# **GOVERNMENT EXPENDITURE AND REVENUE SCOTLAND**

# **DETAILED REVENUE METHODOLOGY PAPER 2017-18**

This paper outlines the various methodologies used to obtain estimates of public sector revenues in Scotland.

In contrast to public sector expenditure, there is no generic best approach to estimating public sector revenue; instead each revenue is estimated using a separate methodology. This paper discusses the methodology used to apportion a share of each revenue stream to Scotland and highlights any significant changes which have been introduced in this edition of GERS. It should be noted that, as the underlying datasets used in GERS have been subject to revisions and updates, estimates may differ from previous editions of GERS even if the methodology remains unchanged.

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# Methodology Overview

As highlighted in Chapter 1 of the main report, the majority of public sector receipts raised in Scotland are collected at the UK level by HM Revenue and Customs.

In some cases, revenue figures can be obtained for Scotland directly. Examples include local government revenues, devolved taxes, and elements of public corporation revenues. For other taxes separate identification of Scottish revenue is not possible. GERS therefore uses a number of different methodologies to apportion revenues to Scotland. In doing so, there are often theoretical and practical challenges in determining an appropriate share to allocate to Scotland. In certain cases, a variety of alternative methodologies could be applied each leading to different estimates.

Obtaining an estimate of public sector revenues in Scotland is a two-stage process.

In the first stage, the UK outturn figure for each stream of revenue is obtained from the ONS Public Sector Finances statistics. In the second stage, Scotland's share of the UK figure is estimated according to a specific apportionment methodology. The methodology used differs for each element of revenue. However, in general, the information comes from survey data for the UK, or a sample of UK administrative data.

## **UK Revenue Figures**

The basis for estimating public sector revenue for Scotland is National Statistics outturn figures for UK fiscal revenue taken from ONS Public Sector Finances. The detailed components, revenue by revenue, are taken from an ONS database (PSAT2) which is produced on a quarterly basis. The fiscal balance calculations in GERS are constrained to the UK Public Sector Finances for June 2018, published in July 2018. An accounting adjustment is applied to both the expenditure and revenue totals so that both sides of the fiscal balance calculations are presented on a consistent basis. The revenue accounting adjustment is small and has been included in the 'other taxes' line.

These data are presented on an accruals basis and separately identify revenue attributed to central government, local government and public corporations. The international standards for National Accounts and Government Finance Statistics use the accruals basis rather than a cash approach. This is because accruals accounting reflects a more accurate picture of when revenue is due and spending occurs than the more volatile alternative of cash, which, for example, records when bills are settled rather than when the expenditure occurs.

The assumptions underpinning the apportionment of each revenue source are outlined below.

# **Summary of Changes**

Table 1 provides a summary of the apportionment methodologies used for each element of revenue and highlights whether or not the methodology has changed since the previous edition of GERS. In some instances ONS's Public Sector Finance estimates of UK revenue for some taxes have also been revised since the last edition of GERS, and these changes will affect the estimates of Scottish tax revenue. In addition, there have been revisions to some of the data sources used to apportion tax revenues to Scotland.

Revenue	Apportionment Methodology	Source	Changed
Income tax	Scottish share of UK income tax liabilities applied to income tax gross of tax credits. Negative expenditure on tax credits estimated using Scot/UK share of overall spend on tax credits (negative tax plus benefits)	Survey of Personal Income (SPI): HMRC and Scottish Government analysis Data on overall spend on tax credits: HMRC	No
National insurance contributions	Estimates of employer, employee, class 2 and class 3 NIC revenue in UK and Scotland	Supplied directly by HMRC	No
VAT	Household VAT: Scotland's share of household expenditure Business and construction VAT: Scotland's share of UK less extra-regio GVA	Living Costs and Food Survey: ONS ONS Regional Accounts HMRC	No
Corporation tax (excl. North Sea)	Scotland's share of UK onshore corporation tax	HMRC	No
Fuel duties	Scotland's share of road traffic fuel consumption	Fuel consumption statistics: BEIS	No
Non-domestic rates	Actual Data	Scottish Local Government Finance Statistics	No
Council tax	Actual Data Scottish Local Government Finance Statistics		No
VAT refunds	LG refunds: Scotland's share of UK LG current expenditure on goods and services  CG Refunds – MoD: Scotland/UK populations  – NHS: Scotland/UK TES for Health  – Other Gov depts: Scotland/UK total TES (Excluding NHS/MoD)	Country and Regional Analysis, HM Treasury	No
Capital gains tax	Actual outturns for Scotland	HMRC	No
Inheritance tax	Actual outturns for Scotland	HMRC	No
Reserved stamp duties	Land and property stamp duty: Actual outturns for Scotland Stocks and shares: - Scotland/UK ratio of adults owning shares	Land and property stamp duty: HMRC Stocks and shares: Family Resources Survey (DWP)	No
Land & buildings transaction tax (LBTT)	Actual outturns for Scotland	Revenue Scotland	No
Scottish Landfill tax	Actual outturns for Scotland	Revenue Scotland	No
Air passenger duty	Scotland's share of passengers by air passenger duty band	Civil Aviation Authority and HMRC	No
Tobacco duties	Spend on tobacco in Scotland/UK	Living Costs and Food Survey: ONS	No
Alcohol duties	Consumption of alcohol in Scotland/UK	Family Food Survey, DEFRA	No
Insurance premium tax	Spend on insurance Scotland/UK	Living Costs and Food Survey: ONS	No
Vehicle excise duty	Scotland's share UK vehicle licences issued	DVLA	No

Table 1: Apportionment Methodologies and Sources for Public Sector Revenue in Scotland (Excluding North Sea Revenue) (Cont)				
Environmental levies	Renewables obligation: Scottish data from ONS Carbon Reduction Commitment: Scotland's share of UK electricity consumption by industrial users	ONS BEIS	No	
Other taxes	Various (see below)	Various (see below)	No	
North Sea revenue	Scotland's estimated share of UK Continental Shelf tax revenue	ONS Country and Regional Public Sector Finances	No	
Interest and dividends	CG: Population share of non-student loan interest and dividends LG: Population share PC: Scotland's share of public sector GVA	Regional Accounts: ONS	No	
Gross operating surplus	CG: Scottish/UK share of central government NMCC LG: Scottish/UK share of local government NMCC Public corporations – individual data for Scottish PCs – data for UK-wide PCs based on relevant industry GVA – and actual data for Local Authority housing rentals	CG: ONS Regional Accounts LG: ONS Regional Accounts PC: Supplied by Public Sector Finance team: ONS, and Regional Accounts: ONS	No	
Other receipts	Various (see below)	Various (see below)	No	

Table 2 summarises the revisions in this edition of GERS by comparing the estimates contained in this report with last year's publication. Overall, Scotland's estimated share of non-North Sea public sector revenue is revised up for between 2013-14 and 2014-15, and down in the last two years.

Table 2: Revision to Estimates of Total Non-North Sea Revenue					
		£ mi	llion		
	2013-14	2014-15	2015-16	2016-17	
Scotland					
Estimates published in GERS 2016-17	50,805	52,640	54,446	57,743	
Estimates published in GERS 2017-18	51,089	52,959	53,942	56,608	
Revision	285	319	-503	-1,135	
Of which, non-domestic rates	0	0	-272	-451	
Of which, housing associations	0	-8	-301	-328	
Of which, corporation tax	-8	20	-50	-316	
UK					
Estimates published in GERS 2016-17	629,982	655,909	681,878	724,312	
Estimates published in GERS 2017-18	631,095	658,263	684,393	726,259	
Revision	1,113	2,354	2,515	1,947	
Of which, non-domestic rates	-4	-3	-6	1,324	
Of which, housing associations	0	0	0	74	
Of which, corporation tax	0	0	201	335	
Scotland/UK ratio					
Estimates published in GERS 2016-17	8.1%	8.0%	8.0%	8.0%	
Estimates published in GERS 2017-18	8.1%	8.0%	7.9%	7.8%	
Revision (% point)	0.0%	0.0%	-0.1%	-0.2%	

Revisions to Scottish estimates can stem from three sources: revisions to UK totals; revisions to apportionment data; and updated apportionment methodologies. There are no methodological changes to non-North Sea revenue in GERS 2017-18, and the main source of revisions is revisions to UK totals.

