Scottish Fiscal Commission

How we forecast devolved taxes

May 2021

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Foreword

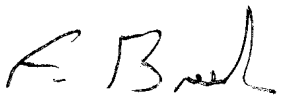
As Scotland's independent forecaster, the Commission is committed to openness and transparency in all of our work. We regularly produce reports to inform users of our forecasts about the approaches used to develop them.

This report sets out our approaches to forecasting the fully devolved taxes: Non-Domestic Rates, Land and Buildings Transactions Tax and Scottish Landfill Tax. We also set out the approaches we use in our illustrative forecasts for the Scottish shares of Air Passenger Duty and Aggregates Levy, which we include in our reports in anticipation of the devolution of these taxes in the future.

The report is intended for a general audience, so we have endeavoured to capture the most important aspects of each forecast model, alongside the most important assumptions we have to make during the creation of our forecasts. Readers who are interested in additional details of our models can get in touch with us directly by e-mailing info@fiscalcommission.scot.

By being transparent in our forecasting, we aim to help people interested in our forecasts understand how they are constructed and we welcome any feedback to help us improve them.

Dame Susan Rice DBE



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26 May 2021

Contents

Chapter 1
Introduction

Scope

1.1 This report sets out how the Scottish Fiscal Commission forecasts each of the fully devolved taxes: Non-Domestic Rates (NDR), Land and Buildings Transactions Tax (LBTT) and Scottish Landfill Tax (SLfT). It also explains how we produce our illustrative forecasts of Air Passenger Duty (APD) and Aggregates Levy.[1]

1.2 The Commission is committed to openness and transparency in our work. We produce these reports to inform users of our forecasts about the approaches used to develop them. By being transparent in our forecasting, we hope to engage with users and receive feedback to help improve our forecasts.

1.3 We previously described how we forecast devolved taxes in our Current Approach to Forecasting document published in September 2017.[2] This paper provides an updated description of our forecast approaches for each of the taxes covered in the September 2017 document and we also set out for the first time how we intend to forecast Aggregates Levy.

Our role

1.4 We are Scotland's independent official forecaster. Our forecasts are used to inform the Scottish Government's devolved taxes revenues for the next financial year. Our forecasts are of revenues raised by the taxes and do not cover any associated administrative costs.

1.5 We also produce estimates of any change in revenue resulting from Scottish Government policy changes. Our objective is to ensure the Scottish Parliament has an independent estimate of the effect of a policy change. We cost only policies announced at the Scottish Budget or Medium Term Financial Strategy, or when legislative changes are introduced in the Scottish Parliament.

Our models

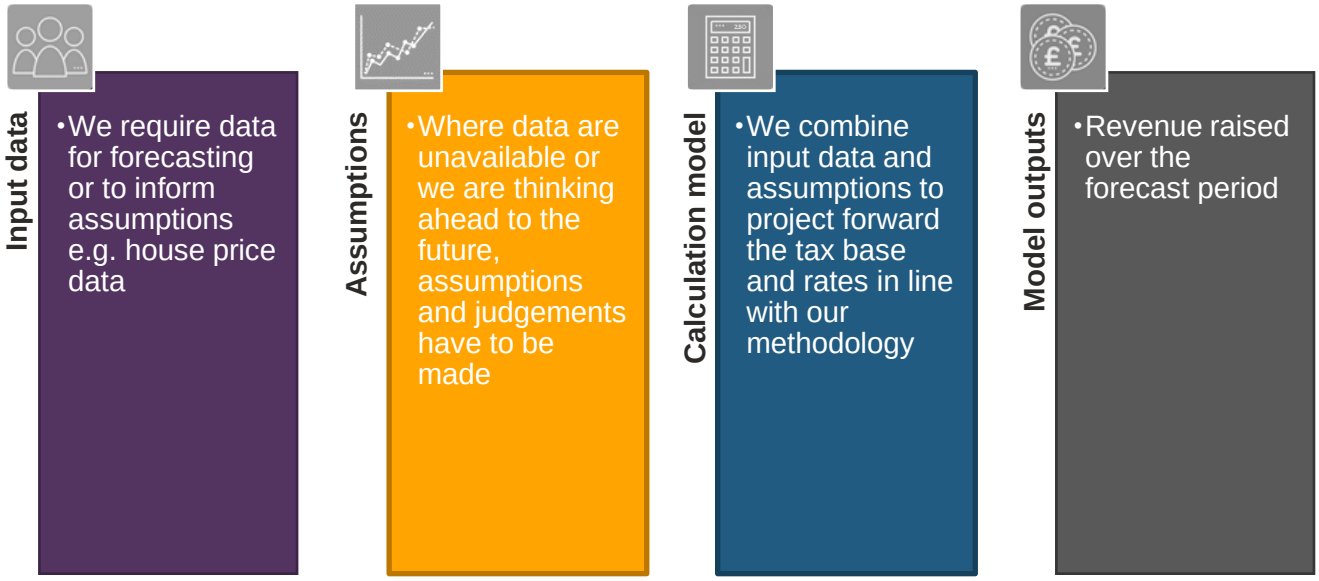
1.6 We use models to produce our forecasts of devolved tax revenues. These models include the key components of the tax, such as the number of people or businesses liable for the tax and the tax rate, that help us forecast the amount of revenue that will be raised. The approach used for each tax depends on the specific features of that tax but there are some features common to all our models.

[1] Our forecasts for APD and Aggregates Levy are illustrative because those taxes are not yet devolved. We produce these forecasts to illustrate our methodology and give the Scottish Government guidance on the approximate scale of the revenues from each tax once devolution takes place.

[2] Scottish Fiscal Commission (2017) Current Approach to Forecasting (link)

1.7 Figure 1.1 shows the basic structure of all our forecast models: input data, assumptions, calculations and model outputs. Forecasting is an evolving process and we will update our choice of input data, assumptions and methodology if we see the need and opportunity to make improvements.

Figure 1.1: Basic structure of our forecast models



Source: Scottish Fiscal Commission

Data

1.8 Data are an essential input into our forecasting models. We use a wide variety of data sources in modelling devolved taxes. These help us understand key trends in different aspects of a tax or in related areas such as inflation or house prices. The main data sources for the taxes covered in this report are:

- Scottish Government
- Revenue Scotland
- Registers of Scotland
- Scottish Environmental Protection Agency

1.9 For further information on our data needs for devolved taxes please refer to our Statement of Data Needs.[3]

1.10 Our inputs also include forecasts of variables which we know, or assume, will drive our tax forecasts. For example, the tax rate for NDR is typically uprated by CPI inflation so our data inputs for the NDR model include our economy forecasting team's inflation forecast.

Assumptions

1.11 Data tell us about current trends but to forecast what will happen in the future, we need to make assumptions and judgements about how the different aspects of our forecasts will behave in future. For example, an important factor in our LBTT forecast is the future level of house prices. Based on

[3] Scottish Fiscal Commission (2020) Statement of Data Needs (link)

our analysis of the data, we know there is a relationship between household incomes and house prices and we make a judgement that this relationship will continue into the future.

1.12 Our assumptions also consider behavioural effects. Again using LBTT as an example, we account for the behavioural effects resulting from an increase in the tax rate. This can be because of fiscal drag, where growth in prices moves properties into a higher tax band, or policy change. To estimate these effects, we use analysis by the OBR on the UK property market, which quantifies the effect on prices and transactions when there is an increase in the tax rate.

Calculation model

1.13 Our calculation models combine the input data and assumptions to project forward the various constituents of the tax. For example, the NDR model forecasts the tax base, the various reliefs, losses from appeals and other adjustments. The final step brings these together to calculate the forecast of total revenue.

Model outputs

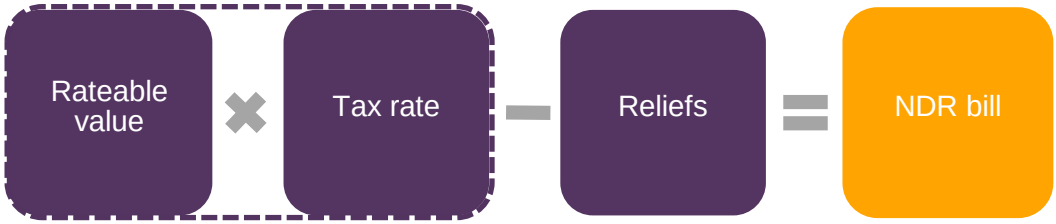
1.14 The main output from our models is forecast revenue, as required by the Scottish Government to inform its budget. We recognise that users, including the Scottish Government, may be interested in other aspects of our forecasts. For example, for LBTT we publish our forecasts of house price and transaction growth and for NDR we publish forecasts of the amounts of relief received.

Chapter 2
Non-Domestic Rates

Overview

2.1 Non-Domestic Rates (NDR) is a tax paid by the occupier of non-domestic properties. The NDR payable on a property depends on its rateable value (RV), the tax rate and any reliefs applied to the property, as illustrated in Figure 2.1.

Figure 2.1: Calculating the amount of NDR to be paid



Source: Scottish Fiscal Commission

2.2 The RV of a property is determined by independent Scottish Assessors. While the method used to calculate RV depends on the type of property being valued, it can be thought of as being broadly based on annual rental values.[4] Properties are revalued on a regular basis with all properties assessed with reference to a single point in time, known as the 'tone date'. The last revaluation took place in 2017 with the next one scheduled for 1 April 2023. Thereafter, revaluations will take place every three years.[5]

2.3 The gross bill faced by a ratepayer is the RV of the property multiplied by the applicable tax rate. All properties pay a basic tax rate (known as poundage or basic property rate), currently 49.0 pence. Properties with RV above certain thresholds are subject to one of two additional tax rates. Those with an RV between £51,000 and £95,000 are liable for the intermediate property rate of 1.3 pence, and those with an RV over £95,000 have the higher property rate of 2.6 pence applied.

2.4 The gross bill may be reduced if the ratepayer is eligible (and applies) for relief. There are a number of different reliefs available to ratepayers and these can be either mandatory, in which case the local authority must grant them to eligible ratepayers, or discretionary, where local authorities can choose whether or not to award the relief to eligible ratepayers.[6] An example of a mandatory relief is the Small Business Bonus Scheme which grants 100 per cent relief for properties with an RV below £15,000.[7] In this case the ratepayer's net bill is reduced to zero because of the relief.

2.5 Ratepayers have the right to appeal the RV of their property under certain circumstances. The main types of appeal in Scotland are revaluation appeals, which must be lodged within 6 months of

[4] Further details on valuation of properties can be found on the website of the Scottish Assessors' Association (link)
[5] The Valuation (Postponement of Revaluation) (Coronavirus) (Scotland) Order 2020 (link)
[6] Scottish Government (2021) Local government finance circular 6/2021: non-domestic rates relief for 2021 to 2022 (link)
[7] SBSS provides varying levels of relief for eligible properties with RVs below £35,000. The RV cap is cumulative such that multiple properties linked to one business may be eligible for relief if their combined RV is below the relevant threshold.

revaluation, and running roll appeals which can be lodged at any time during the revaluation cycle.[8] Typically, there are a large number of revaluation appeals submitted following revaluation and these will be resolved during the course of the revaluation cycle. A successful appeal will result in the RV of the property being lowered, reducing the ratepayer's liability going forward. The reduction will be backdated to the start of the revaluation cycle, resulting in a refund of any overpayments made before the appeal was resolved.

2.6 For example, a property is given an RV of £15,000 at revaluation on 1 April 2017 and the ratepayer submits an appeal within six months. This is resolved on 1 April 2020 and the RV is reduced to £12,000. The ratepayer's gross bill going forward will be £12,000 multiplied by the tax rate applicable in year. The reduced RV is backdated to the start of the revaluation cycle so the ratepayer will also be due a refund for the overpayments they made in 2017-18, 2018-19 and 2019-20. Assuming they were not receiving any reliefs, this will be equal to £3,000 (the difference between the original and revised RV) multiplied by the tax rate applicable in each year.

