

## **Welsh taxes outlook**

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December 2022



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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.<sup>1</sup> The fiscal framework also established a requirement for independent forecasting. The Welsh Government chose to use our forecasts to meet this requirement.<sup>2</sup>

**1.3** Our work with the Welsh Government is guided by a Memorandum of Understanding, Terms of Reference, and a Financial Framework. In the second half of 2020, we jointly reviewed these arrangements to ensure they reflected any lessons learnt in the first year of forecasting.<sup>3</sup> Our first *Welsh taxes outlook (WTO)* was published alongside the Welsh Government's 2020-21 Draft Budget in December 2019.

**1.4** In this *WTO*, published alongside the Welsh Government's 2023-24 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).

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<sup>1</sup> More detailed information on the relevant legislation and governance is available on our website.

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

<sup>3</sup> The joint review is available on our website alongside the 2020 *WTO*.

- 1.6 These forecasts are consistent with the central forecast for the UK economy and public finances presented in our November 2022 *EFO*. European energy prices and global interest rates have risen sharply since our previous *EFO* in March. The consequences of these global shocks for inflation and real incomes across all parts of the UK means we now expect the UK economy to fall into a recession that lasts just over a year. As energy prices and interest rates fall back through the second half of the forecast, the economy recovers. But even so, the energy price shock leaves the economy materially smaller in the medium term than we expected in March, with consequences for all the major tax bases. Our UK fiscal forecast reflects significant short-term fiscal loosening to support households and businesses with high energy prices, followed by material fiscal tightening in the medium term from the tax rises and spending cuts announced in the UK Government's Autumn Statement.
- 1.7 The methodology and the forecasts in this *WTO* 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 November 2022 *EFO*.
  - These were scrutinised by the BRC in a process that was, unusually, completed entirely by correspondence, due to uncertainties around the timing of the Autumn Statement.
  - Updated LTT and LDT forecasts were then prepared by Welsh Government analysts reflecting the latest receipts and house price data. These were scrutinised by the BRC in a meeting on 23 November.
  - On 29 November, we finalised our Welsh taxes forecast, incorporating the impacts of UK and Welsh Government policy announcements up to and including the Autumn Statement, as well as updated receipts 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

### Introduction

#### 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 of liabilities 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 2023-24 income tax liability of three specimen Welsh taxpayers would be split between the UK and Welsh Governments:<sup>1</sup>

- **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, 39 per cent of their £10,782 liability would relate to the Welsh rates and 61 per cent would be reserved to the UK Government, including all the £1,350 due on their dividend income. The effective income tax rate paid by this individual is 18.0 per cent. These calculations include the impact of the UK Government's Autumn Statement 2022 decision to reduce the dividend allowance to £1,000 from April 2023 (followed by a further drop to £500 from April 2024 that would affect tax paid in 2024-25). This has no impact on the amount of tax due to the Welsh Government – since the tax rate on employment income is unchanged – but by increasing the effective tax rate on dividend income it reduces the Welsh share of the overall liability, from 41 to 39 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 £93,038. Of this, only 21 per cent would relate to the Welsh rates, while 79 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 £19,282 from their dividend income, all of which is retained by the UK Government. The effective income tax rate paid by this individual is 37.2 per cent. These calculations reflect two UK Government policy decisions in Autumn Statement 2022 – reducing the dividend allowance (explained above) and lowering the additional rate threshold from £150,000 to £125,140. These changes increase the effective tax rate for additional rate payers and while this has no impact on the amount of tax due to the Welsh Government it does increase the amount due to the UK Government, thereby lowering the Welsh share of overall liability, from 22 to 21 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

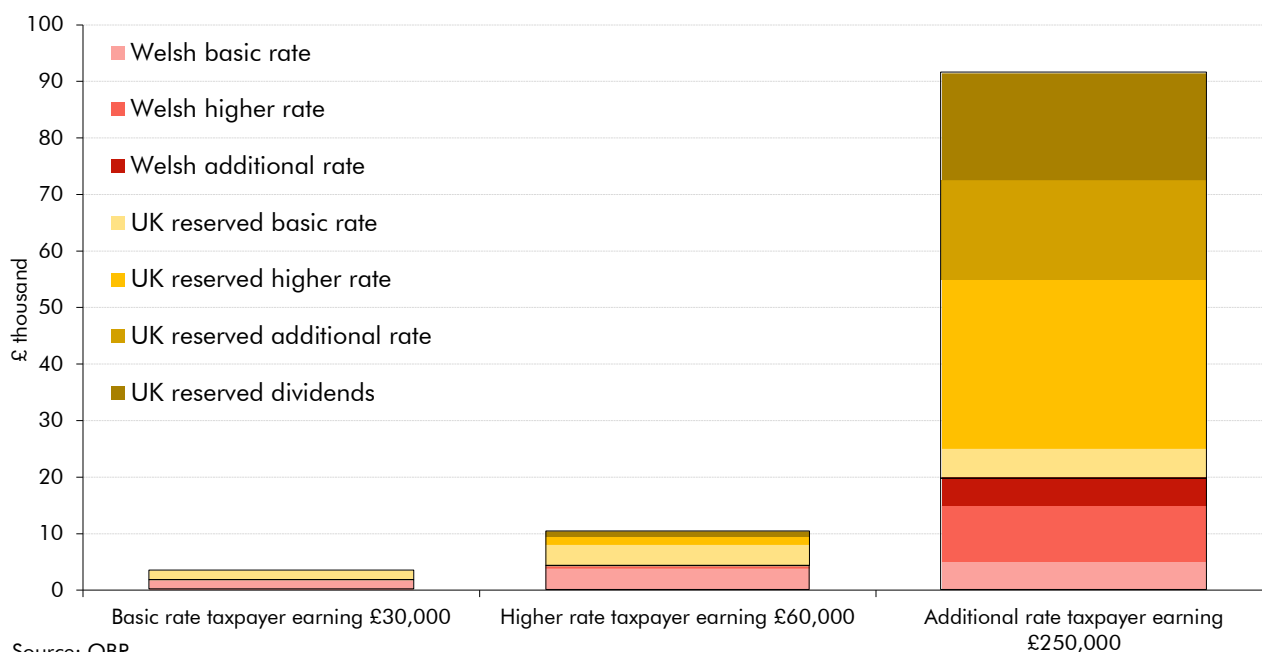
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<sup>1</sup> In addition to the income tax parameters reported in Table 2.2, this also reflects the personal allowance taper that withdraws £1 of personal allowance for every £2 of earnings above £100,000; the dividend allowance of £1,000 in 2023-24; and tax rates on dividend earnings of 8.75 per cent for basic rate taxpayers, 33.75 per cent for higher rate taxpayers and 39.35 per cent for additional rate taxpayers. These specimen examples are illustrative and do not include all aspects of the income tax regime, for example any use of reliefs to lower an individual's tax liability.



Welsh rates liability is only around 2½ times 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.

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.<sup>2</sup> 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).<sup>3</sup>

## Methodology

2.6 Our Welsh income tax forecasts are produced on a 'top-down' basis.<sup>4</sup> 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 2020-21, based on

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

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

<sup>4</sup> 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.

the second year of outturn data for Welsh income tax liabilities, which HMRC published in July. In Box 2.1 we evaluate our forecasts for that second year.

- Finally, we add our estimates of the effect of **new policies** announced since our previous forecast on Welsh rates liabilities.

### Pre-measures UK-wide forecast

- 2.7 We use HMRC's latest published UK-wide NSND income tax liabilities outturn for the most recent tax year (currently 2020-21) 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 – in this case covering all 12 months of 2021-22 and the first five months of 2022-23.
- 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. But in our latest forecast, CPI inflation has very little effect because thresholds are frozen at the UK level until 2027-28.<sup>5</sup>
- 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

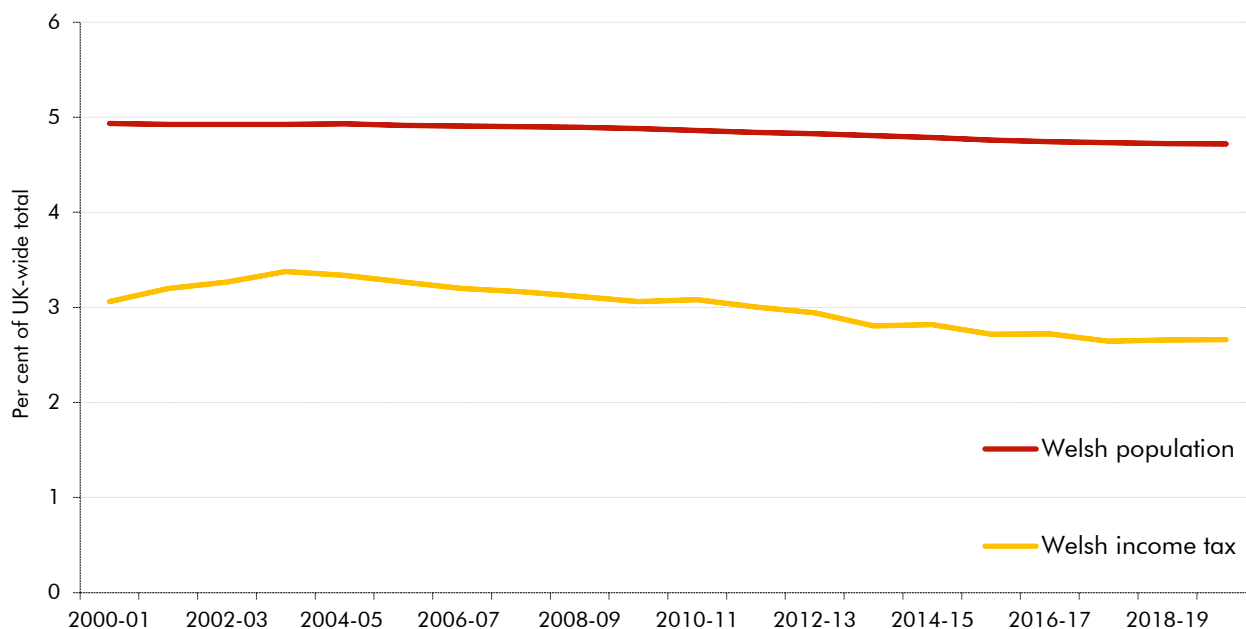
- 2.10 Armed with our forecast for UK NSND income tax liabilities, we then need to calculate the share that will be subject to the Welsh rates and apply this to the UK forecast. This is done in two steps. First, we calculate the overall Welsh share of income tax as captured by HMRC's survey of personal incomes (SPI). This is an annual survey based on a sample of around 822,000 individuals in contact with HMRC. It is published with a long lag, with the 2019-20 SPI being the latest year currently available.
- 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 2019-20) and the difference in the relative rate of decline in the Welsh share of income tax compared with the share of population (declining by 13.1 versus 4.4 per cent since 2000-

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<sup>5</sup> In the absence of these frozen thresholds, high rates of CPI inflation would have caused thresholds to rise faster than earnings so that some people stopped paying income tax and others had greater shares of their income tax at lower rates. This 'negative fiscal drag' would have reduced the average tax rate on all incomes and reduced revenues relative to what has happened with frozen thresholds.

01). On this basis, income tax liabilities per person in Wales in 2019-20 were 44 per cent lower than in the UK as a whole (at £1,596 versus £2,831).

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

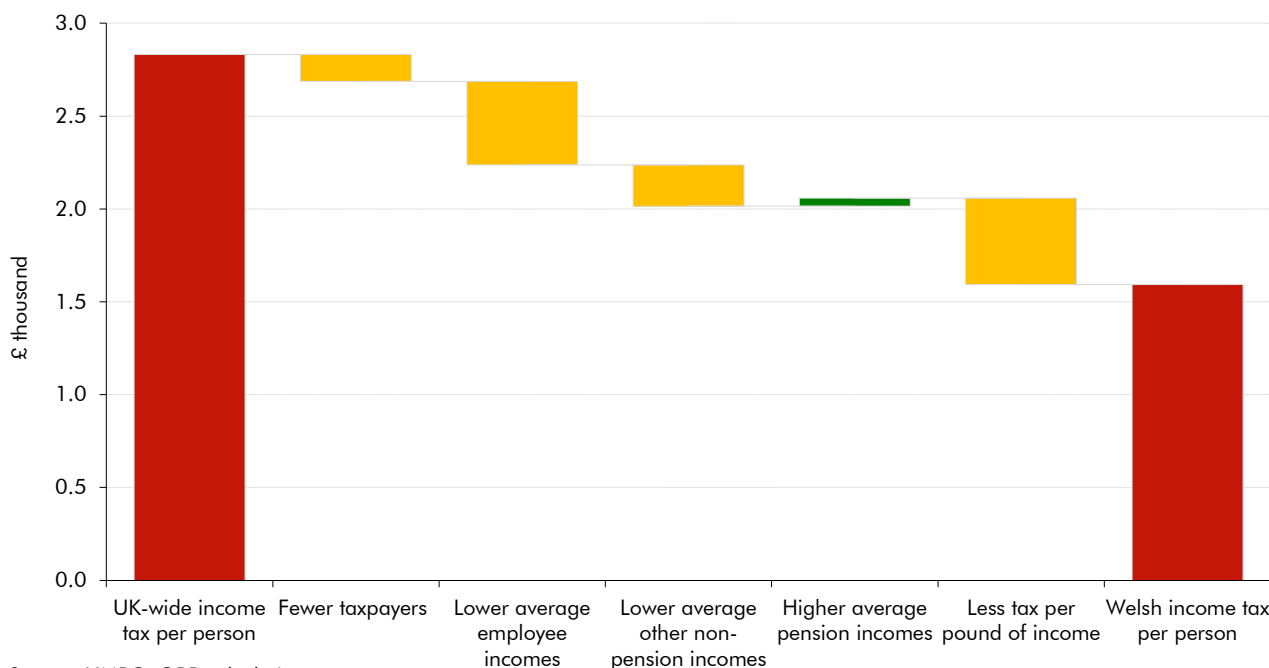


Note: Tax data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.

