU are therefore still uncertain.

2.40 As we set out in our October *EFO*, current import and export trends have so far been consistent with our previous assumptions of a 15 per cent reduction in trade intensity as a result of leaving the EU. While it is too early to draw definitive long-term conclusions, this reduction in trade drives our estimate of a 4 per cent long-run loss of potential productivity

⁸ These assumptions are detailed in Chapter 2 of our October 2021 *EFO*.

that we assume will eventually result from the UK's departure from the EU. The future path of these figures and potential future disruptions to the trading relationship with the EU could have significant implications for the income tax bases in the UK as a whole and in Wales.

The Survey of personal incomes base data

2.41 The representativeness of the geographical and income distributions reported in the SPI base data is important for the development of our forecasts. The SPI is designed to be representative at the UK level, but the sample is not stratified by geography (i.e. smaller sample sizes in each geographical area mean it is likely to be less representative at those levels than it is at the UK level). In the latest version, the confidence interval around the SPI estimate of tax liabilities at the UK level was just 0.5 per cent, but for Wales it was a more material 4 per cent. Sampling variation – in particular due to the small number of observations of high-income taxpayers in Wales – is another potential source of error, although the SPI does have a relatively large sample size overall and is designed to over-sample taxpayers with higher incomes. While we now have the first year of outturn data for Welsh income tax liabilities and so can now calibrate our forecasts to the outturn share, uncertainties around the input data of our Welsh rates forecast remain a forecast risk.

Relative performance of the Welsh and UK income tax bases

2.42 As described in this chapter we use our UK-level macroeconomic forecasts with only a few adjustments to forecast Welsh income tax liabilities. This reflects our assumption that future disparities between growth in any of the variables that determine the tax base in Wales and the UK as a whole are as likely to go in one direction as the other, so a central assumption is that they move in parallel. As our analysis of tax liabilities per person shows, there are large differences between Wales and the UK as a whole at present that have been getting steadily, if only modestly, larger over time. Further divergence or a period of convergence would represent downside or upside risks to our forecast. We will present a detailed investigation of these trends and the effects they have on our forecasts in a forthcoming working paper on devolved income tax next year. This will help to inform future forecast judgements in respect of trends in the Welsh share of income tax over time.

2.43 The key adjustment we make at present relates to different rates of population growth, but we do not make any further allowance for differences in the rate at which the population is ageing in Wales and the UK as a whole. We therefore capture the effect of changing numbers of taxpayers, but not any age-related changes in the distribution of taxpayers and average incomes across the different age groups. We will consider this further in the future.

Box 2.1: Evaluating our forecasts for the Welsh rates of income tax for 2019-20

In July 2021, HMRC published outturn data for the Welsh rates in 2019-20, the first year of their operation. Assessing the performance of our forecasts after the event is important for transparency and accountability, but also helps us understand and identify ways to improve them. This is the first time that we can do this for the Welsh rates and while a more detailed assessment will be published in the *Welsh taxes outlook* update alongside the final Budget early next year, we present a preliminary discussion here. Table A presents the outturn and our forecasts from the five forecasts prior to outturn data being published for both the Welsh rates and the pre-measures Welsh share of UK NSND income tax.

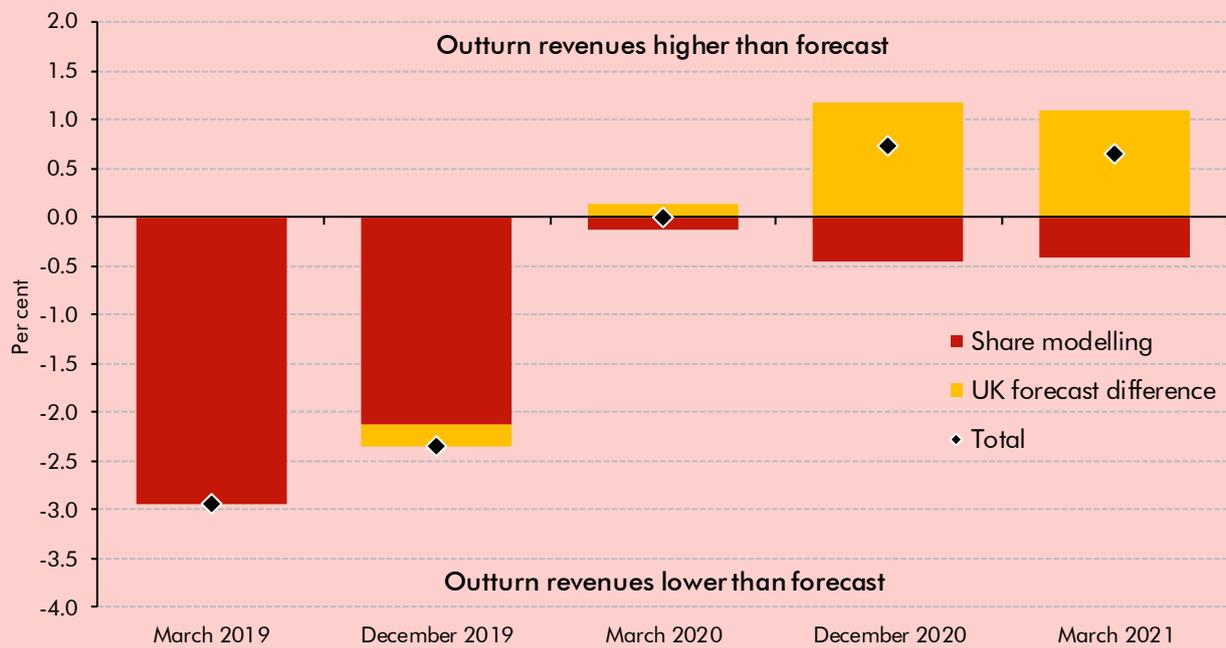
Table A: Successive forecasts for Welsh rates of income tax and the share of pre-measures liabilities subject to the Welsh rate (2019-20)

	Outturn	Forecasts				
		Mar 2019	Dec 2019	Mar 2020	Dec 2020	Mar 2021
WRIT (£ million)	2,041	2,101	2,089	2,041	2,026	2,027
Difference from outturn (£ million)		60	48	0	-15	-14
Welsh share (per cent)	1.15	1.19	1.18	1.16	1.16	1.16
Difference from outturn (per cent)		0.04	0.02	0.00	0.00	0.00

Chart A breaks down the overall differences between the same five forecasts and the outturn for 2019-20, into those relating to the UK NSND forecast and those resulting from our estimate of the share of the total subject to the Welsh rates. In March 2019 and December 2019 we overestimated receipts by 2.9 per cent and 2.3 per cent respectively. These errors were largely explained by overestimates for the Welsh share of the total, with the UK-wide liabilities forecast remarkably accurate.

From March 2020 onwards, our estimates of the Welsh share benefited from Welsh-specific data on earnings and tax paid in Wales from HMRC's RTI system. As a result, both the overall forecast differences and the contribution from errors in our estimates of the Welsh share were much smaller than in the earlier forecasts. Indeed, our March 2020 forecast was accurate to within £0.1 million. But the two subsequent forecasts in December 2020 and March 2021 underestimated receipts by around 0.7 per cent in each case. While our estimates of the Welsh share remained more accurate than the first two forecasts, we underestimated UK NSND receipts by a little over 1 per cent in each forecast.

Chart A: Successive forecast differences for Welsh rates of income tax (2019-20)



Source: HMRC, OBR

As the Welsh rates are calculated on a liabilities basis with a considerable lag, our forecasts generally improve over time with the incorporation of data for the year in question. Most importantly, we learn more about PAYE income tax paid on employee earnings from the RTI system, which informs both our UK-wide forecast and our estimates of the Welsh share. We have made increasing use of this in-year data to improve our estimates of the Welsh share over time. But uncertainties around the portion of Welsh income tax paid via self-assessment remain until the point at which those payments are analysed by HMRC to estimate the outturn.

3 Land transaction tax

Introduction

3.1 This chapter:

- describes the **introduction of land transaction tax (LTT)** in Wales and compares it to the stamp duty land tax (SDLT) regime in operation in England and Northern Ireland;
- outlines our **methodology for forecasting LTT** and explores trends in **property prices and transactions** in Wales that drive growth in the LTT tax base;
- presents our **latest forecasts** and explains how they have changed since the forecasts published in our *March 2021 Economic and fiscal outlook*; and
- discusses some of the key **risks and uncertainties** around these forecasts.

What is 'land transaction tax'?

3.2 Land transaction tax (LTT) replaced stamp duty land tax (SDLT) in Wales from April 2018.¹ It is an *ad valorem* transaction tax levied on the transfer of a property. It is paid by the purchaser, but its incidence is on the house price so the burden actually falls on the seller.²

3.3 LTT has many of the same features as SDLT including different treatment for residential and commercial properties, a tax-free threshold, as well as a surcharge on additional residential property purchases. But there are also some notable differences. For example, LTT has different rates and thresholds; it does not include a relief for first-time buyers; and it is collected by the Welsh Revenue Authority (WRA) rather than by HMRC.

Forecast methodology

3.4 The methodology for generating our LTT forecasts involves three steps.³ These are:

- First, we produce an **in-year estimate** that uses monthly receipts outturn data from the WRA as its starting point. Typically, we gross up the year-to-date receipts by assuming

¹ Both taxes are broadly based on the historical tax 'stamp duty', one of the oldest forms of taxation having been originally introduced on a range of products in 1694. The original duty required legal documents associated with a transaction to be authenticated by means of a physical 'stamp'. Stamp duty was replaced with SDLT in December 2003.

