Annex C Developing our approach to forecasting VAT

Introduction

C.1 The Commission is currently developing a methodology to forecast revenue from Value Added Tax (VAT) assigned to Scotland. Regulations have been introduced in the Scottish Parliament to expand the remit of the Commission to include VAT forecasting. This annex sets out, at a high level, our planned approach and the areas of uncertainty which will require careful judgement.

C.2 This annex is intended as a starting point for engagement and will be followed by stakeholder engagement and a more detailed methodology paper in the September in advance of our first full VAT forecast in December 2018.

Background

C.3 VAT is levied on the purchase of many goods and services. It is reflected in the price paid when items are bought and is collected from traders. Unlike a simple sales tax, it is levied on the amount of value added at each stage of the production chain. For example, a retailer would be able to reclaim VAT paid on the goods they had brought from a wholesaler. VAT can either be charged at 20 per cent (standard rate of VAT), 5 per cent (reduced rate of VAT) or 0 per cent either zero rated or exempt.

C.4 The fiscal framework agreement between the Scottish Government and the UK government states that receipts from the first 10p of the standard rate of VAT and the first 2.5p of the reduced rate of VAT in Scotland will be assigned to the Scottish Government.[1]

[1] See the agreement between the Scottish Government and the United Kingdom Government on the Scottish Governments fiscal framework (2016) (link)

C.5 VAT being assigned rather than devolved means that the Scottish Government will not have any policy control over VAT. For example the Scottish Government will not have the ability to change the rates of VAT in Scotland or change what goods/services fall under the different rates.

C.6 Outturn receipts data for VAT raised in Scotland are not available. This will still be the case when VAT is assigned to Scotland, as VAT is collected by HMRC at a UK level. In a VAT return, there is no information on where the sale of goods and services took place. Therefore, it is not possible to calculate Scottish VAT from tax returns.

C.7 As outturn receipts data on VAT are not available, the amount of VAT that will be assigned to Scotland must be estimated using a statistical model. The methodology for VAT assignment is currently under development by HMRC, Treasury and Scottish Government officials prior to joint ministerial sign-off by the Joint Exchequer Committee (JEC). The assignment model will use a range of sources to estimate the proportion of UK expenditure across the different sectors that occurs in Scotland. This method will be used to estimate an outturn figure, which we will evaluate the accuracy of our forecasts against.

C.8 VAT assignment will be implemented in 2019-20 as part of a transitional period where VAT raised in Scotland will be calculated but there will ~~be a corresponding adjustment to the block grant. This means that for the first year there will~~ not be an impact on the Scottish Government's budget.

C.9 The National Statistics publication 'Government Expenditure and Revenue Scotland' that VAT revenue assigned to Scotland would have been £5,097 million in 2016-17.[2,3]

Proposed approach to forecasting

C.10 The Commission has considered a range of approaches to forecasting VAT assigned to Scotland. The approach will use components of the Commission's economy forecasts, such as projections of household and government spending.

C.11 The OBR commissions a UK VAT forecast from HMRC for each of their fiscal events.[4] We are currently reviewing these models and forecasts before developing and refining our approach to provide an appropriate forecast methodology for Scotland.

