

Office for  
**Budget  
Responsibility**

## **Welsh taxes outlook**

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December 2023

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Charts and tables data are available on our website.

# 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 the OBR's 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 2024-25 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 Welsh Government's 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 assessing the impacts of proposed, as opposed to confirmed, policy decisions.

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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 December 2020 *WTO*.

## Introduction

- 1.6 These forecasts are consistent with the central forecast for the UK economy and public finances presented in our November 2023 *EFO*. The key features of this forecast are:
- **The economy proved to be more resilient to the shocks of the pandemic and energy crisis than anticipated**, with revisions to past growth and unexpected recent strength meaning the level of real GDP in mid-2023 was nearly 2 per cent above its pre-pandemic level, and around 3 per cent above our previous March forecast.
  - **However, we expect the economy to grow more slowly over the forecast period than we previously expected**, leaving the level of real GDP only half a percentage point higher in the medium term than in our March forecast.
  - **Inflation is expected to be more persistent and domestically fuelled than we previously thought**, falling below 5 per cent by the end of this year but not returning to its 2 per cent target until the first half of 2025, with interest rates now expected to remain higher for longer as a consequence.
  - **Inflation boosts nominal tax revenues with the tax burden forecast to rise to a post-war high in the medium-term.** Inflation also raised welfare spending and, through higher interest rates, the cost of servicing the Government's debts. But because the Government chose to leave departmental spending broadly unchanged, on a pre-measures basis borrowing was forecast to be significantly below our March forecast.
  - **Alongside this forecast the UK government announced a package of policies, most significantly cuts to National Insurance Contributions and permanent tax relief for business investment**, that amounted to a significant fiscal loosening and so left overall borrowing broadly unchanged from our March forecast. Public sector net borrowing is forecast to fall from 4.5 per cent of GDP this year to 1.1 per cent GDP in 2028-29, while public sector net debt is forecast to rise to 98.6 per cent of GDP in 2024-25, then fall to 94.1 per cent of GDP in 2028-29.
- 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 We produce a central forecast around which we judge the risks are evenly balanced, and we emphasise the significant uncertainty inherent in all aspects of the forecast. In our *EFO* we illustrate these risks using fan charts, sensitivity analysis and alternative scenarios. In the November 2023 *EFO*, we present alternative scenarios for inflation and productivity growth, and illustrate the significant implications these would have for the path of public sector debt.
- 1.9 All the charts and tables presented in this document, plus supplementary forecast material, are available in spreadsheet format on our website.

## Forecast timetable

1.10 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 2023 *EFO*.
- These were scrutinised by the BRC in two meetings on 17 and 18 October.
- Updated LTT and LDT forecasts were then prepared by Welsh Government analysts, reflecting the latest receipts and house price data, on 27 November. These were scrutinised by the BRC on 28 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

1.11 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 2024-25 income tax liability of three specimen Welsh taxpayers would be split between the UK and Welsh Governments:<sup>1</sup>

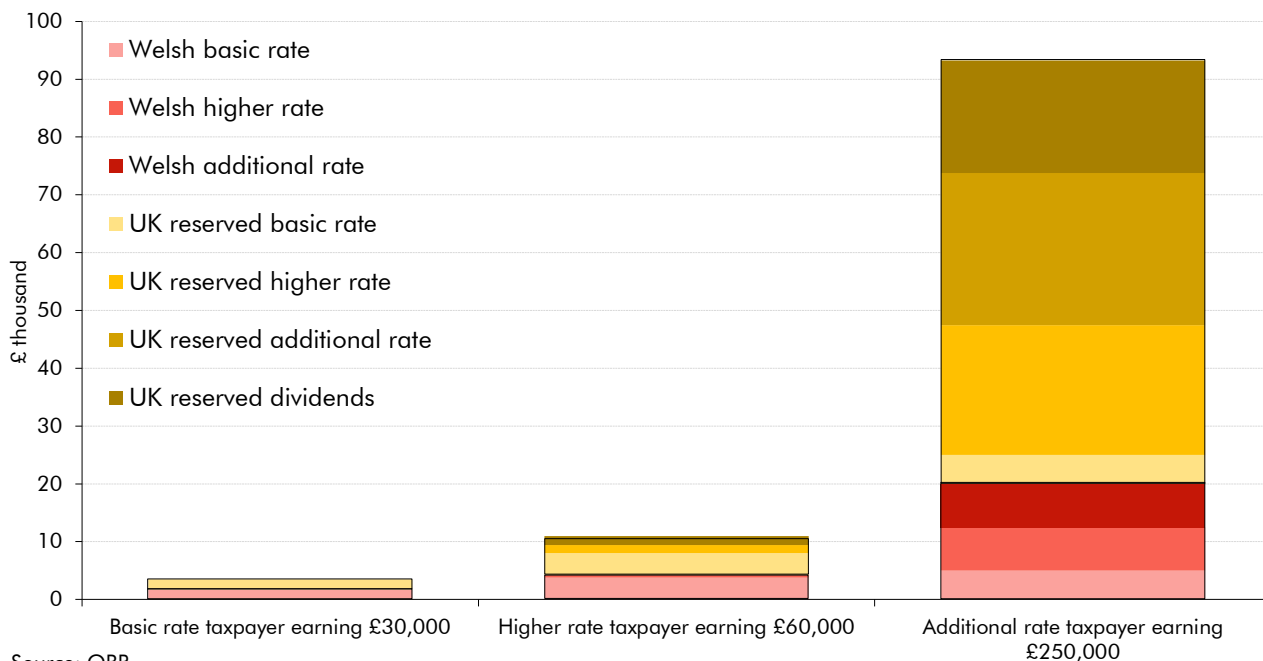
- **For a basic rate taxpayer earning £30,000** from one source of employment income, their £3,486 liability would be split equally between the two administrations. The effective income tax rate paid by this individual is 11.6 per cent (lower than the 20 per cent basic rate thanks to the £12,570 tax-free 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 £10,951 liability would relate to the Welsh rates and 61 per cent would be reserved to the UK Government, including all the £1,519 due on their dividend income. The effective income tax rate is 18.3 per cent.<sup>2</sup> But the amount of tax due to the Welsh Government is unchanged relative to last year, since there is no change to the tax rate on employment income. As the effective tax rate on dividend income has, however, increased compared to last year, it reduces the Welsh share from 39.4 to 38.7 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 £93,235. 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 £19,478 from their dividend income, all of which is retained by the UK Government. The effective income tax rate is 37.3 per cent.

**2.4** These examples illustrate the relative importance of higher earners for tax receipts, but that this is much less the case for the Welsh rates. The higher rate taxpayer earns twice as much as the basic rate taxpayer and has an overall tax liability that is three times greater, but their Welsh rates liability is 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 around 8½ 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.

<sup>1</sup> In addition to the income tax parameters reported in Table 2.3, 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 £500 in 2024-25; 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. Similarly, these amounts do not include other aspects of the personal tax regime, primarily National Insurance Contributions (NICs, which is reserved to the UK Government), so do not represent overall tax liability.

<sup>2</sup> The calculations for both the higher rate and additional rate examples include the impact of the UK Government's Autumn Statement 2022 decision to reduce the dividend allowance to £500 from April 2024 (after an initial reduction to £1,000 in April 2023 from the previous allowance of £2,000). Lowering the dividend allowance increases the amount of dividend income that is taxed by the UK Government, and therefore slightly lowers the Welsh share.

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



Source: OBR

## Methodology

2.5 Our Welsh income tax forecasts are produced on a ‘top-down’ basis.<sup>3</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.<sup>4</sup>
- We then **calibrate the outturn share for the Welsh rates in 2021-22 to outturn data** for Welsh income tax liabilities, which HMRC published in July. In Box 2.1 we evaluate our forecasts for 2021-22.
- Finally, we **add our estimates of the effect of new policies** announced since our previous forecast on Welsh rates liabilities.

2.6 The December 2016 fiscal framework agreement between the Welsh and UK Governments detailed how the Welsh rates would operate.<sup>5</sup> In doing so it placed a requirement on us to

<sup>3</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.

<sup>4</sup> For an in-depth analysis of the composition of these shares, and their evolution over time, see Murphy Corkhill, J., M. Hanson and S. Johal, *OBR Working Paper No.21: Developments in devolved income tax*, October 2023.

<sup>5</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.



forecast income tax liabilities in Wales, and in England and Northern Ireland combined, split by tax band.<sup>6</sup>

## Pre-measures UK-wide forecast of NSND income tax

- 2.7 We use HMRC's latest published UK-wide NSND income tax liabilities outturn for the most recent tax year (currently 2021-22) 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 – which covers all of 2022-23 and the first five months of 2023-24.
- 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 nominal earnings growth, which determine the amount of labour income that can be taxed. In our current forecast, strong expected nominal earnings growth, combined with personal tax thresholds that are frozen at the UK level until 2027-28, drives strong growth in income tax receipts through 'fiscal drag'.<sup>7</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

- 2.10 In this sub-section we explain how we calculate the share of NSND liabilities that are subject to the Welsh rates. It is split into six steps:
- we begin by using HMRC's survey of personal incomes (SPI) to **establish the overall Welsh share of UK-wide income tax liabilities**;
  - we then **explain the differences in income tax per person in Wales compared to the UK**, looking across income streams, the number of taxpayers and the effective tax rate;
  - the next step is to **assess the proportion of the population that pays income tax** by looking at employment rates in Wales and the UK; and
  - the three final steps are to **determine the average income per taxpayer**, calculate the **average amounts of tax paid on that income** before finally **estimating the share of UK liabilities that will be subject to the Welsh rates**.

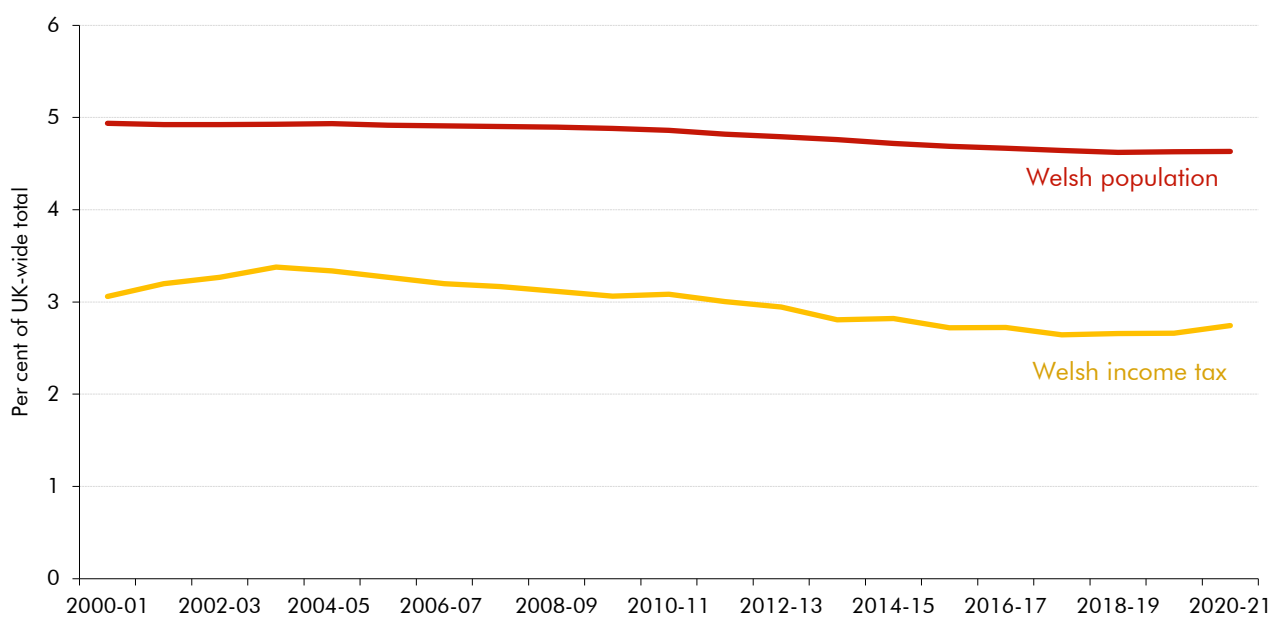
<sup>6</sup> For more on our approach, see Mathews, P. *Working paper No.14: Devolved income tax: forecasting by tax bands*, September 2018.

<sup>7</sup> Fiscal drag is where tax receipts increase as rising earnings push more workers into the tax system or into higher rate tax bands. As we show in our November 2023 EFO, the current threshold freezes mean that around 4 million individuals (at the UK level) will be brought into income tax, with over 3 million new higher-rate and additional-rate taxpayers.

### The overall Welsh share of UK-wide income tax liabilities

- 2.11 To calculate the share of our forecast for UK NSND income tax liabilities that will be subject to the Welsh rates, we start with the overall Welsh share of income tax as captured by the SPI. The SPI is an annual survey based on a sample of around 850,000 individuals in contact with HMRC. It is published with a long lag – with the 2020-21 SPI being the latest year currently available.
- 2.12 However, our modelling continues to use 2019-20 SPI data as the base year (the point from which we project future years) due to the difficulty in unpicking the impacts that Covid had on the 2020-21 data. These include the significant changes to employment and self-employment in this period, as well as the challenges associated with separating ‘regular’ income and income derived from the Government’s Covid support measures, such as the furlough scheme. Our income tax forecasts are calibrated to our economy forecast and any structural changes within the labour market that this implies, meaning that any recent changes are already implicitly captured within our forecast. This effectively means that using 2019-20 rather than 2020-21 as the base year does not materially affect the forecast, since the underlying changes between the two years are being captured through the economic determinants of the income tax forecast.
- 2.13 Chart 2.2 compares the Welsh share of UK income tax liabilities with the Welsh share of the UK population. Both have been declining but the Welsh share of income tax is declining more rapidly. The Welsh share of income tax is low when compared to the Welsh population share (2.7 versus 4.6 per cent in 2020-21), and there has been a more rapid decline in the Welsh share of income tax (10.3 per cent) relative to the Welsh population share (6.1 per cent) since 2000-01).