² Best, M. and Kleven, H., *Housing market responses to transaction taxes: Evidence from notches and stimulus in the U.K.*, June 2017.

³ For more detail on our forecast methodology see Chapter 3 of our December 2019 *Welsh taxes outlook* and the 'Welsh taxes outlook' page of our website.

the remainder of the year follows a similar path to previous years, augmented as necessary by information about the performance of the property market and economy.

- Next, we generate our **pre-measures forecast**, using four separate ‘price bins’ models – one each for residential main rates, the additional properties surcharge, commercial sales and commercial leases.⁴ The models aggregate transactions within relatively small ‘bins’, calculating the tax due on the average price in each bin, and then projecting that forward in line with our forecasts for prices and transactions.⁵
- Finally, we add estimates of the effects of any **new policy measures** to produce our post-measures forecasts.

Property market determinants of the forecast

3.5 By far the most important driver of our forecast for LTT receipts over the medium term is our forecast for growth in the value of property transactions, which in turn reflects assumptions about prospects for property prices and the volume of transactions. Activity in both the Welsh and UK-wide property markets recovered sharply through 2020-21, following the removal of property market restrictions that were in place at the start of the year, but both markets have exhibited significant volatility this year. This reflects the impact of the pandemic and associated restrictions on housing and business needs, the build-up of ‘forced savings’ flowing into house purchases, and time-limited transaction tax holidays.⁶

Property prices

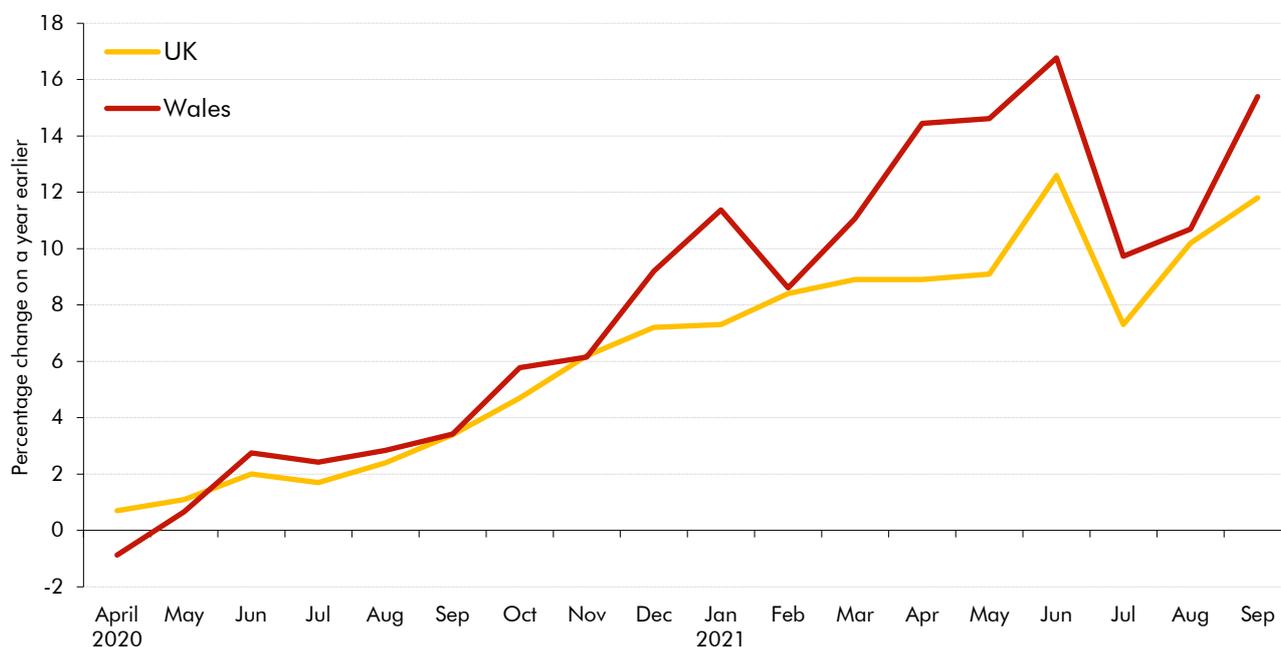
3.6 Chart 3.1 shows that house price inflation accelerated through 2020-21 in both the UK and Wales, peaking at 8.9 per cent and 11.4 per cent, respectively. This reflects a release of pent-up demand as property market restrictions were eased, plus the effect of the temporary tax holidays. This momentum has continued into 2021-22 and although house price inflation in both countries dipped in July, following the ending of the LTT tax holiday and the lowering of the SDLT tax-free threshold on 30 June, it has since bounced back once more. Overall, house prices in Wales rose slightly faster than those across the UK as a whole in 2020-21 and have risen 3.6 percentage points faster so far in 2021-22.

⁴ These models are operated on our behalf by analysts in the Welsh Government, but the underlying forecast assumptions and judgements are those of the OBR’s Budget Responsibility Committee.

⁵ The methodology for forecasting these is set out in the ‘In-depth’ pages of our website.

⁶ The Welsh Government raised the tax-free threshold for residential LTT transactions from [£180,000] to £250,000 between 27 July 2020 and 30 June 2021. The UK Government raised the tax-free SDLT threshold from £125,000 to £500,000 between 8 July 2020 and 30 June 2021. It was then lowered to £250,000 between 1 July 2021 and 30 September 2021, after which it reverted to £125,000.

Chart 3.1: House price inflation: Wales versus the UK as a whole



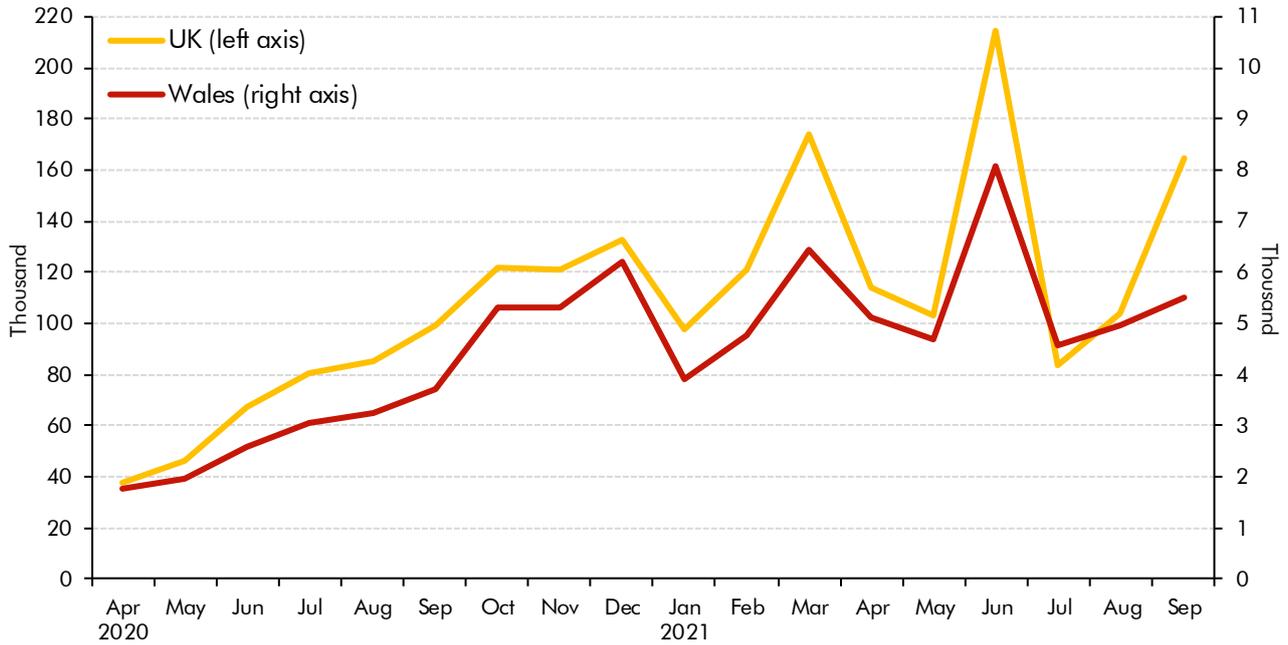
Source: ONS

- 3.7 Commercial property prices in both Wales and the UK rose even more sharply in the first half of 2021-22, by 53 per cent and 21 per cent respectively on a year earlier.

Property transactions

- 3.8 Residential transactions were depressed throughout the UK during the second quarter of 2020, as a result of the national lockdowns introduced in late March and the associated restrictions on property markets, but they recovered through the remainder of the year as restrictions were eased and pent-up demand was released.
- 3.9 Monthly transactions in 2021 have been volatile in both Wales and the UK as a whole, with peaks in March and June followed by sharp reductions in activity. These reflect forestalling (the bringing forward of transactions in order to pay less tax) related to the temporary tax holidays in operation in both tax regimes. The temporary holidays were initially due to end in March but were subsequently extended to June, after which the generosity of the SDLT holiday was reduced. The additional spike in UK transactions in September reflects forestalling ahead of the end of the SDLT holiday, with transactions falling back sharply again in October.
- 3.10 Overall, transactions fell by 13 per cent in Wales in 2020-21, but rose by 1 per cent in the UK as a whole. Transactions to date in 2021-22 are up by 62 and 77 per cent in Wales and the UK respectively, with much of this growth attributable to the weakness of transactions in the early months of 2020-21.