2 This figure represents 50 per cent of the assigned VAT receipts.

3 Government Expenditure and Revenue Scotland 2016-17. The Scottish Government (link)

4 Office for Budget Responsibility website (link)

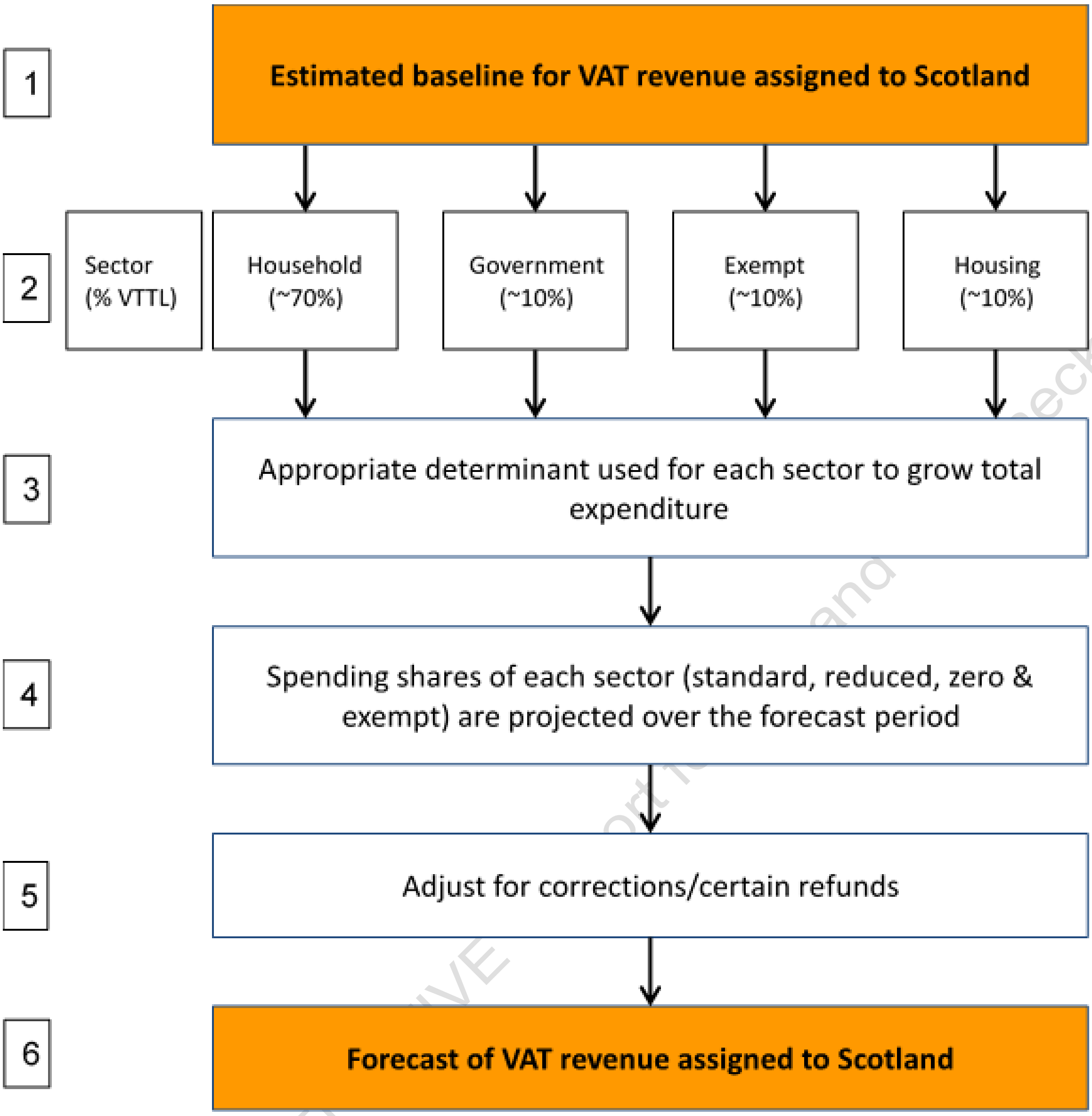
C.12 The UK forecast of VAT is based on the concept of a ‘VAT total theoretical liability’ (VTTL). The VTTL is the total value of VAT that could theoretically be collected from the tax base. The VTTL does not include error, fraud, evasion avoidance and debt to HMRC and therefore will always be higher than the outturn data. The difference between the VTTL and the actual receipts represents an implied VAT tax gap.[5]

C.13 The estimate for the historic Scottish share of VAT is likely to be based upon a VTTL approach, although this is still to be finalised. We expect to use the assignment model as our baseline and will grow each sector in line with appropriate determinants from our economic forecasts to generate a forecast of VAT revenue assigned to Scotland. As there will not be outturn data available for Scotland the tax gap will be assumed to be consistent with the tax gap across the UK.

C.14 Figure C.1 sketches out further detail of how this forecast may work in practice.