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

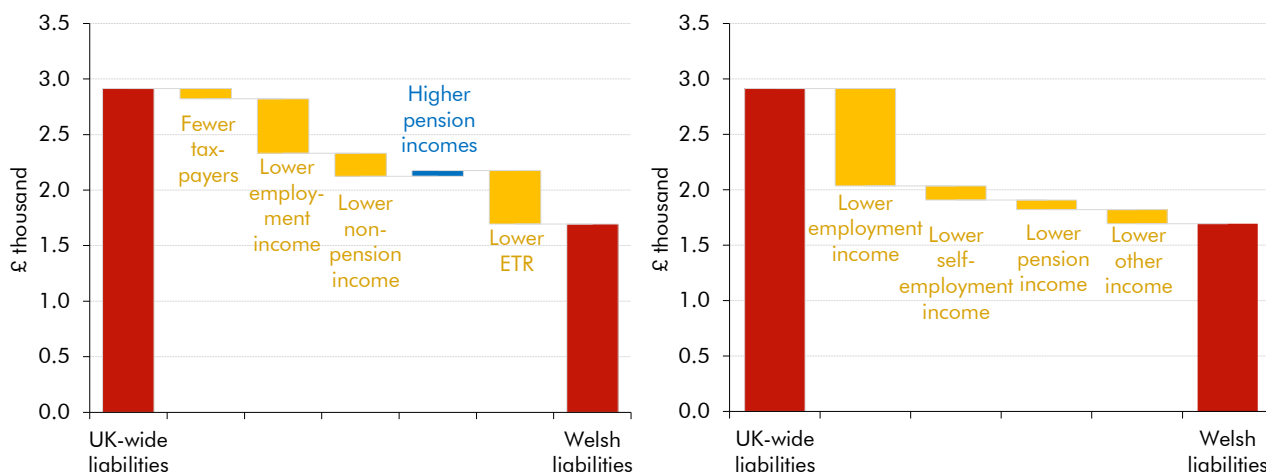
## The differences in income tax per person in Wales compared to the UK

- 2.14 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 has been declining in relative terms, is more complex.
- 2.15 Chart 2.3 presents two different ways of looking at the difference in income tax liabilities per person in Wales relative to the UK as a whole, based on analysis of the SPI data. Both panels show that per-person liabilities in Wales in 2020-21 were £1,221 (42 per cent) lower than in the UK as a whole (£1,693 versus £2,915). Both presentations are methodological constructs that are useful in aiding our understanding of the differences in per-person liabilities and help to facilitate any forecast judgements we may wish to make about how the Welsh share of income tax will evolve. Specifically:
- The left panel disaggregates the difference into 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. It shows that the main factors are lower average incomes (accounting for 53 per cent of the overall £1,221 difference, though average pension incomes were slightly higher) and a lower ETR (40 per cent), with only a marginal impact from fewer taxpayers.
  - The right panel instead decomposes into the four income streams in the SPI data: employment income, self-employment income, pension income and 'other' income (mainly property and dividends).<sup>8</sup> This approach implicitly subsumes the number of taxpayers and the ETR into the different income streams. It shows that lower tax from employment income accounts for 72 per cent of the overall difference, with lower contributions from each of the other three income streams (the effect of pension income is reversed).
- 2.16 The left panel is the way we have presented the differences in previous WTOs, while the right panel is consistent with our recent working paper that explored the factors behind the decline in the Welsh share since 2007-08 and its implications for our forecast.<sup>9</sup> The paper, which is broadly supportive of our methodology, showed that the widening gap is largely explained by the divergence in employment income, which is both the largest source of income tax, the most significant factor in both methodologies, and also the one with the richest source of available data, which we can utilise to refine our forecasting methodology. For example, we use in-year real time PAYE information (RTI) on employee earnings to bridge the gap from the initial SPI-based shares from the most recent year of outturn to the beginning of the forecast period. This enables us to partially capture some of the observed recent dynamics in earnings.

<sup>8</sup> We were unable to remove the savings and dividends elements of 'other income' but this does not materially affect our analysis.

<sup>9</sup> Murphy Corkhill, J., M. Hanson and S. Johal, *OBR Working Paper No.21: Developments in devolved income tax, October 2023*. We will use the findings from the paper to further refine our forecast and investigate some areas, such as employment income, more fully, given the disproportionate role it plays in generating and sustaining gaps in income tax per person.

Chart 2.3: Welsh and UK income tax liabilities per person in 2020-21



Source: HMRC, OBR calculations

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

**2.17** The likelihood of an individual paying income tax is lower in Wales than it is in the UK as a whole. According to the 2020-21 SPI, 45 per cent of the Welsh population paid income tax, compared to 47 per cent of the UK’s population, accounting for around 8 per cent of the gap between Welsh and UK income tax liabilities per person.

**2.18** One of the main contributory factors is that the employment rate in Wales is lower than it is in the UK as a whole. Chart 2.4 uses two different data sources to show that the employment rate in Wales has been consistently below that in the UK in recent years. According to the Labour Force Survey (LFS), the average employment rate in Wales since 1992 has been 4.2 percentage points lower than that in the UK as a whole, and was 3.6 percentage points lower in 2020-21. The LFS also shows that the employment rate in Wales has been around twice as volatile as in the UK as a whole, likely due to the smaller sample size in the LFS for Wales than the UK as a whole.

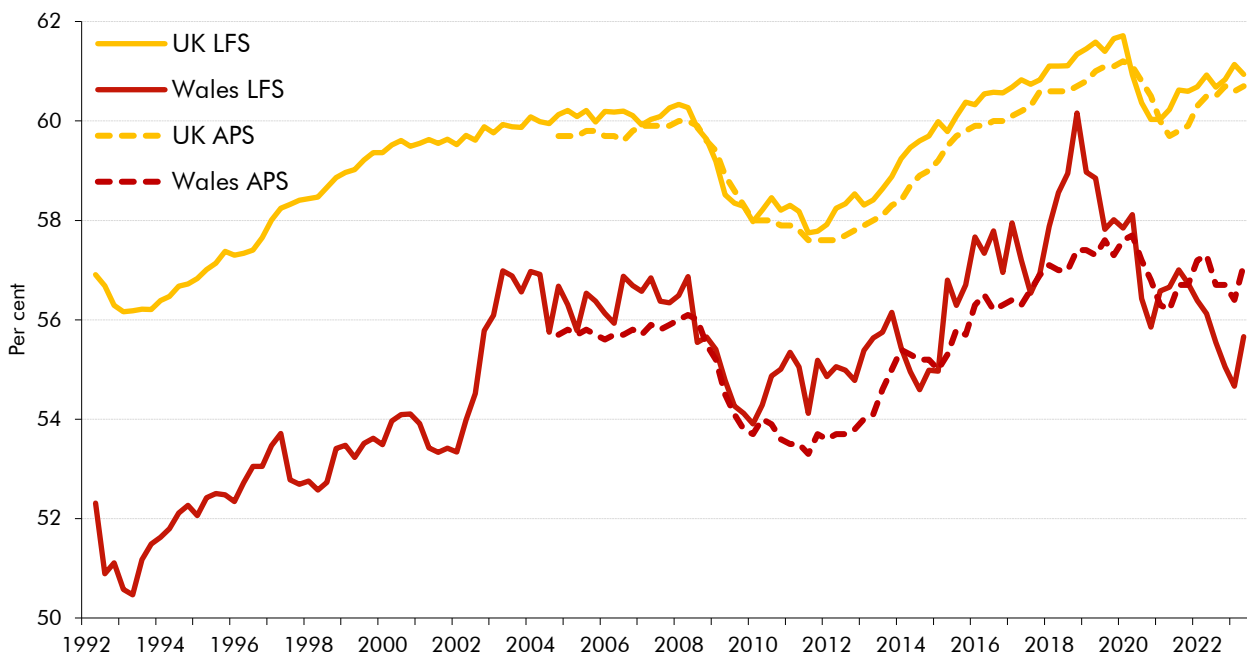
**2.19** LFS response rates have been falling recently, an issue which became more pronounced over the summer, and updates have been paused while the ONS addresses the fall in sample sizes.<sup>10</sup> Updates at the sub-national level have also been paused, making it more challenging to assess recent Welsh labour market developments. Using the more aggregated Annual Population Survey (APS) measure, the overall pattern is similar (though less volatile), with Welsh employment rates an average 3.8 percentage points lower than the UK since 2004 and 3.6 percentage points lower in 2020-21.

**2.20** In 2020, the LFS measure shows that 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. Using the APS measure, the respective declines in the Welsh and UK rates were broadly similar, as were the declines in the HMRC RTI data. Both measures show a rebound

<sup>10</sup> ONS, Labour Force Survey Planned improvements and its reintroduction and Labour Force Survey performance and quality monitoring report: July to September 2023, 2023.

in 2021 but also that employment rates remain below pre-pandemic levels and, indeed, rates in Wales subsequently dropped again. This pattern is partly explained by the post-pandemic rise in inactivity (and sickness), with Wales being disproportionately impacted. The inactivity rate in Wales rose by 1.2 percentage points between 2020 and 2022, compared to 0.7 percentage points in the UK as a whole, though the most recent year of data shows the gap narrowing. For now, we note the divergence in inactivity rates as a downside risk to our estimate of the Welsh share. If it persists in future then we will consider incorporating its effect by making a downward adjustment to the forecast.

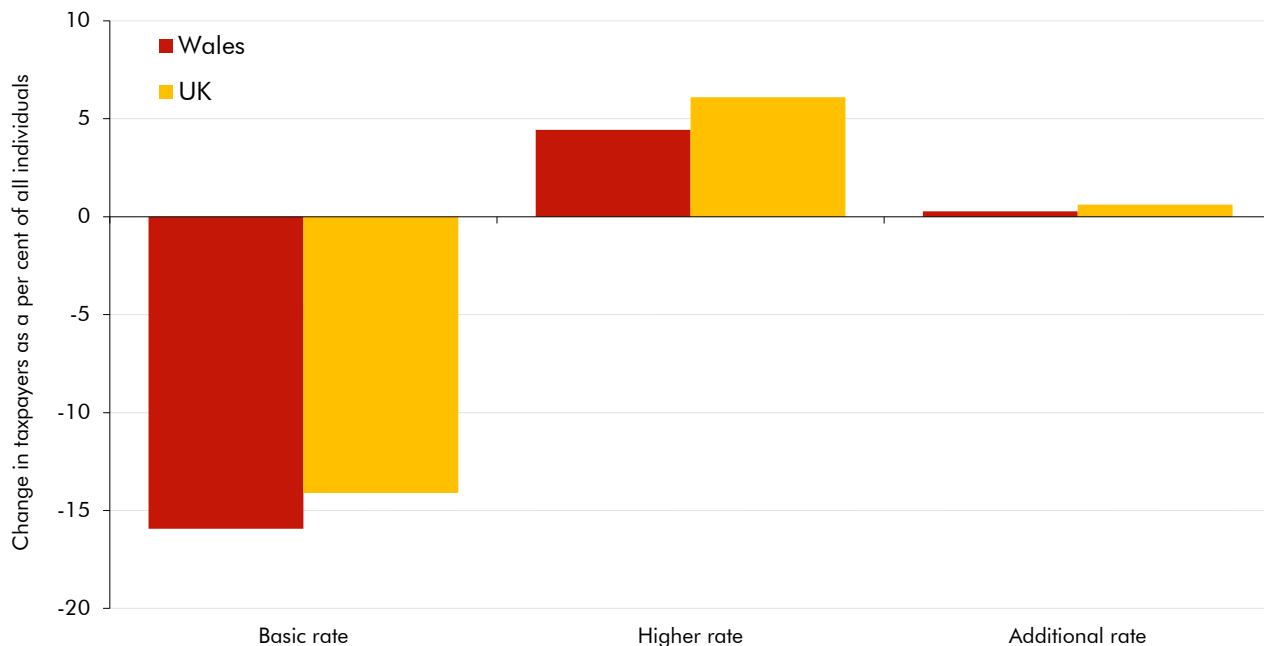
Chart 2.4: Employment rate for the UK and Wales



Source: ONS

2.21 Successive rises in the tax-free personal allowance (PA), from £6,475 in 2010-11 to £12,570 in 2021-22, may have taken disproportionately more Welsh residents out of paying income tax, due to differences in the earnings distribution between Wales and the UK as a whole. Chart 2.5 presents the relative change in the number of taxpayers in each tax band between 2010-11 and 2020-21. It shows that, relative to the UK, there has been a larger decline in the number of basic rate taxpayers in Wales and fewer new higher-rate and additional-rate taxpayers. We shall provide more analysis on the impact of these PA rises in our February WTO update.

Chart 2.5: Change in taxpayers by tax band between 2010-11 and 2020-21



### Average income per taxpayer

**2.22** 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 40 per cent of the shortfall in tax per person in 2020-21.

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

- **The SPI implied average income in Wales is lower than in the UK as a whole**, by 19 per cent in 2020-21, with lower average employee incomes accounting for around three-quarters of the overall £6,912 shortfall. The Wales-UK difference is particularly marked in ‘self-employment and other non-pension income’ (which includes income from savings and dividends), though this accounts for a smaller proportion of the overall difference in absolute terms.
- **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 both panels of Chart 2.3 above).
- **The average income from pensions is higher in Wales than in the UK as a whole** – by 10 per cent in 2020-21. This is largely due to a higher proportion of the Welsh population being of pension age (21 per cent in 2021 versus 19 per cent in the UK as a whole) and Wales having a relatively higher proportion of public sector workers, who tend to have higher average pension incomes, than the UK overall (22.1 per cent in 2020-21 compared to 17.6).