Source: HMRC, ONS

- 2.12** We can readily incorporate differences in expected population growth in our forecasts using published ONS projections, but understanding why tax per person in Wales is lower than in the UK, and declining in relative terms, is more complex. We use in-year real time PAYE information (RTI) to adjust the initial SPI-based shares, thereby partially capturing some of the observed recent dynamics. A more thorough investigation, including how this trend has evolved over time and how it might affect the Welsh share of income tax in the future, will be presented in a forthcoming working paper.
- 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 or 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 2019-20



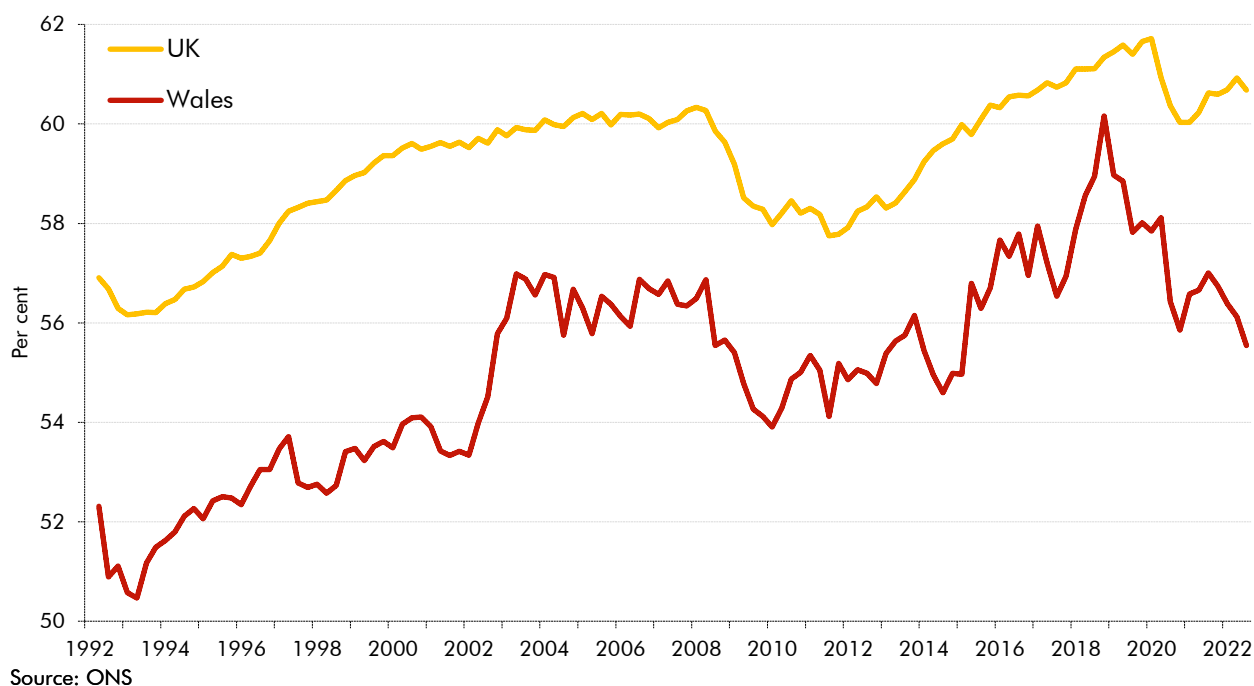
### The proportion of the population that pay income tax

- 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 2019-20 SPI, 43 per cent of the Welsh population paid income tax, compared to 47 per cent of the UK's population, accounting for around 12 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.<sup>6</sup> On average since 1992, the rate in Wales has been 4.1 percentage points lower than that in the UK as a whole. In 2019-20 it was 3.5 percentage points lower. On this Labour Force Survey measure, the employment rate in Wales has also been around twice as volatile as in the UK as a whole
- 2.16** In 2020 the pandemic contributed to a 2.2 percentage point fall in the employment rate in Wales, greater than the 1.6 percentage point drop in the UK as a whole. Initially, employment rebounded more quickly in Wales but it has now begun to fall back again, with the rate dropping 1.5 percentage points in the year to September 2022, whereas the overall UK employment rate rose by 0.1 percentage points. This is partly driven by the recent rise in inactivity (and long-term sickness), which has disproportionately affected Wales. The inactivity rate in Wales has risen by 1.6 percentage points in the year to September 2022, over four times the 0.4 percentage point rise seen in the UK as a whole. Overall this has taken the shortfall in the employment rate in Wales relative to the UK as a whole to a 20-year high of 5.1 percentage points in the three months to September 2022. The outlook for

<sup>6</sup> The employment rate here is the proportion of people aged 16 and over who are in paid work.

labour market inactivity is particularly uncertain at present – indeed, health-related trends were identified as a key source of risk to our UK-wide forecasts in our latest *Economic and fiscal outlook (EFO)*. If trends in Wales were to continue to be less favourable than those in the UK as a whole, this would pose a downside risk to our assumptions about the Welsh share of UK-wide income tax liabilities.

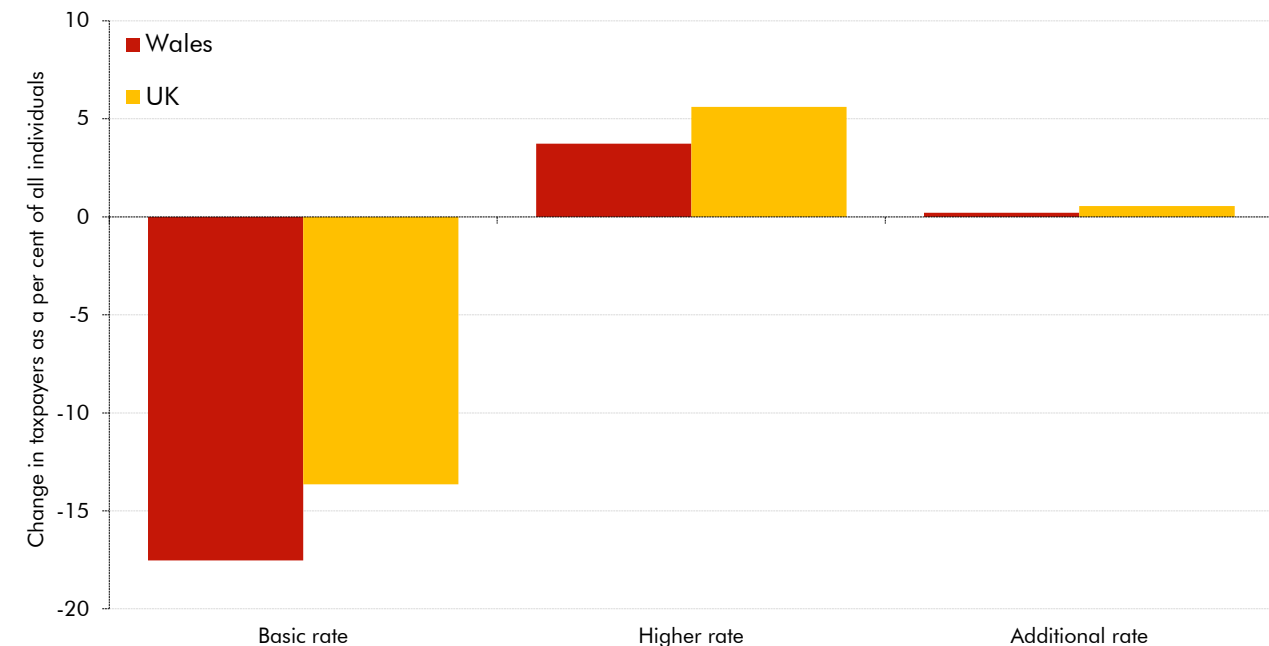
Chart 2.4: Employment rate for the UK and Wales



**2.17** Second, successive rises in the tax-free personal allowance – from £6,475 in 2010-11 to £12,500 in 2019-20 (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 2019-20. The significantly larger decline in the number of basic rate taxpayers in Wales (falling by nearly 30 per cent more than in the UK), reflects the greater concentration of the tax base in this band and the resulting disproportionate effect of raising the personal allowance.<sup>7</sup> Conversely, the Welsh increase in the two higher tax bands is around half as large 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 ½ per cent in the UK between 2010-11 and 2019-20, but dropped by 5.6 per cent in Wales, despite increases in the population and employment rates in both.

<sup>7</sup> This source of divergence between the number of taxpayers in Wales and the UK as a whole should be less of a factor during the forecast period, with the personal allowance set to remain fixed at £12,570 until the end of 2027-28.

Chart 2.5: Change in taxpayers by tax band between 2010-11 and 2019-20



### Average income per taxpayer

**2.18** 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 36 per cent of the shortfall in tax per person in 2019-20.

**2.19** Table 2.1 displays different sources of income averaged across all income taxpayers. It shows that:

- **The vast majority of taxpayer income comes from employee jobs.** This is true in both Wales and the UK as a whole, 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). In 2019-20, lower average employee incomes in Wales accounted for over two-thirds of the overall shortfall in income per taxpayer in Wales relative to the UK as a whole.
- **The SPI implied average income in Wales is lower than in the UK as a whole** – by 18 per cent in 2019-20. The difference is particularly marked in self-employment and other non-pension income (which includes income from savings and dividends) where Welsh income is 40 per cent lower.
- **The average income from pensions is higher in Wales than in the UK as a whole** – by 10 per cent in 2019-20. This is due to a higher proportion of the Welsh population being of pension age (21 per cent in 2020 versus 19 per cent in the UK as a whole) and Wales having a relatively higher proportion of public sector workers (20.7 per cent in 2019-20 compared to 16.5 per cent for the UK overall).

Table 2.1: Average incomes in 2019-20 by type

	UK	Wales	Difference	
	£ per taxpayer		£	Per cent
Employee income	25,841	21,103	-4,738	-18
Self-employment and other non-pension income	5,844	3,515	-2,330	-40
Pension income	4,984	5,463	479	10
<b>Total income</b>	<b>36,825</b>	<b>30,074</b>	<b>-6,752</b>	<b>-18</b>

2.20 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.<sup>8</sup>

Table 2.2: Different measures of average employee earnings in 2019-20

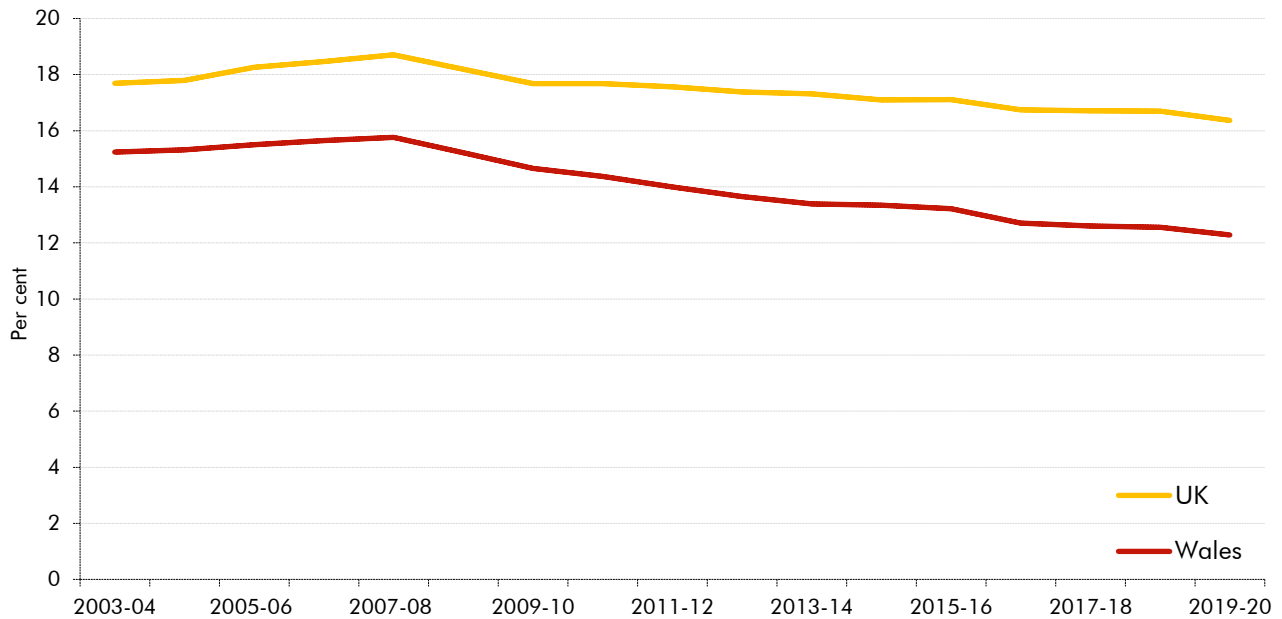
	UK	Wales	Difference	
	£ per employee		£	Per cent
HMRC Survey of personal incomes	33,776	28,137	-5,639	-17
HMRC Real-time information	29,995	24,955	-5,040	-17
ONS Annual survey of hours and earnings	29,782	25,882	-3,900	-13
ONS Labour force survey	33,535	28,746	-4,790	-14

### Average amounts of tax paid per pound of income

- 2.21 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 explained over a third of the difference in 2019-20.
- 2.22 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 3.5 percentage points between the peak in 2007-08 and 2019-20 compared with 2.3 percentage points in the UK as a whole. The effective tax rate declined by 0.3 percentage points in both Wales and the UK in 2019-20 alone, so the gap between them remained stable rather than continuing its decade-long widening.