There are a number of revisions to UK revenue totals from GERS 2016-17, some of which do not affect estimates of Scottish revenue. UK interest and dividends have been revised as the ONS has taken on new data for English housing associations, and UK non-domestic rates have been revised following a review of the recording of rates in England.

Other revisions do impact Scottish estimates. UK corporation tax has been revised following updated information provided by HMRC, and income tax has been revised up following stronger receipts.

The net effect of all of the changes has been to increase the estimate of public sector revenue in the UK by £1,947 million in 2016-17, an increase of 0.3%. In contrast, the estimate of public sector revenue in Scotland was revised down by £1,135 in 2016-17, a decrease of 2%. This is primarily driven by updated apportionment data for income tax, national insurance contributions and VAT, as well as the effect of the downward revision in UK corporation tax.

The revisions to individual revenue lines for 2016-17 are shown in Table 3 below

Other than the revisions discussed above, most revisions are minor and reflect revisions to UK totals However, there are a number of revisions that reflect updates to apportionment data. The differential movement in income tax reflects the latest Survey of Personal Incomes data, and the downward revision to VAT and other indirect taxes reflects the latest Living Costs and Food survey data. The revisions to capital gains tax and inheritance tax reflect updated data for Scotland from HMRC.

Table 3: Revision to Estimates of Public Sector Revenue: Scotland and UK 2016-17					
	£ mi	llion	9,	<b>/</b> o	
	Scotland	UK	Scotland	UK	
Income tax	-451	1,324	-3.5%	0.8%	
National insurance contributions	-328	74	-3.2%	0.1%	
Value added tax	-316	335	-3.1%	0.3%	
Corporation tax (excluding North Sea)	-165	-1,480	-4.2%	-2.7%	
Fuel duties	4	1	0.2%	0.0%	
Non-domestic rates	0	145	0.0%	0.5%	
Council tax	-7	-164	-0.3%	-0.5%	
VAT refunds	21	0	1.7%	0.0%	
Capital gains tax	-18	-324	-4.7%	-3.7%	
Inheritance tax	7	-11	2.6%	-0.2%	
Reserved stamp duties	19	449	6.1%	3.0%	
Scottish Land & Buildings transaction tax	18	18	3.8%	3.8%	
Scottish landfill tax	0	0	0.1%	0.1%	
Air passenger duty	1	8	0.3%	0.2%	
Tobacco duties	-130	0	-11.8%	0.0%	
Alcohol duties	37	0	3.6%	0.0%	
Insurance premium tax	4	63	1.2%	1.3%	
Vehicle excise duties	8	0	1.8%	0.0%	
Environmental levies	-2	-23	-0.3%	-0.4%	
Other taxes	-4	270	-0.2%	1.4%	
Total Non-North Sea taxes	-1,301	685	-2.5%	0.1%	
Other Revenue					
Interest and dividends	-13	272	-3.4%	4.3%	
Gross operating surplus	151	165	3.5%	0.3%	
Other receipts	28	825	7.2%	34.4%	
Total non-North Sea revenue	-1135	1,947	-2.0%	0.3%	

# Longer-run revisions to revenues estimates

The following charts show how revenues (onshore; total, including a population share of North Sea; total, including a geographical share of North Sea) have been revised between successive publications. The associated data appear as revisions parallelograms below the charts.

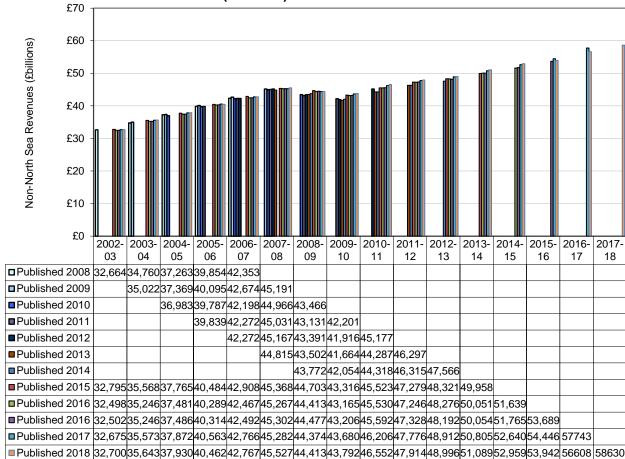


Chart 1: Revisions to onshore revenues (Scotland)

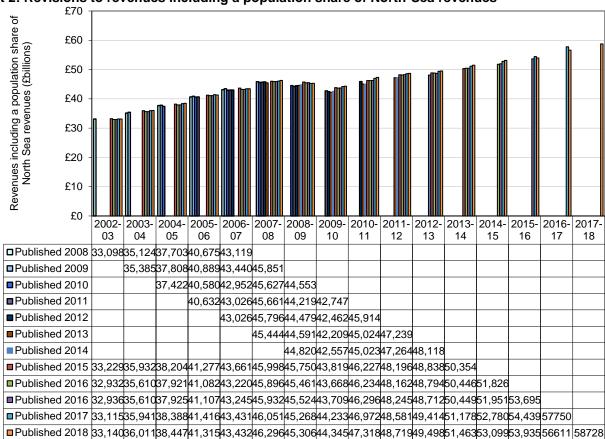
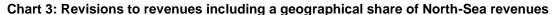
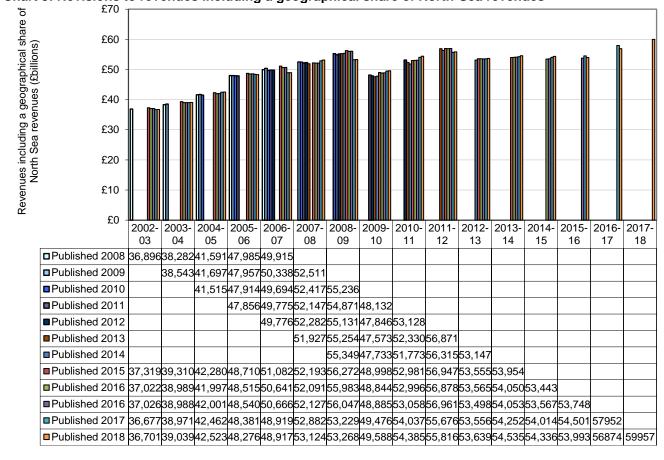


Chart 2: Revisions to revenues including a population share of North-Sea revenues





### **Income Tax**

### Background

Income tax is the single largest source of public sector revenue in both Scotland and the UK. A taxpayer's income is assessed for income tax according to a prescribed order:

- (1) non-savings income,
- (2) savings income (not dividends),
- (3) dividends.

For non-savings income, income tax is charged at a basic rate of 20% and a higher rate of 40%. From 2010-11 an additional rate of 50% was introduced for income over £150,000. This was reduced to 45% for 2013-14. In addition, there is a starting rate of 10% charged on savings income. Details of current tax allowances and rates are available at: <a href="https://www.gov.uk/personal-tax/income-tax">https://www.gov.uk/personal-tax/income-tax</a>

From 2017-18 the Scottish Government gained new income tax powers, enabling it to vary the tax rates and bands on non-savings and non-dividend income tax. This covers around 90% of income tax, with a small amount (around 1%) of income tax being paid on savings, and the remainder of income tax paid on dividend income.