Table 2.1: Average incomes in 2020-21 by type

|  | UK             | Wales         | Difference    |            |
|--|----------------|---------------|---------------|------------|
|  | £ per taxpayer |               | £             | Per cent   |
| Employee income                              | 26,134         | 20,919        | -5,215        | -20        |
| Self-employment and other non-pension income | 5,967          | 3,770         | -2,197        | -37        |
| Pension income                               | 5,154          | 5,692         | 537           | 10         |
| <b>Total income</b>                          | <b>37,265</b>  | <b>30,352</b> | <b>-6,912</b> | <b>-19</b> |

2.24 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>11</sup>

Table 2.2: Different measures of average employee earnings in 2020-21

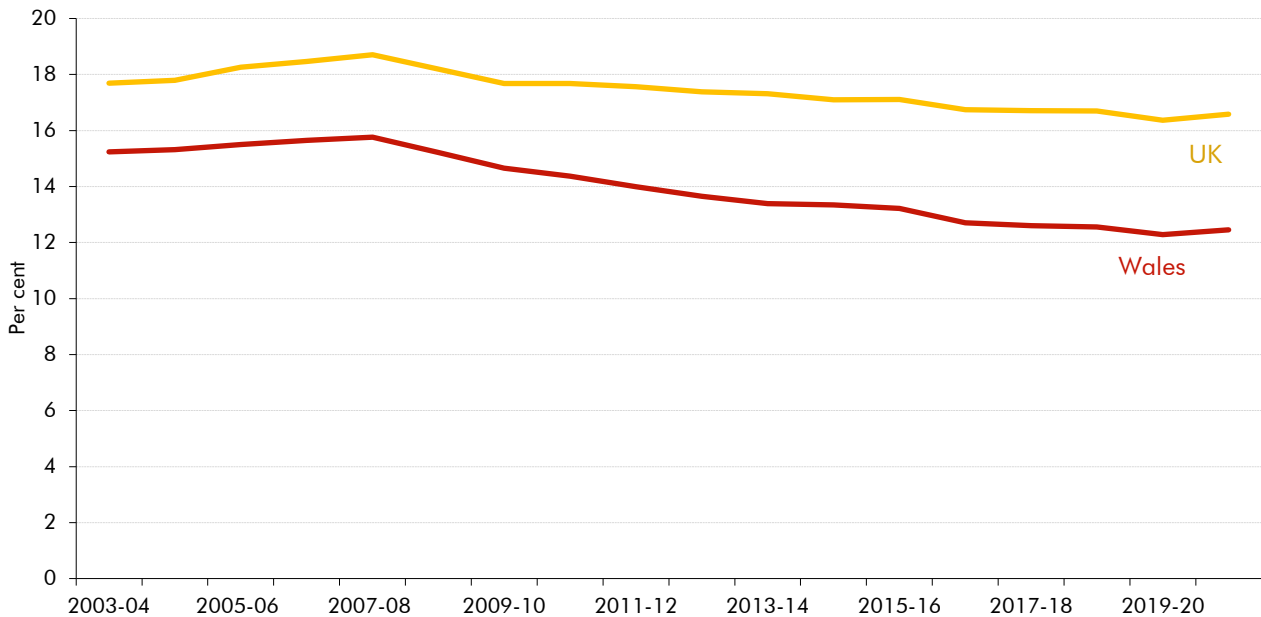
|   | UK             | Wales  | Difference |          |
|---|----------------|--------|------------|----------|
|   | £ per employee |        | £          | Per cent |
| HMRC Survey of personal incomes         | 34,640         | 28,535 | -6,105     | -18      |
| HMRC Real-time information              | 30,947         | 25,948 | -4,999     | -16      |
| ONS Annual survey of hours and earnings | 30,209         | 26,182 | -4,027     | -13      |
| ONS Labour force survey                 | 34,533         | 30,181 | -4,352     | -13      |

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

- 2.25 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 short of that in the UK because less tax is paid per pound of income. This lower effective tax rate explains over a third of the £6,912 difference in 2020-21.
- 2.26 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 and that the gap has been widening. Since 2007-08 the ETR has fallen by 3.3 percentage points in Wales, compared to 2.1 percentage points in the UK as a whole, though it is stable in the most recent year.

<sup>11</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

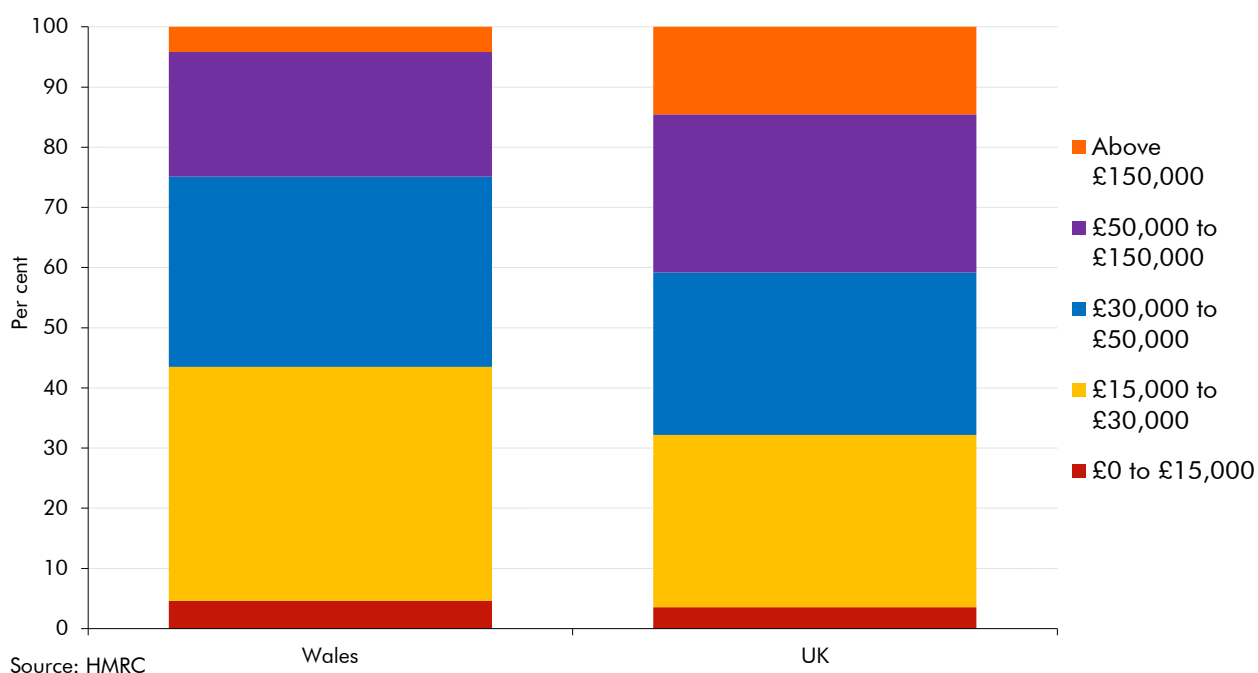


Note: Data unavailable for 2008-09 so the proportional shares are based on interpolation from the adjacent years.  
Source: HMRC

**2.27** 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 2020-21 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 67 per cent of total tax paid in the UK coming from those earning over £50,000, compared with 45 per cent in Wales. Fiscal drag has also increased the proportion of taxpayer income from earnings above £50,000, with the share increasing by over 2 percentage points from 2018-19 to 2020-21 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

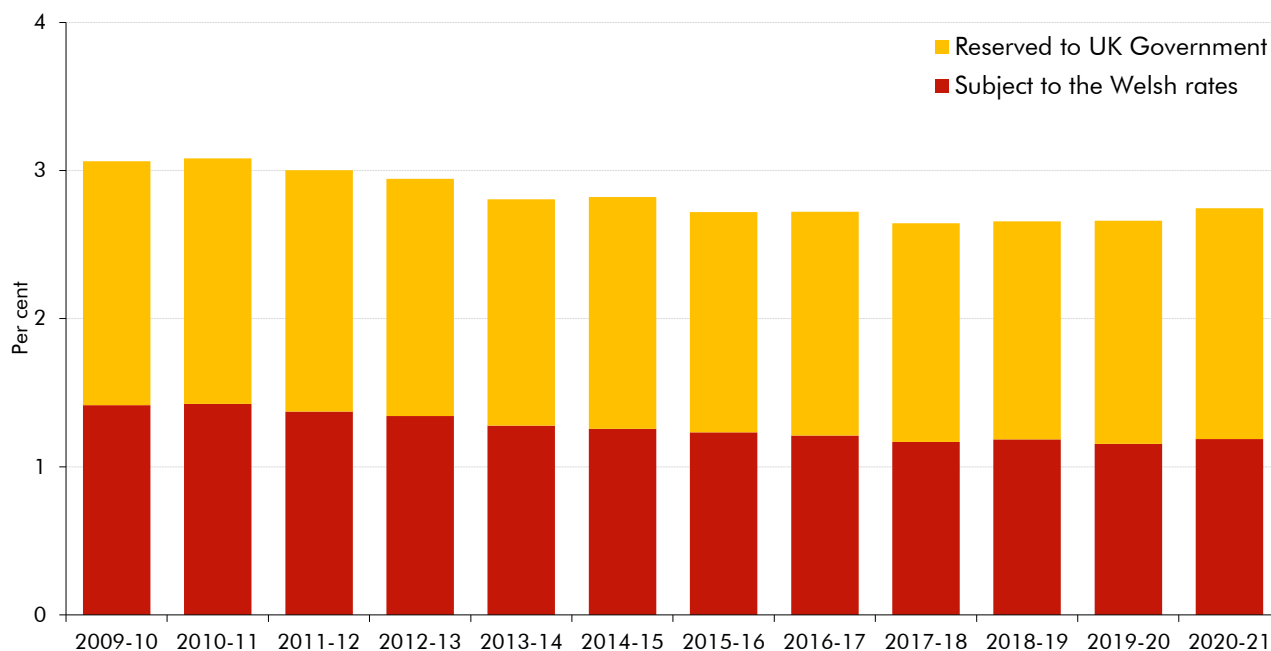


### The share of Welsh income tax liabilities subject to the Welsh rates

**2.28** 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 2020-21) 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 2020-21).<sup>12</sup>

<sup>12</sup> Rates were not devolved until 2019-20, so years prior to this are presented for illustrative purposes only.

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



Source: HMRC

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

2.29 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 2023-24 using HMRC’s estimate of outturn Welsh income tax liabilities in 2021-22, and RTI data thereafter. The latter source provides the Welsh share of total pre-tax employee earnings (i.e. the product of employee numbers and average earnings). 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 2023-24, we factor in relative population growth rates to reflect the different projected 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>13</sup> We adjust for this using an index of the Welsh share of the UK’s adult population, with 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 approach captures trends in both the ageing as well as the size of the population.

<sup>13</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 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.

2.30 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 that is used to estimate the share subject to the Welsh rates in outturn.

## New policy costings

2.31 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 now need to assess the effect of new policies on each individual band of income tax, rather than simply their overall cost or yield.

2.32 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

2.33 As set out in Chapter 1, our latest forecast for UK NSND income tax is based on the economy forecast published in our November 2023 *EFO*, while Table 2.3 reports the rates and thresholds that we use. The UK Government has a pre-existing policy of freezing the personal allowance (PA) and higher rate threshold (HRT) to 2027-28, meaning that all of the parameters in Table 2.3 are fixed until then. But last month's Autumn Statement did not extend the freezes to 2028-29, meaning that the PA and HRT rise by CPI inflation in the final year of the forecast.

Table 2.3: UK Government and Welsh Government income tax parameters

|   | Per cent |         |         |         |         |         |
|---|----------|---------|---------|---------|---------|---------|
|   | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| <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  | 12,790  |
| Higher rate   | 50,270   | 50,270  | 50,270  | 50,270  | 50,270  | 51,190  |
| Additional rate                                       | 125,140  | 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.

**2.34** 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 rose from £208.1 billion in 2021-22 to £226.4 billion in 2022-23 (8.8 per cent higher), largely due to the upwards revision in the pre-measures forecast. This is £1.7 billion higher than our December 2022 WTO forecast though £1.3 billion lower than we forecast in our March 2023 EFO.

**2.35** There is strong year-on-year growth in the forecast from 2023-24 onwards, an average annual growth rate of 6.3 per cent, which is significantly higher than the assumed growth rates in either our December WTO 2022 and March 2023 EFO forecasts. This is driven by strong near-term growth in PAYE outturn receipts, largely due to recent high inflation and nominal earnings growth, and our forecast of continued stronger nominal earnings growth over the forecast period combining with frozen personal tax thresholds.

**2.36** The forecast includes several UK Government policies announced in the Autumn Statement, which raises amounts rising to £3.7 billion by 2028-29:

- A **2 percentage point cut in the main rate of Class 1 NICs**, from 12 per cent to 10 percent, effective from 6 January 2024.
- A **1 percentage point cut in the main rate of Class 4 NICs**, from 9 per cent to 8 per cent, effective from 6 April 2024.
- **Removing the requirement to pay Class 2 NICs**, for self-employed individuals with profits of at least £12,750.

- Providing HMRC with the funds to hire an **additional 700 full-time equivalent staff, to boost the collection of tax debts.**
- **A package of measures, described in the EFO and including the NICs cut, boosts labour supply** through reducing inactivity and incentivising those already in employment to increase their hours of work. We capture the knock-on impacts of these measures to income tax as an indirect effect of UK Government policy decisions.
- Changes since our December 2022 forecast also includes **the effects of the policies announced in the March 2023 Budget, including a package of measures designed to increase labour supply and changes to pensions tax allowances.** The indirect effects of labour supply measures raise income tax receipts by increasing the level of wages and salaries, marginally outweighing the costs from the direct effects of the package, most prominently the abolition of the pensions' lifetime allowance.

**2.37** One of the ways the NICs cuts generate extra income tax revenue is through the behavioural responses. Some individuals will now be incentivised to move into work; some of those already in work will respond by working more hours; and by reducing the tax motivation, some will now choose not to incorporate. Each of these will result in higher revenue from income tax. The debt collection measure is not limited to income tax, but the income tax component generates just under half of the overall annual yield by 2028-29.

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

|   | £ billion  |             |             |             |             |             |             |         |
|---|------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
|   | Outturn    |             |             |             | Forecast    |             |             |         |
|   | 2021-22    | 2022-23     | 2023-24     | 2024-25     | 2025-26     | 2026-27     | 2027-28     | 2028-29 |
| December 2022 forecast                      | 207.3      | 224.7       | 237.9       | 245.8       | 254.8       | 267.0       | 282.5       |         |
| March 2023 forecast                         | 207.7      | 227.7       | 243.4       | 251.3       | 259.7       | 270.6       | 283.2       |         |
| December 2023 forecast                      | 208.1      | 226.4       | 254.8       | 270.0       | 281.9       | 296.0       | 311.6       | 325.7   |
| <b>Difference from December to December</b> | <b>0.8</b> | <b>1.7</b>  | <b>16.9</b> | <b>24.2</b> | <b>27.1</b> | <b>29.0</b> | <b>29.1</b> |         |
| <b>Difference from March to December</b>    | <b>0.4</b> | <b>-1.3</b> | <b>11.4</b> | <b>18.6</b> | <b>22.2</b> | <b>25.4</b> | <b>28.4</b> |         |
| <i>of which:</i>                            |            |             |             |             |             |             |             |         |
| UK NSND outturn alignment                   |            | -0.3        | -0.3        | -0.3        | -0.3        | -0.4        | -0.4        |         |
| Pre-measures forecast                       |            | -1.0        | 11.6        | 17.1        | 19.8        | 22.6        | 25.4        |         |
| Effects of UK policies                      |            | 0.0         | 0.1         | 1.9         | 2.7         | 3.2         | 3.5         | 3.7     |

## Share subject to the Welsh rates

**2.38** Table 2.5 shows our latest forecast for the Welsh share and the change since December and 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. On this basis, the Welsh share is little changed from our December and March forecasts, down by 0.01 percentage points on average. This largely reflects weaker-than-expected 2021-22 Welsh rates outturn data, which serves to lower the 2022-23 share. This is then compounded by lower in-year RTI

## Welsh rates of income tax

outturn in later years, though this is partly offset by revisions to the ONS-derived population shares.