2.7 NDR is collected by local authorities but the Scottish Government has control over the administration of the tax. This includes such decisions as the tax rate, the system of mandatory and discretionary reliefs, and the date at which revaluation takes place. The NDR revenue collected is pooled at the national level and redistributed back to local authorities by the Scottish Government. The amount that flows from local authorities to the Scottish Government is known as the 'contributable amount' and this is the figure that the Commission forecasts. More details about how the Scottish Government redistributes NDR revenues can be found in Chapter 5 of our publication Funding for the Scottish Budget.[9]

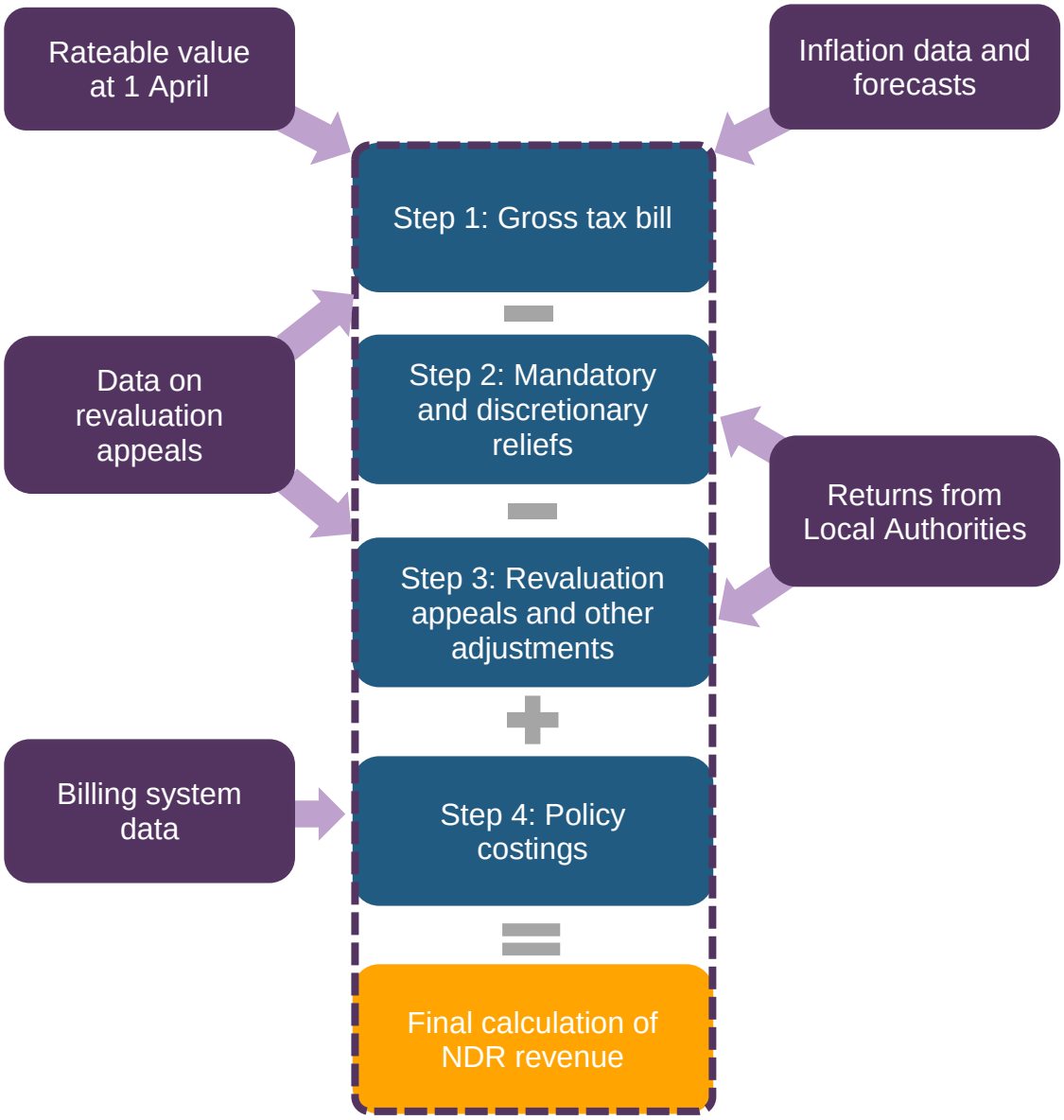
Modelling approach

Overview

2.8 Our modelling approach incorporates the main features of the tax as described above. It is broadly similar to that set out in our 2017 Current Approach to Forecasting paper.[10] The most important development has been to incorporate the cyclical effect of revaluation into the model which allows us to more accurately forecast revenue in years beyond the end of the current revaluation cycle. Figure 2.2 illustrates the steps in the modelling process and the different data sources that are used at each stage.

[8] Running roll appeals are lodged on the grounds of error, new interest, or a material change in circumstances (MCC). Appeals on the grounds of error must be lodged whilst the roll is in force. Appeals for MCC must be lodged no later than six months after the roll ceases to be in force. In the case of a new interest, the ratepayer must appeal within six months of acquiring a new interest in a property.
[9] Scottish Fiscal Commission (2021) Funding for the Scottish Budget (link)
[10] Scottish Fiscal Commission (2017) Current Approach to Forecasting (link)

Figure 2.2: NDR model overview



Source: Scottish Fiscal Commission

Step 1 – The gross tax bill

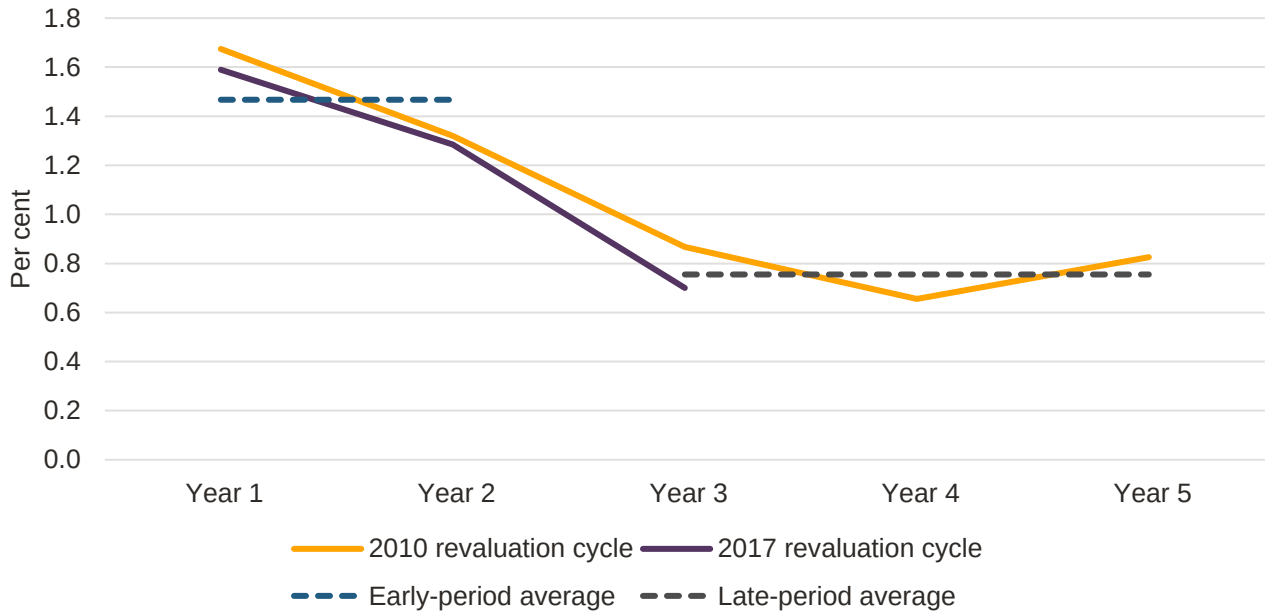
2.9 In the first step, the model calculates the gross tax bill, which is equivalent to the total RV of properties in Scotland multiplied by the relevant tax rates. The total RV at the start of the current financial year is taken from the Scottish Assessors Association data. To project this forward we consider two aspects: the amount of RV expected to be lost to revaluation appeals and the expected growth in RV from new additions (less subtractions) to the valuation roll.

2.10 The amount of RV expected to be lost over the course of the current revaluation cycle as a result of successful revaluation appeals is based on historic data. The data allows us to see what proportion of RV has typically been lost to appeals in a previous revaluation cycles, as well as timing of the losses. From this we build a profile of expected losses in each year of the revaluation cycle which we can adjust to reflect the latest data and any specific information such as the risk of large potential losses from particular appeals.

2.11 Our forecast of growth in rateable value or 'buoyancy' captures a number of factors, such as the construction and demolition of properties and the resolution of running roll appeals, for which specific data are not available.

2.12 Our approach is based on historic data, taking the long-run average buoyancy figure and applying an adjustment depending on which stage of the revaluation cycle we are at. This reflects the observation that buoyancy is typically higher in the earlier years of a revaluation cycle and lower in later years, as illustrated in Figure 2.3.[11] We use snapshots of the valuation roll to monitor additions and deletions from the roll and may adjust our forecast of buoyancy if we have reason to believe that net additions will be higher or lower going forwards.

Figure 2.3: Buoyancy in each year of a revaluation cycle



Source: Scottish Fiscal Commission

2.13 We also need to forecast the three tax rates that are applied to the tax base. The Basic Property Rate (poundage) is applied to the entire tax base. This is typically uprated each year by inflation using the September CPI published by ONS and, in the absence of specific policy announcements, we use forecasts of future inflation from our economy forecasting team to grow the poundage in subsequent years.

2.14 The Intermediate Property Rate and the Higher Property Rate are additional rates of tax (over and above the poundage) paid only by properties with an RV above a certain threshold. Currently, it is assumed the proportion of RV liable to pay these supplements remains constant and, in the absence of specific policy announcements, the rate is assumed to remain fixed.

Step 2 – Mandatory, discretionary and backdated reliefs

2.15 The gross NDR bill due on a property will be reduced by any relief that is claimed. The second step of the model uses data on current relief costs as the basis for future forecasts. These are projected forward using the growth in gross income calculated in the previous step as we assume that the amount of relief received will grow in line with the tax base.

2.16 In some circumstances, ratepayers can backdate their relief claims. This will further reduce the amount of NDR income received by local authorities. To forecast backdated reliefs we use the latest information from local authorities' returns to Scottish Government and project these forward using a

[11] This may be because running roll appeals are typically resolved after revaluation appeals are settled, meaning successful running roll appeals will influence the buoyancy data later in a revaluation cycle.

rolling average of the most recent years' figures. Backdated payments are very variable and we do not expect that they will be related to growth in the tax base.

Step 3 – Revaluation appeals and other adjustments

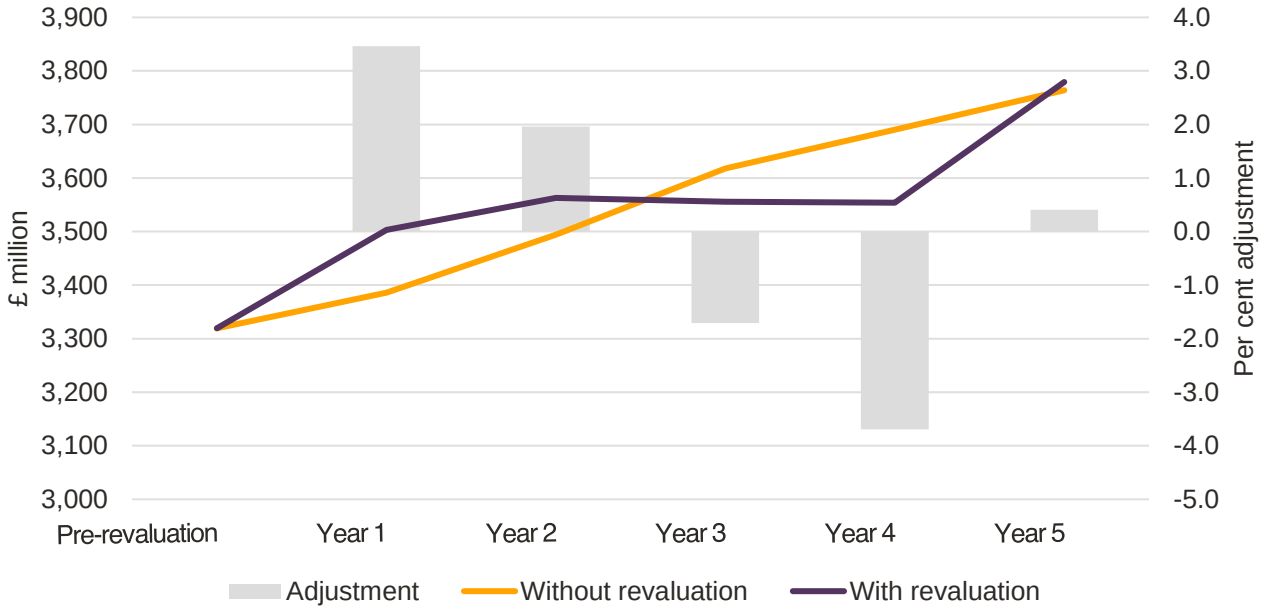
2.17 There are a number of other factors which need to be accounted for before an estimate of revenue can be derived. The largest factor is the backdating of revaluation appeals. When an appeal is successful the RV of the property is reduced and this is reflected in our forecast of gross income. Since these appeals are resolved after the start of the revaluation cycle, ratepayers will have been overpaying in earlier years. To calculate the amounts to be refunded we use our forecast of the amount of RV lost in year, made as part of the gross income forecast, and multiply it by the tax rates in force in each of the previous years in the current revaluation cycle.

2.18 Other adjustments we make to the forecast include reductions for write-offs, where it has been identified that rates cannot be recovered from a particular property, as well as schemes that allow local authorities to retain a part of their NDR income, which currently includes the Business Rates Incentivisation Scheme and Tax Incremental Financing projects. Our forecasts of the adjustments use the latest data from local authorities' returns to the Scottish Government and project them forward using a rolling three-year average.

2.19 As our forecasts are for five years, they generally cover more than one revaluation cycle. Revaluations aim to redistribute the tax base and have historically been broadly revenue-neutral, with any increase in aggregate RVs counterbalanced by a reduction in the tax rate. It is not possible to know in advance what the valuation of the tax base will be, so we cannot predict the tax rate that may be set nor the amount of revenue that may be lost to appeals. As we expect revaluations to be revenue neutral across the cycle, we can simply assume that both the tax rates and RV will continue to grow in the same way as in the current cycle and apply an adjustment to take account of the cyclical way in which revenues change over the course of a cycle.

2.20 Figure 2.4 illustrates how this adjustment works, using an example based on a five-year revaluation cycle. The orange line shows how revenues would grow in the absence of revaluation. There are no revaluation appeals so revenue simply grows in line with our forecasts for long-run buoyancy and inflation. The purple line shows what happens when revaluation occurs. Initially revenues are higher than without revaluation as the tax base and tax rate are reset. As we move further into the cycle, more revaluation appeals have been resolved and losses are starting to come through, lowering revenues in years three and four. By year five almost all appeals have been resolved and NDR revenue is back to the roughly same level as it would have been in the absence of revaluation. The grey bars shows the adjustment that is made to the 'without revaluation' revenue to arrive at the revenue following revaluation (measured on the right-hand axis).