The table below compares the income tax rates and bands for Scotland and the rest of the UK in 2017-18. The only difference in this year is that the higher rate of 40% is levied on earnings over £43,000 in Scotland, compared to earnings over £45,000 in the rest of the UK.

#### Income tax rates for Scotland and the rest of the UK in 2017-18

	Scotland	Rest of UK
Tax free allowance	0% on first £11,500	0% on first £11,500
Basic rate	20% up to £43,000	20% up to £45,000
Higher rate	40% up to £150,000	40% up to £150,000
Additional rate	45% over £150,000	45% over £150,000

Following presentational changes in GERS 2016-17, the income tax line also includes a number of smaller taxes, consistent with the OBR and ONS presentation. These are:

- Company income tax:
- Household charitable donations via gift aid;
- Non-profit institutions serving households tax credits.

# Methodology

The approach for estimating Scottish revenue for each line is summarized in the table below. UK figures for income tax and associated revenue are taken from ONS' database underlying the Public Sector Finances.

The main apportionment for income tax is HMRC's Survey of Personal Incomes (SPI). This is an annual sample of administration data from HMRC's PAYE, Self-Assessment and Claims databases, and covers the income assessable for tax in each tax year. It covers 1.8% of income tax payers with a sample of approximately 600,000 people in the UK. The latest SPI survey was published in March 2018 and provided data for 2015-16.

Revenue	Description	Methodology
Income tax	The main tax on personal incomes in the UK.	Apportioned to Scotland on the basis of income tax liabilities from Survey of Personal Incomes (SPI) data
Company income tax	Where properties in the UK are owned by non-residents, the non-resident is treated as a company, but rather than paying corporation tax pays income tax on income earned income from these properties, such as rental income.	Apportioned to Scotland on the basis of Scotland's proportion of the UK GVA.
Household charitable donations via gift aid	When UK income tax payers donate to charity, the charity can claim an extra 25p for every £1 donated.	Apportioned to Scotland on the basis of income tax liabilities from Survey of Personal Incomes (SPI) data
Non-profit institutions serving households tax credits	Tax credits paid to non-profit institutions serving households, typically charities.	Apportioned to Scotland on the basis of income tax liabilities from Survey of Personal Incomes (SPI) data

## Differences from Previous Year's Methodology

Whilst there has been no change to the overall methodology used in GERS, there has been a change to the use of the apportionment data for 2015-16. This is due to differences in income tax growth between the public sector finances and the SPI. The public sector finances show income tax growth of 3.2% in 2015-16, whilst the SPI shows income tax liabilities growing by 6.6% in 2015-16, and by when 8.0% excluding taxpayers with no postcode information. The difference is primarily due to public sector finances and SPI measuring income tax differently, with the public sector finances broadly showing income tax at the point when it is paid, whilst the SPI shows income tax at the time the income was earned.

GERS uses the SPI data excluding taxpayers with no postcode information. The difference between the growth rates in the SPI and public sector finances means that, were GERS to reflect the SPI data for Scotland in 2015-16, Scottish income tax receipts in GERS would fall even though the SPI data show Scottish income tax continuing to grow. In order to control for this, the SPI data are phased into GERS over two years, 2015-16 and 2016-17.

## **Estimates:**

As shown in Table 4 below, Scotland's estimated share of UK income tax revenue has been revised down in the latest edition of GERS for 2015-16 and 2016-17, reflecting updated apportionment data from the SPI.

Table 4: Income Tax (£ million)						
	2013-14	2014-15	2015-16	2016-17	2017-18	
UK	157,619	163,619	168,874	177,247	180,700	
Scotland	11,393	11,865	11,976	12,309	12,544	
Scotland/UK	7.2%	7.3%	7.1%	6.9%	6.9%	
Estimated ratios in previo	us GERS publication					
Scotland/UK	7.2%	7.3%	7.3%	7.3%	n/a	
Revision (% point)	0.0%	0.0%	-0.2%	-0.3%	n/a	

## **National Insurance Contributions**

### Background

National insurance contributions (NICs) are a tax on earnings. Their payment is designed to allow the payee to build an entitlement to certain social security benefits, including the state pension. There are a number of different rates, thresholds and classes for national insurance. The main rate, known as the class 1 rate, has been unchanged since 2011-12 and is 12% for employees and 13.8% on employers.

For details of current thresholds and rates please see: <a href="https://www.gov.uk/national-insurance-rates-letters/contribution-rates">https://www.gov.uk/national-insurance-rates-letters/contribution-rates</a>

### Methodology

The UK figure for total NICs together with separate figures for class 1 (employee and employer), class 2 and class 4 (self-employed), and class 3 (voluntary contributions paid to fill gaps in contribution records) contributions are taken from ONS' database underlying the Public Sector Finances. Class 1 contributions account for over 97% of the total.

Scotland's share of UK class 1, 2 and 3 contributions have been provided by HMRC. The latest data are for 2015-16 for class 1, 2014-15 for class 2, and 2011-12 for class 3. This reflects lags in producing data on self-reported receipts. Scotland's share of UK class 4 contributions is calculated using its share of class 2 contributions. Scotland's share of each class of contribution is then applied to the total UK national insurance figures provided in the ONS' Public Sector Finance Database.

#### Differences from Previous Year's Methodology

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK National Insurance Contributions is revised down from the previous edition of GERS for 2015-16 and 2016-17, due to the updated apportionment data.

Table 5: National Insurance Contributions (£ million)					
	2013-14	2014-15	2015-16	2016-17	2017-18
UK	107,306	110,260	114,061	126,011	133,049
Scotland	8,798	9,069	9,082	10,038	10,592
Scotland/UK	8.2%	8.2%	8.0%	8.0%	8.0%
Estimated ratios in previo	us GERS publication				
Scotland/UK	8.2%	8.2%	8.2%	8.2%	n/a
Revision (% point)	0.0%	0.0%	-0.3%	-0.3%	n/a

## VAT

## **Background**

Value added tax (VAT) is charged on the sale of most goods and services in the UK. Depending upon the product, VAT is charged at three different rates; during the period of the report these were: standard rate, reduced rate (5%) and zero rate. Certain services are also 'exempt' from VAT.

The standard rate of VAT was temporarily reduced from 17.5% to 15% on 1 December 2008, and it returned to 17.5% on 1 January 2010. The standard rate of VAT increased from 17.5% to 20% on 4 January 2011. For further details please see: https://www.gov.uk/vat-rates

# Methodology

The UK figure for total VAT revenues is taken from ONS' database underlying the Public Sector Finances. VAT revenue is then disaggregated into VAT paid by households, businesses, government, and the housing sector.

Scotland's share of UK net VAT revenues paid by households is estimated from the Living Costs and Food Survey (LCF), formerly the Expenditure and Food Survey (EFS). Scotland's share of VAT paid by businesses and the housing sector is apportioned in line with GVA. Scotland's share of VAT paid by government is apportioned in line with government expenditure. The weights of each sector are provided by HMRC, and are shown in the table below.