<sup>8</sup> 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.

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

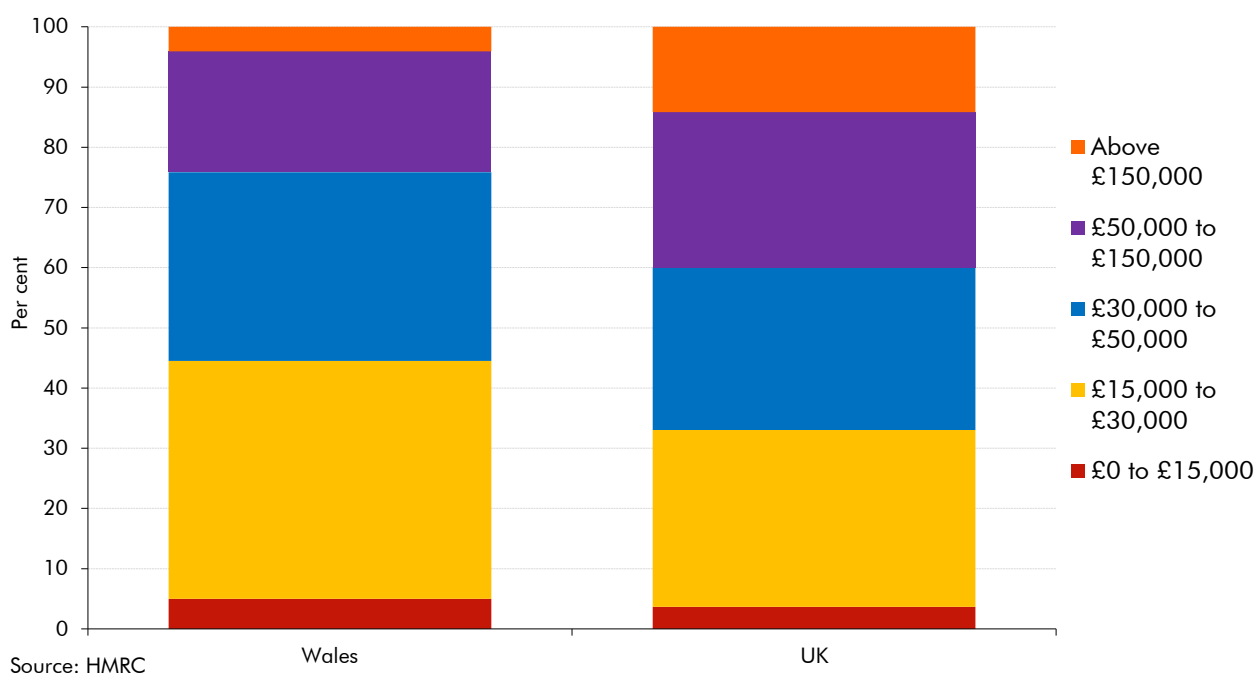


Note: Data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.  
Source: HMRC

**2.23** 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 recorded in the 2019-20 SPI. It shows that taxpayers earning over £50,000 account for around 40 per cent of total taxpayer income in the UK, around two-thirds higher than the equivalent share for Wales. This is reflected in the share of total tax paid at each income band, with 66 per cent of total tax paid in the UK coming from those earning over £50,000, compared with 44 per cent in Wales. Fiscal drag has also increased the proportion of taxpayer income from earnings above £50,000, with the share increasing by almost 2 percentage points from 2018-19 to 2019-20 in both Wales and the UK as a whole, with a corresponding fall in the share attributed to lower earnings.



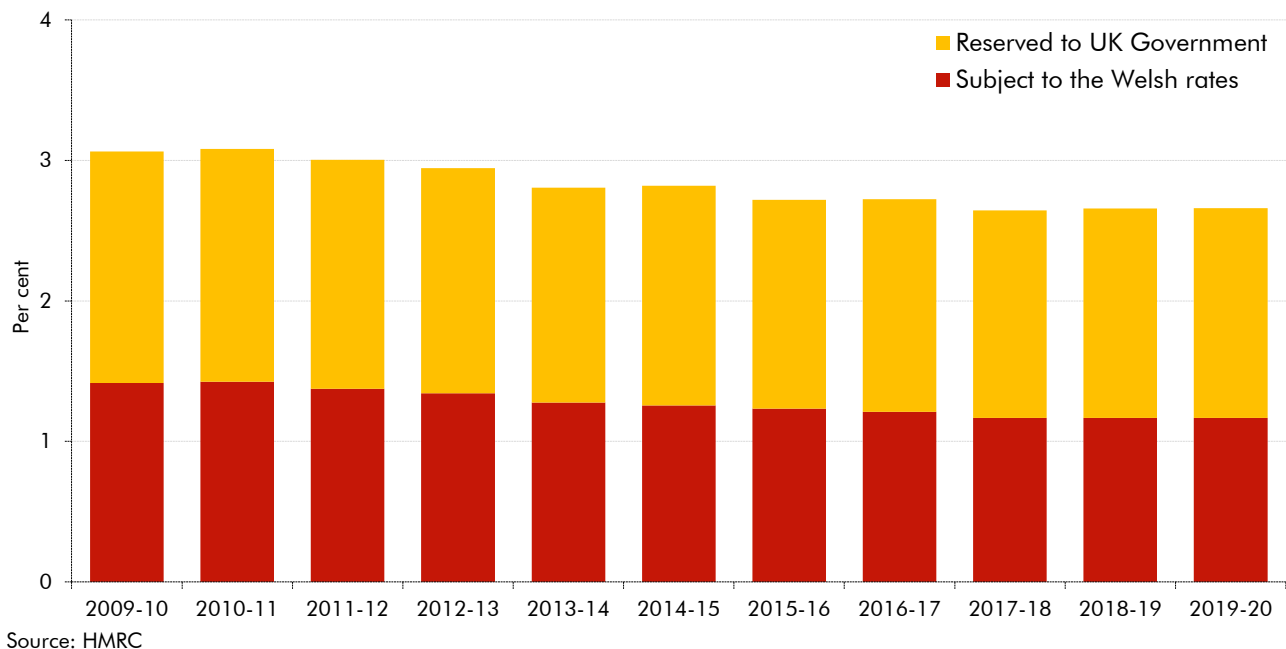
Chart 2.7: Proportion of total taxpayer income in the UK and Wales by income band



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

**2.24** 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 2019-20) 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 2019-20).

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



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

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

- RTI earnings:** we fill in the period between 2019-20 and 2022-23 using HMRC's estimate of outturn Welsh income tax liabilities in 2020-21 and timelier 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 2022-23, we factor in relative population growth rates based on the most recent ONS population projections, which were released in January 2022. These show the Welsh share of the UK population continuing to decline, and we would expect this to reduce the Welsh share of income taxpayers.<sup>9</sup> We adjust for this using an index of the Welsh share of the UK's adult population, which we have recently refined. We now calculate separate indices for the working-age population (those aged 16 to 65) and the pension-age population (those aged 65 and over), weighting both by the proportion of NSND income tax paid by each group. This captures different trends in population ageing as well as in overall population size.

<sup>9</sup> 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.

- We include adjustments for **gift aid and those previously announced policies** that have been or will be implemented between the SPI base year (2019-20) and the end of our forecasts and that are expected to affect the Welsh share.

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

## New policy costings

**2.27** 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 mean that we need to assess the effect of new policies on each individual band of income tax, rather than simply their overall cost or yield.

**2.28** Many of the general sources of uncertainty around policy costings that we routinely highlight are likely to be amplified as we disaggregate costings by geography and tax band. For that reason, we believe a relatively simple approach is appropriate, making sufficient allowance for asymmetric effects across countries and bands, while not seeking spurious precision.

## Latest forecast

### UK income tax forecast

**2.29** As set out in Chapter 1, our latest forecast for UK NSND income tax is based on the economic forecast published in our November 2022 *EFO*. Table 2.3 reports the UK and Welsh rates and thresholds that we have used in this forecast. In last month's Autumn Statement, the UK Government decided to extend the freeze in the personal allowance and the higher rate threshold by a further two years to the end of 2027-28, meaning that almost all the rates and threshold are fixed across the entire forecast period. The one exception is the additional rate threshold, which, also due to an Autumn Statement policy decision, will drop from £150,000 to £125,140 from April 2023 and remain fixed thereafter.

Table 2.3: UK Government and Welsh Government income tax parameters

	Per cent					
	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>UK Government tax rates for Welsh taxpayers</b>						
Basic rate	10	10	10	10	10	10
Higher rate	30	30	30	30	30	30
Additional rate	35	35	35	35	35	35
<b>Welsh rates of income tax</b>						
Basic rate	10	10	10	10	10	10
Higher rate	10	10	10	10	10	10
Additional rate	10	10	10	10	10	10
<b>Total income tax rates</b>						
Basic rate	20	20	20	20	20	20
Higher rate	40	40	40	40	40	40
Additional rate	45	45	45	45	45	45
£						
<b>Tax thresholds (reserved to the UK Government)</b>						
Personal allowance	12,570	12,570	12,570	12,570	12,570	12,570
Higher rate	50,270	50,270	50,270	50,270	50,270	50,270
Additional rate	150,000	125,140	125,140	125,140	125,140	125,140

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

- 2.30** Table 2.4 sets out the forecast for UK NSND income tax liabilities that underpins our Welsh rates forecast. UK-wide NSND income tax liabilities recovered strongly in 2021-22, increasing by £27 billion (15 per cent) relative to 2020-21, though this is £1.1 billion (0.5 per cent) lower than we forecast in our March 2022 *EFO*. The change since March is more than explained by a downward revision to the previous year's outturn (which reduces the forecast in future years by an average of £5.0 billion a year). This outweighs an upward revision to the growth in 2021-22 liabilities (of £3.1 billion, mainly driven by very strong bonus pay growth raising PAYE receipts in the final months of 2021-22).
- 2.31** The upward revisions to our pre-measures income tax forecast persist through 2022-23 (reflecting higher outturn receipts) and 2023-24 (thanks to modestly higher nominal wage growth). But thereafter the impact of the energy price shock on whole-economy productivity and thus wage growth dominates, such that revenues in our pre-measures forecast have been revised down by progressively larger amounts from 2024-25 onwards.
- 2.32** UK Government policies announced since March mitigate the downward revision in the pre-measures forecast, raising £11.0 billion by 2027-28 and around £6.5 billion a year on average. The biggest revenue-raisers include:
- The decision **not to cut the basic rate from 20 to 19 per cent**, which was due to take effect from April 2024 (as announced in the Spring Statement) has the single largest impact, raising £5.9 billion a year on average from 2024-25 onwards.
  - The decision to **scrap the health and social care levy** that was due to come into effect in April 2023. This raises income tax liabilities by amounts rising to £2.5 billion a year

in 2027-28 (while costing much more than that in lost revenue from the levy itself). The income tax yield from this measure comes via its indirect behavioural consequences. These include wages being higher than would have been the case if the levy had gone ahead (which is not separated out in Table 2.4) and the reduced incentive to incorporate, which boosts income tax and NICs at the expense of corporation tax.

- **Other measures** raise receipts by amounts rising to £2.4 billion by 2027-28, the most significant being the extension to the freezes in the personal allowance and higher rate thresholds, and the lowering of the additional rate threshold.