Chart 3.2: Residential property transactions

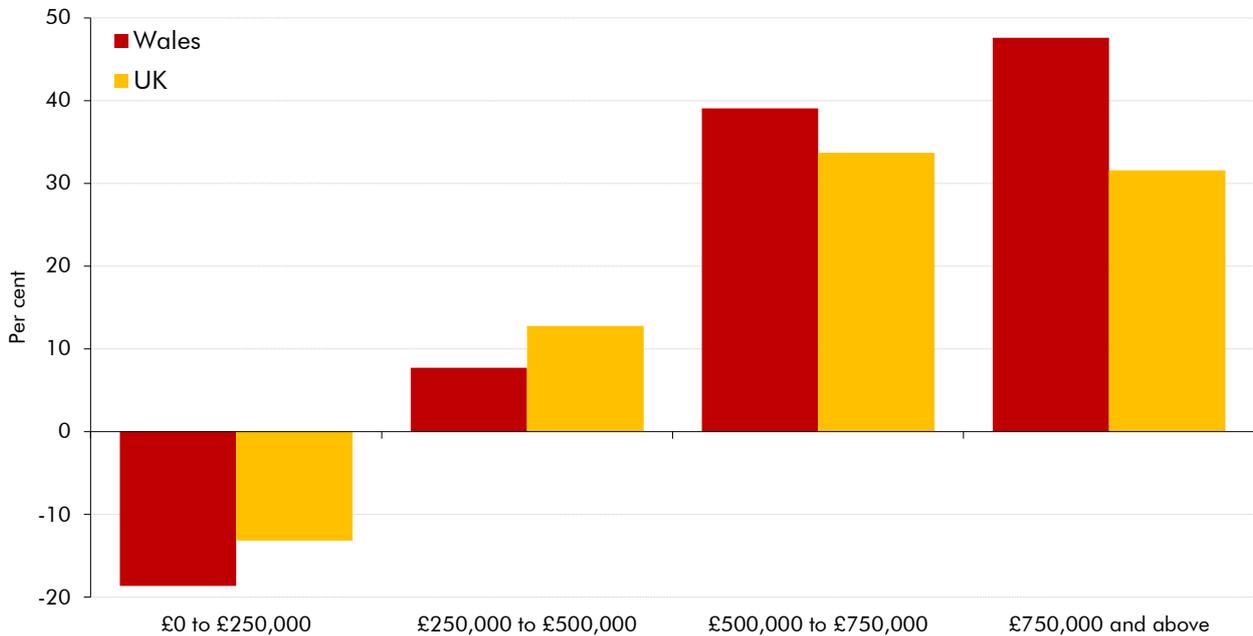


Source: HMRC

3.11 The price distribution of residential transactions changed significantly between 2019-20 and 2020-21, both in Wales and across the UK as a whole (Chart 3.3) – with the changes in Wales even greater than at the UK level. Across the UK, transactions increased much faster for higher-priced properties than for lower-priced ones, but this effect was particularly pronounced in Wales where there was a near 50 per cent increase in the number of transactions over £750,000.⁷ Given the progressive structures of both the LTT and SDLT tax regimes, this increased the effective tax rate relative to what would have been seen had the price distribution of transactions been unchanged from 2019-20.

⁷ Due to the aggregated nature of property price data, it is not possible to determine how much of the change is due to house price inflation pushing more of the housing stock into higher bands or greater turnover of higher value properties changing the composition.

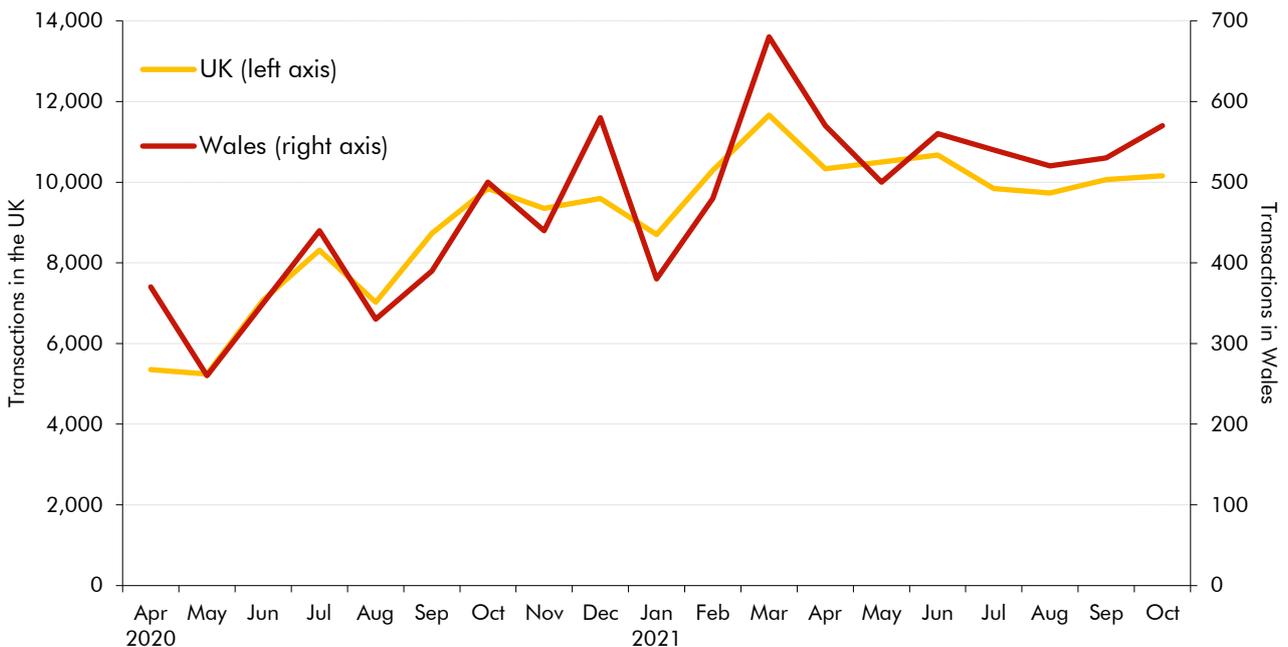
Chart 3.3: Growth in residential property transactions by price in 2020-21



Source: HMRC, WRA

3.12 Commercial property transactions have also been volatile month-to-month, though they have trended upwards since the lockdown-affected start of 2020-21 (Chart 3.4). The level of transactions has stabilised in recent months, perhaps due to greater confidence regarding future business activities as pandemic-related uncertainty recedes. Transactions to date in 2021-22 are up by 44 and 38 per cent in Wales and the UK respectively.

Chart 3.4: Commercial property transactions



Source: HMRC

Forecasts for property market determinants

- 3.13** Our forecasts for property transaction taxes are underpinned by our UK-wide property market forecasts. We assume Welsh prices and transactions move in line with those for the UK as a whole, unless there are clearly reasons to depart from that. In this forecast, the evidence supports assuming different paths for key determinants in 2021-22.
- 3.14** The drivers of differences in transactions growth (Chart 3.2) and the more tax-rich composition of transactions (Chart 3.3) are likely to be temporary, so we have assumed they unwind over 2021-22. That means transactions bounce back more strongly in Wales than in the UK, and the effective tax rate falls back more sharply to return to a point closer to the 2019-20 distribution of transactions. Our forecasts for residential prices and transactions in 2021-22 in Wales therefore diverge from our UK-wide forecasts. On top of this we have added a 3.2 percentage point uplift to our forecast for house prices in 2021-22 to reflect the greater momentum in monthly Welsh house price inflation shown in Chart 3.1. While house price inflation in Wales from 2022-23 is in line with the UK, the relatively higher inflation in 2021-22 will feed through to higher house price levels relative to the UK in all future years. From 2022-23 onwards we use the same determinants as in our UK-wide property market forecasts (Table 3.1).
- 3.15** Relative to our March forecast, we have revised up our forecasts for both residential prices and transactions in Wales for 2021-22. For prices, this reflects the unexpectedly strong performance in the year to date. For transactions, it reflects a rebound from the sharper-than-expected falls in transactions in 2020-21. From 2022-23 onwards we expect house price inflation to slow, bringing the house price to income ratio back to pre-pandemic levels in the UK as a whole. Transactions also fall back in 2022-23, before rising modestly thereafter. Relative to March, both prices and transactions are higher in 2025-26.
- 3.16** As with the residential markets, we assume that commercial transactions in Wales will return to the price distribution seen in 2019-20 as pandemic-induced changes in 2020-21 unwind. This involves a strong rebound in transactions in 2021-22 (Table 3.1). Relative to our March forecast, commercial prices have been revised up 6 per cent by 2025-26, whereas transactions have been revised down 15 per cent.