**Sector weights for VAT calculations** 

Year	Household	Exempt	Government	Housing & other	Total
2000	69.5%	16.5%	9.2%	4.9%	100%
2001	69.4%	16.3%	9.3%	5.0%	100%
2002	69.1%	15.7%	9.8%	5.4%	100%
2003	69.3%	15.1%	10.2%	5.4%	100%
2004	70.5%	13.5%	10.5%	5.4%	100%
2005	69.7%	13.8%	11.3%	5.3%	100%
2006	69.0%	14.1%	11.7%	5.3%	100%
2007	68.6%	14.6%	11.6%	5.2%	100%
2008	67.8%	14.5%	12.6%	5.1%	100%
2009	67.3%	14.1%	13.7%	4.9%	100%
2010	67.7%	14.3%	13.1%	4.9%	100%
2011	67.8%	15.0%	12.4%	4.9%	100%
2012	68.1%	15.0%	12.1%	4.8%	100%
2013	68.3%	15.4%	11.4%	5.0%	100%
2014	68.0%	16.0%	11.0%	5.0%	100%

The LCF provides estimates of average weekly expenditure per household on a large number of goods and services in Scotland and the UK. The relevant VAT rate applicable to each good/service are applied to the average amount spent on each product type to produce an estimate of the average amount of VAT paid per household on each commodity/service. Total VAT revenues are then estimated by multiplying average household VAT revenues by

the number of households in Scotland and the UK. The Scotland/UK ratio of estimated VAT revenues from private households is then applied to actual total UK net VAT revenues to estimate the value of VAT revenues attributable to Scotland.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS. However, since April 2017, the sample of the Living Costs and Food survey has been increased in Scotland, and the Scottish Government has received data for 2017-18. This has been used to adjust forward the three year rolling average of household spending for 2016-17.

## **Estimates**

As shown in the table below, Scotland's estimated share of UK VAT revenue has been revised down in the latest edition of GERS. This reflects revisions to both the LCF data and Scottish GVA.

Table 6: Value Added Tax (£ million)						
	2013-14	2014-15	2015-16	2016-17	2017-18	
UK	106,521	111,244	116,703	121,855	125,127	
Scotland	9,069	9,346	9,729	9,877	10,146	
Scotland/UK	8.5%	8.4%	8.3%	8.1%	8.1%	
Estimated ratios in previo	us GERS publication					
Scotland/UK	8.5%	8.4%	8.4%	8.4%	n/a	
Revision (% point)	0.0%	0.0%	-0.1%	-0.3%	n/a	

# Corporation Tax (excluding the North Sea)

## **Background**

Corporation tax is a tax on a company's taxable income or profits. Different rates apply depending upon the amount of profit raised. There are a number of special accounting rules for particular expenditures, such as capital investment and research and development, which qualify for tax allowances and reliefs. Details of the current tax allowances and tax rates are available at: https://www.gov.uk/business-tax/corporation-tax.

There are different rates and rules governing corporation tax of North Sea output. These are discussed in more detail later in this note.

# Methodology

In general, GERS apportions a share of UK revenues from corporation taxes based on the economic activity undertaken in Scotland and not the location of companies' headquarters. Public corporations' and North Sea corporation tax revenues are excluded from the analysis and are apportioned to Scotland separately.

Calculating Scottish corporation tax revenues is a two stage process. Firstly the UK figure for total corporation tax is taken from ONS' database underlying the Public Sector Finances. An adjustment is then made to remove corporation tax payments from the North Sea sector.

The Scottish share of UK corporation tax (excluding North Sea) is taken from the ONS Country and Regional Public Sector Finances publication.

https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/articles/countryandregionalpublicsectorfinances/2016to2017

This is based on HMRC's country level corporation tax receipts, from their publication, *A disaggregation of HMRC tax receipts between England, Wales, Scotland & Northern Ireland*, available from the link below. However, ONS adjust the cash figures published by HMRC to an accruals basis.

https://www.gov.uk/government/statistics/disaggregation-of-hmrc-tax-receipts

# <u>Differences from Previous Year's Methodology</u>

Whilst there has been no change in methodology since the previous edition of GERS, the ONS have updated their methodology for adjusting from cash to accruals.

# **Estimates**

As shown in the table below, Scotland's estimated share of UK non-North Sea corporation has been revised in the latest edition of GERS, reflecting the changes discussed above.

Table 7: Corporation Tax Non-North Sea (£ million)					
	2013-14	2014-15	2015-16	2016-17	2017-18
UK	38,335	42,523	45,183	53,731	56,403
Scotland	2,710	2,956	3,118	3,744	3,930
Scotland/UK	7.1%	7.0%	6.9%	7.0%	7.0%
Estimated ratios in previo	us GERS publication				
Scotland/UK	7.0%	7.3%	7.1%	7.1%	n/a
Revision (% point)	0.1%	-0.3%	-0.2%	-0.1%	n/a

# **Fuel Duties**

## **Background**

Fuel duty, formally known as hydrocarbon oil duty, is an excise duty levied on the sale of oils (including road fuels). The rate of duty levied varies between fuel types. Information on current duty rates is available from: <a href="https://www.gov.uk/business-tax/fuel-duty">https://www.gov.uk/business-tax/fuel-duty</a>.

## **Methodology**

The UK figure for total fuel duties is taken from ONS' database underlying the Public Sector Finances. This is split into duty paid on petrol and duty paid on diesel using data from HMRC's Hydrocarbon Oils Duties bulletin.

As with other excise duties, the estimation of revenues raised from fuel duty in Scotland is based on the premise that the burden of duty is borne by the final consumer.

Fuel duty revenues are apportioned to Scotland by estimating Scotland's share of UK fuel consumption. UK road traffic fuel consumption and a regional breakdown, based on weighted traffic flows on a sample of roads across the UK, are published by the Department for Business, Energy, and Industrial Strategy (BEIS). Using this information Scotland's share of UK petrol and diesel consumption is derived. These estimates are then applied to the figure for UK revenue from each source to estimate Scotland's share of total fuel duty.

## <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

### **Estimates**

As shown in the table below, Scotland's estimated share of UK fuel duty revenue is unchanged.

Table 8: Fuel Duty (£ million)								
	2013-14	2014-15	2015-16	2016-17	2017-18			
UK	26,881	27,155	27,621	27,937	27,878			
Scotland	2,277	2,301	2,331	2,366	2,361			
Scotland/UK	8.5%	8.5%	8.4%	8.5%	8.5%			
Estimated ratios in previo	us GERS publication							
Scotland/UK	8.5%	8.5%	8.4%	8.5%	n/a			
Revision (% point)	0.0%	0.0%	0.0%	0.0%	n/a			

### Non-Domestic Rates

### **Background**

Non-domestic rates, or business rates, are levied on occupiers of non-residential properties such as shops, offices, warehouses and factories. In Scotland, rates are calculated by multiplying a property's rateable value, set by the local assessor, by the poundage rate, set by the Scottish Government. The standard poundage rate in Scotland in 2017-18 was 46.6 pence; i.e., a property with a rateable value of £10,000 would pay non-domestic rates of £4,600.

In addition, businesses with a rateable value of more than £51,000 in 2017-18 pay a supplement of 2.6 pence, which contributes toward the cost of the Small Business Bonus Scheme. Between 2012-13 and 2014-15 large retail properties which are licenced to sell alcohol for consumption off premises and with a rateable value of more than £300,000 pay a Public Health Supplement of 13 pence.

# Methodology

The figure for Scotland is taken directly from Scottish Local Government Financial Statistics. The latest year's figure is provided by the Scottish Government's Directorate for Local Government and Communities, based upon provisional notified amounts.

## Differences from Previous Year's Methodology

There has been no change in methodology since the previous edition of GERS.

### **Estimates**

As shown in the table below, Scotland's estimated share of UK non-domestic rates revenue is unchanged for 2015-16 and 2016-17, and slightly lower for the preceding two years.. This reflects an increase in Rest of UK non-domestic rates revenues in these years.

