

# Welsh rates of income tax

## What are the ‘Welsh rates of income tax’?

- 1.1 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. It is the taxpayer’s responsibility to tell HMRC their correct address. For those with residences in both Wales and elsewhere in the UK, it is the taxpayer’s responsibility to report their primary residence. This approach is different to some other federal systems, for example in the US, where the taxpayer’s location is defined by their place of employment. 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**. This differs from the devolution of income tax in Scotland, where all relevant liabilities of Scottish taxpayers have been devolved to the Scottish Parliament. Each year, the Welsh Government is required to set the tax rates for each of the basic, higher and additional tax rates, which replace the 10p reduction in the reserved UK Government element of each tax band. Since the Welsh rates have been devolved, they have been set such that overall income tax rates paid by Welsh taxpayers remained aligned with those in England and Northern Ireland. The rest of 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 around 90 per cent of UK-wide income tax liabilities, and somewhat more in Wales. It includes earnings from employment, self-employment, pensions and property, but excludes interest on savings and dividends on shareholdings. Income tax from these sources is reserved to the UK Government.
- 1.2 Finally, the Welsh rates are assessed on a **liabilities basis** rather than a National Accounts basis. Liabilities accrue in the year in which the income that generated the liability was earned. This is typically before the cash payments related to those liabilities are made to HMRC. In the National Accounts, some taxes are recorded using a time-shifted cash basis that provides a simple proxy for accruing them to the point at which the liability was generated – this is the case for pay-as-you-earn (PAYE) income tax. But some taxes are simply recorded on a cash basis – this is the case for self-assessment (SA) income tax. So the distinction between the liabilities and National Accounts treatment is important for

self-assessment due to the significant lag between liabilities being incurred and tax being paid. This also means that outturn data on self-assessment liabilities are not available until well after the fiscal year in question has ended.<sup>1</sup> Chart 2.1 illustrates how the 2020-21 income tax liability of three specimen Welsh taxpayers would be split between the UK and Welsh Governments:<sup>2</sup>

- **For a basic rate taxpayer earning £30,000** from only one source of employment income, their £3,500 liability would be split equally between the two administrations. This results in an effective income tax rate paid by this individual of 11.7 per cent (lower than the 20 per cent basic rate thanks to the £12,500 tax-free personal allowance).
- **For a higher rate taxpayer earning £60,000**, with £55,000 coming from employment and £5,000 of dividends from company shareholdings, 41 per cent of their £10,475 liability would relate to the Welsh rates and 59 per cent would be reserved to the UK Government, including all the £975 due on their dividend income. The effective income tax rate paid by this individual is 17.5 per cent.
- **An additional rate taxpayer earning £250,000**, with £200,000 from employment income and £50,000 in dividends, would have a total tax liability of £90,788. Of this, only 22 per cent would relate to the Welsh rates, while 78 per cent would go to the UK Government. At this income level a taxpayer would not receive any personal allowance. The higher share for the UK Government reflects two factors: first, all earnings above £37,500 would be taxed at the higher or additional rates where the UK Government share is much larger; and second, the taxpayer has a liability of £18,288 from their dividend income, all of which is retained by the UK Government. The effective income tax rate paid by this individual is 36.3 per cent.

**1.3** These examples illustrate the relative importance of higher earners for tax receipts. The higher rate taxpayer earns twice as much as the basic rate taxpayer, but has an overall tax liability that is three times greater and a Welsh rates liability that is a little over twice as large. The additional rate taxpayer earns four times as much as the higher rate taxpayer, but has a tax liability that is more than eight times greater and a Welsh rates liability that 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 are.

---

<sup>1</sup> The most recent outturn data for devolved Scottish income tax liabilities relate to 2017-18 and were only published by HMRC in July 2019. We anticipate a similar lag for the publication of outturn liabilities relating to the Welsh rates.