Figure 2.4: Effect of revaluation on NDR revenue



Source: Scottish Fiscal Commission

Step 4 - Policy costings

2.21 NDR has been subject to numerous policy changes in recent years. Often such policy changes affect the system of reliefs, either changing the eligibility for an existing relief or introducing a new relief. In these cases we produce a separate forecast to estimate the effect of the change. This may involve using a data source known as the Billing System Snapshot, which contains information on all properties in Scotland claiming relief at the annual snapshot date and can be linked to the valuation roll.[12] This allows us to, for example, estimate the number of properties that will be affected by a change to an existing relief, which can then be used to adjust the main relief forecast.[13]

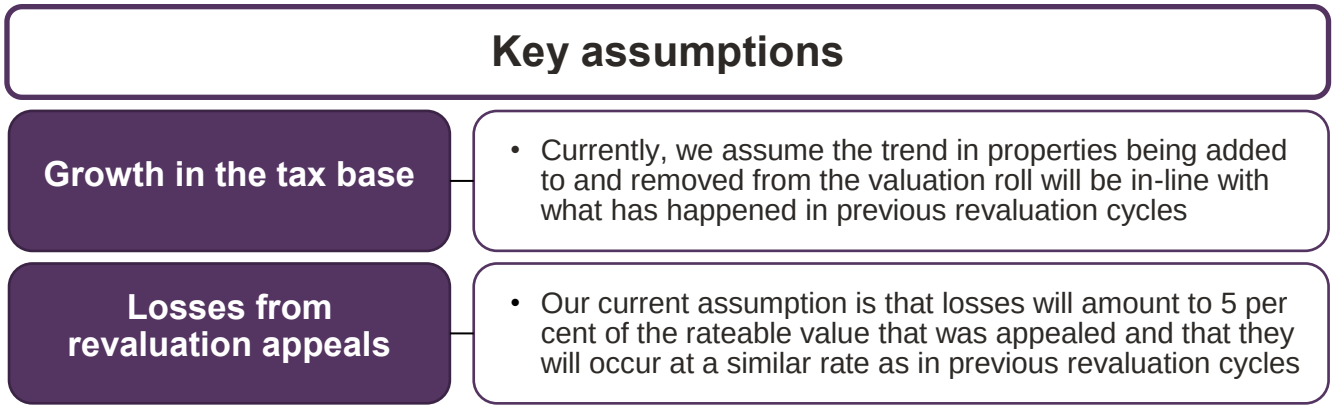
2.22 Other policies changes made in recent years have included changes to the tax rate. For example, in 2020-21, the intermediate property rate was introduced, lowering the additional tax paid by properties with an RV between £51,000 and £95,000. Policy changes may reduce or increase NDR revenue. When presenting policy costs, a policy that decreases revenue will have a negative sign while one that increases it will have a positive sign. Therefore the final step in the modelling process is to add on any policy costings.

Assumptions

2.23 Many aspects of the NDR forecast are based on historic data. Nevertheless, this still requires judgement to be taken about how things might change in the future. The key areas which require Commissioner judgements to be taken are shown in Figure 2.5.

[12] Scottish Government (2020) Billing System Snapshot (link)
[13] For an example policy costing see Scottish Fiscal Commission (2021) Supplementary Costings – Non-Domestic Rates Measures and Self-Isolation Support Grant – March 2021 (link)

Figure 2.5: Current assumptions in the NDR model



Source: Scottish Fiscal Commission

2.24 Our forecast of buoyancy (growth in the tax base) is currently based on trends in the existing data. We monitor the valuation roll carefully for any signs that the trend is deviating from the historic cyclical path and also consider any changes in the economic environment that might affect buoyancy going forward. For example, if the shift to homeworking continues longer-term this may reduce the demand for city centre offices. A key judgement for the Commission is to consider what effect this might have on the tax base.

2.25 Revaluation appeals are another area where judgement is required to consider whether there may be deviation from past trends. The Non-Domestic Rates (Scotland) Act 2020 legislates for three-year revaluation cycles, rather than the current five-year cycles.[14] The Commission will consider how any changes to the appeals system may affect the forecast once these changes are specified, particularly if revaluation appeals are to be resolved within the three-year period of the revaluation cycle.

[14] Non-Domestic Rates (Scotland) Act 2020 (link)

Chapter 3
Residential Land and Buildings Transaction Tax

Overview

3.1 Residential Land and Buildings Transaction Tax (LBTT) is paid on purchases of houses in Scotland. For additional properties, taxpayers pay an additional rate known as the Additional Dwelling Supplement (ADS). Figure 3.1 sets out the rates and bands for residential LBTT in 2021-22. These rates and bands were introduced in 2015-16 and have stayed constant since, except for a temporary policy introduced in response to the COVID-19 pandemic.[15]

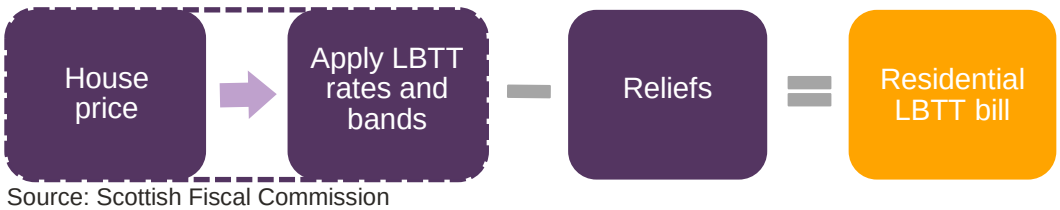
Figure 3.1: Rates and bands for residential LBTT and ADS

Tax band	Tax rate (per cent)
Residential LBTT	
£0 to £145,000	0
£145,000 to £250,000	2
£250,000 to £325,000	5
£325,000 to £750,000	10
£750,000 and above	12
Additional Dwelling Supplement	
£0 to £40,000	0
£40,000 and above	4

Source: Scottish Fiscal Commission, Revenue Scotland (2021) Residential property (link)

3.2 Residential LBTT is a progressive tax, with tax rates increasing with the price of the property. The tax rate for each band is only applied to the part of the house price that falls into that band. The amount of tax paid depends on the price of the property, any reliefs the buyer is eligible for, and whether the buyer already owns another house. Figure 3.2 illustrates how residential LBTT is calculated.

Figure 3.2: Calculating the amount of residential LBTT to be paid



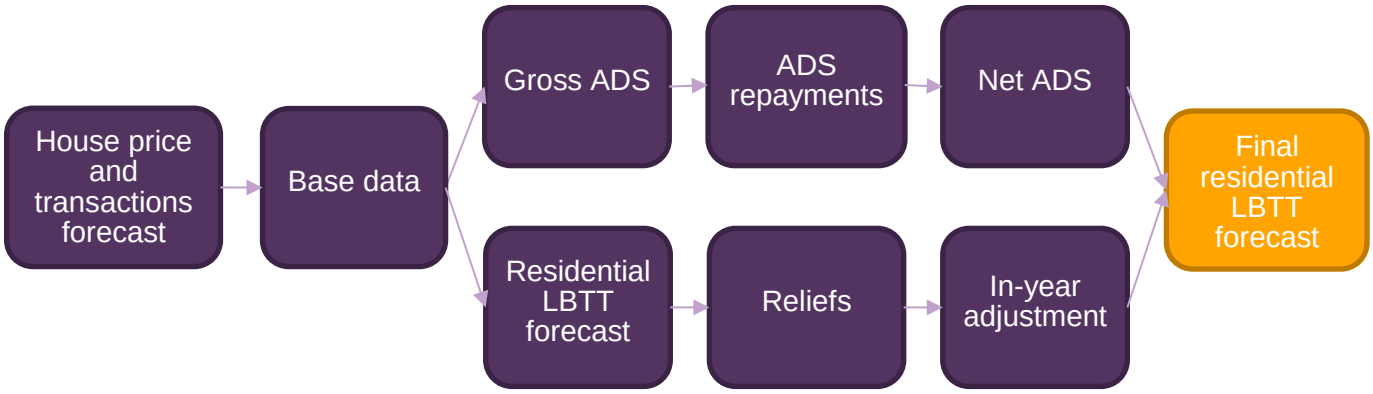
Source: Scottish Fiscal Commission

[15] From 15 July 2020 to 31 March 2021 the nil rate band was raised to £250,000. For more detail on this policy, see our Supplementary Costing – Increased starting threshold for residential LBTT – July 2020 (link).

Modelling approach

3.3 We construct our residential LBTT forecast using Revenue Scotland data on the distribution of residential transactions. We apply our forecast of growth in house prices and the number of transactions to the distribution, and from that estimate residential LBTT revenues in future years. Our forecast model is summarised in Figure 3.3, while the rest of the chapter sets it out in more detail.

Figure 3.3: Overview of residential LBTT forecasting approach



Source: Scottish Fiscal Commission

House prices and transactions forecast

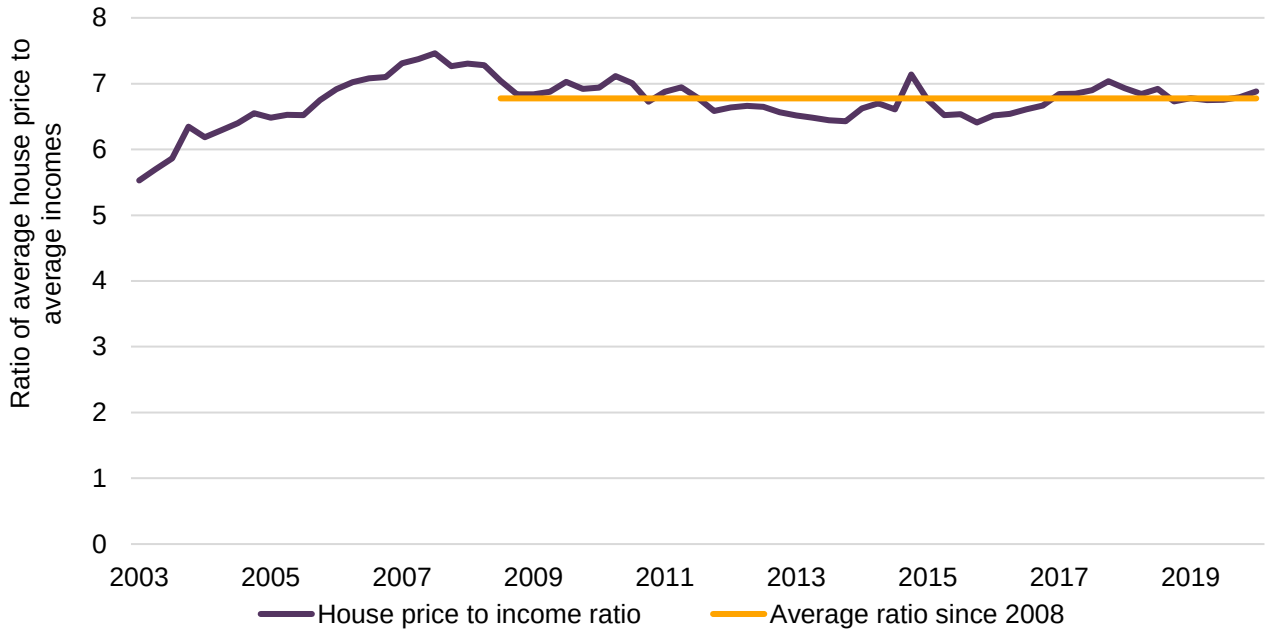
3.4 To produce a forecast of LBTT revenues, we begin by forecasting growth in average house prices and the number of transactions that will take place over the forecast horizon.

House price forecast

3.5 Our house price model joins together short-term changes in recent house price data with changes to the economy over the longer term. We begin with a short-run statistical model, based on recent trends in the Registers of Scotland house price data. We then align this forecast to growth in average incomes over the longer term. This allows us to clearly explain changes in our house price forecasts and to ensure our house price forecast aligned with our views about future developments in the Scottish economy.

3.6 Figure 3.4 shows that since 2008 the ratio between house prices and incomes has been very stable. We use a forecast of average incomes from our economy model and a house price to income ratio of 6.8 as the long-run anchor for our forecasts, as shown in Figure 3.4. A key judgement in our forecasts is the extent to which we expect the stability of the relationship between house prices and incomes to persist.