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

	£ billion							
	Outturn	Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	186.7	208.4	226.7	238.2	245.2	259.4	272.8	
December forecast	180.3	207.3	224.7	237.9	245.8	254.8	267.0	282.5
<b>Difference</b>	<b>-6.4</b>	<b>-1.1</b>	<b>-2.0</b>	<b>-0.2</b>	<b>0.5</b>	<b>-4.6</b>	<b>-5.8</b>	
of which:								
UK NSND outturn alignment		-4.2	-4.6	-4.8	-5.1	-5.4	-5.6	
Pre-measures forecast		3.1	2.1	2.8	-2.6	-7.9	-9.3	
Basic rate cut reversal		0.0	0.0	0.0	5.8	5.8	5.9	6.0
Health and social care levy reversal		0.0	0.5	1.3	1.6	2.0	2.3	2.5
Other UK policies		0.0	0.0	0.5	0.7	0.9	1.0	2.4

## Share subject to the Welsh rates

**2.33** Table 2.5 shows our latest forecast for the Welsh share and the change since March. It is presented on a pre-measures basis because the impact of new policy measures is captured in cash terms rather than via the share. It therefore does not include the effect on the share of not going ahead with the cut to the basic rate of income tax in 2024-25. On this basis, the Welsh share is little changed from our March forecast, up by 0.01 percentage points on average. That reflects a small downward revision in 2022-23 followed by upward revisions from 2024-25 onwards. Initially this reflects the latest in-year RTI data, which serve to lower the share in 2022-23. But ultimately that is outweighed by revisions to ONS-derived population shares, which raise the share relative to March.

**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						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	1.17	1.16	1.17	1.18	1.21	1.21	1.21	
December forecast (pre-measures)	1.19	1.16	1.16	1.18	1.23	1.22	1.22	1.22
<b>Difference</b>	<b>0.02</b>	<b>0.00</b>	<b>-0.01</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.01</b>	
<i>Memo: Population index</i>		100.0	100.0	99.9	99.9	99.8	99.7	99.6
<i>Memo: RTI index (2020-21 = 100)</i>		97.5	97.4	97.4	97.4	97.4	97.4	97.4
<i>Memo: Combined index</i>		97.5	97.4	97.3	97.2	97.1	97.1	97.0

## 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 this forecast down in all years, by an average of £55 million (1.9 per cent). This largely reflects downward revisions to our UK-wide forecast, with only modest revisions due to changes in the Welsh share described above.
- 2.35** In terms of UK Government policies, not going ahead with the health and social care levy increases the forecast by an average of £13 million a year, rising to £24 million in 2027-28. Freezing income tax thresholds for a further two years raises a further £27 million in 2027-28. The cancelling of the basic rate cut has no direct impact on NSND revenues for the Welsh Government since it only affects the reserved portion of the basic rate, leaving the 10p Welsh rate for basic rate payers unaffected (though it does have small indirect effects).

**Table 2.6: Welsh rates of income tax forecast**

	£ million							
	Outturn	Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	2,181	2,412	2,645	2,805	2,961	3,134	3,291	
December forecast	2,140	2,401	2,604	2,795	2,927	3,027	3,162	3,348
<b>Difference</b>	<b>-41</b>	<b>-12</b>	<b>-40</b>	<b>-9</b>	<b>-34</b>	<b>-107</b>	<b>-129</b>	
of which:								
Welsh share modelling		1	-12	8	46	39	35	
UK NSND outturn alignment		-49	-53	-57	-62	-66	-69	
UK NSND forecast and other changes		36	25	33	-30	-94	-111	
Effects of UK Government policies		0	0	6	13	15	16	44

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

	£ million							
	Outturn	Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>December forecast</b>	<b>2,140</b>	<b>2,401</b>	<b>2,604</b>	<b>2,795</b>	<b>2,927</b>	<b>3,027</b>	<b>3,162</b>	<b>3,348</b>
of which:								
Basic rate	1,843	2,040	2,211	2,375	2,490	2,573	2,677	2,824
Higher rate	251	299	327	350	363	377	404	436
Additional rate	46	61	66	71	74	77	82	88
Per cent								
Basic rate	86.1	85.0	84.9	85.0	85.1	85.0	84.6	84.3
Higher rate	11.7	12.5	12.6	12.5	12.4	12.5	12.8	13.0
Additional rate	2.2	2.5	2.5	2.5	2.5	2.6	2.6	2.6

## 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.

### Employment and inactivity

- 2.37 Having entered the coming recession 0.4 per cent (142,000 people) below its pre-pandemic level, UK-wide employment is expected to fall by a further 0.4 per cent (124,000 people) by the first quarter of 2024 as output falls during the recession. The weak outlook for employment also reflects a smaller labour force than we had expected pre-pandemic (a phenomenon that Chart 2.4 above suggests has been more pronounced in Wales than in the UK as a whole). The number of people UK-wide that report inactivity due to long-term sickness has risen by 378,000 since before the pandemic, with a particularly large increase among older age groups. More broadly, several adverse developments in our UK forecasts since March can be traced back to health-related issues. As well as labour market inactivity having risen, health-and disability-related benefit caseloads have too. With the UK having suffered a fourth wave of infections and hospitalisations in 2022, self-reported prevalence of long Covid remaining high, and the NHS waiting list for elective treatments continuing to rise, economic and fiscal risks from health developments appear to have risen since March.

### Growth of productivity and average earnings

- 2.38 Our UK-wide and Welsh income tax forecasts are sensitive to the assumptions we make about growth in labour productivity, which is the key determinant of real earnings growth. With the recession set to weigh on business investment and 'total factor productivity' (as measured) being held back by higher energy prices, the outlook for labour productivity growth and real earnings is weak. There are risks to both sides of these forecasts. On the upside, a rapid end to Russia's war in Ukraine that stabilised European energy markets and lowered prices could relatively quickly feed through to reduced inflationary pressure and smaller rises in interest rates, allowing the economy and earnings to recover more quickly. And since higher energy prices are the key factor explaining why growth in total factor productivity over the next five years is only slightly higher than the very weak post-financial crisis average and much weaker than the pre-financial crisis average, lower energy prices would also boost the medium-term outlook. Against that, the war could intensify and energy prices could remain high and volatile, weighing further on the outlook. And these risks come in the context of continuing uncertainty around prospects for growth in productivity and earnings growth that has been a feature of the post-financial crisis decade.

### The Survey of personal incomes base data

- 2.39 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 less than 0.6 per cent, but for Wales it was a more material 3.6 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 two years 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

- 2.40** 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. This will help to inform future forecast judgements in respect of trends in the Welsh share of income tax over time.
- 2.41** The key adjustment we make at present relates to different rates of population growth, with a simple split between working-age and pension-age adults that allows us to make 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 and, at a high level, age-related changes in the distribution of taxpayers and average incomes across the different age groups. We will consider the case for further refining this in the future.



### Box 2.1: Evaluating our forecasts for the Welsh rates of income tax for 2020-21

HMRC published outturn data for the Welsh rates in 2020-21 in July 2022. Assessing the performance of our forecasts after the event is important for transparency and accountability, while also helping us to understand and identify ways to improve them. We will produce a more detailed assessment in the *Welsh taxes outlook* update alongside the final Budget early next year, so present a preliminary discussion here. This was the second year of operation of the Welsh rates and therefore the second year for which we can assess our forecast performance. Table A presents the outturn data and our five forecasts that preceded that data being published – for both the Welsh rates and the pre-measures Welsh share of UK NSND income tax.

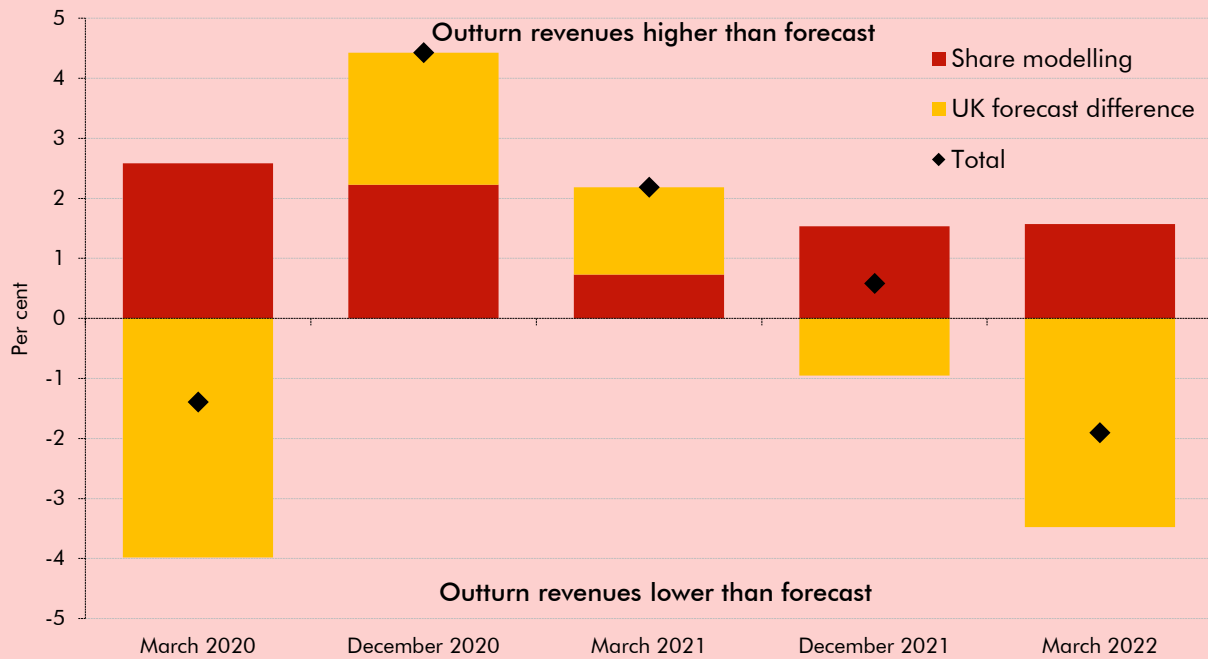
**Table A: Successive forecasts for Welsh rates of income tax and the share of pre-measures liabilities subject to the Welsh rates (2020-21)**

	Outturn	Forecast				
		Mar 2020	Dec 2020	Mar 2021	Dec 2021	Mar 2022
WRIT (£ million)	2,140	2,170	2,045	2,093	2,127	2,181
Difference from outturn (£ million)		30	-95	-47	-12	41
Welsh share (per cent)	1.19	1.16	1.13	1.18	1.17	1.17
Difference from outturn (per cent)		-0.03	-0.06	-0.01	-0.02	-0.02

Chart A breaks down the overall differences between the same five forecasts and the outturn for 2020-21 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. At a high level, it shows that we underestimated the Welsh share in every forecast, whereas the errors in respect of our UK NSND forecast comprised both over- and underestimates. In four of the five forecasts, the error due to the UK NSND forecast was quantitatively more important than the error due to the Welsh share. On a forecast-by-forecast basis:

- In **March 2020** we overestimated receipts by 1.4 per cent, which was more than explained by an overestimate of the UK NSND forecast. We overestimated UK-wide liabilities by 4.1 per cent, reflecting the pandemic-driven fall in receipts relative to this final pre-pandemic forecast. This outweighed our underestimate of the Welsh share.
- In each of **the next three forecasts** we underestimated receipts, though by diminishing amounts. In the first two, this was driven by underestimates of both the Welsh share and UK-wide liabilities. One of the factors behind this was the unexpected resilience of UK-wide receipts during the pandemic, thanks in part to large-scale fiscal support via the furlough scheme, self-employment income support, as well as higher departmental spending. In December 2021, this was more than explained by an underestimate of the Welsh share, with UK-wide liabilities being overestimated.
- In our **March 2022** forecast we overestimated 2020-21 receipts by 1.9 per cent as a result of a larger overestimate of UK-wide liabilities than in the preceding forecast

Chart A: Successive forecast differences for Welsh rates of income tax (2020-21)



We continue to refine our forecasts for the Welsh share by utilising both the in-year RTI data, which informs both our UK-wide forecast and our estimates of the Welsh share. We have also refined our 'population' index by splitting the working-age and pension-age populations, weighting each by their proportion of NSND income tax. This allows us to account for different trends in population ageing, in addition to the overall size of the population.

## 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 2022 *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.<sup>1</sup> 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.<sup>2</sup>

3.3 LTT has many of the same features as SDLT including different treatment for residential and commercial properties, a tax-free threshold and a surcharge on the purchase of additional residential properties. But there are some notable differences: 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.<sup>3</sup> 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

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<sup>1</sup> 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.

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

<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup>
- 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 has been volatile once again this year. This reflects the lingering impacts of the pandemic, including the ‘forced savings’ that were built up during that time continuing to flow into house prices, and the behavioural responses to the Welsh and UK Governments’ time-limited transaction tax holidays. The volatility is also a reflection of more recent economic developments, such as the sharp rise in CPI inflation and the accompanying increase in bank and mortgage rates.