**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    |              |              |              |              |              |         |
|   | 2021-22  | 2022-23     | 2023-24      | 2024-25      | 2025-26      | 2026-27      | 2027-28      | 2028-29 |
| December 2022 forecast  | 1.16   | 1.16        | 1.17         | 1.19         | 1.19         | 1.18         | 1.18         |         |
| March 2023 forecast   | 1.16   | 1.16        | 1.17         | 1.19         | 1.19         | 1.18         | 1.18         |         |
| December 2023 forecast<br>(pre-measures)                      | 1.15   | 1.16        | 1.17         | 1.18         | 1.18         | 1.18         | 1.18         | 1.18    |
| <b>Difference from December<br/>to December</b>               | <b>-0.01</b>   | <b>0.00</b> | <b>-0.01</b> | <b>-0.02</b> | <b>-0.01</b> | <b>-0.01</b> | <b>-0.01</b> |         |
| <b>Difference from March to<br/>December</b>                  | <b>-0.01</b>   | <b>0.00</b> | <b>-0.01</b> | <b>-0.01</b> | <b>-0.01</b> | <b>0.00</b>  | <b>0.00</b>  |         |
| <i>Memo: population index</i>                                 |  | 100.0       | 99.9         | 99.9         | 99.8         | 99.7         | 99.7         | 99.6    |
| <i>Change in index of relative<br/>population since March</i> |  | 0.00        | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.00    |
| <i>Change in RTI index since March</i>                        |  | -0.44       | -0.44        | -0.44        | -0.44        | -0.44        | -0.44        | -0.44   |
| <i>Memo: RTI index (2020-21 = 100)</i>                        |  | 99.4        | 99.9         | 99.9         | 99.9         | 99.9         | 99.9         | 99.9    |
| <i>Memo: combined index</i>                                   |  | 99.4        | 99.8         | 99.7         | 99.6         | 99.6         | 99.5         | 99.4    |

## Latest forecast for the Welsh rates of income tax

**2.39** Table 2.6 sets out our latest forecast for the Welsh rates of income tax and a breakdown of the changes since December and March, while Table 2.7 shows the forecast by tax band. We have revised up the forecast in all years, by an average of £272 million (7.7 per cent) relative to last December, with the difference peaking at £325 million in 2026-27 and reaching £320 million in 2027-28.

**2.40** Relative to March, the forecast is up by an average of £231 million (7.5 per cent). These changes largely reflect upward revisions to our UK-wide forecast, though the UK Government's Autumn Statement 2023 policies (described above) are also a contributory factor. These effects are very slightly offset by changes in the Welsh share and aligning to the latest year of outturn data. Differences between our December 2022 and March 2023 forecasts explain the remainder of the difference between our current and December 2022 WTO forecasts. As we explained in our March 2023 *EFO*, we revised receipts up at the time on the back of strong growth in nominal earnings, the improved economic outlook and the effect of measures (described above).

Table 2.6: Welsh rates of income tax forecast

|   | £ million  |            |            |            |            |            |            |         |
|---|------------|------------|------------|------------|------------|------------|------------|---------|
|   | Outturn    | Forecast   |            |            |            |            |            |         |
|   | 2021-22    | 2022-23    | 2023-24    | 2024-25    | 2025-26    | 2026-27    | 2027-28    | 2028-29 |
| December 2022 forecast                      | 2,401      | 2,604      | 2,795      | 2,927      | 3,027      | 3,162      | 3,348      |         |
| March 2023 forecast                         | 2,403      | 2,642      | 2,857      | 2,982      | 3,081      | 3,202      | 3,344      |         |
| December 2023 forecast                      | 2,384      | 2,616      | 2,972      | 3,171      | 3,322      | 3,487      | 3,668      | 3,827   |
| <b>Difference from December to December</b> | <b>-16</b> | <b>12</b>  | <b>177</b> | <b>244</b> | <b>295</b> | <b>325</b> | <b>320</b> |         |
| <b>Difference from March to December</b>    | <b>-18</b> | <b>-26</b> | <b>115</b> | <b>189</b> | <b>241</b> | <b>285</b> | <b>324</b> |         |
| <i>of which:</i>                            |            |            |            |            |            |            |            |         |
| Welsh share modelling                       |            | -11        | -18        | -30        | -20        | -13        | -9         |         |
| UK NSND outturn alignment                   |            | -3         | -4         | -4         | -4         | -4         | -4         |         |
| UK NSND forecast changes                    |            | -11        | 137        | 216        | 250        | 285        | 316        |         |
| UK Government policies                      |            | 0          | 0          | 7          | 15         | 18         | 21         | 44      |
| <i>of which:</i>                            |            |            |            |            |            |            |            |         |
| <i>NICs rate cut</i>                        |            | 0          | 1          | 3          | 8          | 11         | 15         | 17      |
| <i>HMRC: debt management</i>                |            | 0          | 0          | 3          | 6          | 6          | 6          | 7       |
| <i>Other</i>                                |            | 0          | 0          | 1          | 1          | 0          | 0          | 0       |

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

|                          | £ million    |              |              |              |              |              |              |              |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                          | Outturn      | Forecast     |              |              |              |              |              |              |
|                          | 2021-22      | 2022-23      | 2023-24      | 2024-25      | 2025-26      | 2026-27      | 2027-28      | 2028-29      |
| <b>December forecast</b> | <b>2,384</b> | <b>2,616</b> | <b>2,972</b> | <b>3,171</b> | <b>3,322</b> | <b>3,487</b> | <b>3,668</b> | <b>3,827</b> |
| <i>of which:</i>         |              |              |              |              |              |              |              |              |
| Basic rate               | 2,030        | 2,214        | 2,493        | 2,645        | 2,757        | 2,877        | 3,005        | 3,126        |
| Higher rate              | 293          | 339          | 386          | 425          | 456          | 492          | 535          | 561          |
| Additional rate          | 62           | 63           | 93           | 101          | 109          | 118          | 129          | 141          |
|                          | Per cent     |              |              |              |              |              |              |              |
| Basic rate               | 85.1         | 84.7         | 83.9         | 83.4         | 83.0         | 82.5         | 81.9         | 81.7         |
| Higher rate              | 12.3         | 12.9         | 13.0         | 13.4         | 13.7         | 14.1         | 14.6         | 14.7         |
| Additional rate          | 2.6          | 2.4          | 3.1          | 3.2          | 3.3          | 3.4          | 3.5          | 3.7          |

## Key uncertainties

**2.41** 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

**2.42** Following the pandemic, the number of working-age people classed as inactive in the UK jumped by almost 650,000 at its peak, and it remains 400,000 above pre-pandemic levels.<sup>14</sup> This was primarily driven by individuals citing long-term sickness as their principal reason for remaining out of the labour market. Other contributing factors include the effects of an ageing population and a temporary rise in student inactivity during the pandemic,

<sup>14</sup> See Chapter 2 of our 2023 *Fiscal risks and sustainability report*.

## Welsh rates of income tax

though that has now largely unwound. Inactivity in Wales has historically been relatively high and, as with the UK as a whole, rose sharply in the post-pandemic period. Our UK forecast assumes overall participation rises marginally in the medium-term. If this does not take place, or is not mirrored in Wales, then it poses a downside risk to our forecast.

## Growth of productivity and average earnings

**2.43** 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. In our November 2023 *EFO* we forecast an annual average productivity growth rate of around 1 per cent over the next five years. While this is higher than the ½ a per cent growth rate in the decade following the financial crisis, it is well below the 2 per cent rate seen before the crisis. It remains highly uncertain, though we believe our forecast is central, with risks to both sides. Factors that will affect productivity growth include developments in international trade, domestic supply-side reform, and global technological progress.

## The Survey of personal incomes base data

**2.44** The representativeness of the geographical and income distributions reported in the SPI base data is important for our forecasts. The SPI is designed to be representative at the UK level, but the sample is not stratified by geography (i.e. smaller sample sizes in each geographical area mean it is likely to be less representative at those levels than it is at the UK level). In the latest version, the confidence interval around the SPI estimate of tax liabilities at the UK level was just 1.0 per cent, but for Wales it was a more material 3.5 per cent. Sampling variation – in particular due to the small number of observations of high-income taxpayers in Wales – is therefore a source of risk to the forecast. We have the outturn data for Welsh income tax liabilities and so can calibrate forecasts to the outturn share. However, uncertainties around the input data for our Welsh rates forecast remain a risk.

## Relative performance of the Welsh and UK income tax bases

**2.45** 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 central assumption that the variables that determine tax bases in Wales and the UK move broadly in parallel, with the downside and upside risks around this assumption evenly balanced. Our recent working paper showed that the factors that lead to differences in tax liabilities in the UK and Wales have been getting steadily, if only modestly, larger over time. Further divergence, or a period of convergence, therefore represent downside and upside risks to our forecast, respectively. The working paper suggests that our current approach, which focuses on employment income, helps to mitigate much of this risk, since it allows us to calibrate (using timely RTI data) the most significant factor driving both receipts from the Welsh rates and the Wales-UK divergence.<sup>15</sup>

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<sup>15</sup> The paper does, however, set out several areas for future forecast development work. See Murphy Corkhill, J., M. Hanson and S. Johal, *OBR Working Paper No.21: Developments in devolved income tax, October 2023*.



- 2.46 The other 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 in the future.

### Box 2.1: Evaluating our forecasts for the Welsh rates of income tax for 2021-22

HMRC published 2021-22 outturn data for the Welsh rates in July 2023. 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 publish a detailed assessment in our 2024 WTO update, accompanying the final Budget next year. Ahead of this we present a preliminary discussion in this Box. Table A presents the outturn data alongside our six forecasts of 2021-22, for both the Welsh rates and the pre-measures Welsh share of UK NSND income tax.

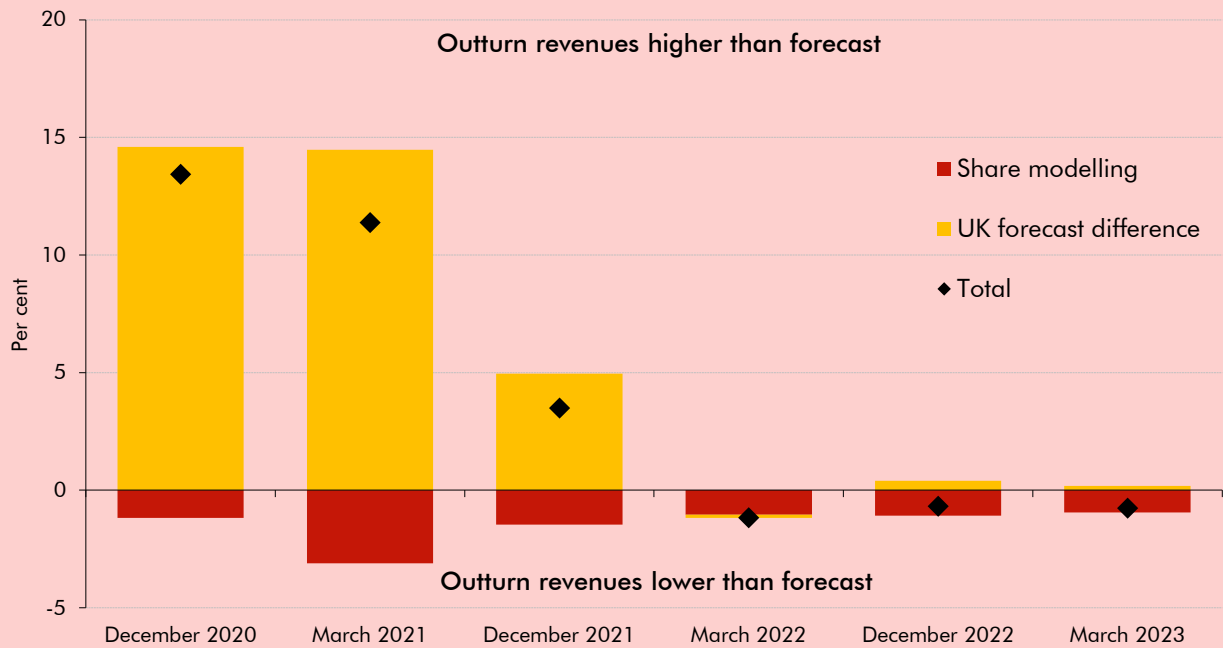
**Table A: Successive forecasts for Welsh rates of income tax and the share of pre-measures liabilities subject to the Welsh rates (2021-22)**

|                                     | Outturn | Forecast |          |          |          |          |          |
|-------------------------------------|---------|----------|----------|----------|----------|----------|----------|
|                                     |         | Dec 2020 | Mar 2021 | Dec 2021 | Mar 2022 | Dec 2022 | Mar 2023 |
| Welsh rates (£ million)             | 2,384   | 2,064    | 2,113    | 2,301    | 2,412    | 2,401    | 2,403    |
| Difference from outturn (£ million) |         | -320     | -271     | -83      | 28       | 16       | 18       |
| Welsh share (per cent)              | 1.15    | 1.16     | 1.17     | 1.16     | 1.16     | 1.16     | 1.16     |
| Difference from outturn (per cent)  |         | 0.01     | 0.03     | 0.02     | 0.01     | 0.01     | 0.01     |

Chart A breaks down the overall differences between the same six forecasts and the outturn for 2021-22 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 overestimated the Welsh share on every occasion, whereas we underestimated the UK NSND forecast four out of six times. On a forecast-by-forecast basis:

- **In December 2020 and March 2021, we underestimated receipts by 13.4 per cent and 11.4 per cent respectively.** These relatively large differences are driven by the unprecedented uncertainty caused by Covid. They are more than explained by our underestimate of the UK NSND forecast, with UK wide receipts unexpectedly resilient during the pandemic, thanks in part to large-scale fiscal support via the furlough scheme, the self-employment income support scheme, as well as higher departmental spending. This is slightly offset by our overestimation of the Welsh share.
- **In December 2021 we underestimated receipts by 3.5 per cent,** due to underestimating UK NSND income tax once again, this time explained by a stronger-than-expected recovery from the pandemic, and only marginally offset by the lower-than-expected Welsh share.
- **In the three most recent forecast we slightly overestimated receipts by an average of 0.9 per cent,** largely due to overestimating the Welsh share.

Chart A: Successive forecast differences for Welsh rates of income tax (2021 -22)



Source: HMRC, OBR

We have already refined our 'population' index since our earlier forecasts, for example by splitting into working-age and pension-age populations. Our recent working paper sets out several areas for future analysis, including seeking additional gains from the use of RTI data, particularly at a more disaggregated level, further decomposing our analysis of employment income by sector, age and qualification, and considering whether the UK Government's successive above-inflation increases in the personal allowance during the 2010s disproportionately impacted Wales.