Figure 3.4: Ratio between average house prices and average disposable household incomes

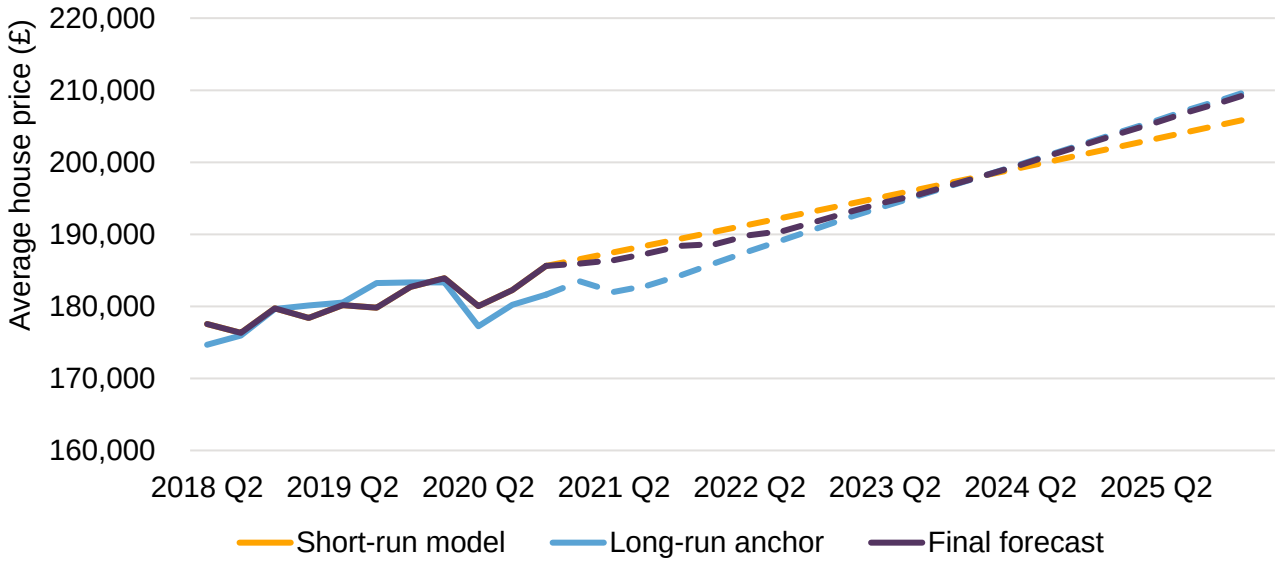


Source: Scottish Fiscal Commission, Registers of Scotland (2021) House Price Statistics (link), Scottish Government (2020) Gross Domestic Product (GDP) Quarterly National Accounts: 2020 Quarter 2 (link).

3.7 For the first year of the forecast horizon, we use a statistical model based on Registers of Scotland house price data to capture shorter term variations in house prices, as shown by the orange line in Figure 3.5. Because the model is sensitive to fluctuations in recent data, it captures deviations from the medium-term trend.

3.8 We assume that house prices will revert to their long-run trend within the forecast period, and apply a path back to the average ratio of prices being 6.8 times average disposable incomes in years two and three of the forecast. From the fourth year of the forecast onwards, we assume that house prices will stay at the average ratio. Figure 3.5 sets out how we constructed the January 2021 house price forecast.

Figure 3.5: Components of the January 2021 house price forecast



Source: Scottish Fiscal Commission, Registers of Scotland (2021) House Price Statistics (link), Scottish Government (2020) Gross Domestic Product (GDP) Quarterly National Accounts: 2020 Quarter 2 (link).
The solid part of the line for the long-run anchor series is obtained by multiplying incomes by the average ratio, and does not reflect house price data, while the solid part of the final forecast line is constructed from Registers of Scotland house price data.

Transactions forecast

3.9 We begin by estimating the number of houses and households in Scotland on a quarterly basis, using Scottish Government data on the number of houses in Scotland, and National Records of Scotland (NRS) data on the number of households. We then compare data on the number of houses to Registers of Scotland's quarterly transactions data, to produce a quarterly estimate of the turnover rate in Scotland – the percentage of houses in Scotland which were bought and sold in each quarter. Using a turnover rate means that our transactions forecast is always anchored to the total number of houses in Scotland.

3.10 We assume that the number of houses in Scotland will grow at the same rate as the number of households projected by NRS. We use a model of the historic trend and seasonal pattern of the turnover rate to create a forecast. We apply that forecast to the projected dwelling stock to get the quarterly transactions forecast.

Residential LBTT (excluding ADS) revenues model

3.11 Once we have our forecasts of house prices and transactions, we need to estimate the resulting LBTT revenue. We also need to account for taxpayer behavioural change, reliefs and any final adjustments for outturn data.

3.12 We use Revenue Scotland data on LBTT transactions by price bin, for example the total value and number of transactions worth between £100,000 and £120,000.

3.13 We project the distribution from the latest outturn data forwards, by growing prices and transactions in each bin in line with our forecasts of transactions and average price growth. Whether the past distribution of transactions is the best estimate of the future pattern of housing transactions is a crucial judgement for Commissioners to make. We use our forecast distribution to calculate how much LBTT will be paid in each year, before we account for the effects of behavioural responses to fiscal drag and policy changes.

Behaviour changes

3.14 We account for two types of behavioural change in our forecast:

- **Home buyer reactions to fiscal drag.** Fiscal drag occurs when the tax paid on a transaction increases over time as a result of growth in prices while the LBTT thresholds stay fixed. This may cause home buyers to offer a lower price for the house than they otherwise would to offset the increased LBTT.

- **Home buyer reactions to policy changes.** Whenever the Scottish Government change the tax paid on a transaction, there will be a behavioural response, with buyers offering a lower or higher price than they otherwise would, which offsets some of the change in LBTT. In some cases, buyers may also choose not to buy the home that they otherwise might have done. Buyers may also choose to alter the timing of their transactions around the time a new policy either starts or is due to end, known as forestalling.

3.15 We estimate the behavioural responses to both fiscal drag and a policy change using a single numerical estimate called an elasticity. An elasticity is the percentage change in either house prices or transactions volumes because of a one percentage point change in the effective tax rate (the tax paid as a percentage of the price of the house). We use the same estimates as the OBR, as there is

no evidence that behaviour changes are significantly different in Scotland than in the rest of the UK. Figure 3.6 sets out the elasticities used in our forecasts.

Figure 3.6: Elasticities used in residential LBTT forecasts

	Property value	Transaction elasticity	Price elasticity
Year one	£0 to £250,000	-7.00	-1.50
	£250,001 to £1,000,000	-5.00	-1.00
	Above £1,000,000	-6.00	-1.00
Year two	£0 to £250,000	-6.50	-2.25
	£250,001 to £1,000,000	-4.75	-1.75
	Above £1,000,000	-6.00	-1.75
Steady state	£0 to £250,000	-6.00	-2.00
	£250,001 to £1,000,000	-4.50	-1.50
	Above £1,000,000	-6.00	-1.50

Source: Scottish Fiscal Commission, Office for Budget Responsibility (2019) Property transaction taxes (link).

3.16 We apply different elasticities in the first three years after a policy is introduced, to capture how the effects of the policy change over time. Because of how long it takes to complete a housing transaction, we expect the largest behavioural response in the second year of a policy, when buyers have had time to adjust their plans in response to the policy change.

3.17 The elasticities applied to transactions worth between £250,000 and £1,000,000 are generally lower than for other transactions. We expect buyers of properties worth less than £250,000 to respond more to policy changes, as the change in LBTT is larger relative to the total price of the property, while we expect buyers of properties worth more than £1,000,000 to be more willing to stop a transaction from going ahead in response to a tax rise, or to enter the market in response to a tax cut.

Reliefs

3.18 There are a number of reliefs which reduce the amount of residential LBTT a buyer needs to pay. The largest of these is First Time Buyer's relief, which raises the point at which the buyer starts to pay LBTT to £175,000 for people buying their first home, while other reliefs mainly apply to specific property types which don't pay LBTT.[16]

3.19 First Time Buyer's relief reduces LBTT revenues by 2.3 per cent on average, while other reliefs reduce revenues by 4.3 per cent. These have been consistent since 2015-16, and we assume that LBTT reliefs will continue at these levels across the forecast horizon.

Outturn adjustment

3.20 We adjust our forecasts of future years to match the in-year outturn data, to make sure our forecasts are consistent with recent trends in the housing market. This adjustment gives our final forecast for residential LBTT revenues.

[16] A full list of LBTT reliefs can be found on Revenue Scotland's website at Revenue Scotland (2021) LBTT3010 – Tax Reliefs (link).

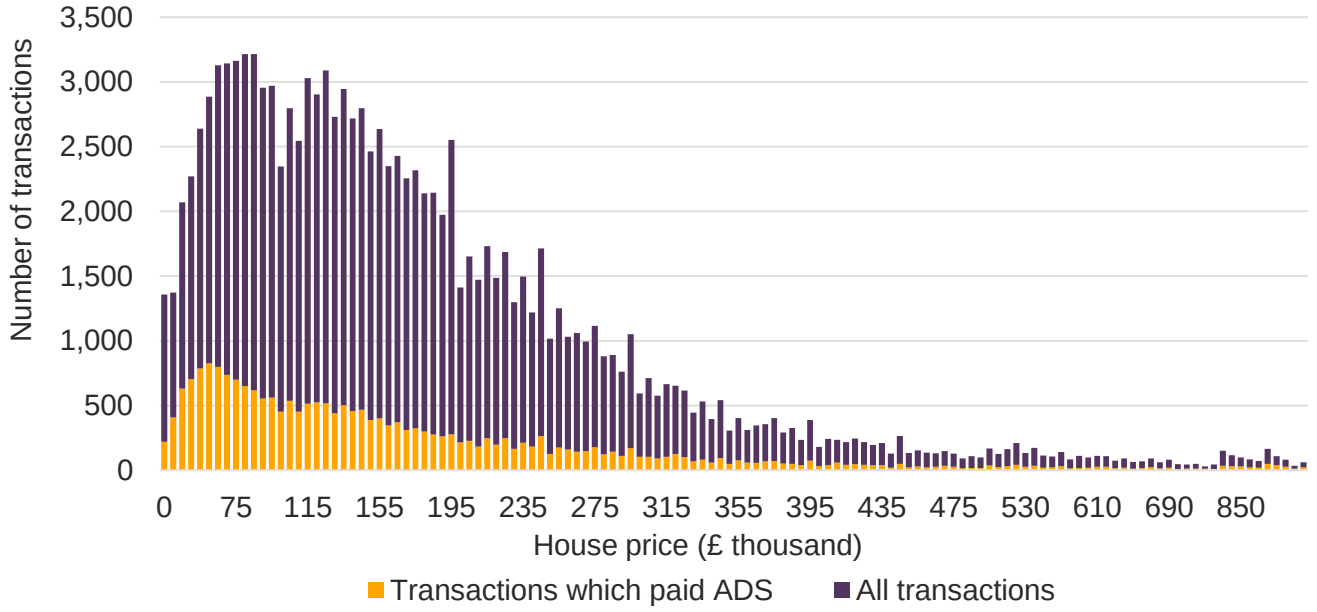
Additional Dwelling Supplement

Gross ADS

3.21 Anyone buying a residential property is liable to pay ADS if, after the transaction, they own two or more dwellings and are not selling their current main residence in order to transfer their residence to their new home. Buyers selling their first property within 18 months of buying their second property may be able to claim a repayment of ADS. To forecast revenues from ADS we first estimate the gross amount of ADS payments made, then subtract an estimate of the number of ADS repayments.

3.22 We use data from Revenue Scotland, to calculate the share of residential transactions in each price band that will be liable for ADS. Figure 3.7 compares the distribution of all residential transactions with the distribution liable for ADS in 2019-20.

Figure 3.7: Distribution of residential transactions submitted to Revenue Scotland, 2019-20



Source: Scottish Fiscal Commission, Revenue Scotland.
Price bins get wider as the house price increases to preserve buyers' anonymity in the Revenue Scotland data, which changes the scale displayed on the horizontal axis at some parts of the distribution.

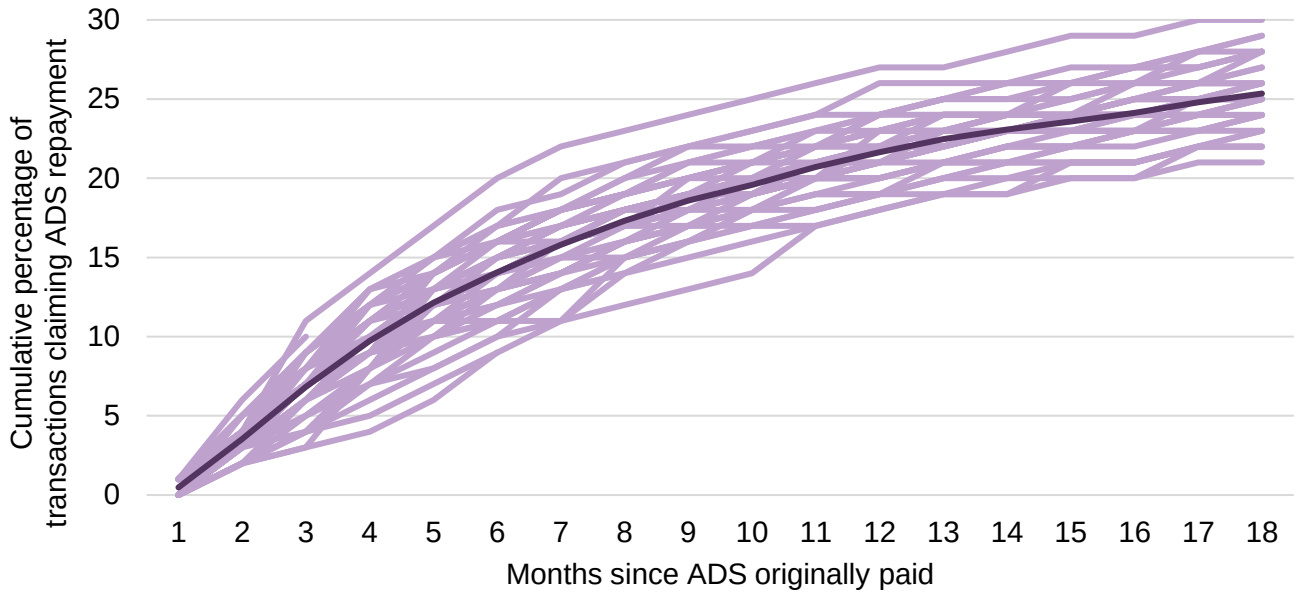
3.23 We assume that the share of transactions in each price bin eligible for ADS will remain constant over the forecast horizon. We apply our price and transactions forecasts to the ADS distribution in the same fashion as in our residential LBTT forecast.

