Scherie Nicol

The Scotland Bill provides for stamp duty land tax and landfill tax to be entirely devolved, along with a 10p share of income tax. The UK Government also has the intention to devolve the aggregates levy, although this is not proposed at this stage as it is currently subject to legal challenge.

If these taxes are devolved then forecasting tax receipts will become a necessary part of the Scottish budget process. The Office for Budget Responsibility has been given responsibility for undertaking this and will produce Scottish tax forecasts twice a year, with the first forecasts having been published on 21 March 2012.

This briefing provides some background information on the role of the Office for Budget Responsibility in forecasting Scottish tax receipts and provides an initial analysis of the first forecasts. Key issues in relation to the accuracy of the forecasts are also outlined.
BACKGROUND

The Scotland Bill provides for stamp duty land tax (SDLT) and landfill tax (LfT) to be entirely devolved. The UK Government’s intention is to provide these powers from April 2015. It also proposes to devolve a 10p share of income tax from April 2016. The aggregates levy is not proposed for devolution at this stage, although the UK Government has stated that it will keep this situation under review with the intention to devolve it as soon as the current legal challenge is fully resolved\(^1\). Further details can be found in the UK Government’s [Command Paper](https://www.gov.uk/government/publications/scotland-bill-command-paper) accompanying the Scotland Bill.

If these taxes are devolved then forecasting tax receipts will become a necessary part of the Scottish budget process. Neither the UK Government nor the Scottish Government currently forecast revenues from SDLT, LfT, the Scottish share of income tax or the aggregates levy. Thus, the Command Paper proposes that “to facilitate the robust and transparent forecasting of Scottish tax receipts, the independent Office for Budget Responsibility (OBR) will start to provide forecasts of Scottish income tax, landfill tax, stamp duty land tax and aggregates levy receipts from April 2012” (HM Government 2010).

THE ROLE OF THE OBR

The OBR will produce Scottish tax forecasts twice a year (at the Budget and in the autumn) alongside each Economic and Fiscal Outlook (OBR 2012a). The forecasts have a five-year horizon.

In March 2012 they published a [Methodological Note](https://www.gov.uk/government/publications/methodology-for-sct-scottish-calculator) outlining how they plan to forecast Scottish tax revenues. This has been developed in co-ordination with analysts at HM Revenue & Customs (HMRC). Although the Command Paper states that “A memorandum of understanding between the OBR, HMRC and HM Treasury will be published in the lead up to implementation alongside more detail on the forecasting methodology” (HM Government 2010), a specific memorandum of understanding (MOU) relating to Scotland has not yet been published. However, a general MOU between the OBR, HMRC and HM Treasury does exist.

The OBR have described the methodologies as a “work-in-progress” and stated that starting the forecasting process three years in advance of the initial devolution of the taxes will enable them “to develop and improve forecasts in the light of experience and the availability of new information sources” (OBR 2012a).

The following information with regard to the proposed methodology is of note:

- The forecasts will actually be produced by HMRC, but scrutinised and challenged by the OBR and its Budget Responsibility Committee (BRC) who have the final say on the assumptions and judgements. The same process is used to produce forecasts of UK receipts.
- While the UK tax forecasts are “bottom up”, there is currently insufficient macroeconomic data in respect of Scotland for this methodology to be replicated. As a result, a “top down” methodology is used, where Scottish forecasts are calculated as a constant share of the UK forecast\(^2\).
- The OBR estimates the Scottish constant share using recent estimates of Scottish and UK tax revenues. The accuracy of the forecasts is thus impacted by the degree to which Scotland and the UK mirror each other economically.

\(^1\) The European Court delivered its judgment in the case of British Aggregates Association v. the European Commission on 7 March 2012. However, appeals can still be brought against the judgment to the European General Court. As such, the UK Government do not believe that the case has reached a definitive conclusion.