Table 9: Non-Domestic Rates (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	27,336	27,885	28,607	29,464	30,141				
Scotland	2,367	2,511	2,579	2,732	2,774				
Scotland/UK (%)	8.7%	9.0%	9.0%	9.3%	9.2%				
Estimated ratios in previo	us GERS publications								
Scotland/UK (%)	8.7%	9.1%	9.0%	9.3%	n/a				
Revision (% point)	-0.1%	-0.1%	0.0%	0.0%	n/a				

# **Council Tax**

## **Background**

Full council tax is levied on occupiers of a house which is their sole or main residence. There are a range of exemptions and reliefs from council tax, including a 25% reduction for single occupancy households, and between 10% and 50% reduction for dwellings which are not the main residence (i.e. second homes). For further details about exemptions and reliefs from council tax please see: <a href="https://www.gov.uk/council-tax">https://www.gov.uk/council-tax</a>

# Methodology

Council tax receipts for Scotland are taken directly from the Scottish Government's Council Tax Collection Statistics 2017-18. Since the collection year for the latest rate is provisional and is typically an underestimate due to late payments, the accrued estimate for the latest year has been taken as the net amount billed multiplied by the historic collection rate across all years.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

## **Estimates**

As shown in the table below, Scotland's estimated share of UK council tax is unchanged since the previous edition of GERS.

Table 10: Council Tax (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	27,364	28,144	28,986	30,361	32,178				
Scotland	1,973	2,007	2,037	2,075	2,261				
Scotland/UK (%)	7.2%	7.1%	7.0%	6.8%	7.0%				
Estimated ratios in previo	us GERS publications								
Scotland/UK (%)	7.2%	7.1%	7.1%	6.8%	n/a				
Revision (% point)	0.0%	0.0%	0.0%	0.0%	n/a				

## VAT refunds

## **Background**

Some public sector bodies receive refunds of VAT that they have paid in respect of contracted out services for non-business purposes, including the free-to-enter public museums. As this VAT is recovered, it is netted out in departmental budgets. In the National Accounts, as these VAT payments by general government bodies form part of the prices paid as a final consumer, they are added back into government expenditure to show gross expenditure. A symmetric adjustment is made to revenues to show VAT receipts gross of these refunds.

# **Methodology**

VAT refunds from local government and central government are apportioned differently. Local government VAT refunds are apportioned on the basis of Scotland's share of UK local government final consumption expenditure.

Central government VAT refunds:

- to the Ministry of Defence are assigned on the basis of Scotland's share of the UK population;
- to NHS are assigned on the basis of Scotland's share of UK Total Expenditure on Services on health;
- to other government departments on basis of Scotland's share of total UK Total Expenditure on Services (less Ministry of Defence and NHS).

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

## **Estimates**

As shown in the table below, Scotland's estimated share of UK VAT refunds revenue has been revised up slightly in the latest edition of GERS. As a symmetric adjustment is applied to expenditure, these revisions do not affect the current budget balance or net fiscal balance.

Table 11: VAT refunds (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	13,646	13,602	14,012	13,735	13,786				
Scotland	1,202	1,193	1,254	1,241	1,245				
Scotland/UK (%)	8.8%	8.8%	8.9%	9.0%	9.0%				
Estimated ratios in previo	us GERS publications								
Scotland/UK (%)	8.8%	8.8%	8.9%	8.9%	n/a				
Revision (% point)	0.0%	0.0%	0.1%	0.2%	n/a				

# **Capital Gains Tax**

## **Background**

Capital gains tax (CGT) is a tax on capital gains from the buying and selling of assets. The capital gain is broadly the difference between the disposal proceeds and the cost of acquiring an asset. Individuals have an annual amount on which CGT is not liable and as with other forms of personal taxation various reliefs and exemptions are available.

Prior to June 2010 capital gains tax was charged at a flat rate of 10%. Since June 2010, it has been charged at a basic rate of 18% and a top rate of 28% for higher-rate taxpayers.

Details of the current tax allowances and tax rates are available at: https://www.gov.uk/capital-gains-tax/overview.

# Methodology

The UK figure for total CGT is taken from ONS' database underlying the Public Sector Finances.

ONS produces estimates of the amount of revenue raised from capital gains tax in Scotland for each financial year. These annual figures are converted to quarterly estimates, and the proportion of the UK revenue raised in Scotland based on these figures is applied to the UK total. The latest estimates of Scotlish revenues are for 2016-17.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS. However, the ONS estimates have been refined to include new data on capital gains tax relating to trusts. Previously, the ONS only made use of data relating to individuals.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK capital gains tax revenue has been revised up for 2013-15 to 2015-16, and is unchanged for 2016-17 in the latest edition of GERS. This reflects the incorporation of the new trusts data by the ONS.

Table 12: Capital Gains Tax (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	3,907	5,559	7,060	8,380	7,879				
Scotland	318	347	373	363	341				
Scotland/UK	8.1%	6.2%	5.3%	4.3%	4.3%				
Estimated ratios in previous	GERS publication								
Scotland/UK	6.1%	5.2%	4.4%	4.4%	n/a				
Revision (% point)	2.0%	1.0%	0.9%	0.0%	n/a				

# Inheritance Tax

### **Background**

Inheritance tax is a tax on assets, exceeding a minimum threshold, transferred on or shortly before death. An individual's estate on death for inheritance tax purposes is made up of a range of assets including those held directly in their name, their share of jointly owned assets and various other forms of asset. For further information regarding exemptions is available from: <a href="https://www.gov.uk/personal-tax/inheritance-tax">https://www.gov.uk/personal-tax/inheritance-tax</a>.

# Methodology

The UK figure for total inheritance tax is taken from ONS' database underlying the Public Sector Finances.

HMRC produces estimates on the amount of revenue raised from inheritance tax in Scotland. The proportion of the UK revenue raised in Scotland based on these figures is applied to the total UK figure obtained from the ONS' database. The latest HMRC data are for 2016-17.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology adopted by GERS since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK inheritance tax revenue has been revised up in the latest edition of GERS. This reflects the latest data from HMRC.

Table 13: Inheritance Tax (£ million)								
	2013-14	2014-15	2015-16	2016-17	2017-18			
UK	3,541	3,879	4,712	4,897	5,287			
Scotland	208	240	277	288	311			
Scotland/UK	5.9%	6.2%	5.9%	5.9%	5.9%			
Estimated ratios in previo	us GERS publications							
Scotland/UK	5.8%	5.7%	5.7%	5.7%	n/a			
Revision (% point)	0.0%	0.5%	0.2%	0.2%	n/a			

# **Reserved Stamp Duties**

#### **Background**

Stamp duty is levied on conveyances and transfers of land and property and on share transactions. Since 1 April 2015, stamp duties on transfers of land and property in Scotland have ben devolved to the Scottish Parliament, and only stamp duty on share transactions remains reserved.

For details on the rates of UK duty, please see: <a href="https://www.gov.uk/stamp-duty-on-shares">https://www.gov.uk/stamp-duty-on-shares</a>

Stamp duties in GERS also include the Annual Tax on Enveloped Dwellings, which was introduced in April 2013. This is a tax payable by companies that own residential property valued at over £2 million. Further information is available at: https://www.gov.uk/annual-tax-on-enveloped-dwellings-the-basics

# Methodology

The UK figure for revenue from reserved taxes is taken from ONS' database underlying the Public Sector Finances.

Separate methods are used for estimating Scotland's share of UK revenue raised from (1) stocks and shares stamp duties, and (2) the annual tax on enveloped dwellings.

1. Stocks and Shares Stamp Duty

The Scotland/UK ratio of adults owning stocks and shares as reported in the DWP Family Resources Survey (FRS), weighted according to estimates of adult population in Scotland and the UK (those classed as aged 18+) was used to estimate the proportion of UK stamp duty from stocks and shares raised in Scotland.