ADS Repayments

3.24 If the buyer of a second home sells their first home within 18 months, they can claim a repayment on their ADS paid. Repayment is claimed on approximately 26 per cent of ADS revenues.

3.25 Figure 3.8 shows the estimated repayments curve, using Revenue Scotland data on when repayments occur within the 18 month window. Although there is quite a lot of variation in the individual monthly series, the average pattern of when repayments occur has remained consistent over time.

Figure 3.8: Monthly data on ADS repayments claims



Source: Scottish Fiscal Commission, Revenue Scotland.

Outturn adjustment

3.26 Similar to residential LBTT, we apply an adjustment to our net ADS forecast so that it is aligned with the most recent outturn data. This forecast adjusted for the in-year data is our final forecast.

Assumptions

3.27 Our residential LBTT forecasts are based on historic data and we need to make assumptions about how this data reflects future years. Figure 3.9 shows the key assumptions in our residential LBTT model.

Figure 3.9: Current assumptions in the residential LBTT model

Key assumptions	
House prices and incomes	• House prices will return to the average ratio of 6.8 times average incomes
Tax base distribution	• The shape of the distribution of transactions will remain the same across the forecast horizon
LBTT reliefs	• The value of reliefs as a percentage of total revenues will remain the same as in the past two years

Source: Scottish Fiscal Commission

3.28 Our central assumption for house prices is that they will return to the average ratio of 6.8 times average incomes by the end of the forecast horizon. This ratio has been very stable since 2008, and we currently judge that house prices will stay at that medium trend. This is the most important

judgement driving the residential LBTT forecast, as the forecast is more sensitive to house prices than any other determinant.[17]

3.29 We assume that the shape of the distribution of house price transactions will remain the same over the forecast horizon. Although we grow the distribution in line with average prices, we normally assume the shape of the distribution will stay the same as the base data.

3.30 We assume that the share of transactions eligible for ADS will remain consistent over time. In 2019-20, 22 per cent of transactions paid ADS. On average, repayment is claimed on 26 per cent of ADS revenues. We normally assume that these rates will stay constant.

3.31 Similarly, we normally assume that the proportion of revenues eligible for reliefs will be constant throughout the forecast horizon. In 2019-20 6.6 per cent of pre-relief revenues were eligible for reliefs and we assume that this will remain constant throughout the forecast horizon. Of this 6.6 per cent, 2.3 percentage points was because of first time buyer's relief, and 4.3 percentage points was because of other reliefs.

[17] In 2018, we found that a change of 0.6 percentage points to the house price forecast can change the LBTT forecast by £20 million. For more detail, see Scottish Fiscal Commission (2018) Scotland's Economic and Fiscal Forecasts – December 2018 (link).

Chapter 4
Non-residential Land and Buildings Transaction Tax

Overview

4.1 Non-residential Land and Buildings Transaction Tax (LBTT) is paid on purchases and leases of properties other than housing. Properties eligible for non-residential LBTT include:

- Commercial property, such as shops or offices
- Forests or land
- Property which isn't currently suitable to be lived in.

4.2 Depending on the type of transaction, non-residential LBTT is subject to two different sets of rates and bands, shown in Figure 4.1. The two types of transaction are:

- **Conveyances**: Purchase of a non-residential property or land, for which LBTT is paid according to the price of the property when it is purchased.
- **Leases**: Rent of a non-residential property or land. Non-residential LBTT on leases is paid according to the total value of the rent payable through the whole tenancy, adjusted for inflation in future years.[18]

Figure 4.1: Rates and bands for non-residential LBTT

Tax band	Tax rate (per cent)
Conveyances	
£0 to £150,000	0
£150,000 to £250,000	1
£250,000 and above	5
Leases	
£0 to £150,000	0
£150,000 to £2,000,000	1
£2,000,000 and above	2

Source: Revenue Scotland (2021) Non-residential property (link), Revenue Scotland (2021) Lease Transactions (link).

3.32 Non-residential LBTT is a progressive tax, with tax rates increasing with the price of the property. The tax rate for each band is only applied to the part of the property price that falls into that band.

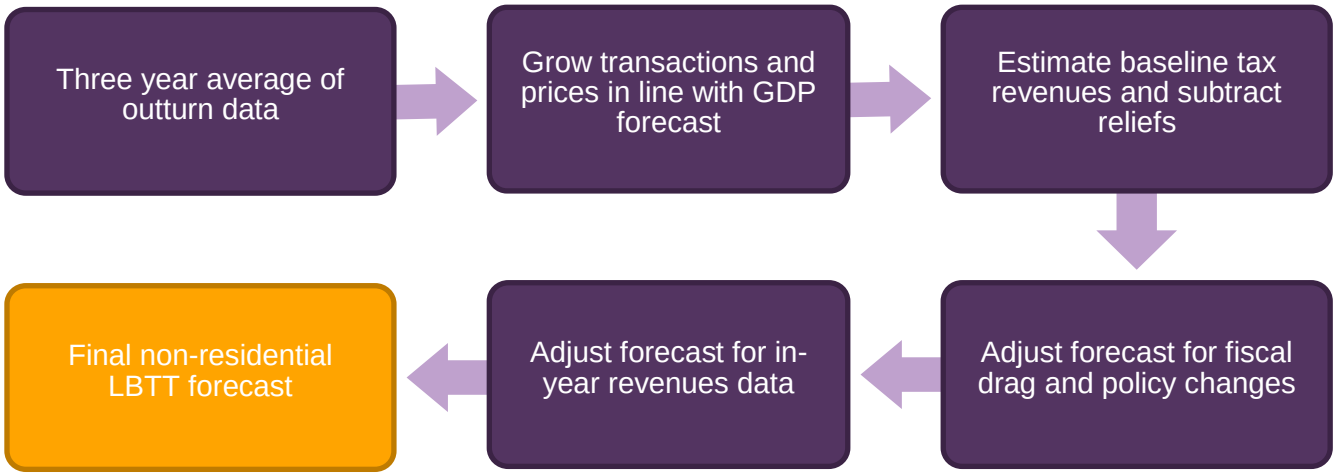
[18] Non-residential leases are reviewed by Revenue Scotland every three years, in case the rent paid has been different than was originally expected when the LBTT bill was first calculated. So far, lease reviews have not significantly affected LBTT revenues, so we do not apply a separate adjustment to the forecast to account for these.

The amount of tax paid depends on the type of transaction, price of the property, any reliefs the buyer is eligible for.

Modelling approach

4.3 Figure 4.2 sets out our modelling approach for non-residential LBTT. Although we estimate revenues from conveyances and leases separately to capture policy changes in each one, we apply the same modelling approach to each of these, and so have not separated them out in the rest of the chapter.

Figure 4.2: Overview of non-residential LBTT forecasting approach



Source: Scottish Fiscal Commission

Price and transactions forecasts

4.4 A wide variety of property types are eligible for non-residential LBTT. This makes it more difficult to predict growth in prices or numbers of transactions than for residential LBTT, because there will be a wide variety of factors influencing each of the property markets captured in non-residential LBTT. On top of this, LBTT revenues are often volatile year-on-year, with a small number of very valuable transactions determining most of non-residential LBTT revenues.

4.5 Instead of specifically forecasting prices and transactions, we link our non-residential LBTT forecast to our forecast of Scottish GDP. We use growth in real GDP to forecast transactions growth, and assume that average commercial property prices will grow in line with inflation. This keeps our non-residential LBTT forecast in line with our wider view of the economy, which is the factor that will govern trends in all of the property markets eligible for non-residential LBTT.

Base data

4.6 We do not base our forecasts on only the most recent year of outturn, as we do for residential LBTT, because non-residential LBTT revenues are volatile year-on-year. Instead we take a three year average of the outturn data to avoid placing too much weight on any one year, which may turn out to be an outlier.

4.7 Figure 4.3 compares the distributions of revenues from non-residential purchases over the past three years to the weighted average of the past three years, on which we base our forecasts. Transactions worth more than £10 million account for an average of 44 per cent of revenues, but on average there are fewer than 100 transactions in this range. Having only four additional transactions

in this range can significantly change non-residential LBTT revenues, so we average across the most recent three years to avoid placing too much weight on any one year.[19]

Figure 4.3: Share of revenues from non-residential purchases by property price

Per cent	2017-18	2018-19	2019-20	Three year average
£0 to £500,000	4	5	4	3
£500,000 to £1 million	7	9	7	7
£1 million to £2 million	10	12	11	11
£2 million to £5 million	20	24	22	22
£5 million to £10 million	13	12	14	13
Above £10 million	46	38	42	43

Source: Scottish Fiscal Commission, Revenue Scotland.

Non-residential LBTT revenues model

4.8 Once we have grown our base data in line with the GDP forecast, we calculate the LBTT revenues arising on non-residential transactions. We also account for behaviour change, reliefs and any final adjustments for outturn data.

4.9 We use a model which captures the distribution of transactions in the commercial property market. We grow the total value and number of transactions in each price bracket in line with the GDP forecast. We apply a reduction to the taxable value to account for reliefs, using the average percentage of the value which was subject to reliefs over the past three years.

4.10 We model conveyances and leases separately to capture differences in the distributions of each component, and to estimate the effects of policy changes. We apply the same behavioural elasticities as used by the OBR for each type of transaction. Our non-residential LBTT price and transaction elasticities are set out in Figure 4.4.

Figure 4.4: Elasticities used in non-residential LBTT forecast

	Transaction elasticity	Price elasticity
Conveyances		
Year one	-5.4	-2.0
Year two	-5.2	-2.0
Steady state	-5.0	-2.0
Leases		
Year one	-1.1	-3.0
Year two	-1.0	-3.0
Steady state	-1.0	-3.0

Source: Scottish Fiscal Commission, Office for Budget Responsibility (2019) Property Transaction Taxes (link).

[19] The average revenue from one transaction worth over £10 million was £0.5 million in 2019-20. This means that a change of four transactions would change revenues by £2 million, or 1 per cent of non-residential LBTT revenues. Averaging over the past three years of data means we avoid placing too much weight on any one year, and should make our forecasts more accurate.

4.11 We account for two types of behaviour change in our forecast:

- **Reactions to fiscal drag:** Fiscal drag occurs when the tax paid on a transaction increases over time as a result of growth in prices, while the LBTT thresholds stay fixed. This may cause buyers to offer a lower price for the property than they otherwise would to offset increased LBTT.

- **Reactions to policy changes:** Whenever Scottish Government policies change the tax paid on a transaction, there will be a behavioural response, with buyers offering a lower or higher price than they otherwise would, which offsets some of the change in LBTT. In some cases, businesses may also choose not to buy or lease a property that they otherwise might have done. Businesses may also choose to alter the timing of their transactions around the time a new policy either starts or is due to end, known as forestalling.

4.12 As with residential LBTT, we use the same non-residential elasticities as the OBR, as there is no evidence that behavioural changes are significantly different in Scotland than in the rest of the UK.

In-year adjustment and final forecast

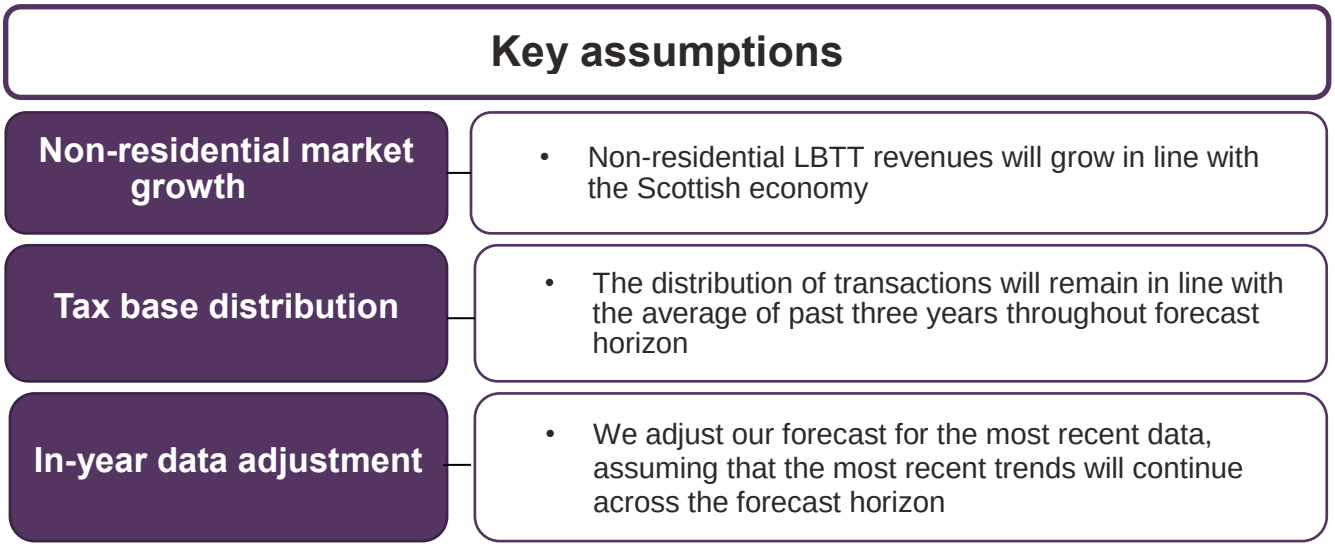
4.13 When producing our forecast, we may have some monthly data available for the current financial year. This data is the clearest guide to current conditions in the non-residential market. Assuming we have sufficient data available, we use the in-year data to produce our forecast of the current financial year, assuming that growth for the full year will be in line with the available monthly data.