### Property prices

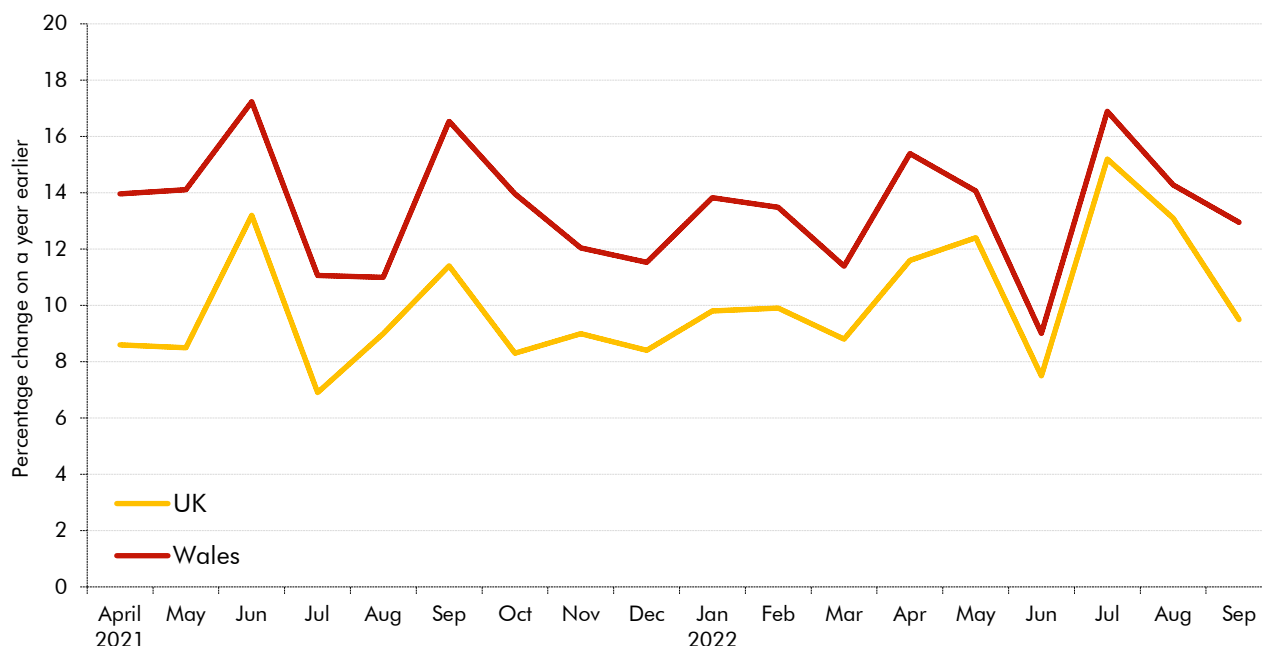
- 3.6** Chart 3.1 shows that **house price inflation** during the 2021-22 fiscal year peaked in June 2021 at 13.2 per cent in the UK and 17.2 per cent in Wales. In both cases that coincided with the end of the respective Government’s tax holidays (both ending on 30 June 2021). House price inflation then dipped in July 2021, before stabilising during the remainder of 2021-22. House price inflation has continued to fluctuate this year, with the rate of increase slowing in the past two months, though by relatively less in Wales than in the UK as a whole. Sharp rises in the year to July 2022 (of 15.2 and 16.9 per cent in the UK and Wales respectively) are influenced by the post-holiday dip in prices in July 2021. With mortgage rates having risen very sharply in September and October, we expect house prices to have peaked and so year-on-year house price inflation to continue dropping.

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<sup>4</sup> 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.

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

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



Source: ONS

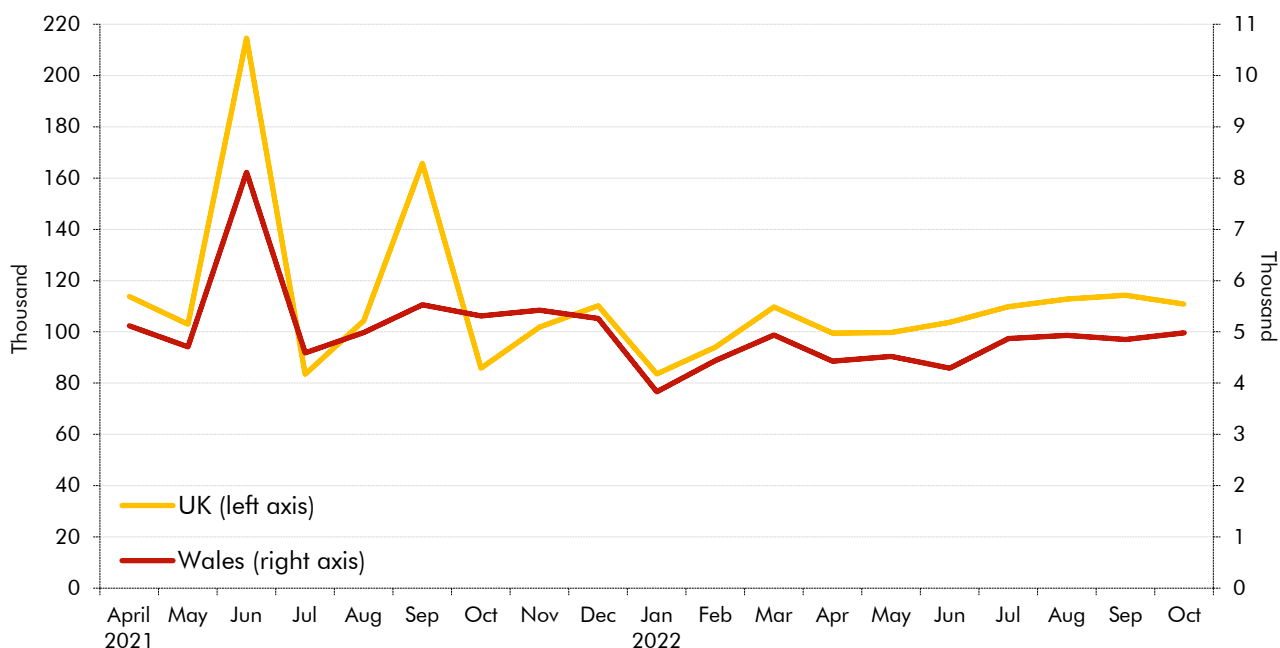
- 3.7 Commercial property prices** (as measured by the average price of transactions recorded by the respective tax authorities) fell in Wales in the first half of 2022-23, by 5.3 per cent, whereas in the UK they rose by 4.5 per cent on a year earlier.

### Property transactions

- 3.8 Monthly residential property transactions** in 2021-22 were dominated by a spike in June 2021 (for both Wales and the UK) with a second UK-wide spike in September. These reflect the forestalling (bringing forward) of transactions ahead of the ending of the two Governments' temporary tax holidays on 30 June, and the UK Government's subsequent, but less generous, 3-month extension (which ended on 30 September).<sup>6</sup> In both cases the transactions that were brought forward were partially offset by fewer transactions in subsequent months. Overall, transactions in 2021-22 were 15.7 per cent and 29.0 per cent up on 2020-21 in the UK and Wales, respectively, largely due to a rebound from the depressed pandemic-impacted market of 2020-21 and the release of pent-up demand.
- 3.9** Transactions in the year to date in 2022-23 are down by 13.8 per cent in the UK and 14.4 per cent in Wales, reflecting both the weaker economic outlook and rising mortgage rates, and the unusually high number of transactions in 2021-22 that are the base for comparison.

<sup>6</sup> The SDLT nil rate threshold was raised to £500,000 until 30 June 2021, whereas for the extension to 30 September 2021 it was lowered to £250,000, though that was still higher than the usual threshold of £125,000.

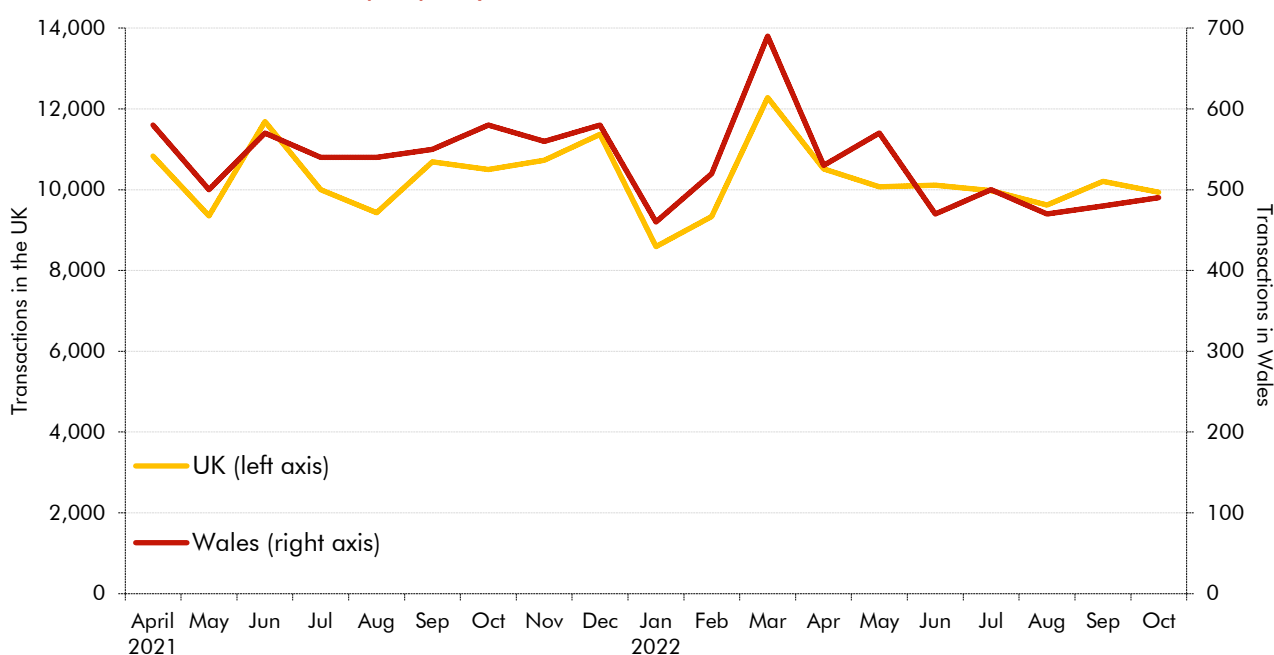
Chart 3.2: Residential property transactions



Source: HMRC, WRA

**3.10 Commercial property transactions** in Wales have largely mirrored those in the UK as a whole during 2021-22 and 2022-23 (Chart 3.3). Transactions in the year to date in 2022-23 are down 2.8 per cent in the UK as a whole and 9.6 per cent lower in Wales, following significant rises in 2021-22 after the pandemic-related weakness in 2020-21.

Chart 3.3: Commercial property transactions

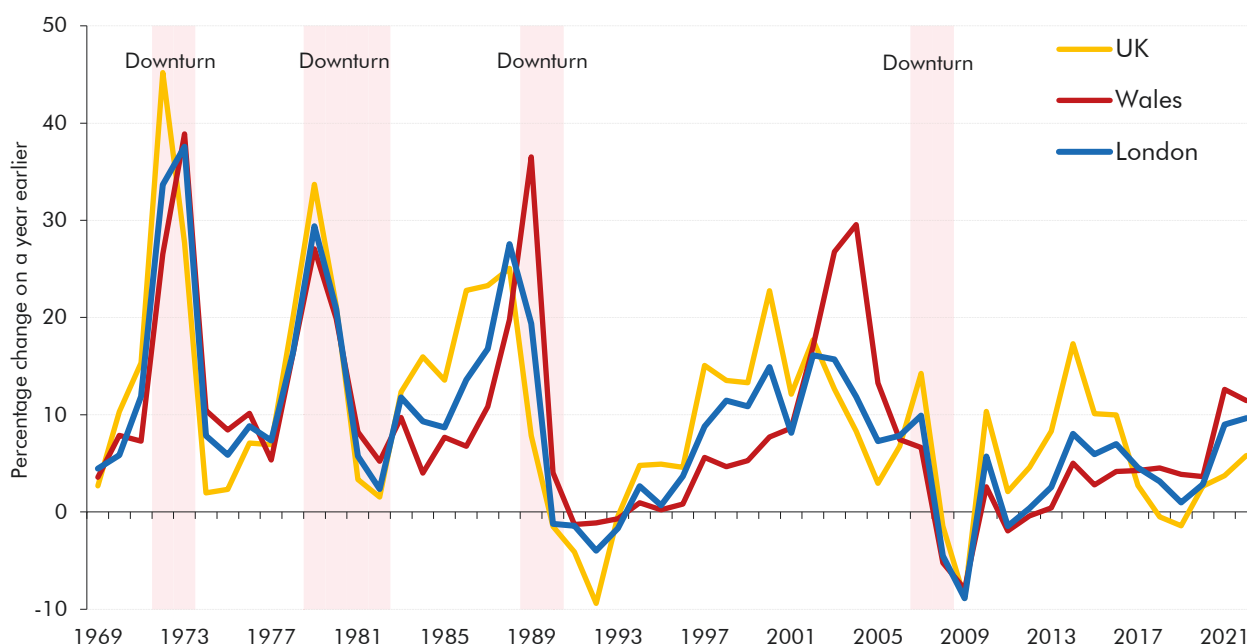


Source: HMRC, WRA

## Forecasts for property market determinants

- 3.11** Our forecasts for property transaction taxes are underpinned by our UK-wide property market forecasts. We typically assume Welsh prices and transactions move in line with those for the UK as a whole, unless there are clear reasons to depart from that. In practice, this often involves us using somewhat different house price assumptions in the near term before assuming house price inflation converges from the second or third year of the forecast. In outturn, house price inflation in Wales during the first half of 2022-23 has been 2.2 percentage points above that in the UK (shown in Chart 3.1 above).
- 3.12** For the second half of 2022-23 and beyond, we therefore need to decide whether that stronger momentum will continue or not. For this forecast, we have assumed that house prices will move together in Wales and the UK as a whole from this point onwards, reflecting the sharp rise in mortgage rates hitting both markets simultaneously. To allow for this we have added a 1.1 percentage point wedge to the house price determinant for 2022-23 and nothing thereafter. There are risks around this assumption. Chart 3.4 shows that, historically, house prices in Wales have tended to rise faster than the UK as a whole just ahead of a downturn (as they are now), and then decline with a modest lag relative to the UK during a downturn – with London house prices often leading the wider market. If that lag in Welsh price falls were to be repeated in the downturn we assume to be underway now, it would represent an upside risk to our near-term LTT receipts forecast.