Table 3.1: Forecasts for Welsh property prices and transactions

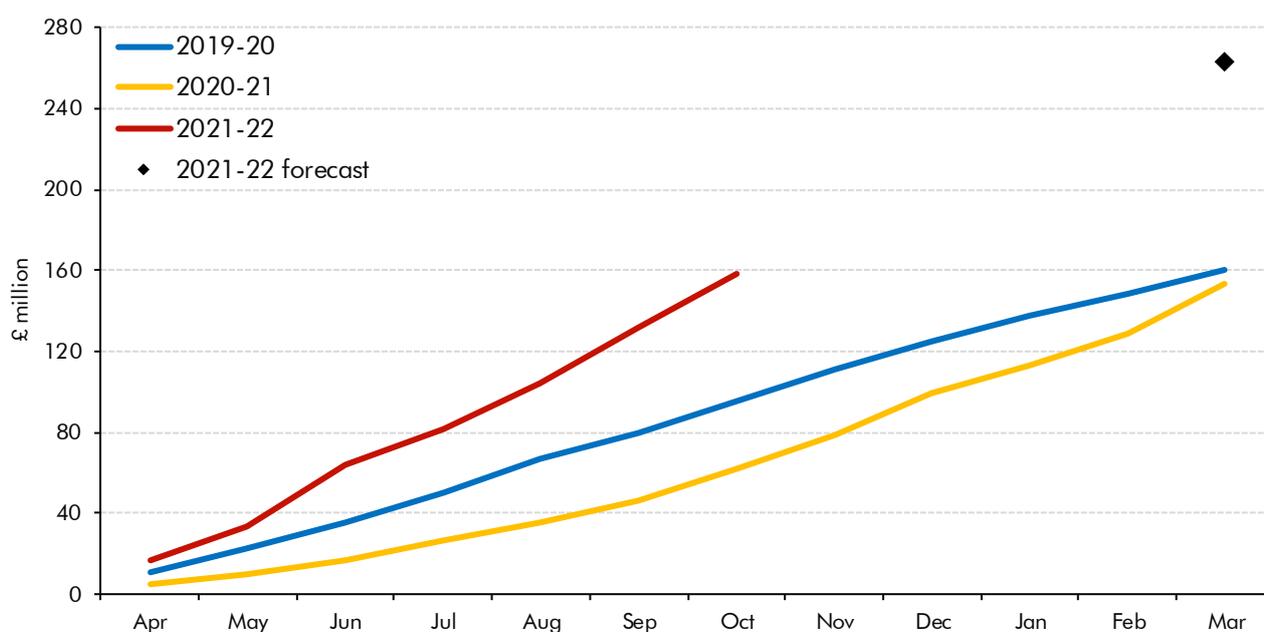
	Percentage change on previous year						
	Outturn 2020-21	Forecast					
		2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Residential property prices	6.7	11.0	2.2	1.0	2.2	3.1	3.6
Residential property transactions	-12.8	29.9	-1.4	3.2	1.7	1.0	1.2
Commercial property prices	3.0	2.3	2.2	2.2	1.9	2.0	2.1
Commercial property transactions	-8.7	10.4	-1.0	1.7	1.4	1.6	1.7
Change since March forecast							
Residential property prices		5.0	3.5	-0.5	-2.1	-1.1	
Residential property transactions		17.5	-5.5	2.1	0.9	0.2	
Commercial property prices		3.2	2.0	0.4	-0.2	-0.2	
Commercial property transactions		-0.5	-5.9	-2.2	-2.4	-1.8	

Trends in LTT receipts

Residential property receipts

3.17 Chart 3.5 shows that residential LTT receipts (net of refunds) so far this year are significantly higher than during the same period in the past two years. In the seven months to October, residential LTT receipts totalled £158 million, well over double their level at the same point in 2020-21. Receipts from the main and additional rates are up by £66 million and £30 million respectively. We expect continued strength in receipts in the remainder of the year, and for full-year receipts to be £109 million higher than in 2020-21.

Chart 3.5: Cumulative residential LTT receipts

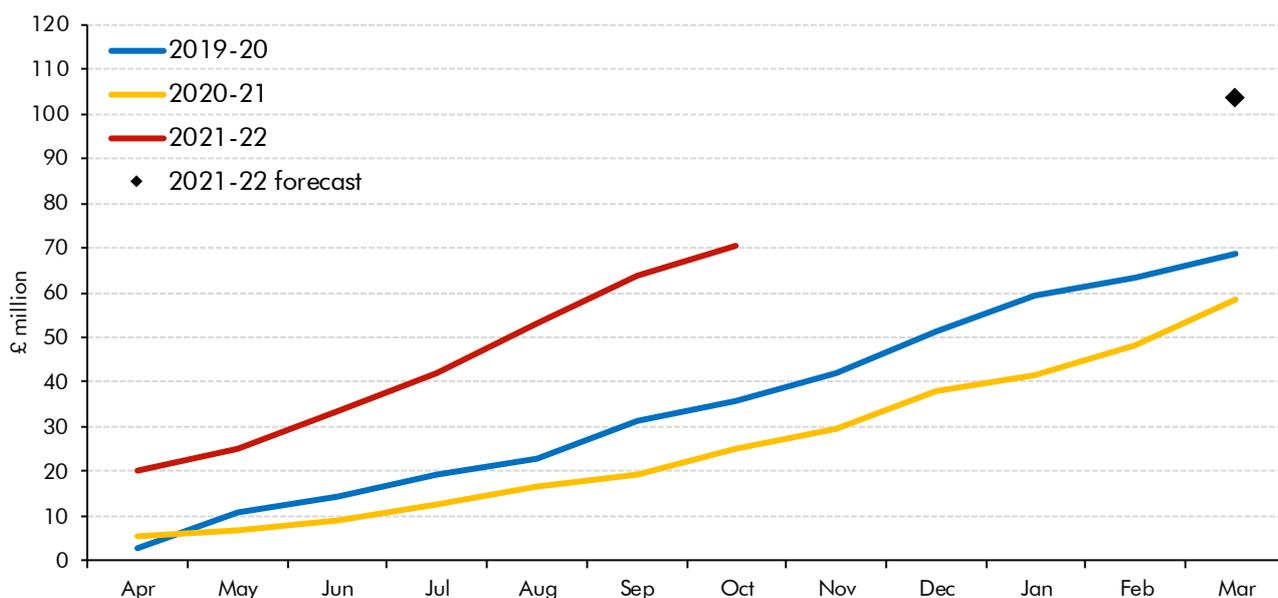


Source: WRA, OBR

Commercial property receipts

3.18 Chart 3.6 shows a similar picture for commercial LTT receipts. Year-to-date receipts are £71 million, nearly three times higher than at the same point last year. We have assumed that some of the strength in the first half of the year relates to one-offs, so expect slightly weaker receipts in the second half of the year. Even so, we expect full-year receipts to be £45 million higher than in 2020-21 and £35 million higher than in 2019-20.⁸

Chart 3.6: Cumulative commercial LTT receipts



Note: The monthly receipts shown above for 2019-20 do not include the transfer of the Core Valley Lines (CVL) rail network into public ownership. The WRA records this as an untypically large transaction, which adds £28 million to total LTT receipts in 2019-20. Source: WRA, OBR

Latest LTT forecasts

3.19 Table 3.2 sets out our latest forecast for overall LTT revenue and its components. Relative to March, overall receipts are up by an average of a third (£97 million) from 2021-22 onwards. This reflects the upward revisions to our forecasts for both residential main rates and commercial LTT, by an average of £51 million and £43 million respectively.

⁸ This value does not include the Core Valley Lines purchase in 2019-20 which is excluded from WRA monthly figures since it is classed as an abnormally large transaction. With its inclusion, the difference with 2019-20 full-year receipts drops to £7 million.

Table 3.2: LTT forecast

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	
Total LTT							
March forecast	190	260	272	285	310	338	
December forecast	212	367	366	383	404	432	465
Change	22	107	93	98	94	94	
Residential (excluding additional properties)							
March forecast	83	131	133	141	158	177	
December forecast	89	176	185	196	209	229	252
Change	6	46	51	55	52	52	
Additional properties							
March forecast	59	77	84	86	90	95	
December forecast	66	87	86	87	91	95	100
Change	6	10	2	2	1	0	
Commercial							
March forecast	49	52	55	58	62	66	
December forecast	58	104	95	100	104	108	113
Change	10	52	40	41	41	42	

Residential LTT forecast

- 3.20** Table 3.3 sets out the changes in our main rates forecast since March. The upward revision in each year is driven by the more optimistic outlook for house prices, which boosts receipts by an average of £44 million a year. The stronger rebound in transactions this year adds to receipts in 2021-22, but this effect is reversed in 2022-23 as transactions fall back from this year's elevated levels, with little impact in subsequent years. We have revised up our in-year forecast based on the stronger than expected receipts outturn for the year to date.
- 3.21** Table 3.4 presents the changes in our additional rates forecast since March. We have revised up receipts in 2021-22 by £10 million, reflecting the improved near-term outlook for transactions and prices, but from 2022-23 onwards the revisions are small. This reflects the diminishing effects of faster house price inflation being progressively offset by the negative impact of modelling changes. These stem from our expectation, based on the latest receipts data, that there will be a higher level of refund payments on additional rate property purchases than we assumed in March.
- 3.22** Our forecasts for both the main and additional rates are also affected by the extension of the LTT holiday, from an end date of 31 March 2021 to 30 June 2021. We estimate that around 7,300 transactions will have benefitted from this extension, with an average LTT saving of £1,700 to give an overall cost of £12 million in 2021-22. The additional rates charged on second homes and buy-to-let properties were not reduced, so all the tax paid for liable transactions on the portion of the property valued between £180,000 and £250,000 will be recorded as revenue from the additional rates during the period of the extension, boosting these receipts by £2 million in 2021-22.