4.14 To arrive at our final forecast, we adjust our forecast of future years so that it is in line with the in-year data. This means our final forecast reflects the most recent trends in the non-residential data.

Assumptions

4.15 Although our non-residential LBTT forecasts are based on historic data, we need to make assumptions about how to use the data to predict future years. We also make assumptions about what drives growth in non-residential LBTT. Our key assumptions are set out in Figure 4.5.

Figure 4.5: Current assumptions in the non-residential LBTT model



Source: Scottish Fiscal Commission

4.16 Our central assumption is that the Scottish non-residential LBTT revenues will grow in line with Scottish GDP. This is because we do not have data on how specific property types contribute to

non-residential LBTT revenues, and so growing the forecast in line with GDP is the best way to capture the effects of changes in the wider economy on the non-residential market.

4.17 We assume that the distribution of commercial transactions will remain the same as the distribution in the past three years of outturn data. Because the distribution can change a lot from year-to-year, capturing this wider view means our forecast is based on trends in the commercial property market, and not overly dependent on any one year.

4.18 Finally, we assume that future years will match the trends in the most recent months of non-residential LBTT data. This adjustment keeps our forecast in line with the recent data, and lets us capture any trends in the non-residential property market that won't be captured in our GDP forecast.

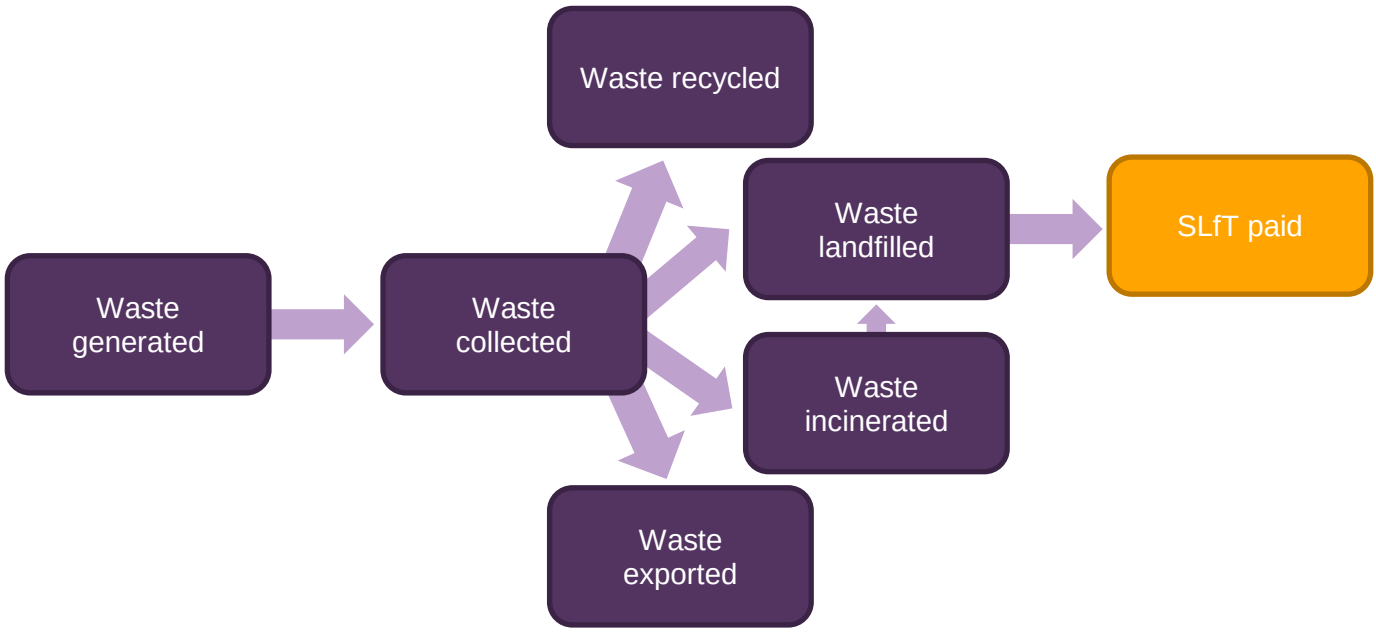
Chapter 5
Scottish Landfill Tax

Overview

5.1 Scottish Landfill Tax (SLfT) is a tax on the disposal of waste to landfill. The power to set a tax on landfill deposits was devolved to the Scottish Government as a result of the Scotland Act (2012). From 1 April 2015 Revenue Scotland became responsible for collecting revenue for the newly created SLfT, which replaced the previous UK-wide tax.

5.2 The amount of tax payable is determined by the weight of waste (and ash from incinerated waste) being disposed of in Scotland, rather than waste sent for incineration, exported or recycled (see Figure 5.1). The current standard rate of SLfT is £96.70 per tonne and the lower rate is £3.10 per tonne for certain inert materials such as naturally occurring soil and rocks. Since devolution the Scottish Government has chosen to match the stated policy of the UK Government of uprating the tax rates annually in line with the Retail Price Index (RPI). The Scottish Government has committed to implementing a ban on the landfilling of biodegradable municipal waste (BMW) from 31 December 2025 onwards.

Figure 5.1: The path from waste generated to SLfT paid



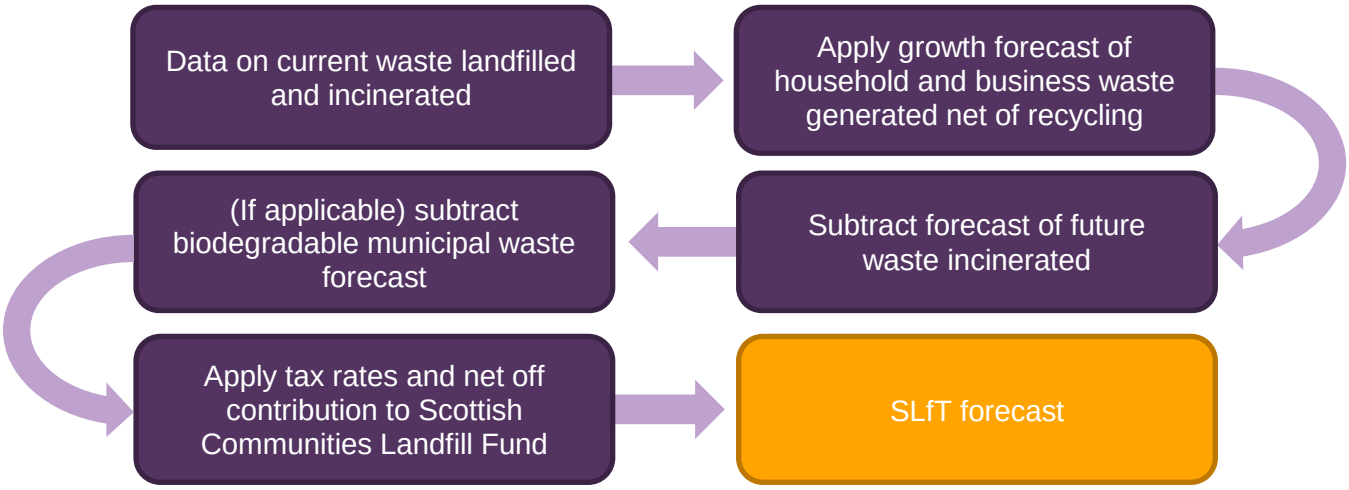
Source: Scottish Fiscal Commission

Modelling approach

5.3 Our modelling approach is broadly the same as set out in our 2017 Current Approaches to Forecasting paper.[20] Central to the calculation is the fact that new incineration capacity is coming on-stream and so more and more waste is being diverted away from landfill than is currently the case. This means that we cannot simply take the most recent Revenue Scotland data on waste landfilled and project it forward.

5.4 We take Revenue Scotland data on standard rate waste sent to landfill and add on data from the Scottish Environmental Protection Agency (SEPA) on waste incinerated to create a starting point for our forecast that can either be incinerated or sent to landfill. We use the household consumption forecast from our economy forecast to project this forward. Our approach for lower rate landfill makes use of outturn data from Revenue Scotland, which is then projected forward based on our forecast for GDP (combined with further judgements by Commissioners).

Figure 5.2: SLfT model overview



Source: Scottish Fiscal Commission

5.5 The second step is to project future increases in the capacity of alternative waste treatment facilities across Scotland. These treatment facilities include incineration and mechanical biological treatment and are an alternative to landfilling waste, and once online can be expected to reduce the level of waste being landfilled. We use information from SEPA to help ensure these projections are up-to-date and reflect the likely timescales for these facilities coming on-stream and old facilities being retired. This is then subtracted from the baseline forecast, accounting for the fact that some of the resulting ash from incineration is sent to landfill.

5.6 The Scottish Government's BMW ban is set to come into force from 31 December 2025 onwards. Our model uses an estimate from SEPA for current BMW tonnage and grows this in line with the Commission's forecast for household consumption expenditure to create the forecast for future waste that falls under the scope of the ban. We use the household consumption forecast as it is also the forecast we use for standard rate waste. We net off the part of our BMW waste forecast that is greater than the amount of waste subject to alternative treatment off the landfill tonnage forecast before applying tax rates.

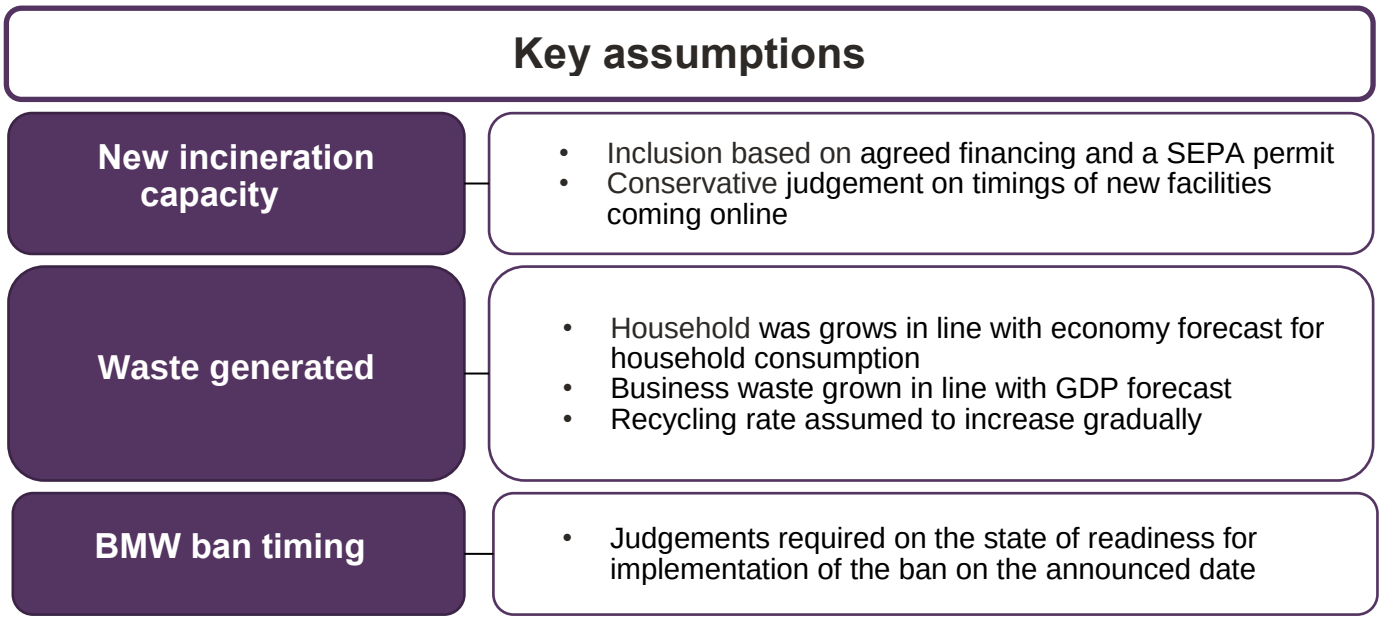
5.7 We then forecast revenue by applying the relevant tax rate to the forecast amount of waste. The rates of tax for landfill have previously been assumed to increase with RPI, in line with the current

[20] Scottish Fiscal Commission (2017) Current Approach to Forecasting (link).

stated government policy. The current maximum 5.6 per cent contribution allowed to the Scottish Communities Landfill Fund is netted off to give a final forecast of revenue.

Assumptions

Figure 5.3 Current assumptions in the SLfT model



Source: Scottish Fiscal Commission

5.8 The most significant assumption facing Commissioners concerns the construction and activation of new incineration facilities. These are very large scale and complex projects and as such can be subject to unanticipated delays. In order for a prospective incineration facility to be included in our forecast, it needs to have agreed financing and have a SEPA permit.

5.9 The second set of assumptions concern the change in the amount of waste generated. For household waste, the current approach is to use the forecast for real household consumption expenditure from our macroeconomic model. The business waste forecast is informed by the Commission's GDP forecast. There is a further judgement on future rates of recycling.

5.10 The final major judgement concerns the implementation of the BMW ban. This has a significant effect on our forecast. Our latest forecast includes implementation of the ban in the final three months of 2025-26. This reduces our SLfT forecast by 19 per cent in that year.

5.11 The Scottish Government has announced that the ban will be implemented on 31 December 2025. A key judgement for the Commission is our assessment of the feasibility of implementing the ban at the stated date, as it depends on the availability of alternatives to landfill.