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

Chart 1.1: Illustrative splits between Welsh and UK Government income tax liabilities



1.4 The December 2016 fiscal framework agreement between the Welsh and UK Governments detailed how the Welsh rates would operate.<sup>3</sup> In doing so it placed a requirement on us to forecast income tax liabilities in Wales, and in England and Northern Ireland combined, split by tax band. This was not something that had previously been necessary or possible.<sup>4</sup>

## Methodology

1.5 Our Welsh income tax forecasts are produced on a ‘top-down’ basis. 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.
- Finally, we add our estimates of the effect of **new policies** announced since our previous forecast on Welsh rates liabilities.

1.6 There are two main advantages to this top-down shares approach. First, it provides a transparent way to ensure that our Welsh rates forecast is consistent with our UK-wide forecast, which in turn aligns with how HMRC administers the tax system separately for PAYE and SA. This maximises our ability to monitor and act upon the most timely outturn information about these tax receipts. Second, it provides an efficient way to ensure that our

<sup>3</sup> HM Government and Welsh Government, *The agreement between the Welsh Government and the United Kingdom on the Welsh Government’s fiscal framework*, December 2016.

<sup>4</sup> For more on our approach, see Mathews, P. *Working paper no. 14: Devolved income tax: forecasting by tax bands*, September 2018.

final UK-wide economy and fiscal forecast judgements are automatically reflected in our Welsh rates forecast. This is important given the very tight deadlines to which the final stages of a Budget process operate.

### Pre-measures UK-wide forecast

- 1.7 We use HMRC's latest published UK-wide NSND income tax liabilities outturn as the starting point for our pre-measures forecast. This relates to a tax year some distance in the past (currently 2017-18), given the lags between liabilities being incurred and tax being paid. 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.
- 1.8 We forecast growth in the UK income tax base in line with our wider economy forecast. The key determinants are employment and average earnings growth, which determine the amount of labour income that can be taxed, and CPI inflation, which is used to uprate tax thresholds in the absence of other stated policies. Our short-term forecast for labour income growth is informed by indicators of labour market slack and pay pressures, as well as broader conjunctural evidence about the economy. Over the medium term, productivity growth (on an output-per-worker basis) is the key driver – and the most important and uncertain judgement in our forecast. Our short-term inflation forecast is constructed bottom-up looking at prospects for different prices – for example, how oil price movements will affect petrol prices or how exchange rate movements will affect import prices. We typically assume that the Bank of England's Monetary Policy Committee will return inflation to target over its two-to-three-year policy horizon. As we largely assume that the Welsh income tax base will grow at the same rate as that of the UK as a whole (at least in per person terms), our major economy forecast judgements enter our Welsh rates forecast at this stage.
- 1.9 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, while SA income includes profits from self-employment and income from dividends, land and property, and savings. As virtually all tax on savings and dividends income is collected via SA, the proportion of NSND income tax collected via PAYE is even higher than for total income tax at over 90 per cent.
- 1.10 Our PAYE forecast is produced using HMRC's personal tax model (PTM) – a micro-simulation model based on HMRC's Survey of Personal Incomes (SPI). This is an annual survey based on a sample of around 745,000 individuals in contact with HMRC during a year through the PAYE, SA or repayment claim systems. The PTM calculates the average marginal tax rate on additional income by taking account of reliefs, allowances and our assumptions about inflation and any differences in earnings growth at different points in the distribution. The latter are informed by HMRC's real-time information (RTI) about the PAYE population. The PTM applies the calculated tax rates to our forecast for income growth.

- 1.11 Our SA income tax forecast starts by splitting up historical tax return data into the key income streams and projecting these forward using relevant determinants drawn from our economy forecast. We turn these income forecasts into projections for SA liabilities by applying appropriate average effective tax rates, again estimated using the PTM.