Land transaction tax

Table 3.3: Residential main rates LTT forecast

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast	83	131	133	141	158	177	
December forecast	89	176	185	196	209	229	252
Change	6	46	51	55	52	52	
<i>of which:</i>							
Modelling changes		6	6	6	6	7	
Price changes		33	50	50	45	44	
Transaction changes		4	-3	-1	1	1	
In-year data		16	0	0	0	0	
LTT holiday extension		-14	0	0	0	0	

Table 3.4: Residential additional rates LTT forecast

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast	59	77	84	86	90	95	
December forecast	66	87	86	87	91	95	100
Change	6	10	2	2	1	0	
<i>of which:</i>							
Modelling changes		-5	-7	-8	-8	-9	
Price changes		8	11	10	9	8	
Transaction changes		4	-2	0	0	1	
LTT holiday extension		2	0	0	0	0	

Latest commercial LTT forecast

3.23 Table 3.5 shows changes in our commercial LTT forecast relative to March. The strength in receipts so far in 2021-22 has been sufficient to lead us to double our full-year forecast for 2021-22. Receipts from 2022-23 onwards have been revised up by an average of £41 million a year, thanks both to an improved outlook for prices and our assumption that around two thirds of the unexpected strength in 2021-22 outturn persists. Commercial LTT receipts can be volatile from year to year, so this judgement is particularly uncertain.

Table 3.5: Commercial LTT forecast

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast	49	52	55	58	62	66	
December forecast	58	104	95	100	104	108	113
Change	10	52	40	41	41	42	
<i>of which:</i>							
Modelling changes		-1	-1	-1	-1	-1	
Price changes		13	15	16	17	18	
Transaction changes		7	4	2	1	0	
In-year data		31	21	22	23	24	

Risks and uncertainties

3.24 In this section we summarise some key uncertainties around our central LTT forecast. The outlook for property markets, like the wider economy, may still be subject to uncertainties related to the path of the coronavirus pandemic over the coming months and years. The key risks to the residential property market are likely to stem from the outlook for household incomes. The commercial property market could also be sensitive to any persistent changes in the composition of economic activity, such as greater prevalence of working from home or the accelerated shift of high street retail sales online.

3.25 In this forecast we have added a **house price inflation** uplift for Wales in 2021-22. We then assume that prices rise in line with the UK as a whole from 2022-23 onwards, so one clear risk is that price inflation in Wales will continue to diverge in future years. That could come in the form of continued higher price rises, if demand were to remain stronger for houses in Wales than in the UK as a whole. Or the recent outperformance could be followed by a period of underperformance if the drivers of recent price rises proved transient. There is not yet sufficient evidence to say which is more likely, hence assuming that prices will move in step beyond the near term. To illustrate the scale of this risk, if house prices in Wales were 1 per cent higher than assumed from 2022-23 onwards, LTT receipts would be £6 million a year higher on average (an increase of slightly more than 1 per cent due to the progressive nature of the LTT tax schedule).

3.26 Other risks relating to our LTT forecasts include:

- **Mapping property market determinants to the true tax base.** It is challenging to map from the whole property market to only those transactions that will be subject to LTT. Only a very small minority of all potential taxpayers will pay LTT in any given year, which differs from most other taxable activities, where taxpayers incur a liability year after year. There are around 1.4 million dwellings in Wales, but there were only around 55,000 residential transactions in 2019-20. Our LTT forecasting models are still calibrated to the distribution of transactions in 2019-20 as we believe the distributional changes in 2020-21 (shown in Chart 3.3) are likely to reflect temporary pandemic-induced changes and the LTT holiday, so 2020-21 is unlikely to be representative of property market activity in a typical year. If these changes are permanent and result in differences between the simulated tax base and the future composition of LTT-liable transactions, this will generate forecast errors.
- **Tax base concentration.** LTT has a progressive tax schedule: a £200,000 residential transaction will pay £700 in tax, whereas a transaction for five times this price (£1,000,000) pays over eighty-five times more tax (£61,200). In 2019-20 around a third of residential revenue came from the top 4 per cent of transactions.⁹ Our LTT forecast will also be sensitive to high-value commercial property transactions in

⁹ Temporary tax measures in 2020-21, while adding to the concentration of this figure, are unlikely to be representative of future years. Price increases since 2019-20 will have also pushed this proportion higher.

Cardiff. In 2020-21, 5 per cent of the total (280) commercial transactions accounted for just over two-thirds (69%) of commercial LTT receipts.

- **Frequent policy changes.** The property transaction tax regime has been subject to repeated policy changes. These changes, especially when they are pre-announced, add uncertainty to our forecasts in respect of how taxpayers will respond to the new tax incentives they face. This applies to the temporary raising of both the LTT and SDLT thresholds from July 2020 to June 2021 and September 2021 respectively.
- **Forestalling.** Where rises in property taxes are pre-announced it allows for purchases to be brought forward in order to be taxed at the existing lower rate. It can be difficult to gauge the strength of this response and therefore the quantity of transactions that will be brought forward from future periods.¹⁰ Our costing for the extension of the LTT holiday to 30 June assumed a level of forestalling commensurate with the evidence from past episodes, with around 1,000 transactions being brought forward to benefit from the holiday, at a cost of £2 million. Residential transactions in Wales almost doubled between May and June, before then halving in July (Chart 3.2), pointing to significant degrees of forestalling.
- **Future LTT policy changes.** Our forecasts only include the effects of current stated policies, and not policy intentions or ambitions that are under consideration (reflecting the requirements placed on us by the UK Parliament when establishing the OBR). The Welsh Government has stated its intention to extend the refund period for the additional rates in cases such as unsafe cladding and other exceptional circumstances.¹¹ It has not set a start date for this measure, but if implemented we would expect it to result in a small increase in refunds and therefore to reduce additional rates receipts. Alongside its draft Budget, the Welsh Government has also published a consultation exploring options for local variation in LTT rates on second homes.¹² The scale and direction of the risk these pose to our LTT forecast will depend on a number of factors, most notably the extent to which any new powers for differential rate setting are used and the rates chosen. We will include costings for these measures in our forecast if and when the Welsh Government states them as firm policy.

¹⁰ For more detailed information on this see Mathews, P., *OBR Working Paper no. 10: Forestalling ahead of property tax changes*, October 2016.

¹¹ Written Statement by the Minister for Finance and Local Government, *Land Transaction Tax higher residential rates refund period extension where exceptional circumstances apply*, 16 November 2021.

¹² Government of Wales, *Local variation of Land Transaction Tax for second homes and holiday lets or additional residential properties*, 20 December 2021.

4 Landfill disposals tax

Introduction

4.1 This chapter:

- describes the **landfill disposals tax** levied in Wales;
- sets out our **methodology** for forecasting receipts; and
- presents our **latest forecast** and some **key uncertainties** around it.

What is the 'landfill disposals tax'?

4.2 Landfill tax was introduced in the UK in 1996. It applies to all waste disposed of by way of landfill at a licensed site unless the waste is specifically exempt. In Wales it was replaced with landfill disposals tax (LDT) from April 2018. The Welsh Government has said that LDT is designed to *"promote positive environmental behaviours through greater prevention of waste to landfill sites and to encourage the reuse, recycling and recovery of waste"*.¹

4.3 LDT is charged per tonne of waste disposed of at a landfill site. It is payable by landfill site operators, who are expected to pass the costs onto those making the disposals. A small number of disposals are exempt from LDT while some reliefs and discounts are also available. The tax is collected by the Welsh Revenue Authority (WRA). The Welsh Government has thus far set rates that match those in the rest of the UK.

4.4 Our forecast is driven by the amount of waste sent to landfill and the effective tax rate that will be paid. The latter largely depends on policy decisions on rates, but also on the composition of waste sent to landfill as there are three different rates – a 'standard rate', a 'lower rate' and an 'unauthorised disposals rate'. In 2020-21 revenue from standard rate waste accounted for 95 per cent of total revenue from LDT.

Forecast methodology

4.5 The LDT forecast uses a bottom-up model operated on our behalf by analysts in the Welsh Government. The assumptions and judgements that are fed into it are those of the Budget Responsibility Committee. The forecast methodology is straightforward – the main steps are:

¹ Welsh Government, *Landfill Disposals Tax (Wales) Bill 2016: Impact Assessments*.

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- establishing an **in-year estimate** drawing on the latest administrative data (and other relevant sources) to estimate the level of receipts in the current year in progress;
- producing a **pre-measures forecast** by using the LDT forecast model to multiply the amount of liable waste sent to landfill (the tax base) by the relevant duty rate; and
- generating a **post-measures forecast** by adding the effects of any new policy measures.

We discuss each step in turn.