Chapter 6
Air Departure Tax – illustrative

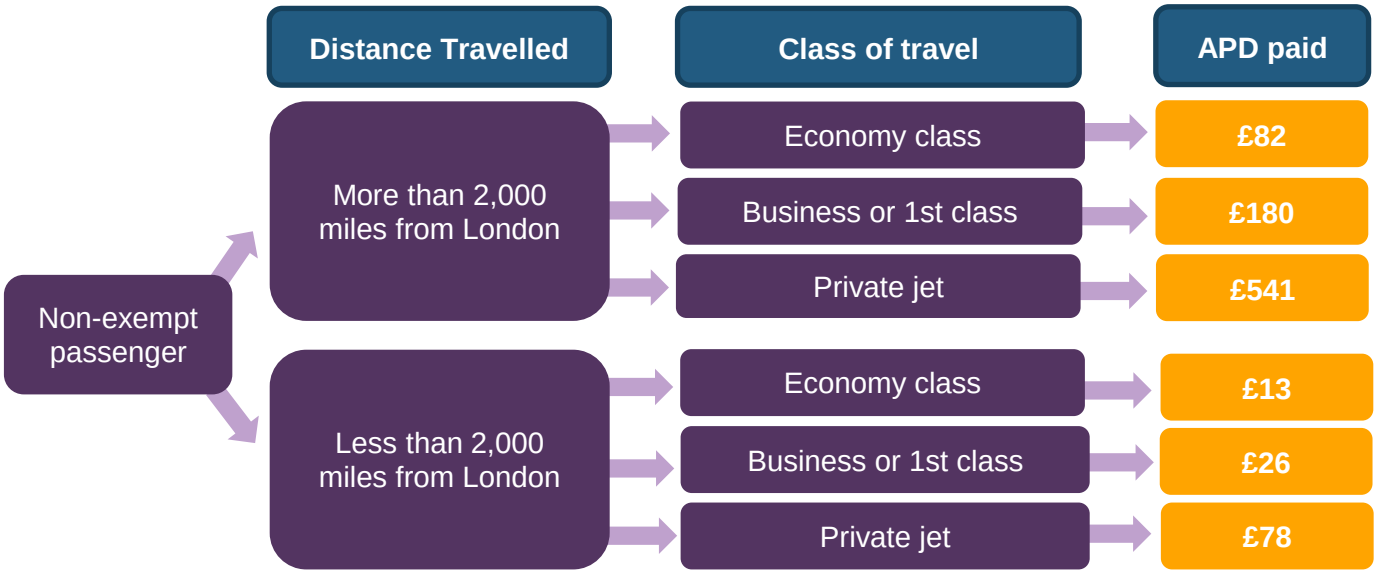
Overview

6.1 Air Departure Tax (ADT) will replace Air Passenger Duty (APD) in Scotland. The Scottish Government has committed to introducing the ADT when a solution to the Highlands and Islands exemption issue has been found. In the meantime, APD continues to apply in Scotland. Our illustrative forecast is for the Scottish share of APD.

6.2 APD is a tax paid on passengers departing from UK airports. The amount of tax paid depends on the passenger's class of travel and their final destination. Under APD, destinations fall into two bands based on flight distance from London. The higher band applies to countries with capital cities further than 2,000 miles from London.

6.3 The rate of APD paid is also determined by the class of travel. The reduced rate applies where passengers are travelling in the lowest class available. The standard rate applies to passengers travelling in any other class of travel and the higher rate applies to private jets.

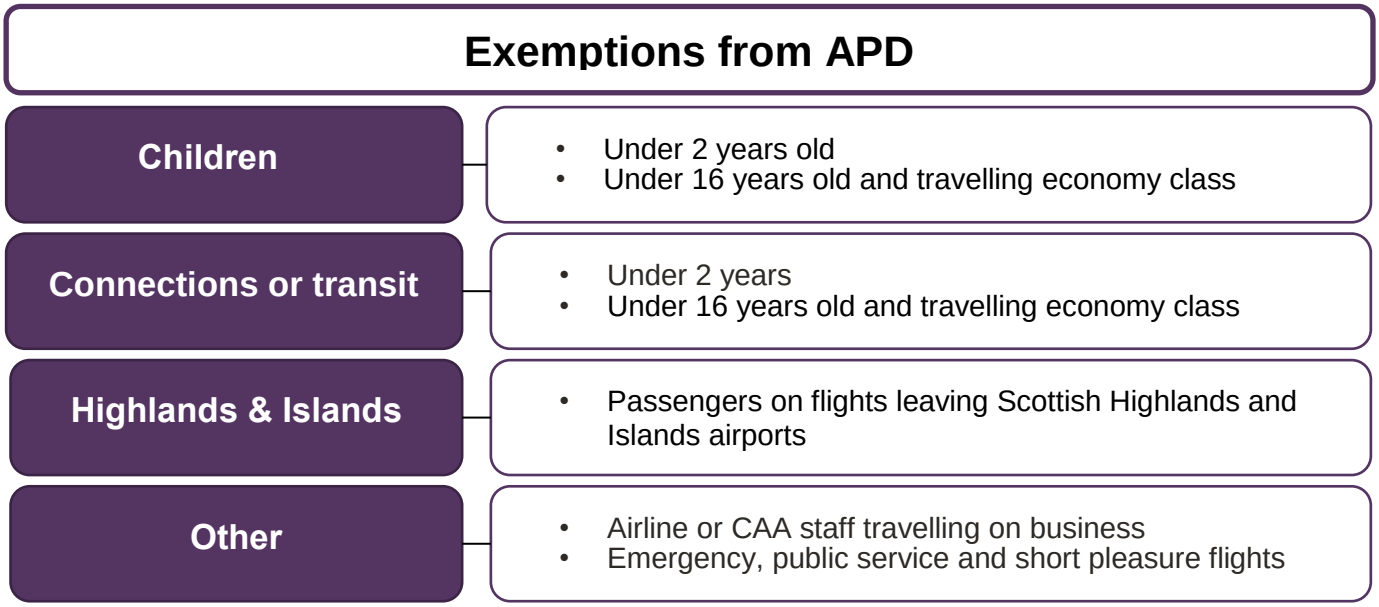
Figure 6.1: Calculation of 2021-22 APD rates



Source: Scottish Fiscal Commission, UK Government guidance on rates for Air Passenger Duty (link).

6.4 There are a number of exemptions from APD. For our forecast, the most important of these are the child exemption and the exemption for passengers who are transferring or on connecting flights. For the introduction of ADT, the most important concerns the preservation of the Highlands and Islands exemption. Figure 6.2 sets out a summary of the various exemptions from APD.

Figure 6.2: Summary of exemptions from APD



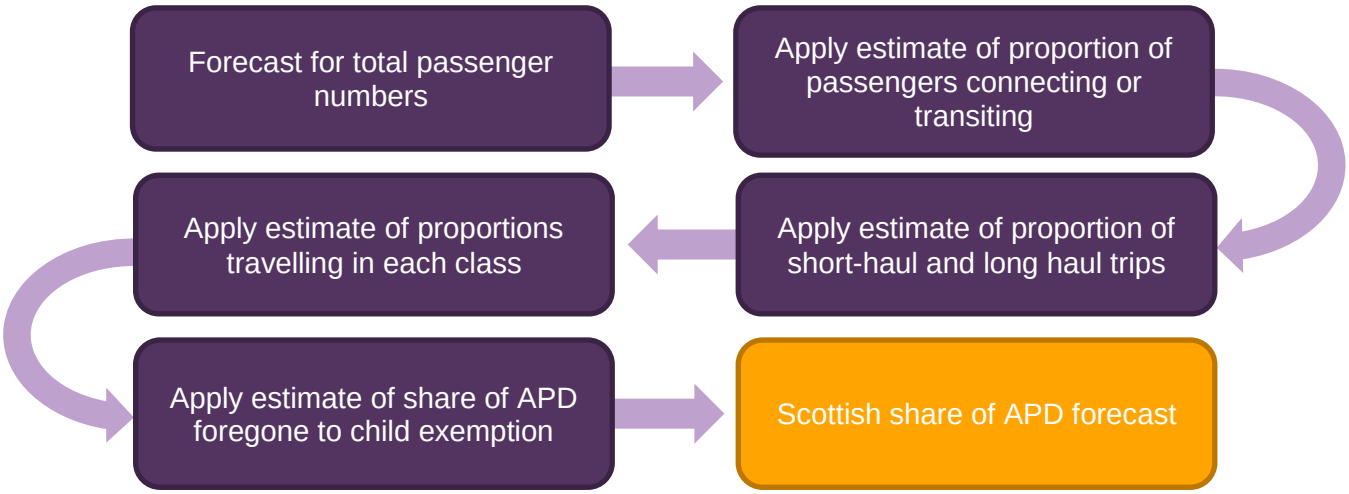
Source: Scottish Fiscal Commission, HMRC (2018) Exemptions from Air Passenger Durty (link).

Modelling approach

6.5 Our modelling approach is broadly the same as we set out in our 2017 Current Approaches to Forecasting paper.[21] The forecast is calculated in two steps. In the first step, we use Civil Aviation Authority (CAA) survey data to calculate the proportion of passengers which have historically travelled in the different classes and bands. The survey also enables us to identify passengers on connecting flights and exclude them from the final calculation, as these are exempt.

6.6 In the second step, we generate a forecast for total passenger numbers using monthly CAA data for the major Scottish airports and the latest OBR forecast for UK GDP. We use our estimates from the survey data to allocate the forecast passenger numbers into classes and bands. We then apply APD rates to calculate an estimate of the Scottish share of APD. The final step is to apply an estimate for revenue foregone to child exemption, using UK-level data from HMRC.

Figure 6.3: Scottish share of APD model overview

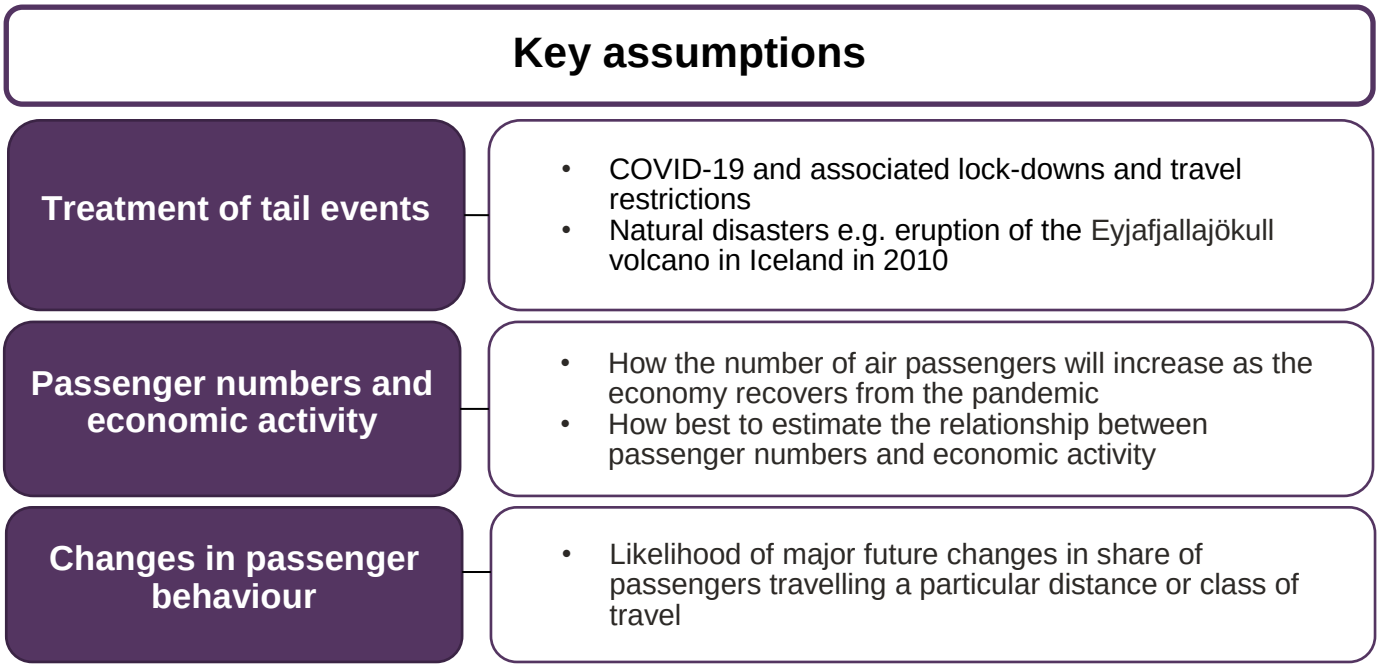


Source: Scottish Fiscal Commission

[21] Scottish Fiscal Commission (2017) Current Approach to Forecasting (link)

Assumptions

Figure 6.4: Current assumptions for Scottish share of APD



Source: Scottish Fiscal Commission

6.7 Our most important assumptions concern the outlook for passenger numbers. The first judgement is on the treatment in our model of extreme events, such as the onset of the COVID-19 pandemic or the disruption caused by the 2010 eruption of the Eyjafjallajökull volcano in Iceland, which reportedly affected around 100,000 flights. These can affect both our assessment of the historical relationship between air travel and economic activity and our judgements about the shape of future increases or decreases in passenger numbers. In our Budget 2021 forecast, we had to judge the extent to which the recovery in air travel might be slower than the recovery in economic activity as captured in the outlook for UK GDP.