Chart 3.4: Historical trends in house prices



Source: Land Registry

- 3.13** We have revised up house price inflation in 2022-23 since our March forecast, reflecting stronger-than-expected outturn data. But prices are now expected to fall in 2023-24 and 2024-25, and to rise only modestly in 2025-26, thanks to significantly higher mortgage rates and the gloomier economic outlook. Cumulative house price growth between 2021-

22 and 2026-27 has been revised down by 7.9 percentage points. Residential transactions have also been revised down between 2022-23 and 2024-25, reflecting the effects of the forthcoming recession and higher interest rates, with the latter already feeding through to lower transactions in outturn. Transactions recover from 2025-26 onwards, but cumulative growth between 2021-22 and 2026-27 is 9.2 percentage points lower than in March.

- 3.14** We also assume that commercial prices and transactions fall in the near term, again due to the recession and higher interest rates. Relative to March, commercial prices are much lower in 2023-24, with more modest revisions in later years, reflecting an earlier trough than for residential prices, but a more gradual recovery thereafter. The near-term downward revisions to our commercial transactions forecast are smaller than those to our residential forecast, a difference informed by their relative changes during the financial crisis.

**Table 3.1: Forecasts for Welsh property prices and transactions**

	Percentage change on previous year						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Residential property prices	9.6	9.2	-4.2	-4.0	2.1	3.2	3.6
Residential property transactions	15.7	-14.0	-15.4	0.6	11.0	15.2	8.6
Commercial property prices	12.4	-0.6	-3.2	2.2	0.9	1.5	1.9
Commercial property transactions	22.8	-3.0	-5.1	0.9	6.2	6.4	2.0
Change since March forecast							
Residential property prices		3.6	-5.1	-5.7	-0.6	0.0	
Residential property transactions		-9.9	-18.3	-1.4	9.7	14.0	
Commercial property prices		0.1	-5.6	0.3	-1.0	-0.5	
Commercial property transactions		-1.9	-7.1	-0.8	4.6	4.7	

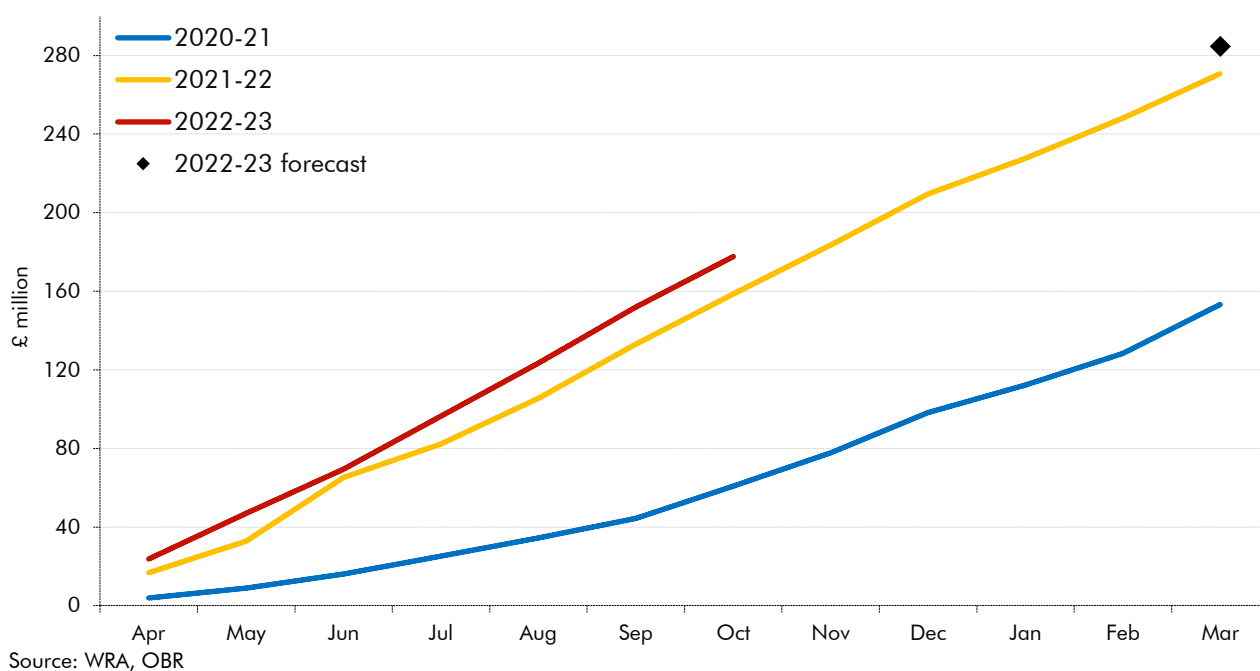
## Trends in LTT receipts

### Residential property receipts

- 3.15** Chart 3.5 shows that residential LTT receipts (net of refunds) in the first half of the year are up £19 million (11.9 per cent) on 2021-22 and up £117 million (192 per cent) on 2020-21, which was heavily affected by lockdown restrictions. We expect a modestly weaker path for receipts during the second half of the year, with total receipts in 2022-23 forecast to be £14 million (5.1) per cent) above 2021-22 outturns.



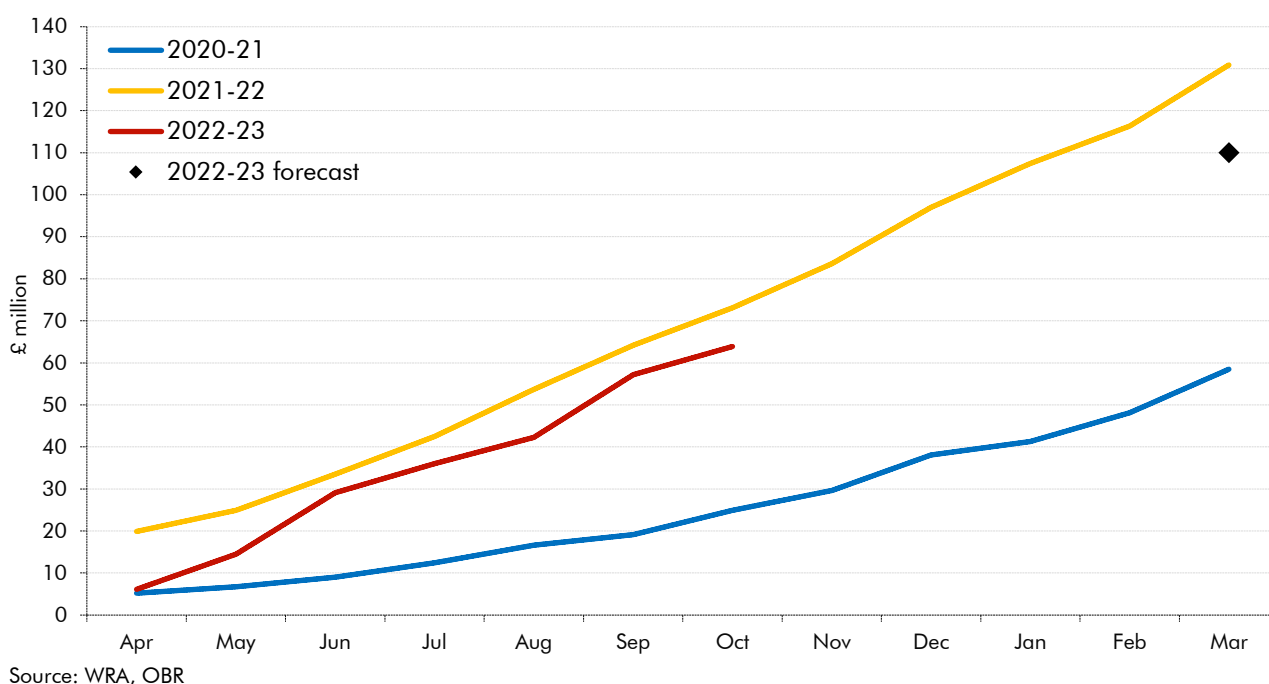
Chart 3.5: Cumulative residential LTT receipts



## Commercial property receipts

**3.16** Chart 3.6 shows year-to-date commercial receipts are down £9.2 million (12.6 per cent) on 2021-22, but up £39 million (157 per cent) on the lockdown affected 2020-21. We assume further weakness in receipts during the second half of the year, such that full-year receipts are expected to be £20.9 million (16.0 per cent) lower than in 2021-22.

Chart 3.6: Cumulative commercial LTT receipts



## Latest LTT forecasts

**3.17** Table 3.2 sets out our latest forecast for LTT and its components. Relative to March, receipts have been revised down in every year of the forecast, by an average of £107 million (23 per cent), reflecting the downward revisions to both prices and transactions described above. The weaker outlook for the property market means that LTT receipts fall each year between 2021-22 and 2024-25, with a peak-to-trough decline of 25 per cent.

Table 3.2: LTT forecast

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Total LTT</b>							
March forecast	390	412	431	453	482	514	
December forecast	402	395	314	301	341	404	455
Difference		-17	-117	-152	-140	-110	
<b>Residential (excluding additional properties)</b>							
March forecast	179	214	226	239	259	282	
December forecast	181	203	149	134	156	194	228
Difference		-11	-76	-105	-103	-88	
<b>Additional properties</b>							
March forecast	89	89	91	94	98	102	
December forecast	91	82	64	63	73	89	100
Difference		-7	-27	-31	-25	-13	
<b>Commercial</b>							
March forecast	123	109	115	119	124	130	
December forecast	130	110	100	104	112	121	126
Difference		1	-14	-15	-13	-9	

## Residential LTT forecast

**3.18** Table 3.3 sets out the revisions to our residential LTT forecasts since March. Residential main rates receipts have been revised down in every year of the forecast, by an average of £77 million a year (31 per cent). This is largely thanks to downward revisions to both transactions and house prices, with the former dominating the near term with the impact of the latter increasing year by year. This results in a peak-to-trough decline of 34 per cent from 2022-23 to 2024-25 with receipts not returning to 2022-23 levels until 2027-28. The Welsh Government's decision to increase the LTT threshold from £180,000 to £225,000 from 10 October 2022 lowers receipts by an average of £10 million a year.

**3.19** Table 3.4 presents the changes to our additional rates forecast, which is also down significantly relative to March, by an average of £21 million (22 per cent). The peak-to-trough decline of 31 per cent is of a similar magnitude to the main rates forecast.

Table 3.3: Residential main rates LTT forecast

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	179	214	226	239	259	282	
December forecast	181	203	149	134	156	194	228
<b>Difference</b>		<b>-11</b>	<b>-76</b>	<b>-105</b>	<b>-103</b>	<b>-88</b>	
of which:							
Price changes		19	-6	-29	-35	-43	
Transaction changes		-22	-59	-64	-51	-25	
Outturn data and modelling		-2	-2	-2	-5	-6	
Policy changes		-6	-10	-10	-12	-13	

Table 3.4: Residential additional rates LTT forecast

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	89	89	91	94	98	102	
December forecast	91	82	64	63	73	89	100
<b>Difference</b>		<b>-7</b>	<b>-27</b>	<b>-31</b>	<b>-25</b>	<b>-13</b>	
of which:							
Price changes		4	-1	-5	-6	-7	
Transaction changes		-11	-27	-27	-19	-7	
Outturn data and modelling		-1	0	-1	-1	-1	
Policy changes		1	1	1	1	2	

## Commercial LTT forecast

**3.20** Table 3.5 shows revisions to our commercial LTT forecast relative to March. While receipts have been revised up slightly in 2022-23 (albeit still assuming a large year-on-year fall) they are an average of £13 million a year (10 per cent) lower thereafter. Fewer transactions lead to lower receipts in the middle years of the forecast, while the effect of lower prices builds more gradually across the forecast. The outlook for the commercial property market is always uncertain, and even more so in the current climate.