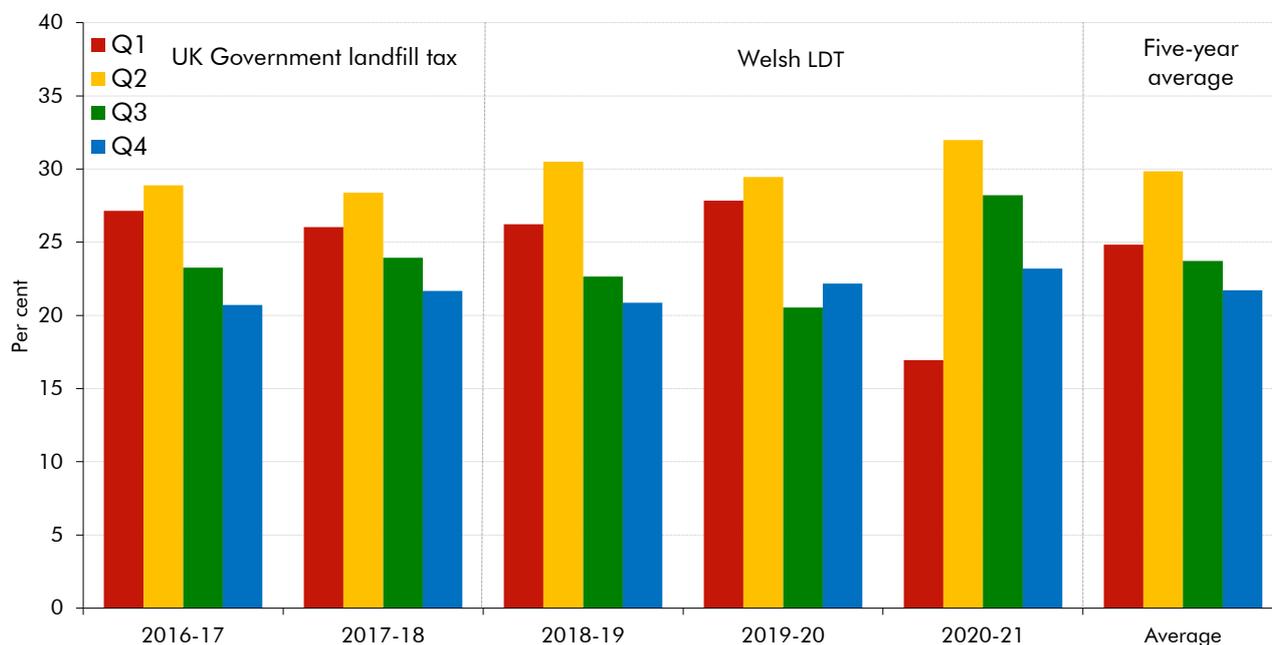
Establishing an in-year estimate

4.6 Most landfill site operators have a calendar year annual accounting period. Most LDT returns are received by the WRA at the end of April, July, October and January (returns must be sent by the last working day of the month following the end of the accounting period). The WRA publishes LDT receipts outturn data on a quarterly basis.²

4.7 Our in-year forecast is based on outturn data from the first half of 2021-22. Chart 4.1 shows the percentage of annual tax receipts in each quarter of the fiscal year, for the UK Government's landfill tax in 2016-17 and 2017-18 and then for LDT thereafter. It suggests there is some seasonality in the amount of waste that is disposed of at landfill sites. Each quarter, aside from the lockdown-affected first quarter in 2020-21, contributes at least a fifth of full-year receipts, but the highest share of receipts in each year comes in the second quarter. The profile of receipts in 2020-21 was unusual due to pandemic-related restrictions and their impacts on economic activity, which were most acute in the first quarter. As a result, the share of receipts in the first quarter of the year was unusually low and the shares (if not the absolute amounts) in the remaining quarters of the year were unusually high.

² A smaller number of site operators use different accounting periods, which means that monthly data releases could be disclosive. We do not draw on the WRA's unpublished monthly administrative data when preparing our in-year estimates.

Chart 4.1: Percentage of annual landfill taxes receipts from each quarter



Source: HMRC, WRA

The pre-measures forecast

Tax base: the volume of waste sent to landfill

4.8 The volume of waste sent to landfill is estimated by calibrating data from Natural Resources Wales (NRW) with outturn data from the WRA. Our model sorts these data by 'European waste catalogue' code into tonnages liable to the standard and lower rates of LDT. This allows us to remove waste that is exempt from LDT. The LDT-liable tonnages are then projected forward using information on local authority waste management plans, waste infrastructure developments, and an assumption about the future path of other waste.

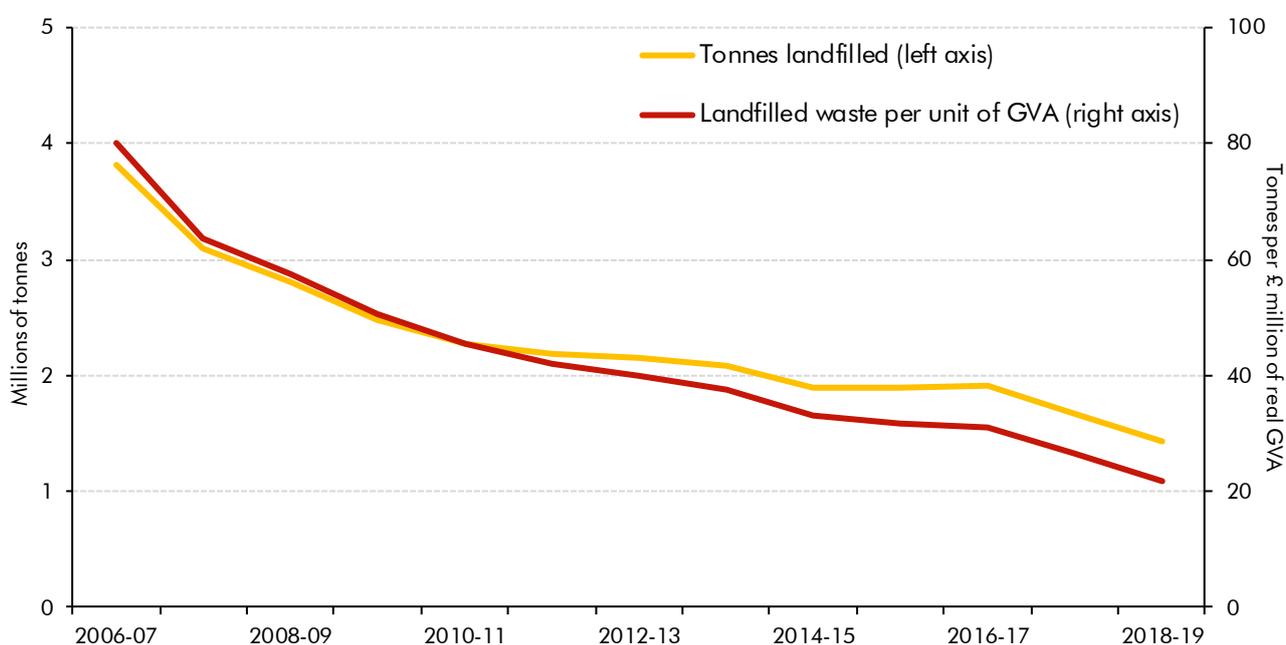
4.9 There are several alternatives to sending waste to landfill sites, including:

- **Recycling and incineration**, the levels of which depend on the capacity of available Welsh infrastructure. Given the much smaller tax base in Wales, changes in alternative waste treatment infrastructure can lead to proportionally larger effects on LDT receipts than an equivalent change in England would have on UK landfill tax receipts.
- **Exporting waste**, which can be cheaper than sending it to landfill. There are currently two external factors that may limit the volume of exports over the medium term – the UK's future trading relationship with the EU and the Chinese Government's ban on the imports of solid waste. Each could increase the amount of waste sent to landfill (including waste generated in England) and represent an upside risk to LDT receipts. If these or other factors have already affected LDT receipts then this would be captured implicitly in our in-year estimate rather than via an explicit forecast adjustment.

Landfill disposals tax

- 4.10 We do not explicitly model the use of these alternatives. Instead, we assume they provide sufficient headroom to accommodate future growth in waste arising without affecting the volume of landfilled waste. The granular level of information available to us on Welsh infrastructure means that we can factor in expected changes when we need to.
- 4.11 The volume of waste sent to landfill in the UK as a whole has been trending down and Chart 4.2 shows a similar pattern in Wales. The volume sent to landfill has fallen by around two-thirds between 2006-07 (3.8 million tonnes) and 2018-19 (1.4 million tonnes). Chart 4.2 also shows that over the same period progressively less waste has been sent to landfill per unit of gross value added (GVA – a measure of economic activity).

Chart 4.2: Landfill waste tonnage in Wales relative to Welsh economic activity



Source: NRW, ONS

The effective rate of landfill disposals tax paid

- 4.12 There are two main rates for LDT – a ‘standard’ rate and a ‘lower’ rate. The lower rate applies to waste that is ‘inert’ – i.e. less hazardous or less polluting materials such as bricks, concrete and sand. The standard rate applies to everything else that is neither exempt (see below) or unauthorised.³ In this Budget the Welsh Government has kept rates aligned with those in the UK for 2022-23, setting a **standard rate of £98.60 per tonne** of waste and a **lower rate of £3.15 per tonne**.⁴ Our forecast assumes that both rates rise in line with RPI inflation in future years (in line with the UK Government’s default indexation assumption). The Welsh Government has not set out its policy for future years and would be free to set other rates if it so wished.

³ The Welsh Government has also introduced a third ‘unauthorised disposals’ rate that applies to all disposals that are made outside of authorised landfill sites, regardless of whether they would have qualified for the standard or lower rates. The 2022-23 rate for such disposals has been set at £147.90 per tonne of waste.

⁴ All rates are subject to approval by the Senedd.

4.13 As with UK landfill tax, LDT legislation allows for both exemptions and reliefs. Where a disposal is exempt, for example within a pet cemetery, there is no tax liability and the site operator does not need to record it on a tax return. Where a disposal is eligible for a relief, such as when it contains material removed from water by dredging, it does need to be accounted for by the site operator, but the relief can be claimed via the tax return. The effective rate paid depends not just on statutory rates and exemptions, but also the composition of waste disposals. In 2020-21 the effective rate paid was £32.42 per tonne of waste sent to landfill.

Post-measures forecast

4.14 The final stage in our forecast process is to add the effect of new policy measures that have been announced since our previous forecast was published. For landfill tax and LDT these are typically small, although they can still be subject to some uncertainty. For example, the UK Government's decision to extend landfill tax to illegal sites started six months later than planned due to delays in implementing the health and safety procedures required to safeguard the new compliance staff that were taken on to police it.