2. Annual tax on enveloped dwellings

HMRC publishes estimates of receipts from this tax in Scotland, based upon the share of transactions of residential property valued above £1 million. This is used in place of administrative data in order to meet disclosure rules.

#### Differences from Previous Year's Methodology

There has been no change in methodology since the previous edition of GERS.

### **Estimates**

As shown in the table below, Scotland's estimated share of reserved stamp duties revenue is broadly unrevised in the latest edition of GERS.

Table 14: Reserved Stamp Duties (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	12,481	13,779	14,181	15,657	16,569				
Scotland	661	741	280	337	317				
Scotland/UK	5.3%	5.4%	2.0%	2.1%	1.9%				
Estimated ratios in previo	us GERS publications								
Scotland/UK	5.3%	5.4%	2.0%	2.1%	n/a				
Revision (% point)	0.0%	0.0%	-0.1%	0.1%	n/a				

# Land and Buildings Transaction Tax

### **Background**

Land and Buildings Transaction Tax replaced the UK Stamp Duty from 1 April 2015. It is a tax on purchases of commercial and residential land and buildings. The structure of the tax is designed so that the charge is proportionate to price of the property. From 1 April 2016, an additional supplement is applied to purchases of additional residential properties in Scotland, such as buy-to-let properties and second homes.

For further details and rates see:

https://www.revenue.scot/land-buildings-transaction-tax

# Methodology

Figures reflect outturn data from Revenue Scotland. For 2016-17, figures are consistent with Revenue Scotland's 2016-17 Annual Report - Devolved Taxes Accounts. For 2017-18, figures are based on the in-year reported amounts, although there may be small differences due to timing adjustments.

## <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

### **Estimates**

As shown in the table below, Scotland's estimated revenue from land and buildings transaction tax has been revised up for the last year in the latest edition of GERS.

Table 15: Land and Buildings Transactions Tax (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
Latest estimate	-	-	425	484	546				
Estimate in previous GERS publication	ī	=	425	466	n/a				
Revision	Revision 0 18 n								

# Scottish Landfill Tax

### **Background**

Landfill tax is a tax on the disposal of waste and is paid on top of normal landfill fees. Different rates are applied according to the type of waste being disposed of. In Scotland, Scottish Landfill Tax replaced the UK tax from 1 April 2015. Further details and rates are available at

https://www.revenue.scot/scottish-landfill-tax

For further information on the UK tax, which also applied in Scotland prior to 1 April 2015, please see:

https://www.gov.uk/business-tax/landfill-tax

# Methodology

For years prior to 2015-16, the UK figure for total landfill tax is taken from ONS' database underlying the Public Sector Finances.

The proportion of the UK total tonnage of waste sent to landfill in Scotland is used to apportion total UK landfill tax to Scotland, but with an adjustment applied to reflect the fact that Scotland's outturn share of UK landfill tax is higher than this amount.

From 2015-16 figures reflect outturn data from Revenue Scotland. For 2016-17, figures are consistent with Revenue Scotland's 2016-17 Annual Report - Devolved Taxes Accounts. For 2017-18, figures are based on the in-year reported amounts, although there may be small differences due to timing adjustments.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated revenue from Scottish Landfill Tax is unrevised in the latest edition of GERS.

Table 16: Scottish Landfill Tax (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
Latest estimate	-	-	147	149	149				
Estimated in previous GERS publication	-	=	147	149	n/a				
Revision		-	0	0	n/a				

# Air Passenger Duty

## **Background**

Air passenger duty (APD) is levied on the carriage, from a UK airport, of chargeable passengers on chargeable aircrafts. There are currently four rates of duty with exemptions for certain flights, e.g. flights from the Highlands and Islands of Scotland. For details of current rates and exemptions please see:

https://www.gov.uk/business-tax/air-passenger-duty.

## Methodology

The UK figure for total APD is taken from ONS' database underlying the Public Sector Finances. This is then apportioned using the following methodology.

Data from the Civil Aviation Authority (CAA) surveys of Scottish airports in 2005, 2009, and 2013 are combined with Scottish passenger numbers from Scottish Transport Statistics, excluding flights from the Highland and Islands and to offshore facilities. This provides an estimate of the number of Scottish passengers by each air passenger duty band on the basis of their final destination, disaggregated by ticket class. These are combined with HMRC figures on UK APD liable passengers travelling in each duty band and ticket class to estimate Scotland's share of UK passengers by duty band. An adjustment is also made to exclude exempt passengers.

Data for the years between 2005 and 2009, and 2009 and 2013 are interpolated to provide estimates for intervening years. There is assumed to be no change in the distribution of Scottish passengers across bands before 2005 and after 2013. Estimates are produced on a calendar year basis, consistent with the CAA survey data, and converted to a smoothed quarterly series using a cubic spline.

These shares are combined with HMRC figures for air passenger duty revenues by band to derive an estimate of Scotland's share of total UK revenues.

### <u>Differences from Previous Year's Methodology</u>

Whilst there has been no change in the methodological approach since the previous edition of GERS, there has been a small data change to make use of new HMRC figures for child exemptions.

#### **Estimates**

As shown in the table below, Scotland's estimated share of air passenger duty revenue is broadly unchanged.

Table 17: Air Passenger Duty (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	3,003	3,205	3,040	3,236	3,360				
Scotland	226	240	250	265	275				
Scotland/UK	7.5%	7.5%	8.2%	8.2%	8.2%				
Estimated ratios in previo	us GERS publications								
Scotland/UK	7.5%	7.6%	8.1%	8.2%	n/a				
Revision (% point)	0.0%	-0.1%	0.1%	0.0%	n/a				

# **Tobacco Duty**

#### Background

Tobacco excise duty is a tax charged on cigarettes, cigars, hand rolling, pipe and chewing tobacco. Duty on cigarettes is based on a percentage of the recommended retail price, plus a specified charge per 1,000 cigarettes. Duties on cigars, hand rolling, pipe and chewing tobacco are charged according to weight. There are no exemptions or reliefs for tobacco duty. The rates of duty are set each UK Budget. For details on the rates of duty please see: <a href="https://www.gov.uk/government/publications/tobacco-duty-rates">https://www.gov.uk/government/publications/tobacco-duty-rates</a>

## <u>Methodology</u>

As with alcohol (see below), the estimation of tobacco duty raised in Scotland is based on the premise that the burden of duty is borne by the final consumer.

UK tobacco duty revenues are taken from ONS' database underlying the Public Sector Finances. Scotland's share of total UK private household expenditure on tobacco products is then used to derive the proportion of duty attributable to Scotland.

Expenditure on tobacco products is estimated using the Living Costs and Food Survey (LCF), formerly the Expenditure and Food Survey (EFS), which collects information on average household spending patterns on a wide variety of products including tobacco. The latest Scottish data are for 2015. Total weekly spend is then estimated by multiplying average household spend by the number of households in Scotland and the UK. The ratio of tobacco expenditure in Scotland and the UK is then applied to total UK tobacco revenue to estimate the proportion of tobacco duty attributable to Scotland.

### <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK tobacco duty revenue has been revised down in the latest edition of GERS. This reflects the latest data from the LCF.

Table 18: Tobacco Duty (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	9,556	9,251	9,106	8,681	8,766				
Scotland	1,243	1,131	995	970	972				
Scotland/UK	13.0%	12.2%	10.9%	11.2%	11.1%				
Estimated ratios in previous	GERS publications								
Scotland/UK	12.9%	12.6%	12.7%	12.7%	n/a				
Revision (% point)	0.1%	-0.4%	-1.7%	-1.5%	n/a				

# **Alcohol Duty**

### **Background**

Alcohol excise duty is a flat-rate duty on alcoholic beverages. Duty on spirits is calculated per litre of pure alcohol; cider, perry, wine and made wine are dutied in bands of alcoholic strength and calculated by volume; beer duty is calculated by strength and volume. Since flat-rates are expressed in cash terms, they are revalorised (i.e. increased in line with inflation) each year. For details of current rates of duty please see: <a href="https://www.gov.uk/business-tax/alcohol-duties">https://www.gov.uk/business-tax/alcohol-duties</a>

## **Methodology**

The estimation of alcohol duty raised in Scotland is based on the premise that the burden of duty is borne by the final consumer rather than the producer.