Table 3.5: Commercial LTT forecast

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	123	109	115	119	124	130	
December forecast	130	110	100	104	112	121	126
<b>Difference</b>		<b>1</b>	<b>-14</b>	<b>-15</b>	<b>-13</b>	<b>-9</b>	
of which:							
Price changes		0	-7	-7	-9	-10	
Transaction changes		-2	-10	-12	-7	-1	
Outturn data and modelling		3	3	3	3	3	

## Risks and uncertainties

- 3.21** In this section we summarise some key uncertainties around our central LTT forecast, which are dominated by the risks to property prices and transactions as a result of the energy-price-driven economic downturn and the associated rise in interest rates on residential and commercial borrowing. Over the longer term, 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 retail sales online.
- 3.22** In this forecast we have added a **house price inflation** uplift for Wales in 2022-23 in light of recent outturn. We then assume that prices rise in line with the UK as a whole, 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 momentum through the first half of 2022-23 were to persist. But equally, the recent outperformance could be followed by a period of underperformance, as has sometimes been the case in the past.
- 3.23** 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 62,000 residential transactions in 2021-22.
  - **Tax base concentration.** LTT has a progressive tax schedule: a £200,000 residential transaction will pay £1,500 in tax, whereas a transaction for four times this price (£1,000,000) pays over forty times more tax (£61,750). In 2021-22 around half of residential revenue came from the top 10 per cent of transactions. Our LTT forecast will also be sensitive to high-value commercial property transactions in Cardiff. In 2021-22, three per cent of the total commercial transactions with capital values in excess of £2 million accounted for 72 per cent 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 applied to the temporary raising of both the LTT and SDLT thresholds at the height of the pandemic as well as further changes to both in recent months.
  - **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.<sup>7</sup> Our SDLT forecast factors in forestalling

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<sup>7</sup> For more information on this see Mathews, P., *OBR Working Paper no. 10: Forestalling ahead of property tax changes*, October 2016.

ahead of a rise in thresholds being withdrawn at the end of March 2025. To the extent that this forestalling affects chains of transactions that include properties in Wales, it could also bring forward LTT receipts from 2025-26 to 2024-25.

- **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.<sup>8</sup> It has not set a start date for this, but if implemented we would expect it to result in a small increase in refunds and therefore to reduce additional rates receipts. In July 2022, the Welsh Government published a ministerial statement and consultation response document exploring options for local variation in LTT rates on second homes and are continuing consultation preparations for the introduction of this policy at a yet unannounced date.<sup>9</sup> 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.

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<sup>8</sup> 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.

<sup>9</sup> Written Statement by the Minister for Finance and Local Government, *A summary of the responses to the consultation on second homes and land transaction tax*, 15 July 2022.



## 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*”.<sup>1</sup>
- 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 equivalent to 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 2021-22 revenue from standard rate waste accounted for 96 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:
- 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;

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

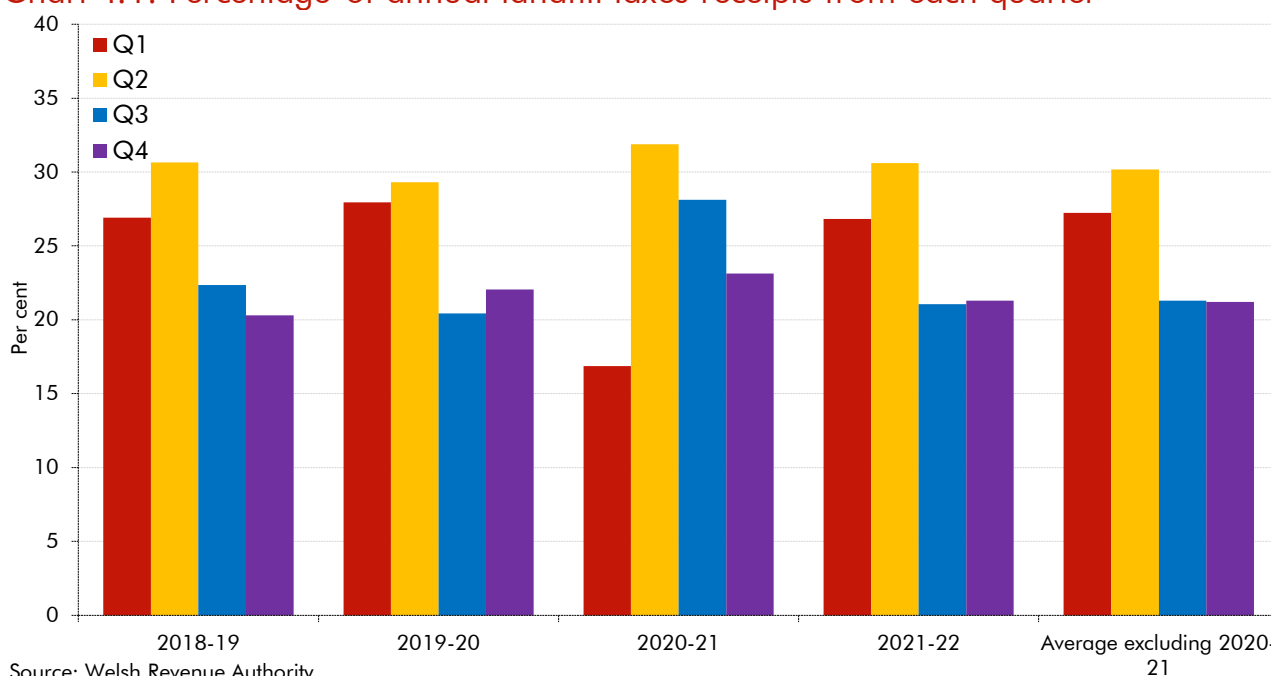
- producing a **pre-measures forecast** by using the LDT forecast model to multiply the amount of liable waste sent to landfill (the tax base) by the relevant duty rate; and
- generating a **post-measures forecast** by adding the effects of any new policy measures.

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 quarterly 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.<sup>2</sup>
- 4.7** Our in-year forecast is based on outturn data from the first half of 2022-23. Chart 4.1 shows the quarterly split of annual LDT receipts from 2018-19 onwards, and indicates a degree of 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 2020-21 was unusually low and the shares (if not the absolute amounts) in the remaining quarters of the year were unusually high. Since 2018-19, the average share of full-year revenues received in the first half of the fiscal year (excluding the pandemic-distorted 2020-21 fiscal year) has been 57 per cent.

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



<sup>2</sup> 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.

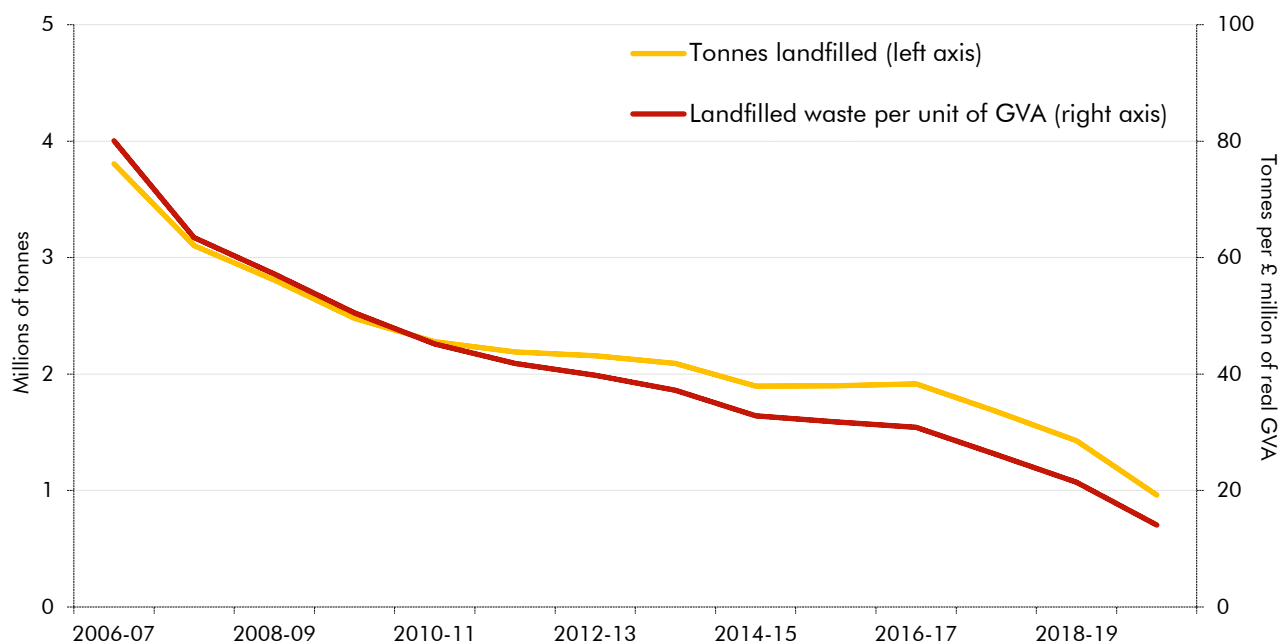


## The pre-measures forecast

### 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 new 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. To the extent that these or other factors have already affected LDT receipts, which have surprised to the upside in recent forecasts, then this would be captured implicitly in our in-year estimate rather than via an explicit forecast adjustment.
- 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 nearly three-quarters between 2006-07 (3.8 million tonnes) and 2019-20 (1.0 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: Natural Resources Wales, 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.<sup>3</sup> In this Budget the Welsh Government maintains alignment with the 2023-24 rates set by the UK Government, with a **standard rate of £102.10 per tonne** of waste and a **lower rate of £3.25 per tonne**.<sup>4</sup> 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.
- 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 2021-22 the effective rate paid was £38.75 per tonne of waste sent to landfill. In the first two quarters of 2022-23 the effective tax rate paid fell to £35.86 per tonne of waste as the share of standard rate waste declined modestly.

<sup>3</sup> 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 2023-24 rate for such disposals has been set at £153.15 per tonne of waste.

<sup>4</sup> All rates are subject to approval by the Senedd.

## 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 2018 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.

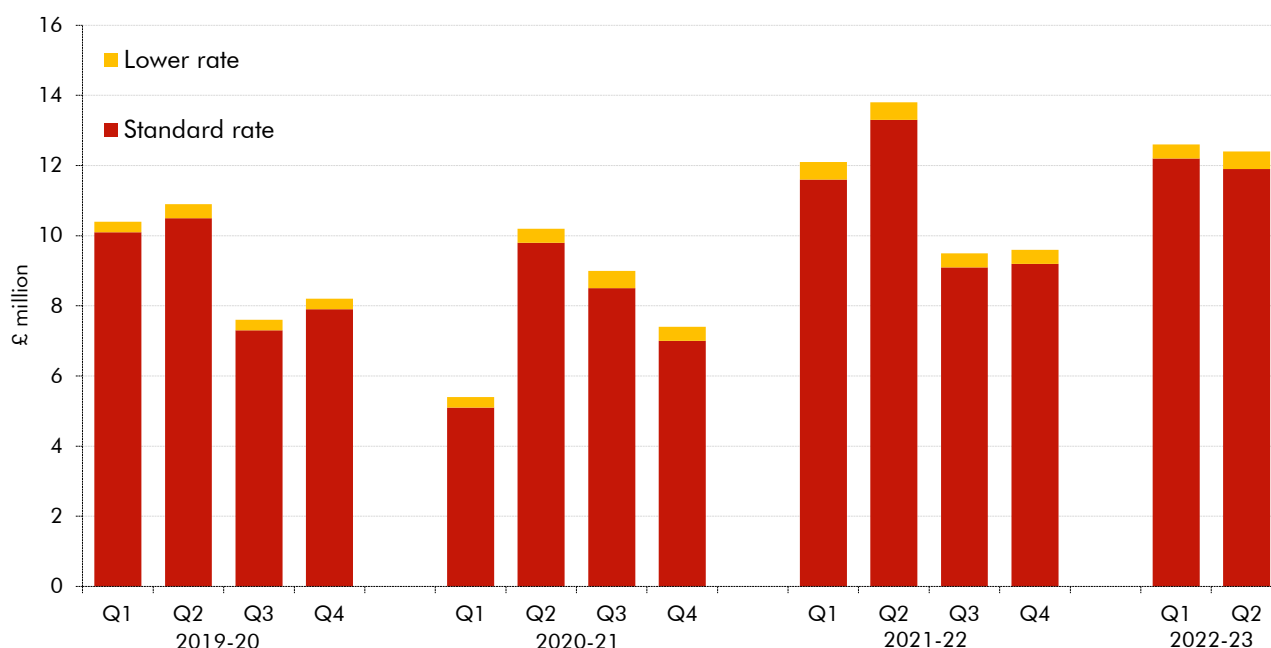
## Landfill disposals tax forecast

- 4.15** Using the methodology described above and based on LDT outturn data for the first two quarters of 2022-23, 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 2022-23 are down by £0.8 million on the same period last year, which was boosted somewhat by catch-up activity after the pandemic-related lockdowns of 2020-21 that hit economic activity and the volumes of waste sent to landfill. Receipts are £3.8 million higher than in the same period in 2019-20 and £9.5 million higher relative to 2020-21. We expect lower receipts in the remainder of 2022-23 – in line with the quarterly pattern of receipts shown in Chart 4.1 – but for them to total £43.4 million in the full year, £1.9 million lower than in 2021-22 but £6.3 million and £11.4 million higher than in 2019-20 and 2020-21 respectively.