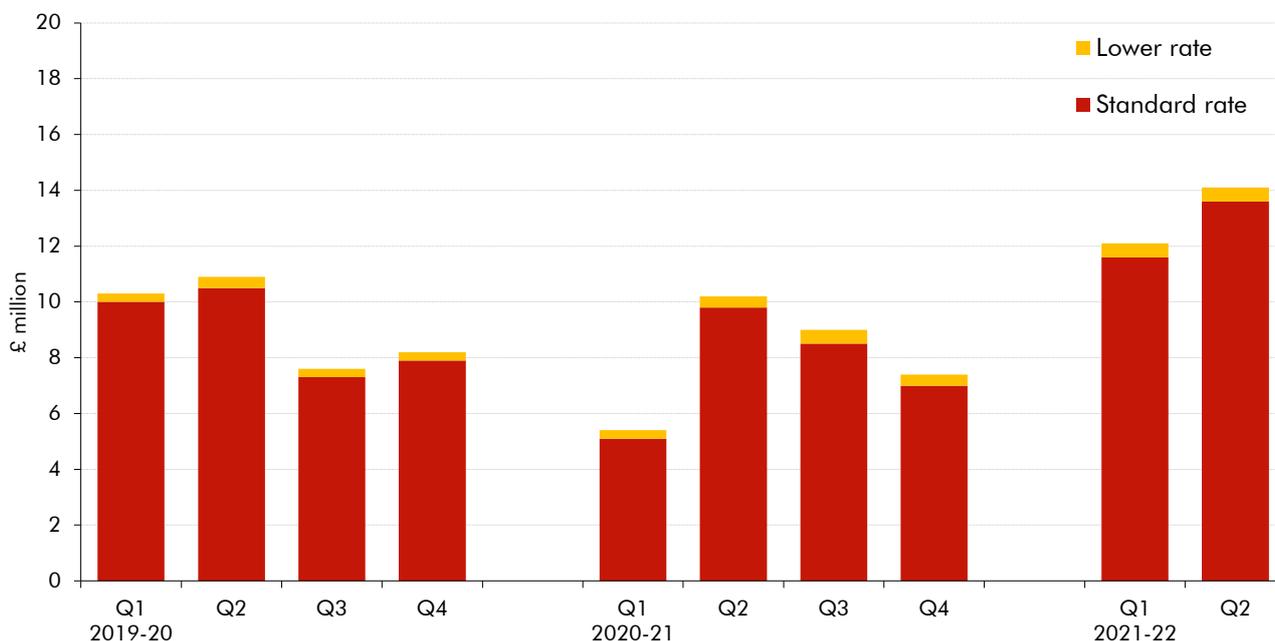
Landfill disposals tax forecast

4.15 Using the methodology described above and based on LDT outturn data for the first two quarters of 2021-22, this section describes our latest forecast and changes since March.

Receipts outturn

4.16 Chart 4.3 shows that receipts in the first half of 2021-22 are up 68 per cent (£10.6 million) on the same period last year. This reflects the pandemic-related lockdowns that hit economic activity and the volumes of waste sent to landfill. Receipts in the first quarter of 2020-21 were less than half their level in the first quarter of 2021-22. Receipts in the first half of 2021-22 were also 24 per cent (£5 million) higher compared to the same period in 2019-20. We expect lower receipts in the remainder of 2021-22 – in line with the quarterly pattern of receipts shown in Chart 4.1 – but for them to total £45 million in the full year, £8 million and £13 million higher than in 2019-20 and 2020-21 respectively.

Chart 4.3: Quarterly LDT receipts



Source: WRA

Latest forecast

4.17 Table 4.1 presents our LDT forecast and the sources of changes since March. We have revised receipts in 2021-22 up £11 million in light of the strong outturn data in the first half of the year. Part of this strength is assumed to persist, but its effect on the forecast is partly offset from 2022-23 onwards by updated inputs to our modelling of the effect of additional use of incineration.

Table 4.1: LDT forecast

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March forecast	31	34	34	33	33	32	
December forecast	32	45	36	36	36	35	35
Change	1	11	2	3	3	3	
<i>of which:</i>							
Outturn data		11	5	5	5	5	
Modelling and other		0	-3	-2	-2	-2	

Risks and uncertainties

4.18 This section summarises some of the main uncertainties around our central LDT forecast. We would not expect the risk posed by any of these to be particularly large. They include:

- The **net volume of waste arising** is assumed to remain constant over the forecast period. Changes in Welsh infrastructure, such as increases in incineration usage, mean that the forecast for tonnes of waste sent to landfill trends down. As Chart 4.2

showed, waste sent to landfill has tended to fall over time, but it did increase slightly between 2014-15 and 2016-17. This illustrates the scope of the tax base to surprise us on either side of our central forecast.

- All taxes are subject to a degree of **non-compliance**, ranging from simple errors to deliberate criminal activity. At the UK level, HMRC uses statistical techniques to measure the difference between the theoretical tax liability and what is actually paid, the 'tax gap'. Its latest estimate of the tax gap for the UK landfill tax is 22.7 per cent or £200 million.⁵ There is no estimate yet for the LDT tax gap, but if the gap were the same in percentage terms, then this would imply that around £9 million of potential receipts in 2020-21 were not collected. We do not yet have sufficient information on the WRA's LDT compliance activities to take a firm view so, for now, our forecast implicitly assumes no change in the (currently unknown) rate of non-compliance in future years. Any changes in that rate would pose a risk to receipts.
- LDT on **unauthorised disposals** is not a self-assessed tax, with the tax liability instead arising from the WRA identifying suitable cases and issuing charging notices. The WRA's scoping work around this was delayed because of the impact of the pandemic, but its plan to resume activities from this year could lead to additional tax revenue.⁶ The amount collected would depend on resources, planning and risks of litigation.
- Our forecast implicitly assumes that there is sufficient **incineration and recycling capacity** in Wales to absorb any increase in waste arising. These assumptions would need to be revisited if there were problems with infrastructure capacity, for example if a large incinerator were to be offline for a significant period or new capacity were delayed. Such events would imply a higher share of total waste being sent to landfill than implicitly assumed in our forecast and therefore higher LDT receipts.
- The Welsh Government has stated its intention to bring in **new business recycling regulations**, to increase recycling and reduce the amount of waste entering landfill. These will, among other things, require businesses to separate out waste into different waste streams and ban certain materials from incineration or landfill. We will factor them into our forecast once the Welsh Government has set the date from which the regulations will come into force and provided more detail on their operation.⁷
- It is possible that non-Welsh Government policies could affect LDT receipts. The **UK's exit from the EU** could make exporting waste to Europe less attractive, at least in the short to medium term. For now, we have not assumed any waste-specific impediments to the UK's future exports to the EU. Were any to materialise, more waste could be sent to landfill representing an upside risk to LDT receipts. Similarly, the **Chinese Government's ban on the import of solid waste** that came into force on 1 January

⁵ This relates to 2019-20. For more detail see HMRC's *Measuring tax gaps 2021 edition*.

⁶ Welsh Revenue Authority, *Annual Report and Accounts 2020 to 2021*, July 2021.

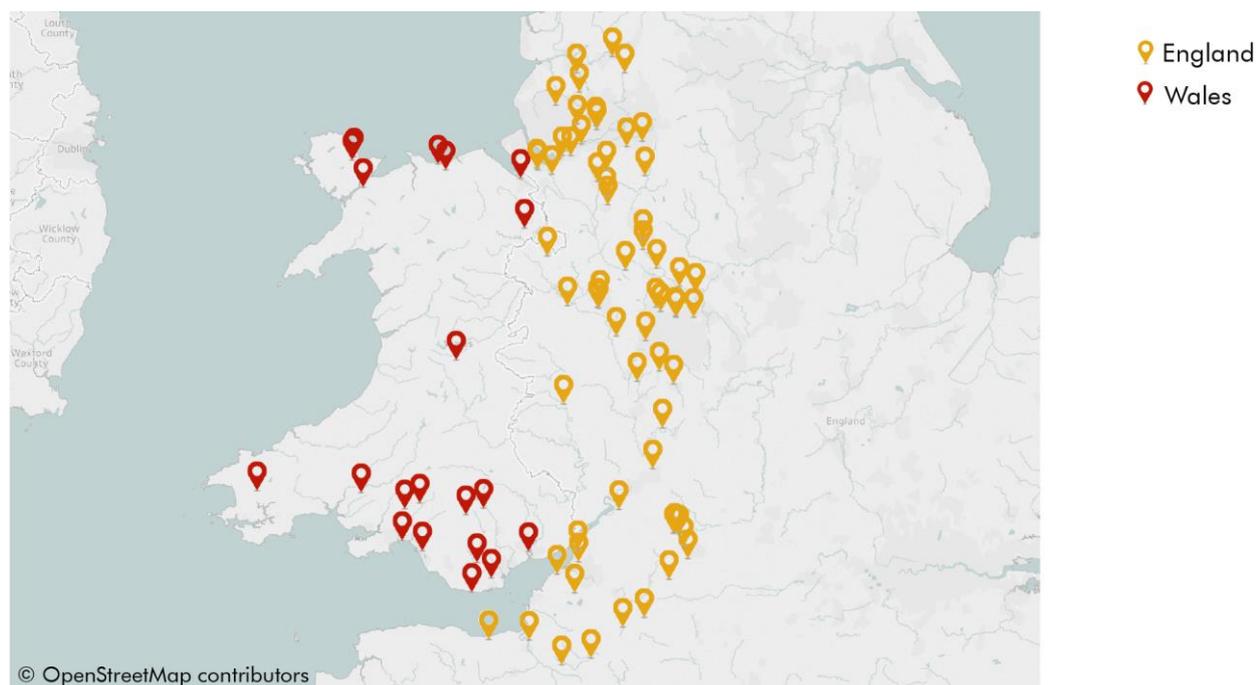
⁷ The Welsh Government's *Net Zero Wales Carbon Budget 2 (2021-2025)* suggests that new business recycling regulations are due to be implemented in early 2022, however a date has not been specified.