# 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 over the last year; 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 property 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 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.

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<sup>1</sup> Both taxes are broadly based on the historical '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 H. Kleven, *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.

## Land transaction tax

- 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.

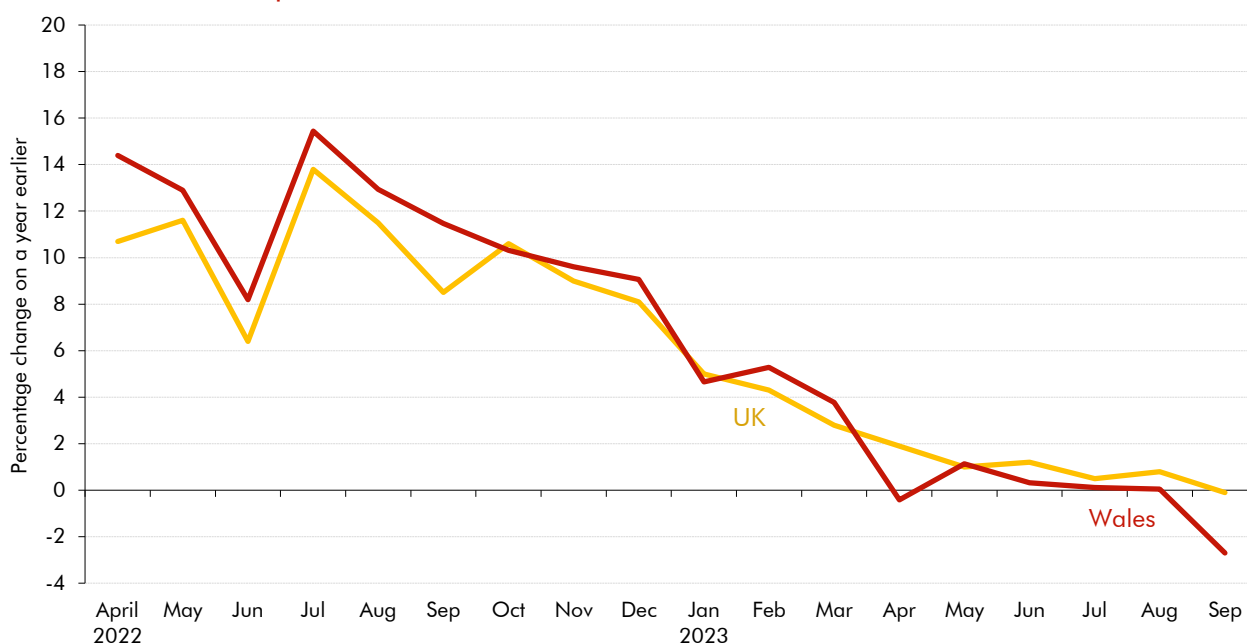
## Property market determinants of the forecast

**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 fallen steeply in the last year, due to the impact of sustained high interest rates on mortgage rates and the prolonged squeeze on real incomes which have impacted purchasing power.

### Property prices

**3.6** Chart 3.1 shows that **house prices** during the 2022-23 fiscal year peaked in July 2022 at 15.4 per cent in Wales and 13.8 per cent in the UK, following strong post-pandemic growth<sup>6</sup>. But it has trended downwards since as demand has been impacted by higher interest rates. Both UK and Welsh house price changes during recent months has been hovering around zero.

Chart 3.1: House prices: Wales versus the UK as a whole



Source: ONS

<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.

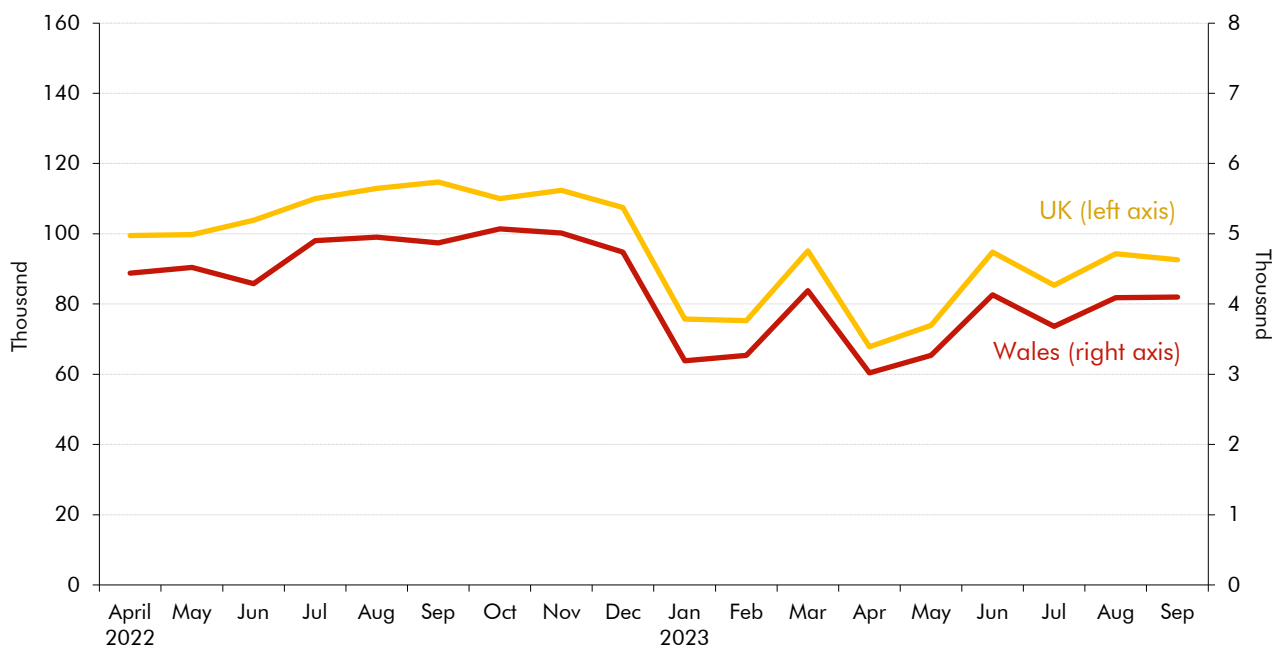
<sup>6</sup> ONS, *UK House Price Index: September 2023*, November 2023

**3.7 Commercial property prices** (as measured by the average price of transactions recorded by the respective tax authorities) in Wales fell during the first half of 2023-24, by 27.9 per cent, relative to 2022-23, whereas prices fell by 0.5 per cent in the UK over the equivalent period.

### Property transactions

**3.8 Monthly residential property transactions** in Wales and the UK as a whole have followed a broadly similar path over the past 18 months (Chart 3.2). In both cases transactions have been lower during 2023-24 than they were in 2022-23, again weighed down by the deterioration in lending conditions. Transactions in Wales in the 2023-24 year-to-date are 20.3 per cent lower than they were in 2022-23, while the equivalent fall at the UK level is 20.6 per cent. This follows falls of 14.2 per cent and 11.2 per cent in 2022-23 compared to 2021-22, in Wales and the UK, respectively.

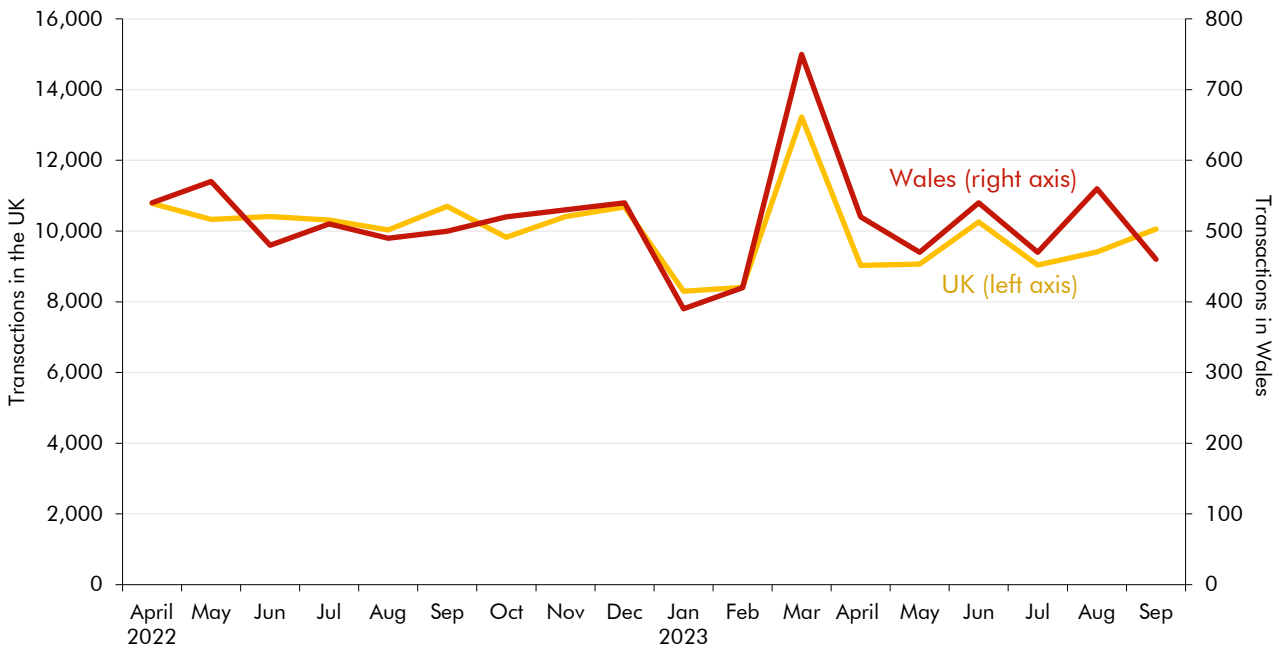
**Chart 3.2: Residential property transactions**



Source: HMRC, WRA

**3.9 Commercial property transactions** in Wales have largely mirrored those in the UK as a whole during 2022-23 and 2023-24 (Chart 3.3). Year-to-date transactions are down 2.3 per cent in Wales and 9.1 per cent in the UK as a whole, compared to 2022-23.

Chart 3.3: Commercial property transactions

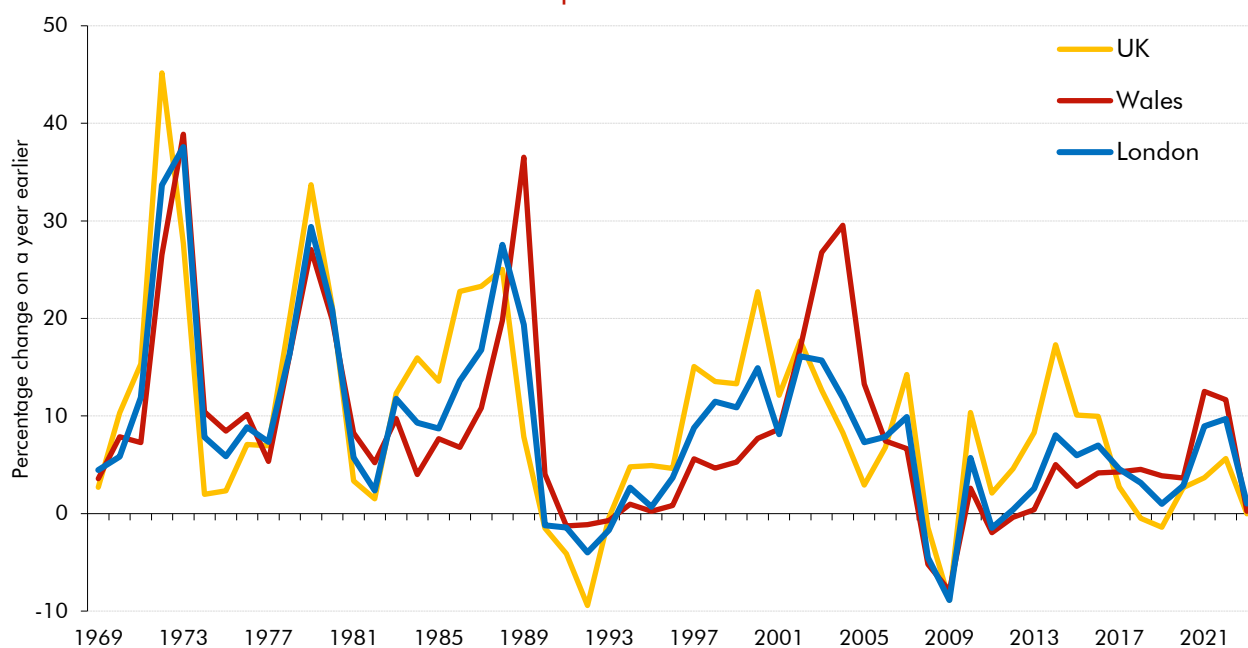


Source: HMRC, WRA

### Forecasts for property market determinants

- 3.10 Our forecasts for property transaction taxes are underpinned by our UK-wide property market forecasts. We assume Welsh prices and transactions move in line with those for the UK as a whole, unless there are clearly reasons to depart from that. In practice, any assumed divergence involves us using different Welsh house price assumptions in the near term before assuming convergence from the second or third year of the forecast. Chart 3.4 shows that, historically, house prices in Wales have followed a similar path to those in the UK as a whole, with relatively few periods of short-term divergence.
- 3.11 In this forecast we assume house prices in UK and Wales move together across the forecast period. This is consistent with the recent outturn data showing that house price changes in Wales during the first half of 2023-24 have been close to those in the UK (Chart 3.1).

Chart 3.4: Historical trends in house prices



Source: Land Registry

- 3.12** We have revised up our UK and Welsh house price forecasts in 2023-24 since our February forecast, reflecting slightly stronger-than-expected outturn data. But prices are still expected to fall slightly this year and more significantly in 2024-25, thanks to a weaker economic outlook than we previously anticipated, following the period of higher and sustained interest rates. Prices then rise only modestly thereafter. Residential transactions have also been revised down between 2023-24 and 2026-27, reflecting that same weakness, with it already feeding through to lower transactions in outturn. While transactions have been revised down in most years and are down by 2.5 per cent from 2023-24 and 2027-28 since February, we still expect them to begin recovering from 2025-26 onwards with annual growth averaging 10.0 per cent thereafter.
- 3.13** We also assume that commercial prices and transactions fall in the near term, again due to the weaker economic outlook and high interest rates. Relative to February, commercial prices are much lower in 2024-25, with more modest revisions in later years, reflecting an earlier trough than we expect for residential prices, but with a more gradual recovery thereafter. While we previously expected the trough in commercial prices to be shallower than that in the residential market, we are now forecasting a larger cumulative fall in the former.