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

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

- 1.12 Armed with our forecast for UK NSND income tax liabilities, we then need to calculate the share that will be subject to the Welsh rates and apply this to the UK forecast. This is done in two steps. First, we calculate the overall Welsh share of income tax as captured by the most recent SPI. This pre-dates the Welsh rates coming into effect and so refers to all income tax paid by Welsh taxpayers. The SPI has to date been our primary data source for Welsh income tax analysis, though it is published with a long lag.
- 1.13 Both the Welsh share of UK income tax liabilities and its share of the UK population have been declining – with the Welsh share of income tax declining more rapidly. It is worth noting that the Welsh share of income tax is far lower than its share of the population. On this basis, income tax liabilities per person in Wales are significantly lower than in the UK as a whole. We can readily incorporate differences in expected population growth in our forecasts as the ONS publish these, but understanding why tax per person in Wales is lower than in the UK, and how it has evolved over the past, can help inform other assumptions we make about the future Welsh tax share. Our first WTO included detailed analysis on this disparity, and it is a theme we will continue to explore going forward.

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

- 1.14 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.

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

- 1.15 From these starting points, we adjust our forecast for the overall Welsh share in three ways:
- **RTI earnings:** we fill in the period between the year captured in the latest SPI data and the previous fiscal year using RTI data on 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 most recent Scottish income tax forecasts suggested that it provides a reasonable guide to movements in NSND income shares.
  - **Population:** we then factor in relative population growth rates based on the most recent ONS principal population projections. These show the Welsh share of the UK population continuing to decline, and we would expect a similar decline for the Welsh

## Welsh rates of income tax

share of income tax payers.<sup>5</sup> We adjust for this using an index of the Welsh share of the UK's adult population.

- We include adjustments for **gift aid and those previously announced policies** that have been or will be implemented between the SPI base year and the end of our forecasts and that are expected to affect the Welsh share. In recent forecasts these have included rises in the personal allowance, which we expected to reduce the Welsh share of income tax given lower average earnings in Wales.

1.16 Finally, we calculate the share of all Welsh income tax subject to the Welsh rates. For the forecast years this is done via the PTM rather than the SPI, but otherwise follows the same methodology as has been used to estimate the share subject to Welsh rates in outturn.

## New policy costings

1.17 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 has meant that we now need to assess the effect of new policies on the individual bands of income tax rather than simply their overall cost or yield.

1.18 Many of the general sources of uncertainty around policy costings that we routinely highlight in our forecast publications are likely to be amplified as we disaggregate costings by geography and tax band. For that reason, we believe a relatively simple approach that makes sufficient allowance for asymmetric effects across countries and bands, while not seeking spurious precision, is appropriate. In part this reflects the relatively small sums involved – relative to our UK-wide forecast – and the fact that these estimates often need to be generated during the most time-pressured phase of a UK Budget forecast process.

1.19 For UK or Welsh Government changes to rates or thresholds – for example changing the basic rate or personal allowance – ‘static’ estimates by geography and tax band are relatively straightforward to produce using the PTM, with reasonably well understood behavioural effects factored in separately. For other UK Government ‘off-model’ measures, including those targeted at sub-sets of the population, we have approved several rule-of-thumb profiles developed by HMRC from its various sources of taxpayer information. These relate to different collection methods, income streams or taxpayer characteristics.<sup>6</sup> Most of these profiles have been created using information from the PTM and SPI. For anti-avoidance measures targeting higher-earning individuals, the profiles are based on taxpayers’ postcodes recorded in HMRC’s disclosure of tax avoidance schemes register.

1.20 If we were to judge that a measure did not readily fit one of these pre-approved profiles, or if additional bespoke analysis were available, we would use an alternative profile. We update and add to the generic profiles periodically as new information becomes available.

---

<sup>5</sup> See Box A.2 in Annex A of our 2017 *Fiscal sustainability report* for a discussion of the fiscal risks that might be associated with demographic trends in the constituent nations of the UK.

<sup>6</sup> These were reported in Mathews, P. *Working paper No. 14: Devolved income tax: forecasting by tax bands*, September 2018.