\(^2\) A “top down” approach obtains an estimate by breaking down a larger estimate into its component parts, a “bottom up” approach would build up an estimate by piecing together the different components of it.
- With the exception of SDLT, actual outturn tax revenue data does not yet exist for Scotland, so the OBR bases recent estimates on information from other sources which provide proxy indicators. This is the same methodology used to estimate outturn tax revenues in the Scottish Government’s Government Expenditure and Revenue Scotland (GERS) publication.

- Forecasts will be adjusted if the Scottish or UK Parliaments make changes to tax policy or if the OBR have reason to believe that the constant share assumption no longer holds true.

Table 1 outlines how OBR data will be used in the process of devolving these taxes.

**Table 1: The use of OBR data during the devolution process**

<table>
<thead>
<tr>
<th>Period</th>
<th>Timing</th>
<th>SDLT and LfT</th>
<th>Income tax</th>
<th>Aggregates levy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-devolution</td>
<td>2012 onwards</td>
<td>OBR forecasts are notionally assigned to the Scottish budget for illustrative purposes, although the Scottish budget will not be impacted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitional phase</td>
<td>Income tax: 2016 for 2-3 years</td>
<td>No transitional phase.</td>
<td>There will be an annual deduction of income tax revenues from the block grant based on OBR forecasts. This will not be reconciled with actual receipts and thus any deviation of the outturn from the forecast will not impact the Scottish budget.</td>
<td>No plans outlined until the current legal challenge is fully resolved.</td>
</tr>
<tr>
<td>Calculating permanent block grant reduction</td>
<td>SDLT and LfT: 2015 Income tax: 2018/19</td>
<td>OBR forecasts will be used as a basis for calculating the permanent block grant reduction.</td>
<td>Outturn tax revenue data and OBR forecasts will be used to calculate the block grant reduction. The Governments have agreed to use the “Holtham approach” to guide this calculation, requiring recalculation annually.</td>
<td></td>
</tr>
<tr>
<td>Post-devolution</td>
<td>Assignment of actual receipts.</td>
<td>OBR forecasts will be used to calculate UK Government payments to the Scottish budget corresponding to Scottish income tax receipts. Actual receipts will be reconciled with the OBR forecast, with a corresponding transfer either to or from the Scottish budget to the UK Government after actual receipts are known – usually 2 years after the end of relevant tax year.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-devolution adjustments to block grant</td>
<td>Not necessary as complete devolution of tax to Scotland.</td>
<td>OBR estimates will be used to adjust the block grant upon any change to the structure of the UK income tax system.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: HM Government 2010
LATEST FORECASTS

The OBR published the first set of Scottish tax forecasts in March 2012. These forecasts are calculated by taking a Scottish share of UK forecasts. This estimate has then been adjusted to take into account the effect of Budget 2012 announcements. These forecasts assume that a 10p Scottish rate of income tax would be levied. They also assume that the current system of SDLT, LfT and aggregates levy remain in place over the period. Forecasts will be revised in the event of the Scottish Parliament changing any of these taxes after devolution.

Figure 1 and Table 2 provide an overview of the Scottish tax forecasts to 2016-17.

**Figure 1: Budget 2012 Scottish tax forecasts to 2016-17**

![Chart showing Scottish tax forecasts to 2016-17]

Source: OBR 2012b

**Table 2: Forecast growth in tax revenues over the period 2010-11 to 2016-17**

<table>
<thead>
<tr>
<th>Tax</th>
<th>UK revenues pre-Budget 2012 measures</th>
<th>Scottish revenues pre-Budget 2012 measures</th>
<th>Scottish revenues post-Budget 2012 measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income tax*</td>
<td>37.9%</td>
<td>30.7%</td>
<td>28.1%</td>
</tr>
<tr>
<td>SDLT</td>
<td>78.7%</td>
<td>60.3%</td>
<td>62.4%</td>
</tr>
<tr>
<td>LfT</td>
<td>54.6%</td>
<td>57.6%</td>
<td>58.6%</td>
</tr>
<tr>
<td>Aggregates levy</td>
<td>15.4%</td>
<td>15.2%</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

* Note – the Scottish revenues refer to those from the Scottish rate of income tax.