Landfill disposals tax

2021 could divert waste that would otherwise have been exported (either from Wales or England) to landfill in Wales, also raising LDT receipts.⁸

- **Behavioural responses to policy changes.** The Welsh Government has so far aligned LDT rates with those for UK landfill tax. If those rates were to diverge then we would expect some waste to be diverted across the border to the sites that were subject to the lower rates. A significant share of waste being sent to landfill in Wales originates in England.⁹ Moreover, as Figure 4.1 shows, there are numerous landfill sites relatively close to either side of the Welsh-English border, so there would clearly be scope for such behavioural responses to take place.¹⁰ The degree to which they did would depend on how the potential tax saving compared to the transport and other costs associated with sending waste to a landfill site subject to the lower tax rates. For example, the biodegradable municipal waste (BMW) ban in Scotland, effective from 31 December 2025, will prevent biodegradable household (or other similar) waste entering landfill. We expect a significant behavioural response with much of the Scottish BMW instead being landfilled in England. The introduction of a similar policy in England or Wales would be likely to induce a significant behavioural response.

Figure 4.1: Landfill sites in Wales and within 60 miles of the border with England



⁸ Trade data suggest that some of this impact might have materialised prior to the full ban taking effect, with the amount of solid waste imported by China falling sharply since 2017.

⁹ Data from Natural Resources Wales show that in each year from 2015-16 to 2019-20 waste from England accounted for over 20 per cent of standard-rated waste sent to landfill in Wales.

¹⁰ The 60-mile corridor from the border is purely illustrative.

A Forecasts required for the block grant adjustments

- A.1** The block grant is a mechanism for transferring funds from the UK Government to the devolved administrations, as allocated from within the departmental spending limits set by the Treasury. The block grants for the Welsh and Scottish Governments are adjusted in accordance with their respective fiscal frameworks.¹ The OBR has no direct involvement in these spending decisions or block grant negotiations, but the spending settlements do draw on our tax forecasts.
- A.2** This annex presents those forecasts, which largely relate to the UK Government's revenue from the taxes equivalent to those that have been devolved. For the three taxes covered in this report, the corresponding UK Government tax is (non-savings, non-dividends) income tax, stamp duty land tax, and landfill tax, all from England and Northern Ireland.
- A.3** The forecast methodologies for the Scottish and UK Government taxes are largely the same as those described for Wales in Chapters 2 to 4. We first establish an in-year estimate using the latest administrative data to estimate the level of receipts in 2021-22. We then project over the five-year horizon using the respective forecast models and our own judgements. The economic determinants used are from our October 2021 *Economic and fiscal outlook*.
- A.4** Tables A.1 to A.4 compare our current forecasts for the devolved Welsh (and Scottish) taxes to their UK Government equivalents (which relate to England and Northern Ireland). In the near term, our income tax forecasts reflect the package of policy measures announced by the UK Government in its Autumn Budget and Spending Review 2021. In the longer term, differences in our income tax forecasts will mainly reflect assumptions about relative population growth, while differences in our forecasts for property transaction taxes derive from the more progressive structure of the Welsh and Scottish tax schedules, which delivers greater revenue gains from fiscal drag as house prices rise.

¹ *The agreement between the Welsh Government and the United Kingdom Government on the Welsh Government's fiscal framework*, December 2016, and *The agreement between the Scottish Government and the United Kingdom Government on the Scottish Government's fiscal framework*, February 2016.

Forecasts required for the block grant adjustments

Table A.1: Income tax on non-savings, non-dividend income

	£ billion							
	Outturn	Forecast						
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Whole UK NSND income tax	176.8	182.0	198.0	212.0	223.7	233.8	248.1	261.8
<i>of which:</i>								
Welsh Government income tax (WRIT basis)	2.0	2.1	2.3	2.5	2.6	2.7	2.9	3.1
UK Government NSND income tax from Wales	2.6	2.8	3.0	3.3	3.5	3.7	4.0	4.2
Scottish income tax	11.8	12.0	12.9	13.8	14.5	15.0	15.8	16.6
England and Northern Ireland NSND income tax	160.3	165.1	179.7	192.5	203.2	212.3	225.4	238.0
Whole UK NSND income tax excluding Scottish income tax	165.0	170.0	185.1	198.2	209.3	218.8	232.3	245.2
UK Government NSND income tax¹	162.9	167.9	182.8	195.7	206.7	216.0	229.4	242.2
		Percentage change on a year earlier						
Whole UK NSND income tax		3.0	8.7	7.1	5.5	4.5	6.1	5.5
<i>of which:</i>								
Welsh Government income tax (WRIT basis)		4.2	8.2	7.7	6.1	4.5	5.9	5.2
UK Government NSND income tax from Wales		5.7	9.2	8.0	7.4	5.5	6.7	5.7
Scottish income tax		1.4	7.3	7.0	4.8	3.9	5.3	5.1
England and Northern Ireland NSND income tax		3.0	8.8	7.1	5.5	4.5	6.2	5.6
Whole UK NSND income tax excluding Scottish income tax		3.1	8.8	7.1	5.6	4.5	6.2	5.6
UK Government NSND income tax¹		3.1	8.8	7.1	5.6	4.5	6.2	5.6

¹ Whole UK NSND income tax excluding Scottish income tax and Welsh Government income tax (WRIT basis).

Table A.2: Welsh rates and England and Northern Ireland equivalent income tax by band forecasts

	£ billion							
	Outturn	Forecast						
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
England and Northern Ireland NSND income tax (WRIT basis)	59.5	61.3	66.6	71.4	75.2	78.2	82.6	86.9
<i>of which:</i>								
Basic rate	40.8	41.9	45.3	48.7	51.0	52.6	55.1	57.6
Higher rate	11.3	12.0	13.2	14.2	15.1	16.0	17.3	18.3
Additional rate	7.5	7.4	8.1	8.5	9.0	9.5	10.2	11.0
Welsh rates	2.0	2.1	2.3	2.5	2.6	2.7	2.9	3.1
<i>of which:</i>								
Basic rate	1.8	1.8	2.0	2.1	2.2	2.3	2.4	2.5
Higher rate	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Additional rate	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
		Percentage change on a year earlier						
England and Northern Ireland NSND income tax (WRIT basis)		3.0	8.6	7.2	5.3	4.0	5.7	5.2
<i>of which:</i>								
Basic rate		2.8	8.0	7.5	4.8	3.2	4.7	4.5
Higher rate		6.4	10.5	7.4	6.4	6.1	7.9	5.7
Additional rate		-1.0	8.6	5.6	6.2	5.5	7.0	7.8
Welsh rates		4.3	8.2	7.7	6.1	4.5	5.9	5.2
<i>of which:</i>								
Basic rate		3.2	7.4	7.5	5.2	3.8	5.3	4.8
Higher rate		11.5	12.3	9.0	8.7	8.5	10.7	7.2
Additional rate		11.1	13.2	8.2	23.2	8.4	2.6	7.2

Table A.3: Property transaction taxes

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Whole UK property transaction taxes	9,396	14,693	15,759	16,410	17,181	18,128	19,370
<i>of which:</i>							
LTT (Wales)	212	367	366	383	404	432	465
LBTT (Scotland)	517	731	773	811	849	895	949
SDLT (England and Northern Ireland)	8,667	13,595	14,620	15,216	15,929	16,800	17,956
UK excluding Scottish LBTT	8,879	13,963	14,986	15,599	16,332	17,232	18,420
		Percentage change on a year earlier					
Whole UK property transaction taxes		56.4	7.3	4.1	4.7	5.5	6.9
<i>of which:</i>							
LTT (Wales)		73.1	-0.4	4.6	5.5	7.1	7.4
LBTT (Scotland)		41.3	5.8	4.9	4.7	5.5	6.0
SDLT (England and Northern Ireland)		56.9	7.5	4.1	4.7	5.5	6.9
UK excluding Scottish LBTT		57.3	7.3	4.1	4.7	5.5	6.9

Forecasts required for the block grant adjustments

Table A.4: Landfill taxes

	£ million						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Whole UK landfill taxes	730	741	683	667	636	573	575
<i>of which:</i>							
Landfill disposals tax (Wales)	32	45	36	36	36	35	35
Scottish landfill tax	106	109	107	90	93	77	18
Landfill tax (England and Northern Ireland)	592	587	540	541	507	461	522
UK excluding Scottish landfill tax	624	632	576	577	542	496	557
		Percentage change on a year earlier					
Whole UK landfill taxes		1.5	-7.8	-2.4	-4.7	-9.9	0.4
<i>of which:</i>							
Landfill disposals tax (Wales)		42.1	-20.8	-0.1	-0.5	-0.8	-0.2
Scottish landfill tax		2.8	-2.2	-15.5	3.0	-17.7	-76.5
Landfill tax (England and Northern Ireland)		-0.9	-7.9	0.0	-6.3	-9.1	13.3
UK excluding Scottish landfill tax		1.3	-8.8	0.0	-5.9	-8.5	12.3

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