UK alcohol duty revenues are taken from ONS' database underlying the Public Sector Finances for:

- Spirits:
- · Cider and perry;
- Wine; and
- Beer.

Scotland's share of total UK private household consumption of these different alcohol products is then used to derive the proportion of duty attributable to Scotland.

Expenditure on alcoholic products is estimated using the Family Food Survey published by DEFRA, which collects information on average household spending patterns on a wide variety of products including alcohol. Total weekly consumption is then estimated by multiplying average personal consumption spend by the estimated population in Scotland and the UK. The ratios of total consumption in Scotland and the UK of spirits, cider and perry, wine, and beer are then applied to UK alcohol duty revenues to estimate Scotland's share. The latest Scottish data are for 2015.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK alcohol duty revenue has been revised up in the latest edition of GERS, reflecting updated data from the Family Food Survey.

Table 19: Alcohol Duty (£ million)									
	2013-14	2014-15	2015-16	2016-17	2017-18				
UK	10,308	10,449	10,697	11,117	11,586				
Scotland	980	1,001	1,030	1,076	1,122				
Scotland/UK	9.5%	9.6%	9.6%	9.7%	9.7%				
Estimated ratios in previo	us GERS publications								
Scotland/UK	9.4%	9.2%	9.3%	9.3%	n/a				
Revision (% point)	0.1%	0.4%	0.3%	0.3%	n/a				

# **Insurance Premium Tax**

### **Background**

Insurance premium tax (IPT) is a tax on general insurance premiums. IPT is payable on most types of insurance in the UK and on foreign travel insurance for trips lasting less than four months. There are two rates: a standard rate of 10% and a higher rate of 20% depending upon the type of insurance purchased. There are some exceptions to IPT including life insurance. For further details please see: <a href="https://www.gov.uk/business-tax/insurance-premium-tax">https://www.gov.uk/business-tax/insurance-premium-tax</a>.

### **Methodology**

The UK figure for total IPT is taken from ONS' database underlying the Public Sector Finances.

The estimation of IPT revenues raised in Scotland is based on the premise that the burden of duty is borne by the final consumer.

Expenditure on insurance is estimated using the Living Costs and Food Survey (LCFS), formerly the Expenditure and Food Survey (EFS), which collects information on average household spending patterns on a wide variety of products including insurance. The latest Scottish data are for 2015. Total weekly spend is then estimated by multiplying average household spend by the number of households in Scotland and the UK. The ratio of insurance expenditure in Scotland and the UK is then applied to UK insurance premium tax revenues to estimate the value of insurance premium tax revenues attributable to Scotland.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK insurance premium tax revenue is unchanged in the latest edition of GERS.

Table 20: Insurance Premium Tax (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	3,018	2,973	3,717	4,872	5,943		
Scotland	211	204	255	334	408		
Scotland/UK	7.0%	6.8%	6.9%	6.9%	6.9%		
Estimated ratios in previo	us GERS publications						
Scotland/UK	7.0%	6.9%	6.9%	6.9%	n/a		
Revision (% point)	0.0%	0.0%	0.0%	0.0%	n/a		

# Vehicle Excise Duty

## **Background**

Vehicle excise duty (also known as road tax) is an annual charge paid by vehicle owners. For cars registered since 2001, duty is charged according to the emissions of the vehicle and the type of fuel used. For older cars, duty is charged according to the engine size. For details of current rates of duty please see: <a href="https://www.gov.uk/vehicle-tax-rate-tables">https://www.gov.uk/vehicle-tax-rate-tables</a>.

## **Methodology**

The UK figures for both vehicle excise duty from households and vehicle excise duty from businesses are taken from ONS' database underlying the Public Sector Finances. These figures are disaggregated into Great Britain's (GB) revenues and revenues from Northern Ireland, as in Northern Ireland the duty is collected separately by the Northern Ireland Vehicle Agency. Northern Ireland data is not used in the apportionment to Scotland, but is used in producing UK totals published in GERS.

Data published by DVLA on the numbers of licenced vehicles, by type of vehicle, in each region of the UK are used to estimate Scotland's share of GB vehicle excise duty. This is a change to the source data, as previously DVLA data on the value of licences issued was used; however, these data are no longer available. The new data are available quarterly and the latest data are for 2018Q1.

## Differences from Previous Year's Methodology

There has been no change in methodology since the previous edition of GERS, although there has been a change in the source data as discussed above.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK vehicle excise duty revenue is revised upwards slightly in the latest edition of GER, due to a change in the source data and more timely availability of the data..

Table 21: Vehicle Excise Duty (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	6,121	5,910	5,922	5,997	6,378		
Scotland	494	463	466	475	503		
Scotland/UK	8.1%	7.8%	7.9%	7.9%	7.9%		
Estimated ratios in previo	us GERS publications						
Scotland/UK	8.0%	7.7%	7.7%	7.8%	n/a		
Revision (% point)	0.1%	0.1%	0.1%	0.1%	n/a		

## **Environmental Levies**

### **Background**

Environmental levies consist of Carbon Reduction Commitment and Renewables Obligation payments.

The Carbon Reduction Commitment is a mandatory scheme which aims to improve energy efficiency and cut emissions in large public and private sector energy users across the UK. Participants must monitor their energy supplies and purchase allowances to cover the associated CO<sub>2</sub> emissions.

The Renewables Obligation places an obligation on UK electricity suppliers to source an increasing proportion of the electricity they supply from renewable sources. Operators require certificates for the energy they generate. Certificates can be traded between operators to ensure they have sufficient to meet their scheme targets. As the scheme is mandatory, payments associated with it are regarded as a tax, even when they are not made directly to the government. As such, revenue and expenditure associated with the scheme by energy operators are included as both an imputed tax and subsidy in the public sector finances. This does not affect the fiscal balances.

# **Methodology**

Scotland is allocated a share of Carbon Reduction Commitment revenue in line with its share of UK electricity consumption by industry. This is taken from the BEIS Sub-national electricity consumption data.

https://www.gov.uk/government/collections/sub-national-electricity-consumption-data

Figures for the Renewables Obligation are based on data on payments made by operators in Scotland, based on data provided directly by ONS.

#### Differences from Previous Year's Methodology

There has been no change in methodology since the previous edition of GERS.

#### **Estimates**

As shown in the table below, Scotland's estimated share of UK vehicle excise duty revenue is unrevised in the latest edition of GERS.

Table 22: Environmental Levies (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	3,128	3,657	4,527	5,172	6,514		
Scotland	343	406	507	590	752		
Scotland/UK	11.0%	11.1%	11.2%	11.4%	11.5%		
Estimated ratios in previo	us GERS publications						
Scotland/UK	11.0%	11.1%	11.2%	11.4%	n/a		
Revision (% point)	0.0%	0.0%	0.0%	0.0%	n/a		

# **Other Taxes**

# **Background**

Other taxes and royalties comprise a number of relatively small public sector revenue sources. Each of which is apportioned to Scotland separately.