Table 3.1: Forecasts for Welsh property prices and transactions

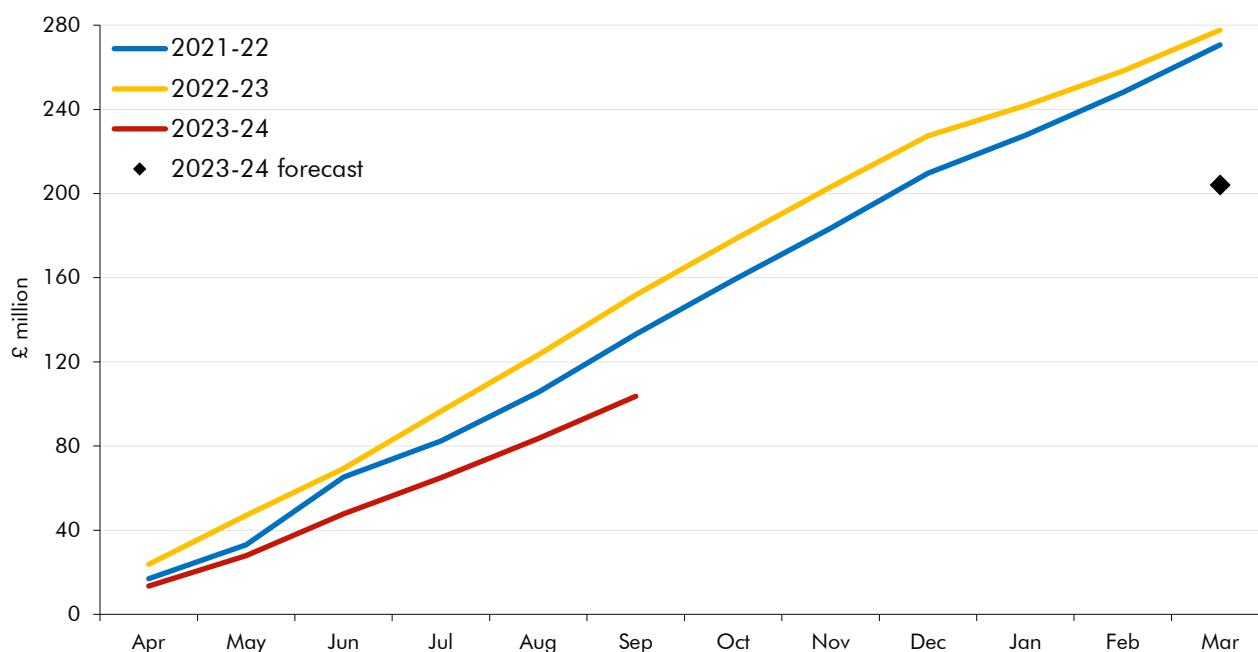
|                                   | Percentage change on previous year |          |         |         |         |         |         |
|-----------------------------------|------------------------------------|----------|---------|---------|---------|---------|---------|
|                                   | Outturn                            | Forecast |         |         |         |         |         |
|                                   | 2022-23                            | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| Residential property prices       | 8.6                                | -0.9     | -4.9    | 1.2     | 3.6     | 3.7     | 3.7     |
| Residential property transactions | -12.3                              | -20.0    | -3.4    | 8.4     | 11.2    | 11.2    | 9.3     |
| Commercial property prices        | -4.0                               | -1.2     | -1.2    | 1.6     | 1.6     | 1.8     | 1.9     |
| Commercial property transactions  | -1.7                               | -8.1     | -1.3    | 6.1     | 5.4     | 1.9     | 1.7     |
| Change since February forecast    |                                    |          |         |         |         |         |         |
| Residential property prices       |                                    | 3.3      | -0.9    | -0.9    | 0.4     | 0.2     |         |
| Residential property transactions |                                    | -4.6     | -4.0    | -2.5    | -4.0    | 2.7     |         |
| Commercial property prices        |                                    | 2.0      | -3.4    | 0.8     | 0.1     | -0.1    |         |
| Commercial property transactions  |                                    | -3.1     | -2.2    | -0.1    | -1.1    | 0.0     |         |

## Trends in LTT receipts

### Residential property receipts

3.14 Chart 3.5 shows that residential LTT receipts (net of refunds) in the first six months are down £48 million (31.7 per cent) on 2022-23 and £29 million (22 per cent) on 2021-22. We expect this weakness to continue in the second half of the year, with total receipts in 2022-23 forecast to be £74 million (26 per cent) below 2022-23 outturns.

Chart 3.5: Cumulative residential LTT receipts



Source: WRA, OBR

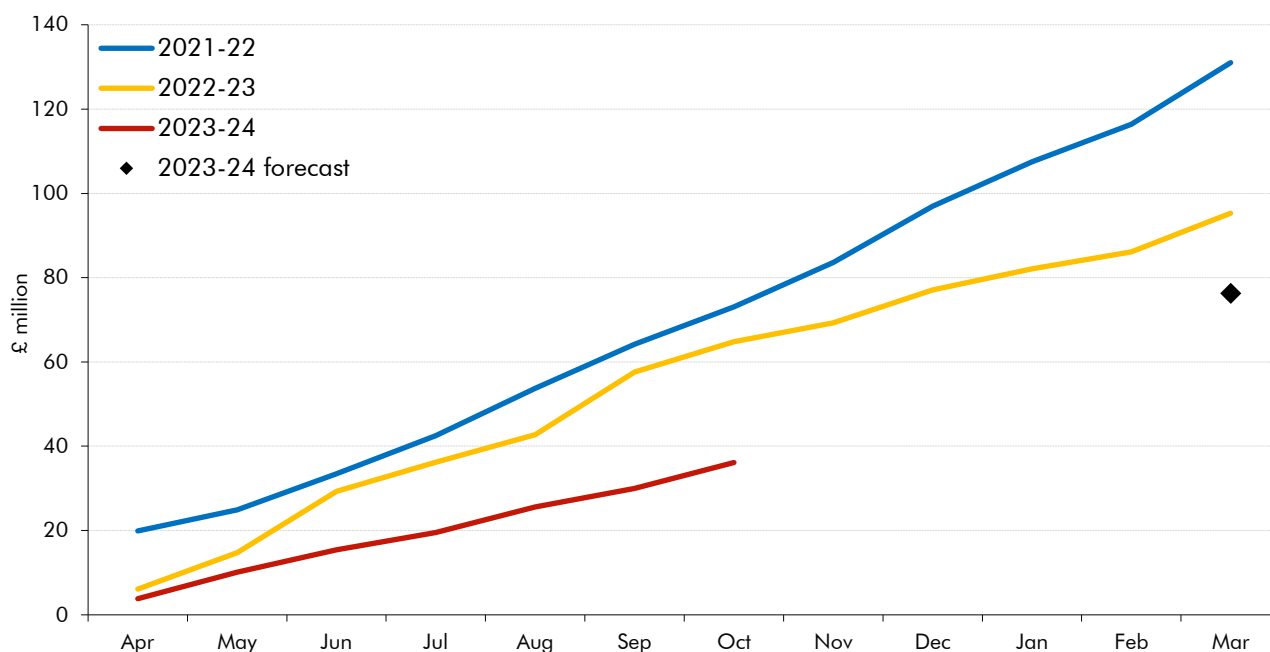
### Commercial property receipts

3.15 Chart 3.6 shows year-to-date commercial receipts are down £29 million (44 per cent) on 2022-23, and down £37 million (51 per cent) on 2021-22. We expect revenues to partially



pick up in the remaining months of the year, due to volatility in the Welsh commercial market, with receipts ending £18 million (19 per cent) lower than in 2022-23.

**Chart 3.6: Cumulative commercial LTT receipts**



Source: WRA, OBR

## Latest LTT forecasts

**3.16** Table 3.2 sets out our latest forecast for LTT and its components. Relative to February, receipts have been revised down in every year of the forecast and by an average of £59 million (16 per cent). This reflects the recent weakness in outturn data, particularly driven by a fall in transactions relative to our February forecast. We now forecast a peak-to-trough decline in receipts of around a third between 2022-23 and 2024-25, though with a similar annual rate of receipts growth thereafter.

Table 3.2: LTT forecast

|  | £ million |          |         |         |         |         |         |
|--|-----------|----------|---------|---------|---------|---------|---------|
|  | Outturn   | Forecast |         |         |         |         |         |
|  | 2022-23   | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| <b>Total LTT</b>                                     |           |          |         |         |         |         |         |
| February forecast                                    | 372       | 312      | 299     | 340     | 403     | 453     |         |
| December forecast                                    | 372       | 280      | 251     | 279     | 325     | 375     | 437     |
| Difference   |           | -32      | -48     | -61     | -78     | -78     |         |
| <b>Residential (excluding additional properties)</b> |           |          |         |         |         |         |         |
| February forecast                                    | 196       | 150      | 134     | 157     | 194     | 229     |         |
| December forecast                                    | 196       | 146      | 122     | 136     | 165     | 200     | 238     |
| Difference   |           | -4       | -12     | -20     | -30     | -29     |         |
| <b>Additional properties</b>                         |           |          |         |         |         |         |         |
| February forecast                                    | 82        | 65       | 64      | 75      | 91      | 101     |         |
| December forecast                                    | 82        | 58       | 54      | 62      | 73      | 85      | 106     |
| Difference   |           | -7       | -9      | -12     | -17     | -17     |         |
| <b>Commercial</b>                                    |           |          |         |         |         |         |         |
| February forecast                                    | 94        | 97       | 101     | 108     | 117     | 123     |         |
| December forecast                                    | 94        | 76       | 74      | 80      | 86      | 90      | 94      |
| Difference   |           | -21      | -27     | -28     | -31     | -33     |         |

### Residential LTT forecast

- 3.17** Table 3.3 sets out the revisions to our residential LTT forecasts since February. Residential main rates have been revised down in every year of the forecast, by an average of £19 million a year (11 per cent). There is a peak-to-trough drop of 38 per cent between 2022-23 and 2024-25, with receipts not returning to their 2022-23 levels until 2027-28. Weakness from the shortfall in the effective tax rate, as a result of lower-priced transactions, which generate less revenue per pound, making up a higher share of revenues (contained within the 'outturn data and modelling' line) explains most of the decrease. Otherwise, revisions to our transaction determinants (down by an average of £13 million a year) are largely offset by revisions to price determinants (up £12 million a year).
- 3.18** Table 3.4 presents the changes to our additional rates forecast, which is also down relative to February, by an average of £12 million a year (16 per cent). In this case the fall is due to a combination of lower outturn data and weaker transactions, only very marginally offset by slightly stronger prices. This creates a steeper peak-to-trough drop between 2022-23 and 2024-25 though with a similar rate of annual growth during the remaining years of the forecast.

Table 3.3: Residential main rates LTT forecast

|                            | £ million |          |         |         |         |         |         |
|----------------------------|-----------|----------|---------|---------|---------|---------|---------|
|                            | Outturn   | Forecast |         |         |         |         |         |
|                            | 2022-23   | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| February forecast          | 196       | 150      | 134     | 157     | 194     | 229     |         |
| December forecast          | 196       | 146      | 122     | 136     | 165     | 200     | 238     |
| <b>Difference</b>          |           | -4       | -12     | -20     | -30     | -29     |         |
| <i>of which:</i>           |           |          |         |         |         |         |         |
| Price changes              |           | 15       | 10      | 8       | 12      | 14      |         |
| Transaction changes        |           | -3       | -8      | -12     | -21     | -20     |         |
| Outturn data and modelling |           | -16      | -15     | -17     | -20     | -24     |         |

Table 3.4: Residential additional rates LTT forecast

|                            | £ million |          |         |         |         |         |         |
|----------------------------|-----------|----------|---------|---------|---------|---------|---------|
|                            | Outturn   | Forecast |         |         |         |         |         |
|                            | 2022-23   | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| February forecast          | 82        | 65       | 64      | 75      | 91      | 101     |         |
| December forecast          | 82        | 58       | 54      | 62      | 73      | 85      | 106     |
| <b>Difference</b>          |           | -7       | -9      | -12     | -17     | -17     |         |
| <i>of which:</i>           |           |          |         |         |         |         |         |
| Price changes              |           | 2        | 1       | 0       | 1       | 1       |         |
| Transaction changes        |           | -2       | -4      | -6      | -10     | -8      |         |
| Outturn data and modelling |           | -7       | -6      | -7      | -8      | -9      |         |

## Commercial LTT forecast

3.19 Table 3.5 shows changes to our commercial LTT forecast relative to February. Receipts have been revised down by progressively increasing amounts, reaching £33 million by 2027-28. The £20 million drop in receipts over the two-year period between 2022-23 and 2024-25 compares to the £7 million *increase* that we were forecasting in February. The reduction since February is largely due to the weakness in the outturn data, with receipts 29 per cent lower than we previously forecast. We assume around half of this weakness will persist through to the end of the forecast period. Lower transactions are also a contributory factor, though around a half of that is offset by higher prices.

Table 3.5: Commercial LTT forecast

|                            | £ million |          |         |         |         |         |         |
|----------------------------|-----------|----------|---------|---------|---------|---------|---------|
|                            | Outturn   | Forecast |         |         |         |         |         |
|                            | 2022-23   | 2023-24  | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| February forecast          | 94        | 97       | 101     | 108     | 117     | 123     |         |
| December forecast          | 94        | 76       | 74      | 80      | 86      | 90      | 94      |
| <b>Difference</b>          |           | -21      | -27     | -28     | -31     | -33     |         |
| <i>of which:</i>           |           |          |         |         |         |         |         |
| Price changes              |           | 7        | 4       | 5       | 5       | 5       |         |
| Transaction changes        |           | -5       | -7      | -8      | -9      | -10     |         |
| Outturn data and modelling |           | -23      | -23     | -25     | -27     | -28     |         |

## Risks and uncertainties

- 3.20 In this section we summarise some key uncertainties around our central LTT forecast. This is again dominated by the risks to property prices and transactions given the rise in interest rates and the uncertain path for CPI inflation. The risks are evenly balanced. On the downside, inflation has been more persistent than we expected, and if that continues then it would likely require interest rates to remain higher for longer. But it is also possible that inflation and interest rates will fall more quickly than we expect. And furthermore prices have held up more than we anticipated, despite the rise in interest rates.
- 3.21 The commercial property market is generally sensitive to the overall economic outlook, but there are also uncertainties from persistent changes in the composition of economic activity, such as greater prevalence of working from home or further growth in online retailing.
- 3.22 In this forecast we have not assumed any divergence in house prices or transactions between Wales and the UK as a whole, and so this remains a source of uncertainty. Residential property prices have been slightly weaker in Wales in recent months compared to the UK, following a period of relative strength.
- 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 53,000 residential transactions in 2022-23.
  - **Tax base concentration.** LTT has a progressive tax schedule: a £250,000 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 2022-23 around half of residential revenue came from the top 10 per cent of transactions. Our LTT forecast is also sensitive to a small number of high-value commercial property transactions. This is true historically and helps to explain past errors, both in the in-year position and the medium term forecast.
  - **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.
  - **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 – this is known as ‘forestalling’. The reverse is also true if tax cuts are pre-announced, with buyers incentivised to defer transactions to benefit from the lower rate. While it is a regularly

observed phenomenon, it is difficult to gauge the precise size of the behavioural response and the number of affected transactions, though we do use evidence from past episodes to guide us.<sup>7</sup>

- **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 announced a public consultation on extending the refund period for the additional rates in exceptional circumstances, such as when there is unsafe cladding<sup>8</sup>. This will reduce receipts.<sup>9</sup> We will include its effect, and of any other policy ambitions, when the policy is sufficiently firm and costed.<sup>10</sup>

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

<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> 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 (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).