Figure C.1: Schematic representation of our proposed approach to forecasting VAT revenue assigned to Scotland

[5] HM Revenue & Customs (2017) Measuring tax gaps: Tax gap estimates for 2015-16. (link)



C.15 The key steps in this process will be:

1. The Commission will use historic estimates of assigned VAT revenue as agreed by the Joint Exchequer Committee (JEC). The Scottish Government and HMRC are currently in the process of agreeing a methodology for estimating the Scottish share of VAT revenue. Our forecast in December will use the figures calculated using this agreed methodology as the baseline for the forecast.
2. We will split our forecast into these 4 main sectors as each of these are driven by different determinants[6]. The Household Expenditure

[6] We anticipate that Non Profit Institutions Serving Households (NPISH) will be included within the household sector for the purposes of our forecast.

sector is the largest, accounting for approximately 70 per cent of VAT revenue assigned in Scotland.

3. The choice of determinant for each sector will be a judgement. Where possible we will look to use Scottish specific determinants. For instance for the household sector we are likely to use Scottish nominal household consumption.
4. We will need to forecast the share of spending subject to the standard rate of VAT if we expect spending patterns to change within each sector. Typically, consumer durables, such as televisions, are charged at the standard rate of VAT (20%). Whereas necessities, such as food, are more likely to be exempt from VAT. Therefore if consumers where to shift their spending from durables to necessities then VAT revenue would decline.
5. In the VAT assignment methodology there may be corrections made to account for legitimate reasons for VAT not being collected. For instance, if a trader is below the registration threshold then they do not charge VAT on their goods and services. Similarly, various schemes and reliefs will allow businesses to reclaim VAT. We will consider whether any of these factors are likely to change over the forecast period and therefore will need to be accounted for in our models.
6. This will produce our forecast of VTTL assigned to Scotland. We do not take account of a Scottish tax gap in our forecast as since VAT is not collected on a regional basis there is no data on the size of the tax gap in Scotland compared to the rest of the UK.

Key drivers

C.16 Household expenditure accounts for approximately 70 per cent of VAT revenue assigned in Scotland. Growth in this sector is therefore likely to be a key driver in our forecast of VAT assignment. We propose using the Scottish nominal household consumption forecast which is generated as part of our economy forecast to grow household expenditure.

C.17 Table C.1 shows the forecast growth in household consumption in Scotland compared to the UK as a whole. Household consumption is a major component of VAT revenue and we note that growth in household consumption is forecast to be slower in Scotland than the UK average. Other determinants will impact on our forecast of the Scottish share of VAT assignment and any impact for the Scottish Governments budget will depend on the block grant adjustment [7]. All else being equal, slower growth in nominal household consumption would lead to a reduction in the Scottish share of total UK VAT revenue over the forecast period.

Table C.1: Household Consumption (Nominal Terms) Forecasts for Scotland and for the UK.

% change on previous year	2016-17 Outturn	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast
Scotland	4.3	2.9	2.5	2.4	2.7	2.8	2.9	3.1
UK	4.6	3.3	2.9	2.9	3.2	3.5	3.5	

Source: Scotland Scottish Fiscal Commission; OBR March 2018 Economic and fiscal outlook - supplementary economy tables (link). Note: Scottish household consumption in nominal terms is derived by applying the Consumer Expenditure Deflator to real-terms household consumption.

C.18 The Commission will always have to make some judgements in order to create forecasts where there is uncertainty or limited evidence. In addition to household expenditure, the key drivers in our forecast which will require careful investigation and judgement include:

- **Standard, reduced and exempt spending shares.** Estimating how the proportion of spending which subject to the standard rate of VAT will be a key judgement within our forecasts. Our judgement will be informed by the evidence on changes at the UK level, the historical estimates of the share and any other factors in our broader economy forecasts that we consider relevant.
- **Feedback between our forecast of VAT assignment and our economy forecast.** Government spending is a significant component of GDP and VAT assigned to the Scottish Government will be the second largest revenue source to affect the Scottish Government's budget after income tax. There will therefore be an interdependence between our VAT and economy forecasts.

Timeline for engagement and forecast development

C.19 The commission will develop our methodology for forecasting assignment of VAT revenue to Scotland over the summer. We will present the results of this development work along with an illustrative forecast in September, using economic determinants taken from our forecasts in this publication.

C.20 Our first full VAT forecast will be published in December 2018.

[7] During 2019-20 VAT assignment will be calculated but there will be no impact on the Scottish Governments budget due to a corresponding adjustment to the block grant. Beyond this point the BGA is yet to be decided.