Chart 4.3: Quarterly LDT receipts



Source: Welsh Revenue Authority

## Latest forecast

- 4.17** Table 4.1 presents our LDT forecast and the sources of changes since March. We have revised receipts in 2022-23 up by £8 million, reflecting stronger-than-expected outturn data in the first half of the year. Of this, we have assumed that £6 million a year will persist across the forecast, which is reflected as a modelling change to assume higher volumes of waste being sent to landfill, since post-pandemic waste volumes have recovered more strongly than we previously expected. From 2025-26 onwards this is partly offset by our lower forecast for RPI inflation and thus assumed future LDT rates.
- 4.18** The Welsh Government recently published its proposals for new business recycling regulations to increase recycling and reduce the amount of waste entering landfill.<sup>5</sup> These regulations are due to come into effect from 1 October 2023 and will require businesses to separate waste into different streams and ban certain materials from incineration or landfill. The proposals are subject to consultation, but the key parameters and the proposed start date have been deemed sufficiently firm to factor in the effects of the regulations on LDT receipts in this forecast. Any subsequent changes to the policy design or start date in response to the consultation will be reflected in future forecasts. We have drawn on the Welsh Government's analysis of its likely impact to estimate that it will reduce receipts by £1 million in 2023-24 rising to £3 million by 2027-28, as awareness and effective compliance with the regulations improve.

Table 4.1: LDT forecast

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
March forecast	47	35	35	35	35	34	
December forecast	45	43	41	39	37	35	35
<b>Difference</b>		<b>8</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>1</b>	
of which:							
Outturn data		2	0	0	0	0	
Determinants		0	0	0	-2	-2	
Business recycling regulations		0	-1	-2	-3	-3	
Modelling and other		6	6	6	6	6	

## Risks and uncertainties

- 4.19** 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, 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

<sup>5</sup> Welsh Government, *Proposals for enforcing business, public and third sector recycling regulations in Wales*, 23 November.

2014-15 and 2016-17 and has surprised on the upside again in this forecast. 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 17.1 per cent or £125 million.<sup>6</sup> 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 2021-22 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 began issuing notices to potential taxpayers in 2021-22 and plans to increase its operational activities over the coming years, which could lead to additional revenue.<sup>7</sup> The amount collected would depend on resources, planning and the 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.
- 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 2021 could divert waste that would otherwise have been exported (either from Wales or England) to landfill in Wales, also raising LDT receipts.<sup>8</sup>
- **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.<sup>9</sup> Moreover, as Figure 4.1 shows, there are numerous landfill sites relatively

<sup>6</sup> This relates to 2020-21. For more detail see HMRC’s *Measuring tax gaps 2022 edition*.

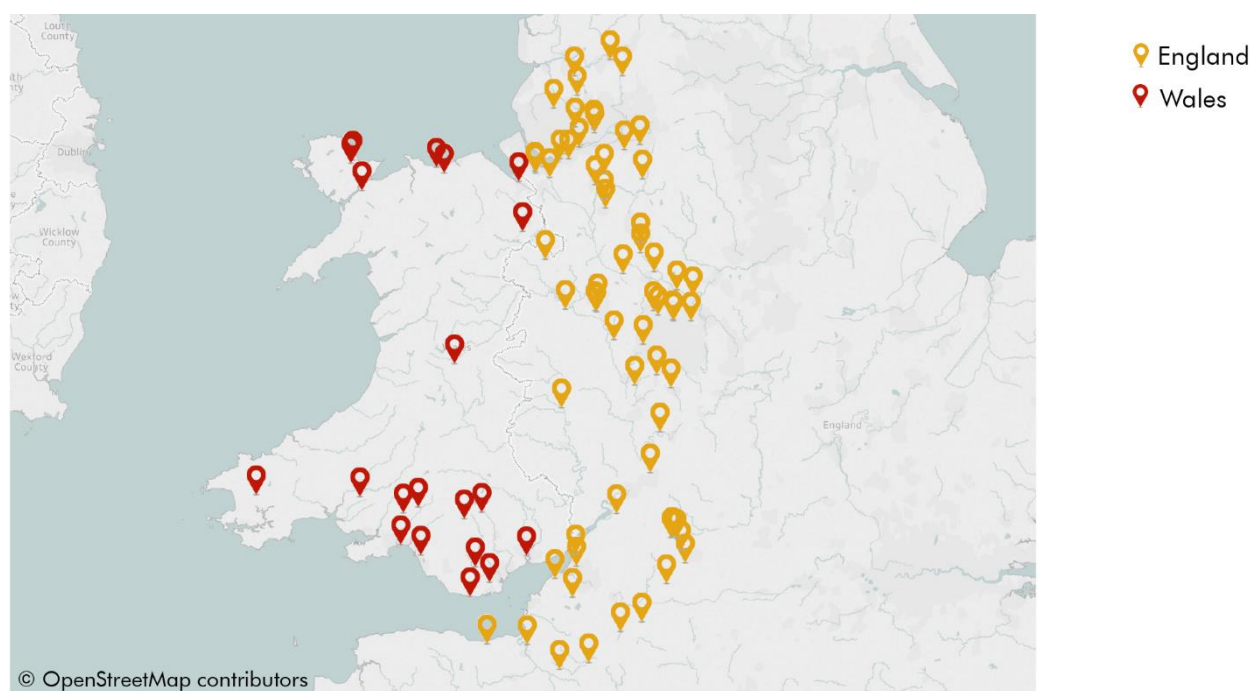
<sup>7</sup> Welsh Revenue Authority, *Annual Report and Accounts 2021 to 2022*, July 2022.

<sup>8</sup> 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.

<sup>9</sup> Data from Natural Resources Wales show that since the devolution of LDT, waste from England accounted for 18 per cent of waste sent to landfill in Wales.

close to either side of the Welsh-English border, so there would clearly be scope for such behavioural responses to take place.<sup>10</sup> 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. And this forecast incorporates a more modest assumed behavioural response to new business recycling regulations, which is also subject to uncertainty until the response of businesses can be observed.

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



<sup>10</sup> The 60-mile corridor from the border has been chosen purely for illustration.

# 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 governments, 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.<sup>1</sup> 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 and on the relevant pages of our website. We first establish an in-year estimate using the latest administrative data to estimate the level of receipts in 2022-23. We then project over the five-year horizon using the respective forecast models and our own judgements. The economic determinants used are from our November 2022 *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 Autumn Statement 2022 and the four other fiscal statements since March.<sup>2</sup> In the longer term, differences in our income tax forecasts will mainly reflect assumptions about relative population growth. 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. This is overlaid by the material effects of the temporary changes to stamp duty thresholds that apply in England and Northern Ireland (which lower receipts from mid-way through 2022-23 until the measure ends at the end of 2024-25), plus the more modest effects of a permanent change to land transaction tax thresholds in Wales that took effect in October.

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<sup>1</sup> 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.

<sup>2</sup> The full list of measures and their associated costing breakdowns is provided in supplementary Table 3.11, available on our website.

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

	£ billion							
	Outturn	Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Whole UK NSND income tax</b>	<b>180.3</b>	<b>207.3</b>	<b>224.7</b>	<b>237.9</b>	<b>245.8</b>	<b>254.8</b>	<b>267.0</b>	<b>282.5</b>
of which:								
Welsh Government income tax (WRIT basis)	2.1	2.4	2.6	2.8	2.9	3.0	3.2	3.3
UK Government NSND income tax from Wales	2.8	3.2	3.4	3.7	3.8	4.0	4.2	4.4
Scottish income tax	11.9	13.5	14.6	15.2	15.7	16.2	16.9	17.8
England and Northern Ireland NSND income tax	163.5	188.2	204.1	216.2	223.3	231.6	242.8	256.9
UK Government NSND income tax <sup>1</sup>	166.2	191.4	207.6	219.9	227.2	235.6	246.9	261.3
	Percentage change on a year earlier							
<b>Whole UK NSND income tax</b>		<b>15.0</b>	<b>8.4</b>	<b>5.9</b>	<b>3.3</b>	<b>3.7</b>	<b>4.8</b>	<b>5.8</b>
of which:								
Welsh Government income tax (WRIT basis)		12.2	8.5	7.3	4.7	3.4	4.5	5.9
UK Government NSND income tax from Wales		14.4	8.7	7.2	4.5	3.6	5.0	6.4
Scottish income tax		13.0	8.0	4.5	2.7	3.4	4.4	5.4
England and Northern Ireland NSND income tax		15.2	8.4	5.9	3.3	3.7	4.8	5.8
UK Government NSND income tax <sup>1</sup>		15.2	8.4	5.9	3.3	3.7	4.8	5.8

<sup>1</sup> 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						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>England and Northern Ireland NSND income tax (WRIT basis)</b>	<b>60.7</b>	<b>69.8</b>	<b>75.8</b>	<b>80.2</b>	<b>83.0</b>	<b>86.0</b>	<b>90.0</b>	<b>95.0</b>
of which:								
Basic rate	41.5	47.8	52.0	55.4	57.5	59.5	61.9	65.2
Higher rate	11.4	12.6	13.7	13.0	13.3	13.8	14.6	15.5
Additional rate	7.7	9.3	10.1	11.9	12.2	12.8	13.4	14.3
<b>Welsh rates</b>	<b>2.1</b>	<b>2.4</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>	<b>3.0</b>	<b>3.2</b>	<b>3.3</b>
of which:								
Basic rate	1.8	2.0	2.2	2.4	2.5	2.6	2.7	2.8
Higher rate	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Additional rate	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Percentage change on a year earlier								
<b>England and Northern Ireland NSND income tax (WRIT basis)</b>		<b>15.1</b>	<b>8.5</b>	<b>5.9</b>	<b>3.5</b>	<b>3.6</b>	<b>4.6</b>	<b>5.6</b>
of which:								
Basic rate		15.2	8.7	6.5	3.8	3.5	4.1	5.3
Higher rate		10.6	8.4	-5.1	2.6	3.6	5.9	6.2
Additional rate		21.1	8.0	18.0	3.0	4.2	5.3	6.5
<b>Welsh rates</b>		<b>12.2</b>	<b>8.5</b>	<b>7.3</b>	<b>4.7</b>	<b>3.4</b>	<b>4.5</b>	<b>5.9</b>
of which:								
Basic rate		10.7	8.4	7.4	4.8	3.3	4.0	5.5
Higher rate		19.3	9.3	6.8	3.9	3.9	7.1	7.9
Additional rate		32.5	8.8	6.8	4.3	4.7	5.8	8.1

**Table A.3: Property transaction taxes**

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Whole UK property transaction taxes</b>	<b>15,299</b>	<b>17,034</b>	<b>12,449</b>	<b>12,283</b>	<b>14,586</b>	<b>17,770</b>	<b>20,122</b>
of which:							
LTT (Wales)	402	395	314	301	341	404	455
LBTT (Scotland)	799	852	697	676	765	901	1,014
SDLT (England and Northern Ireland)	14,098	15,788	11,438	11,306	13,480	16,465	18,654
Percentage change on a year earlier							
<b>Whole UK property transaction taxes</b>		<b>11.3</b>	<b>-26.9</b>	<b>-1.3</b>	<b>18.8</b>	<b>21.8</b>	<b>13.2</b>
of which:							
LTT (Wales)		-1.9	-20.5	-4.2	13.5	18.4	12.5
LBTT (Scotland)		6.6	-18.2	-3.0	13.2	17.9	12.5
SDLT (England and Northern Ireland)		12.0	-27.6	-1.2	19.2	22.1	13.3

Table A.4: Landfill taxes

	£ million						
	Outturn	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Whole UK landfill taxes</b>	<b>854</b>	<b>835</b>	<b>774</b>	<b>739</b>	<b>679</b>	<b>667</b>	<b>679</b>
<i>of which:</i>							
Landfill disposals tax (Wales)	45	43	41	39	37	35	35
Scottish landfill tax	125	114	83	81	65	16	16
Landfill tax (England and Northern Ireland)	683	677	651	619	578	616	628
Percentage change on a year earlier							
<b>Whole UK landfill taxes</b>		<b>-2.2</b>	<b>-7.3</b>	<b>-4.6</b>	<b>-8.0</b>	<b>-1.9</b>	<b>1.8</b>
<i>of which:</i>							
Landfill disposals tax (Wales)		-4.2	-6.1	-4.2	-6.2	-4.7	-0.3
Scottish landfill tax		-9.2	-27.3	-2.2	-20.1	-75.8	2.4
Landfill tax (England and Northern Ireland)		-0.8	-4.0	-4.9	-6.5	6.5	2.0

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