<sup>10</sup> Another policy ambition is the December 2022 announcement on the intention to extend the Help to Buy Wales scheme until March 2025 (Written Statement by the Minister for Climate Change, *The future of Help to Buy Wales from April 2023*, 14 December 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 kept the rates consistent with those in the rest of the UK since LDT was introduced.

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 2022-23 revenue from standard rate waste accounted for 97 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:

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

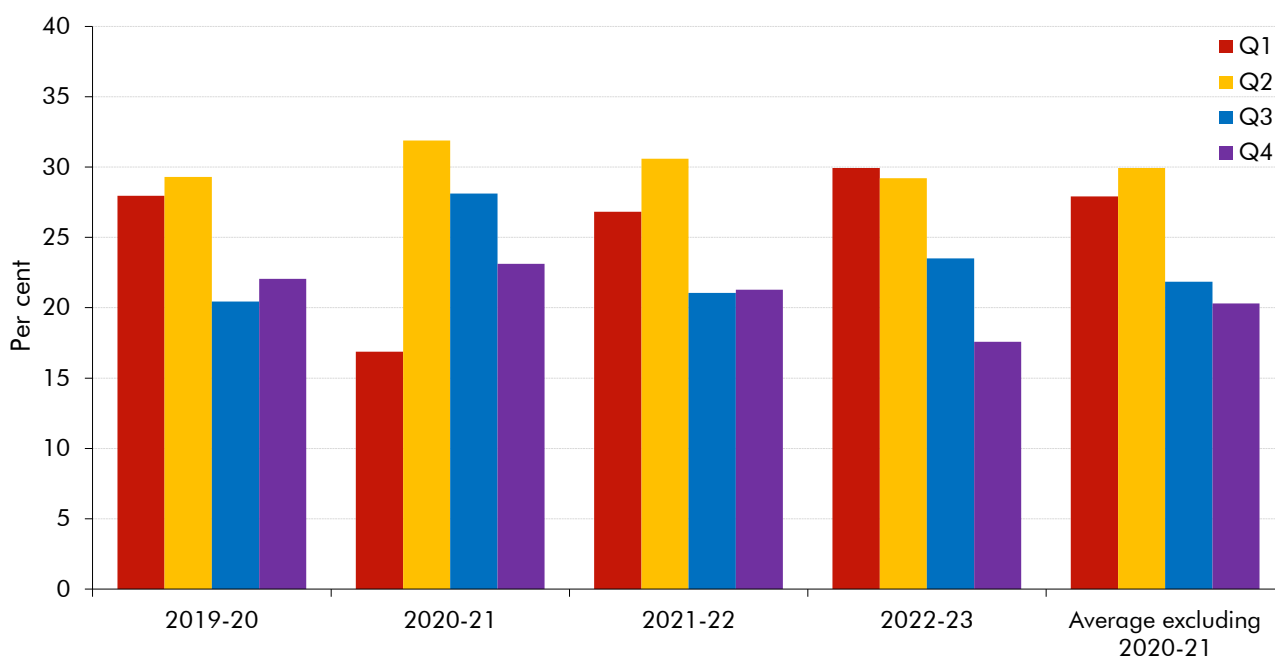
- establishing an **in-year estimate** drawing on the latest administrative data (and other relevant sources) to estimate the level of receipts in the current year;
- producing a **pre-measures forecast** by using the LDT forecast model to multiply the amount of liable waste sent to landfill (the tax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

## Establishing an in-year estimate

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

**4.7** Our in-year forecast is based on outturn data from the first half of 2023-24. Chart 4.1 shows the quarterly split of annual LDT receipts from 2019-20 onwards, and indicates a degree of seasonality in the amount of waste that is disposed of at landfill sites. Typically, the highest share of receipts come in the first and second quarters of the year. The exception to this in recent years was the lockdown-affected first quarter in 2020-21. Since 2019-20, the average share of full revenues received in the first half of the fiscal year, excluding the pandemic-distorted 2020-21 fiscal year, has been 58 per cent.

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



Source: Welsh Revenue Authority

<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.

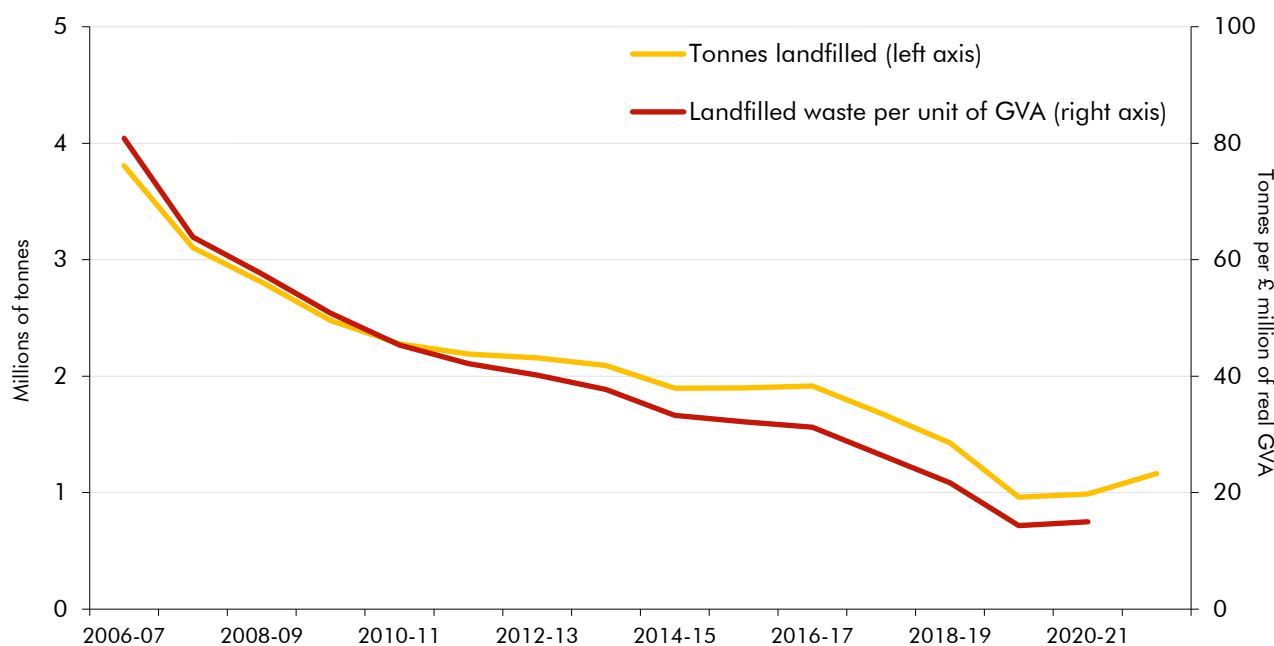
## The pre-measures forecast

### Tax base: the volume of waste sent to landfill

- 4.8 The volume of waste sent to landfill in future years is forecast by calibrating data from Natural Resources Wales (NRW) with the 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 developing 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 UK and Welsh landfill (including waste generated in England) and represent an upside risk to LDT receipts. The extent to which these or other factors have already affected LDT receipts would be implicitly captured 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 seven-tenths between 2006-07 (3.8 million tonnes) and 2021-22 (1.2 million tonnes), although there has been a small uptick from 2020-21 onwards, in contrast to this longer-term downward trend. 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). We assume that the level of waste arising from landfill remains constant over the forecast period, in part due to this recent upside surprise, but there is some uncertainty around this judgement.



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>
- 4.13** In this Budget, the Welsh Government has maintained alignment with the 2024-25 rates set by the UK Government, with a **standard rate of £103.70 per tonne** of waste and a **lower rate of £3.30 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.
- 4.14** 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 needs 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 2022-23, the effective rate paid was £34.26 per tonne of waste sent to landfill. In the first two quarters of 2023-24 the effective tax rate paid fell to £28.20 per tonne of waste, as a result of the decline in the share of standard rate waste.

<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. The 2024-25 rate is set to be announced in April 2024.

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

## Landfill disposals tax

### Post-measures forecast

4.15 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 effects are typically small, although they can still be subject to some uncertainty. For example, the UK Government's Autumn Statement 2023 policies introducing a new 'deposit return scheme', for those consuming drinks in a container and an 'extended producer responsibility' scheme that requires packaging producers to incur the cost of managing the packaging once it becomes waste. Both schemes are expected to lower landfill tax receipts by reducing the amount of waste sent to landfill.

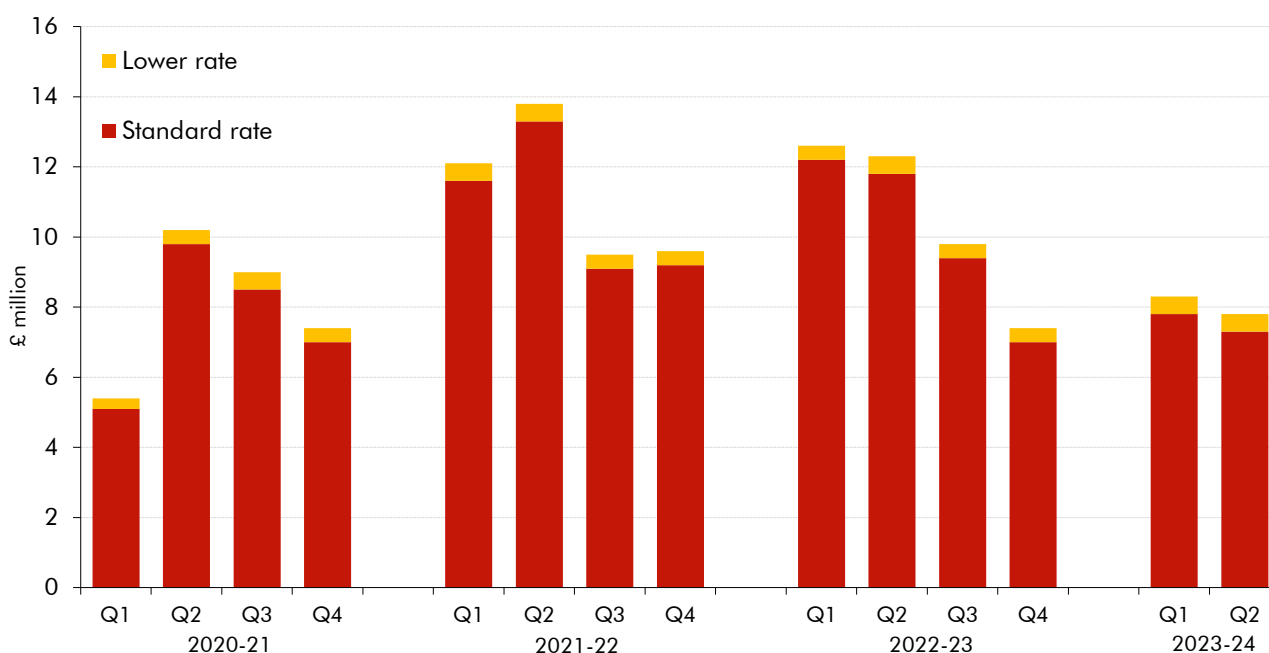
### Landfill disposals tax forecast

4.16 Using the methodology described above and based on LDT outturn data for the first two quarters of 2023-24, this section describes our latest forecast and changes since March.

### Receipts outturn

4.17 Chart 4.3 shows that receipts in the first half of 2023-24 are down by £8.8 million (35.3 per cent) on the same period last year, driven by a reduction in the amount of standard-rate waste sent to landfill. Receipts are £9.8 million (37.8 per cent) lower compared to the first half of 2021-22. The decline in receipts possibly reflects a more general slowing down in waste-generating economic activity. We expect receipts for the remainder of 2023-24 to follow the quarterly pattern shown in Chart 4.1, reaching £31.4 million by the end of the year. This is £0.6 million (1.9 per cent) lower than in 2020-21, £13.6 million (30.3 per cent) lower than 2021-22 and £10.8 million (25.6 per cent) lower than 2022-23.

Chart 4.3: Quarterly LDT receipts



Source: Welsh Revenue Authority

## Latest forecast

4.18 Table 4.1 presents our LDT forecast and the sources of changes since February. We have revised 2023-24 receipts down by £9 million. This reflects the weaker-than-expected outturn data in the first half of the year, the effect of which we expect to persist across the forecast. This is compounded by a change in the assumed amount of standard rate waste that is *not* from Welsh local authorities. We previously assumed that the level of standard rate waste that is not from Welsh local authorities was falling at a rate of 3.3 per cent, which we have now revised up to 5 per cent, reflecting recent outturn. In the latter years of the forecast this is slightly offset by the higher forecast for RPI inflation (and thus higher assumed future LDT rates) and delays to the Welsh Government's previously announced business recycling regulations, which were designed to increase recycling and reduce the amount of waste entering landfill.<sup>4</sup> These are now due to come into effect on 1 April 2024 instead of 1 October 2023, as previously expected.

Table 4.1: LDT forecast

|                     | £ million |           |            |           |           |           |         |
|---------------------|-----------|-----------|------------|-----------|-----------|-----------|---------|
|                     | Outturn   |           | Forecast   |           |           |           |         |
|                     | 2022-23   | 2023-24   | 2024-25    | 2025-26   | 2026-27   | 2027-28   | 2028-29 |
| February forecast   | 44        | 41        | 39         | 37        | 35        | 35        |         |
| December forecast   | 42        | 31        | 29         | 28        | 27        | 26        | 26      |
| <b>Difference</b>   |           | <b>-9</b> | <b>-10</b> | <b>-9</b> | <b>-8</b> | <b>-9</b> |         |
| <i>of which:</i>    |           |           |            |           |           |           |         |
| Outturn data        |           | -9        | -8         | -8        | -7        | -7        |         |
| Determinants        |           | 0         | 0          | 1         | 2         | 2         |         |
| Modelling and other |           | -1        | -2         | -2        | -3        | -4        |         |

## 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 2014-15 and 2016-17 and again more recently. 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 18.4 per cent or £150 million.<sup>5</sup> There is no estimate yet for the LDT tax gap, but if the gap were the

<sup>4</sup> Welsh Government, *Proposals for enforcing business, public and third sector recycling regulations in Wales*, 23 November 2023.