Source: OBR 2012b

The following information with regard to the forecasts is of note:

- Scottish tax revenues are forecast to pick up markedly from 2013-14 onwards on the assumption that the economy improves, as in the rest of the UK.
- Income tax accounts for a much higher proportion of forecast receipts than the other taxes.
- Scottish tax revenues are forecast to grow at a different rate from UK revenues as a result of a combination of factors including the different nature of Scottish revenues relative to UK revenues, and the different distributional impacts of Budget 2012 measures.
- In the case of the Scottish rate of income tax, the lower rate of growth forecast is attributable to a number of factors, including more income growth taking place in the...
higher tax bands, of which the Scottish rate accounts for a significantly smaller share compared to the basic rate tax band. The increase in personal allowances announced in Budget 2012 will also tend to slow the increase in Scottish rate of income tax receipts more than total income tax receipts.

- With regard to SDLT, Scotland is estimated to have a lower share of UK residential SDLT revenues, for which receipts are expected to grow strongly over the period. In addition, the effect of recently announced UK Government policy measures on Scottish SDLT revenues is estimated to be modest. These factors are likely to be driving the lower rate of growth forecast for Scottish SDLT revenues, relative to UK revenues.

**KEY ISSUES**

Given that the forecasts are a key piece of the jigsaw from which the Scottish budget will be built up from, it is important that the methodology selected to undertake the forecasts is subject to scrutiny and considered by stakeholders to be suitably robust. It is also necessary to bear in mind that in the case of SDLT and LfT adjustments to the block grant, forecasts will have a one-off effect in setting the initial block grant adjustment. Given the current methodology, the robustness of the estimates will be impacted by:

- The representativeness of the sample period selected. Note that different sample periods have been chosen for different taxes and the reasons for this have not always been made explicit within the OBR methodology.

- The quality and timeliness of the data on which forecasts are based will also have an impact on accuracy. At present there is a long lag (around 20 months) on the data for Survey of Personal Incomes data which is being used to forecast income tax receipts and LfT and aggregates levy receipts are only estimated indirectly based on Scotland’s share of UK waste sent to landfill and aggregates production respectively.

- The degree to which there are Scotland-specific economic trends. This impacts whether or not it is appropriate to assume that Scotland has a constant share of any UK tax. At present Scottish and UK economic trends are broadly similar, although increased financial devolution might bring about divergence.

- The degree to which the economy performs as forecast. Unexpected economic shocks will inevitably affect the accuracy of forecasts. Perhaps unsurprisingly, in recent history the year associated with the largest forecast errors was 2009-10, as HM Treasury forecasts did not anticipate the financial crisis (Bell 2011).

- The accuracy of the OBR estimates of how policy measures affect tax revenues, including behavioural effects.

- Forecast timing. Although the OBR will be producing forecasts twice-yearly, it is currently proposed that the forecast at the start of the Spending Review period is used as a basis for determining income tax payments due to Scotland “to ensure that the Scottish Government is protected from unexpected economic shocks which would require a revision to their Spending Review spending plans” (HM Government 2010). The final detail of this has yet to be agreed by the Joint Exchequer Committee (the Ministerial forum for discussion/resolution of the technical implementation issues), but it is worth noting that research by Professor David Bell (2011) showed that, historically, the average error of HM Treasury forecasts rose dramatically as the forecast horizon increased.

- The accuracy and impartiality of human judgement. Research by Professor David Bell (2011) found that historically HM Treasury forecasts have been over-optimistic.
The OBR are committed to publishing a Forecast Evaluation Report once a year, comparing the forecasts it makes at the time of each year’s Budget with the outturns shown in official data in the autumn of the following year. The most recent report on UK forecasts shows the following:

Table 3: Breakdown of June 2010 Budget forecasting errors for UK receipts in 2010-11