6.8 The second set of judgements concerns the estimated relationship between Scottish air passenger numbers and economic activity. We have looked at the extent to which Scottish GDP and UK GDP are more associated with Scottish air passenger numbers and found a greater association with the latter.

6.9 The final major judgement concerns changes in passenger behaviour. Our model uses the CAA survey data to estimate the proportion of long-haul flights compared to short-haul flights and the proportions of passengers choosing different classes of air travel. We need to judge the extent to which the past will be similar to the future. Changing preferences around distance and class of travel will affect the proportions of passengers subject to each of the different rates. For example, an increasing proportion of people choosing First Class travel would increase the amount of APD payable.

Chapter 7
Aggregates Levy – illustrative

Overview

7.1 Aggregates Levy is a tax on crushed rock, sand and gravel extracted from or imported to Scotland. It was introduced for the UK in 2002 to reduce extraction of aggregates, and to encourage recycling of aggregates in construction projects.

7.2 The Scotland Act (2016) gives the Scottish Parliament powers over the Aggregates Levy, but devolution has been delayed due to an ongoing court case.[22] In 2020, the Scottish Government announced that devolution of the Aggregates Levy would be for the next Scottish Parliament.[23] Now the sixth Scottish Parliament is in session, we will produce illustrative forecasts of Aggregates Levy revenue, to provide information in preparation for devolution of the Aggregates Levy.

7.3 Aggregates Levy is paid by the quarry operator when rock, sand or gravel is either:

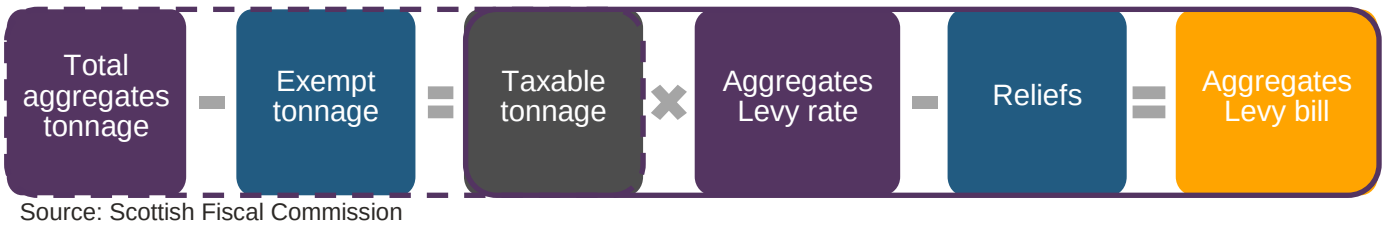
- removed from the site where it was extracted.
- supplied to another person.
- used for construction.
- mixed with any material other than water.

7.4 There are a number of reliefs and exemptions applied to aggregates. Exemptions apply to materials such as slate, clay or soil, and to aggregates which arise as a by-product of construction processes. Reliefs can be claimed on aggregates which are either:

- exported from the UK.
- used in specific exempted processes.
- disposed of as waste.

7.5 Figure 7.1 shows an example Aggregates Levy bill calculation.

Figure 7.1: Calculating the amount of Aggregates Levy to be paid



Source: Scottish Fiscal Commission

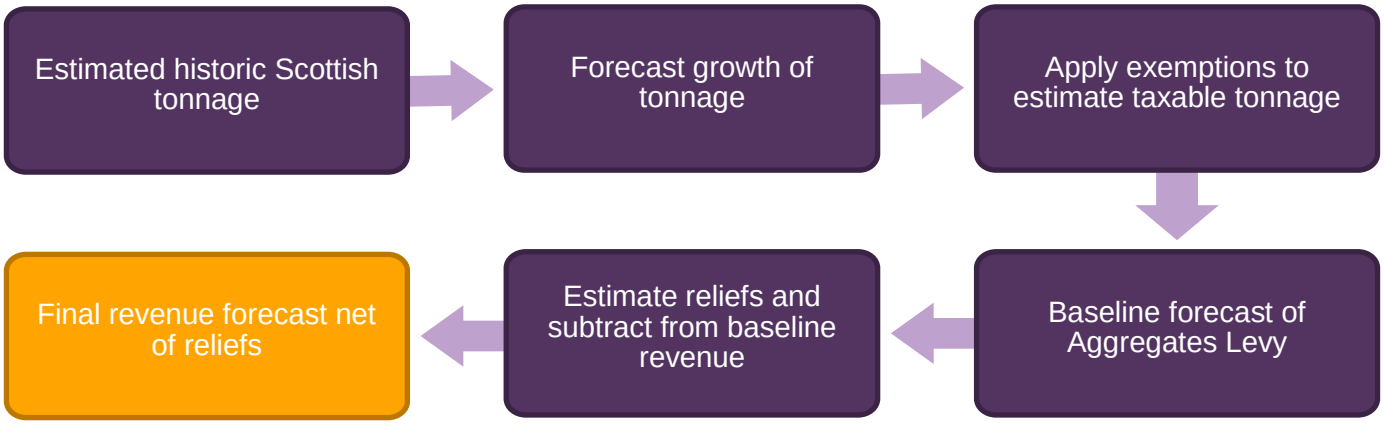
[22] Scotland Act 2016 Part 2 Section 18 (link)
[23] Scottish Government (2021) Scottish Budget 2021 to 2022 (link)

Modelling approach

7.6 Because Aggregates Levy is not yet devolved, the data available for Scotland are limited. In particular, there are no recent data on the actual amount of Aggregates Levy raised in Scotland. Because of these data limitations, we have had to estimate historic Scottish data.

7.7 These data limitations mean that our current estimates may be far from actual Scottish Aggregates Levy revenues once the tax is devolved. Once we have outturn Aggregates Levy data, we will review our approach and the methodology may change compared to what we set out here. Figure 7.2 sets out our current approach for modelling the Aggregates Levy.

Figure 7.2: Aggregates Levy model overview



Source: Scottish Fiscal Commission

Estimating the tonnage produced in Scotland

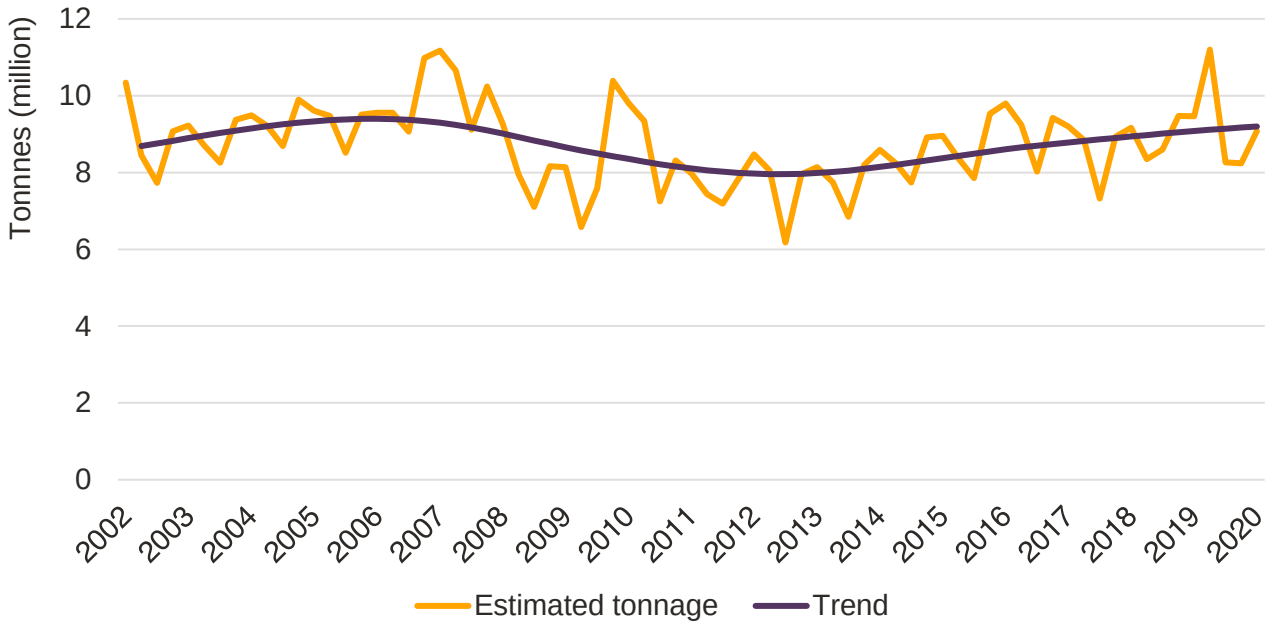
7.8 As set out in the Scottish Government's evidence review on Aggregates Levy policy options, the data for Scottish Aggregates production are limited.[24] There are no recent Scottish specific data on Aggregates Levy revenues or taxable tonnage, so we estimate historic data for these series.

7.9 We use British Geological Survey (BGS) and HMRC data to estimate Scottish total aggregates production. The BGS data gives Scottish and UK Aggregates production data, which we use to estimate the Scottish share of aggregates production. We apply this Scottish share to Aggregates Levy data from HMRC, which gives us an estimate of Scottish tonnage (the tonnes of aggregates declared to HMRC in Scotland) and Aggregates Levy revenues since 2002-03.

7.10 Figure 7.3 sets out our estimate of the Scottish portion of total tonnage declared to HMRC since 2002-03. We grow tonnage across the forecast horizon in line with the average growth since 2015. Once we have data on the actual total aggregates tonnage in Scotland, we will review this approach and look for economic determinants we can use in the forecast.

[24] Scottish Government (2020) Scottish Aggregates Levy: evidence review and policy options (link)

Figure 7.3: Estimated Scottish portion of total aggregates tonnage declared to HMRC



Source: Scottish Fiscal Commission

Aggregates Levy revenue forecast

7.11 As we set out above, Aggregates Levy is subject to a number of exemptions and reliefs. Because of the data limitations, we do not know how much of the total aggregates produced in Scotland is exempt or relieved from the Aggregates Levy. We assume that the shares of the total Scottish tonnage which are exempt or eligible for reliefs match the shares in the whole of the UK.

7.12 Because the share of total UK tonnage eligible for exemptions has been stable at around 8 per cent since 2014-15, we reduce the total tonnage in our forecast by 8 per cent each year to estimate the taxable tonnage. Similarly, we reduce the taxable tonnage by 13 per cent, in line with the average share of taxable UK tonnage eligible for reliefs since 2014-15. This gives our forecast of the taxable tonnage.

7.13 We estimate Aggregates Levy revenues by multiplying the tonnage after reliefs by £2.00. We assume that the Aggregates Levy rate will not change over the forecast horizon, as it has been set at £2.00 per tonne since 2009-10. This gives our final illustrative forecast of Aggregates Levy.

Assumptions

7.14 Because there is no data on Aggregates Levy at the Scottish level, our current forecast methodology is based on assumptions around the HMRC data applying to Scotland. Once Aggregates Levy has been devolved to Scotland, we will be able to base our forecasts on actual Scottish data. That may significantly change the assumptions set out here.

Figure 7.4: Assumptions in the Aggregates Levy model

Source: Scottish Fiscal Commission

7.15 The average share of UK total tonnage that is exempt from Aggregates Levy or subject to reliefs has been stable since 2014-15, after some large fluctuations during the 2008 recession. We assume that the shares of exempt tonnage and tonnage eligible for reliefs will remain at the average since 2014-15 across the forecast horizon, and that the shares of Scottish tonnage which are exempt or eligible for reliefs is the same as in the rest of the UK.

7.16 We assume that the Aggregates Levy will remain set at £2.00 per tonne across the forecast horizon. Since its introduction in 2002, the Aggregates Levy rate has only changed in 2008-09 and 2009-10, when it was revised upwards to account for inflation. Because the rate has stayed at £2.00 per tonne since 2009-10, our baseline assumption is that it will stay unchanged in future years.

Additional information

Abbreviations

ADS	Additional Dwelling Supplement
ADT	Air Departure Tax
APD	Air Passengers Duty
ASHE	Annual Survey of Hours and Earnings
BGA	Block Grant Adjustment
BGS	British Geological Survey
BMW	Biodegradable Municipal Waste
CAA	Civil Aviation Authority
CPI	Consumer Price Index
FTB	First Time Buyer
GDP	Gross Domestic Product
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
HPR	Higher Property Rate
IPR	Intermediate Property Rate
LBTT	Land and Buildings Transaction Tax
MTFS	Medium Term Financial Strategy
NDR	Non-Domestic Rates
OBR	Office for Budget Responsibility
OECD	Organisation for Economic Cooperation and Development
ONS	Office for National Statistics
QNAS	Quarterly National Accounts Scotland
RV	Rateable Value
SAA	Scottish Assessors' Association
SEFF	Scotland's Economic and Fiscal Forecasts
SEPA	Scottish Environmental Protection Agency
SFC	Scottish Fiscal Commission
SG	The Scottish Government
SLfT	Scottish Landfill Tax
VAT	Value Added Tax

A full glossary of terms is available on our website:

https://www.fiscalcommission.scot/explainers/glossary/

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The Commission is committed to fulfilling our role as an Independent Fiscal Institution, in line with the principles set out by the Organisation for Economic Cooperation and Development (OECD).[25]

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All charts and tables in this publication have also been made available in spreadsheet form on our website. For technical enquiries about the analysis and data presented in this paper please contact the responsible analyst:

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For general enquiries about this publication or the commission and how we work please contact info@fiscalcommission.scot

[25] OECD (2014) Recommendation on Principles for Independent Fiscal Institutions (link)
[26] Scottish Fiscal Commission (2018) Compliance with the Code of Practice for Official Statistics (link)

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