<sup>5</sup> This relates to 2021-22. For more detail see HMRC's *Measuring tax gaps 2023* edition.

same in percentage terms, then this would imply that around £9.5 million of potential receipts in 2022-23 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 in 2022-23 they successfully charged their first two cases to the LDT unauthorised disposals rate of tax.<sup>6</sup> The WRA plans to increase its operational activities over the coming years, which could lead to additional revenue. 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.
- **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>7</sup> Moreover, as Figure 4.1 shows, there are numerous landfill sites relatively close to either side of the Welsh-English border, so there would clearly be scope for such behavioural responses to take place.<sup>8</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. Similarly, the behavioural response to the new business recycling regulations remains uncertain.

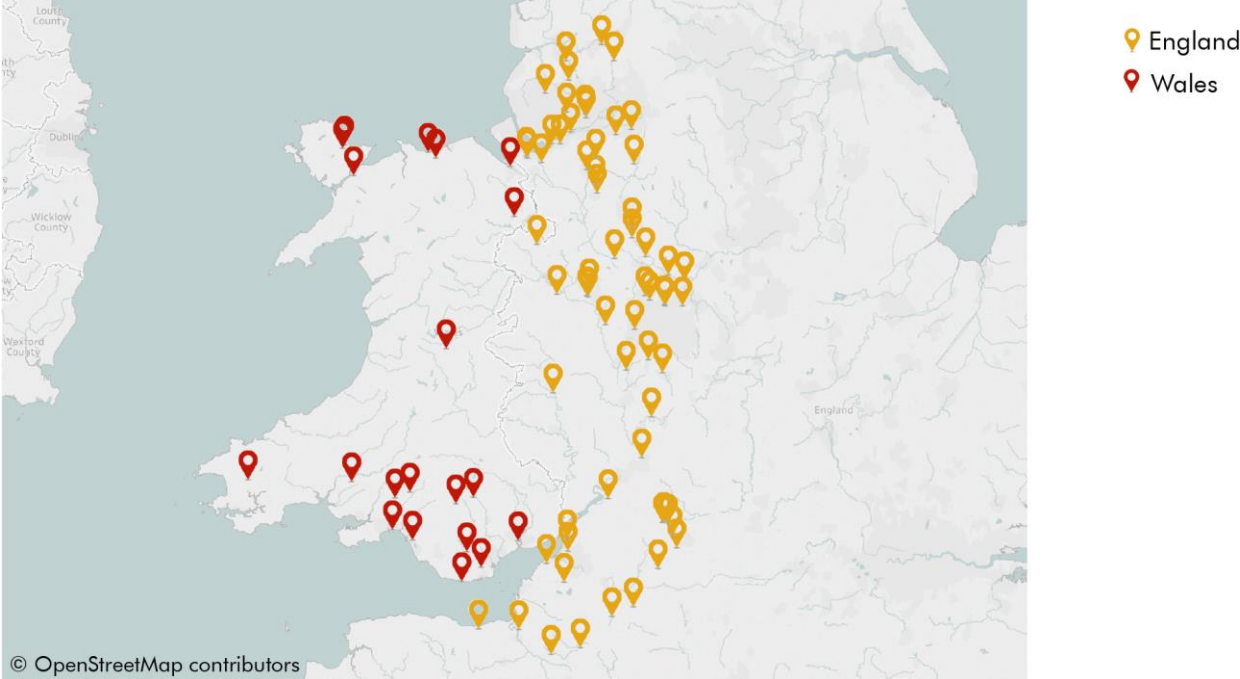
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<sup>6</sup> Welsh Revenue Authority, *Annual Report and Accounts 2022 to 2023*, September 2023.

<sup>7</sup> Data from Natural Resources Wales show that in each year from 2015-16 to 2021-22, waste from England accounted for over 20 per cent of standard-rated waste sent to landfill in Wales.

<sup>8</sup> The 60-mile corridor from the border is purely illustrative.

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



# 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 the forecasts that are required for the block grant adjustment mechanism. These largely relate to the UK Government's revenue from the taxes that are equivalent to those that have been devolved. For the three taxes covered in this report, the corresponding UK Government tax (relating to England and Northern Ireland in each case) is 'non-savings, non-dividends' income tax, stamp duty land tax and landfill tax.
- 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 2023-24. We then project that over the five-year horizon using the respective forecast models and our own judgements. The economic determinants used are from our November 2023 *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). Our income tax forecasts reflect the package of policy measures announced by the UK Government in Autumn Statement 2023.<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.

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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*, August 2023.

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

## Forecasts required for the block grant adjustments

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

|  | £ billion    |                                     |              |              |              |              |              |              |
|--|--------------|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Outturn      | Forecast                            |              |              |              |              |              |              |
|  | 2021-22      | 2022-23                             | 2023-24      | 2024-25      | 2025-26      | 2026-27      | 2027-28      | 2028-29      |
| <b>Whole UK NSND income tax</b>                  | <b>208.1</b> | <b>226.4</b>                        | <b>254.8</b> | <b>270.0</b> | <b>281.9</b> | <b>296.0</b> | <b>311.6</b> | <b>325.7</b> |
| <i>of which:</i>                                 |              |                                     |              |              |              |              |              |              |
| Welsh Government income tax (WRIT basis)         | 2.4          | 2.6                                 | 3.0          | 3.2          | 3.3          | 3.5          | 3.7          | 3.8          |
| UK Government NSND income tax from Wales         | 3.1          | 3.5                                 | 4.0          | 4.3          | 4.5          | 4.8          | 5.1          | 5.3          |
| Scottish income tax                              | 13.7         | 15.0                                | 17.1         | 18.2         | 19.0         | 19.9         | 20.8         | 21.8         |
| England and Northern Ireland NSND income tax     | 188.9        | 205.3                               | 230.8        | 244.4        | 255.1        | 267.9        | 282.0        | 294.8        |
| <b>UK Government NSND income tax<sup>1</sup></b> | <b>192.0</b> | <b>208.8</b>                        | <b>234.8</b> | <b>248.6</b> | <b>259.6</b> | <b>272.7</b> | <b>287.1</b> | <b>300.1</b> |
|  |              | Percentage change on a year earlier |              |              |              |              |              |              |
| <b>Whole UK NSND income tax</b>                  |              | <b>8.8</b>                          | <b>12.5</b>  | <b>6.0</b>   | <b>4.4</b>   | <b>5.0</b>   | <b>5.3</b>   | <b>4.5</b>   |
| <i>of which:</i>                                 |              |                                     |              |              |              |              |              |              |
| Welsh Government income tax (WRIT basis)         |              | 9.7                                 | 13.6         | 6.7          | 4.8          | 5.0          | 5.2          | 4.3          |
| UK Government NSND income tax from Wales         |              | 10.5                                | 15.3         | 7.4          | 5.4          | 5.8          | 6.1          | 4.8          |
| Scottish income tax                              |              | 9.3                                 | 13.8         | 6.5          | 4.4          | 4.7          | 5.0          | 4.5          |
| England and Northern Ireland NSND income tax     |              | 8.7                                 | 12.4         | 5.9          | 4.4          | 5.0          | 5.3          | 4.5          |
| <b>UK Government NSND income tax<sup>1</sup></b> |              | <b>8.7</b>                          | <b>12.4</b>  | <b>5.9</b>   | <b>4.4</b>   | <b>5.0</b>   | <b>5.3</b>   | <b>4.5</b>   |

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

## Forecasts required for the block grand adjustments

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

|  | £ billion   |                                     |             |             |             |             |              |              |
|--|-------------|-------------------------------------|-------------|-------------|-------------|-------------|--------------|--------------|
|  | Outturn     | Forecast                            |             |             |             |             |              |              |
|  | 2021-22     | 2022-23                             | 2023-24     | 2024-25     | 2025-26     | 2026-27     | 2027-28      | 2028-29      |
| <b>England and Northern Ireland NSND income tax (WRIT basis)</b> | <b>68.9</b> | <b>75.9</b>                         | <b>84.7</b> | <b>89.5</b> | <b>93.2</b> | <b>97.4</b> | <b>102.0</b> | <b>106.3</b> |
| <i>of which:</i>   |             |                                     |             |             |             |             |              |              |
| Basic rate   | 45.7        | 51.5                                | 57.0        | 59.9        | 62.1        | 64.4        | 66.8         | 69.2         |
| Higher rate  | 13.5        | 15.1                                | 15.8        | 17.0        | 17.9        | 19.0        | 20.2         | 21.1         |
| Additional rate  | 9.7         | 9.3                                 | 11.9        | 12.5        | 13.2        | 14.0        | 15.0         | 16.0         |
| <b>Welsh rates</b>   | <b>2.4</b>  | <b>2.6</b>                          | <b>3.0</b>  | <b>3.2</b>  | <b>3.3</b>  | <b>3.5</b>  | <b>3.7</b>   | <b>3.8</b>   |
| <i>of which:</i>   |             |                                     |             |             |             |             |              |              |
| Basic rate   | 2.0         | 2.2                                 | 2.5         | 2.6         | 2.8         | 2.9         | 3.0          | 3.1          |
| Higher rate  | 0.3         | 0.3                                 | 0.4         | 0.4         | 0.5         | 0.5         | 0.5          | 0.6          |
| Additional rate  | 0.1         | 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>10.3</b>                         | <b>11.6</b> | <b>5.6</b>  | <b>4.1</b>  | <b>4.6</b>  | <b>4.7</b>   | <b>4.2</b>   |
| <i>of which:</i>   |             |                                     |             |             |             |             |              |              |
| Basic rate   |             | 12.8                                | 10.6        | 5.2         | 3.5         | 3.8         | 3.8          | 3.6          |
| Higher rate  |             | 11.8                                | 5.2         | 7.5         | 5.3         | 6.1         | 6.4          | 4.0          |
| Additional rate  |             | -3.7                                | 27.0        | 5.5         | 5.2         | 6.4         | 6.9          | 7.0          |
| <b>Welsh rates</b>   |             | <b>9.7</b>                          | <b>13.6</b> | <b>6.7</b>  | <b>4.8</b>  | <b>5.0</b>  | <b>5.2</b>   | <b>4.3</b>   |
| <i>of which:</i>   |             |                                     |             |             |             |             |              |              |
| Basic rate   |             | 9.1                                 | 12.6        | 6.1         | 4.3         | 4.3         | 4.4          | 4.0          |
| Higher rate  |             | 15.6                                | 14.0        | 10.2        | 7.2         | 7.9         | 8.6          | 4.9          |
| Additional rate  |             | 1.4                                 | 48.5        | 8.0         | 7.8         | 8.5         | 9.1          | 9.3          |

**Table A.3 Property transaction taxes**

|  | £ million     |                                     |               |               |               |               |               |
|--|---------------|-------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  | Outturn       | Forecast                            |               |               |               |               |               |
|  | 2022-23       | 2023-24                             | 2024-25       | 2025-26       | 2026-27       | 2027-28       | 2028-29       |
| <b>Whole UK property transaction taxes</b> | <b>17,117</b> | <b>12,900</b>                       | <b>12,560</b> | <b>14,300</b> | <b>16,850</b> | <b>19,409</b> | <b>22,059</b> |
| <i>of which:</i>                           |               |                                     |               |               |               |               |               |
| LTT (Wales)                                | 372           | 280                                 | 251           | 279           | 325           | 375           | 437           |
| LBTT (Scotland)                            | 848           | 823                                 | 733           | 808           | 922           | 1,056         | 1,197         |
| SDLT (England and Northern Ireland)        | 15,897        | 11,796                              | 11,576        | 13,213        | 15,603        | 17,978        | 20,424        |
|  |               | Percentage change on a year earlier |               |               |               |               |               |
| <b>Whole UK property transaction taxes</b> |               | <b>-24.6</b>                        | <b>-2.6</b>   | <b>13.9</b>   | <b>17.8</b>   | <b>15.2</b>   | <b>13.6</b>   |
| <i>of which:</i>                           |               |                                     |               |               |               |               |               |
| LTT (Wales)                                |               | -24.6                               | -10.6         | 11.2          | 16.3          | 15.5          | 16.7          |
| LBTT (Scotland)                            |               | -2.9                                | -11.0         | 10.4          | 14.1          | 14.5          | 13.3          |
| SDLT (England and Northern Ireland)        |               | -25.8                               | -1.9          | 14.1          | 18.1          | 15.2          | 13.6          |



## Forecasts required for the block grant adjustments

### Table A.4 Landfill taxes

|   | £ million  |                                     |             |             |             |            |             |
|---|------------|-------------------------------------|-------------|-------------|-------------|------------|-------------|
|   | Outturn    | Forecast                            |             |             |             |            |             |
|   | 2022-23    | 2023-24                             | 2024-25     | 2025-26     | 2026-27     | 2027-28    | 2028-29     |
| <b>Whole UK landfill taxes</b>              | <b>747</b> | <b>652</b>                          | <b>649</b>  | <b>588</b>  | <b>557</b>  | <b>560</b> | <b>553</b>  |
| <i>of which:</i>                            |            |                                     |             |             |             |            |             |
| Landfill disposals tax (Wales)              | 42         | 31                                  | 29          | 28          | 27          | 26         | 26          |
| Scottish landfill tax                       | 110        | 82                                  | 66          | 54          | 15          | 16         | 16          |
| Landfill tax (England and Northern Ireland) | 595        | 539                                 | 553         | 507         | 515         | 518        | 512         |
|   |            | Percentage change on a year earlier |             |             |             |            |             |
| <b>Whole UK landfill taxes</b>              |            | <b>-12.6</b>                        | <b>-0.6</b> | <b>-9.3</b> | <b>-5.3</b> | <b>0.5</b> | <b>-1.2</b> |
| <i>of which:</i>                            |            |                                     |             |             |             |            |             |
| Landfill disposals tax (Wales)              |            | -25.3                               | -6.4        | -5.4        | -4.2        | -1.9       | -1.8        |
| Scottish landfill tax                       |            | -25.3                               | -19.2       | -18.7       | -71.5       | 2.7        | 2.8         |
| Landfill tax (England and Northern Ireland) |            | -9.4                                | 2.6         | -8.4        | 1.7         | 0.6        | -1.3        |

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