<table>
<thead>
<tr>
<th>Tax</th>
<th>UK forecast receipts £bn</th>
<th>UK outturn receipts £bn</th>
<th>Difference £bn</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income tax (gross of tax credits)</td>
<td>150.2</td>
<td>153.5</td>
<td>3.3</td>
<td>2.2</td>
</tr>
<tr>
<td>SDLT</td>
<td>5.8</td>
<td>6.0</td>
<td>0.2</td>
<td>2.8</td>
</tr>
<tr>
<td>LfT</td>
<td>1.1</td>
<td>1.1</td>
<td>-0.1</td>
<td>-4.9</td>
</tr>
<tr>
<td>Aggregates levy</td>
<td>0.3</td>
<td>0.3</td>
<td>0</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Source: OBR 2011

The difference between the forecast and outturn ranges from 2.2% below the outturn for income tax to 4.9% above the outturn for landfill tax. The report highlights the reasons for these differences. For example, in relation to income tax, the changes in the apportionment of receipts between Pay-As-You-Earn and national insurance contributions explained much of the fiscal forecasting error. There was also stronger than expected growth in wages and salaries.

In the future, the evaluation of Scottish forecasts as part of this could be useful in determining how appropriate the current methodology is and how it could be improved.

BORROWING REQUIREMENTS

The Scotland Bill proposes that the Scottish Government will have extended resource borrowing powers to allow it to manage potential deviations between forecast and outturn receipts for the newly devolved taxes. Where the revenue outturn is above forecast, the UK will transfer this amount alongside the block grant in a future period – likely to be two years after the tax year in question to enable receipts to be reconciled. The Scottish Government will be able to retain this surplus in a new Scottish cash reserve, which would then be available to cover effects in the opposite direction. If the outturn receipts are below forecast, any surplus in the reserve would be the first port of call, after which the Scottish Government will be able to borrow to cover the shortfall, up to the borrowing limit of £200m per annum - £500m cumulatively. Thereafter, any gap would have to be closed by reducing expenditure.

The accuracy of OBR forecasts will underpin Scottish Government resource borrowing requirements and the adequacy of the proposed borrowing limits. Given the current forecast for Scottish rate of income tax revenues, if there is no cash reserve then it would take outturn revenues to be more than 3.6% below the forecast in 2016-17 for the borrowing requirement to go beyond the proposed annual limit.

Concerns have been expressed that the annual and overall limits for resource borrowing may be inadequate, particularly if there is another period of economic turbulence. Research by Professor David Bell (2011) found that “the possibility of larger worst-case forecast error due to longer forecast horizons, poor OBR forecasts and the uncertainty of the inflation adjustment to the borrowing limit suggest that the proposed borrowing limits are too low to adequately protect the Scottish Government against the risk of revenue shortfalls. And this does not allow for the cumulative effect of successive years of over-optimistic forecasts”.

IMPROVING SCOTTISH ECONOMIC MODELLING

Subsequent to their devolution, the Scottish Government will be taking tax policy decisions. However, it should be noted that, in the case of income tax, HMRC will still have responsibility for collecting tax revenues. Given that HMRC will still be administering this tax, and their
experience in modelling policy changes, it may be that they or the OBR might estimate the impact of different tax policies to inform decision making for the Scottish Government. On the other hand, the Scottish Government may wish to develop this modelling capacity in-house.

In the longer-term, improved availability of timeous key economic data for Scotland, such as wages and salaries and mixed income (for self-employment income), has the potential to increase the accuracy of Scottish forecasts, particularly if increased devolution brings about Scottish-specific economic trends. There is scope for further development in this area.

OTHER CONSIDERATIONS

When it comes to devolving taxes it is worth remembering that the forecasts are just one of the factors impacting the Scottish Government’s budget. The block grant adjustment and the growth in revenues from the devolved taxes will be of paramount importance. With regard to the Scottish rate of income tax, what will affect net revenues is the interaction between receipts and the block grant adjustment. The impact of forecasting errors will be reduced to zero over time by reconciliations between forecast and actual tax receipts after the end of the tax year in question, with correcting payments made either into or out of the Scottish block. Thus, while variations between forecast and actual receipts will bring about some timing differences in spending power and borrowing requirements between years, there should not be a material effect on spending power in the long run as the Scottish Government will receive what they raise in tax.

SOURCES


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