# Methodology

UK revenue from other taxes is apportioned to Scotland as follows

Revenue	Background	Methodology
Betting and gaming duties	A tax on various forms of gambling. There are six different betting and gaming duties each of various rates. For example, there is a 15% tax on bookmakers' gross profits and for non-UK established online betting and gaming operators.	Scottish share of expenditure on gambling products is estimated using the Living Costs and Food Survey (LCF),
Horserace betting levy board	A levy on bookmakers and the Tote to fund the horserace betting levy board.	Scottish share of expenditure on gambling products is estimated using the Living Costs and Food Survey (LCF),
Climate change levy	A levy chargeable on the industrial and commercial supply of lighting, heating and other sources of power used by industry, commerce, agriculture, public administration and other services. The levy does not apply to domestic consumers or to charities. Different rates apply for different sources of power.	Based on Scottish consumption of electricity and gas, from BEIS.
Aggregates levy	A tax on the commercial exploitation of rock, sand and gravel. It is charged at a flat rate per tonne	Based on the proportion of UK aggregate production of sand, gravel and crushed rock that takes place in Scotland each year, sourced from the United Kingdom Minerals Yearbook. Exports of marine dredged sand and gravel, which are exempt from aggregates levy, are excluded from the UK total.
Non-Fossil Purchasing Agency levy income	OFGEM's Non-Fossil Purchasing Agency sells renewable electricity produced under Non-Fossil Fuel Obligation orders, and may charge a levy to cover any losses it makes	As for renewable energy obligations
Fossil Fuel Levy	For years up to 2002/03, this was a levy paid by suppliers of electricity from non-renewable energy sources in the UK. The costs were passed to the consumers in the cost of the electricity supplied. The fossil fuel levy was imposed to fund the Non-Fossil Fuel Obligation.	Based on GVA share
Consumer Credit Act fees	The Consumer Credit Act requires businesses that offer credit or lend money to consumers to be licensed by the OFT. This includes where credit is arranged to finance the purchase of goods or services.	Apportioned to Scotland on the basis of Scotland's proportion of the UK population.
Northern Ireland		Not applicable to Scotland
To levy funded bodies	Statutory bodies which impose a compulsory change on industry members and exist only in the agricultural sector.	Scotland share of agriculture GVA.

Revenue	Background	Methodology
Regulatory fees	Fees and levies intended to be raised for regulatory bodies such as the FSA, the Financial Services Ombudsman and Financial Services Compensation Scheme.	Apportioned to Scotland on the basis of Scotland's proportion of the UK population.
Boat licences		Apportioned to Scotland on the basis of Scotland's proportion of the UK population.
Milk super levy	UK-administered quota system on milk production introduced by the EU in 1984 to curb excess production. If a producer exceeds the quota an annual super levy is charged and used to pay for disposal.	Apportioned to Scotland on the basis of Scotland's proportion of UK agricultural GVA.
National lottery	This is the contribution that Camelot makes to the National Lottery Distribution Fund (not part of betting and gaming duty).	Method as for betting and gaming duty – using Scotland's proportion of estimated UK spend on betting etc as estimated by the Living Costs and Food Survey.
Rail franchise premia	Train operators pay the government a set fee for the right to run services on the rail network.  The franchises usually run for 10 years.	On the advice of ONS, Scotland is allocated 6.7% of this revenue.
Fishing licences	These relate to Environment Agency rod licences in England and Wales. No fishing/rod licence is required for fishing in Scotland (although as per England and Wales a fishing permit is often requested by a local water authority or land owner).	None for Scotland
Passport fees		Apportioned to Scotland on the basis of Scotland's proportion of the UK population.
TV licences		Apportioned to Scotland on the basis of Scotland's proportion of the UK's estimated number of private households.
Accounting adjustment	Adjustment to constrain total UK revenue to be consistent with the latest public sector finances	Apportioned to Scotland on the basis of Scotland's proportion of the UK population.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

# **Estimates**

As shown in the table below, Scotland's estimated share of other taxes revenue shows slight revisions – up in 2013-14 and 2014-15, and down in the next two years - in the latest edition of GERS.

Table 23: Other Taxes (£ million)								
	2013-14	2014-15	2015-16	2016-17	2017-18			
UK	17,915	18,900	19,498	19,739	20,848			
Scotland	1,620	1,685	1,577	1,639	1,742			
Scotland/UK	9.0%	8.9%	8.1%	8.3%	8.4%			
Estimated ratios in previous	GERS publication							
Scotland/UK	8.9%	8.8%	8.3%	8.4%	n/a			
Revision (% point)	0.1%	0.1%	-0.2%	-0.1%	n/a			

## Interest and Dividends

### Background

This revenue element includes all interest and dividend payments received by the public sector from the private sector and the rest of the world. Interest payments received by public sector bodies from other UK public sector bodies are not included.

### Methodology

UK figures for interest and dividend revenue received by (a) public corporations, (b) local government and (c) central government, are obtained from ONS' database underlying the Public Sector Finances. Following advice from the OBR, central government interest income is split into interest received from student loans and other interest income. Following the reclassification of housing associations into the public sector, public corporation interest income is split into housing association and non-housing association income.

UK central government student loans income is estimated for Scotland using actual Scottish receipts in the ONS PSAT2 database. Local government and other central government revenues from interest and dividends are apportioned to Scotland using Scotland's share of UK population.

## <u>Differences from Previous Year's Methodology</u>

There has been no change in methodology since the previous edition of GERS.

### **Estimates**

As shown in the table below, Scotland's estimated share of UK interest and dividends revenue has been revised down in the latest edition of GERS. This reflects an upward revision to UK interest and dividends due to English Housing Associations.

Table 24: Interest and Dividends (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	6,183	6,663	6,978	6,528	7,149		
Scotland	393	368	422	368	339		
Scotland/UK (%)	6.4%	5.5%	6.0%	5.6%	4.7%		
Estimated ratios in previo	us GERS publications						
Scotland/UK (%)	7.2%	6.2%	6.3%	6.1%	n/a		
Revision (% point)	-0.8%	-0.7%	-0.3%	-0.5%	n/a		

# **Gross Operating Surplus**

### **Background**

Gross operating surplus (GOS) refers to the operating (or trading) surpluses (or losses) of central government, local government and public corporation trading activity.

By definition, general government GOS is equal to general government non-market capital consumption. This is a measure of the amount of fixed capital resources used up in the production process (i.e. depreciation). Since this is a public sector receipt, that does not raise actual funds, it is balanced by an offsetting item within public expenditure. By definition, the adjustment item (NMCC) is added to public expenditure rather than subtracted on the revenue side.

For public corporations, the GOS figure includes the gross trading surplus, rental income, stock appreciation (or holding gains), and FISIM (Financial Intermediation Services Indirectly Measured).

# **Methodology**

In calculating GOS for Scotland, separate figures are estimated for:

- 1. Central government
- 2. Local government
- 3. Public corporations
- 1. The UK revenue for central government GOS is taken from ONS' database underlying the Public Sector Finances.

It is apportioned to Scotland according to Scotland's share of UK NMCC for central government obtained from ONS Regional Accounts.

2. The UK revenue for local government GOS is taken from ONS' database underlying the Public Sector Finances.

It is apportioned to Scotland according to Scotland's share of UK NMCC for local government obtained from ONS Regional Accounts.

- 3. The approach taken to estimate the GOS for public corporations in Scotland is different. The GOS of public corporations comprises the following elements
  - 1. Gross trading surplus (from operating activities);
  - 2. Gross trading surplus (from artistic originals);
  - 3. Housing Revenue Account (HRA)
  - 4. Rental Income (excluding HRA)
  - 5. FISIM
  - 6. Holding Gains

For elements 1 and 4, revenue from every public corporation was obtained. Public corporations were classified as 'Scotland', 'Not Scotland', or 'UK', depending on their area of coverage. For those classified as 'Scotland', all of the revenue (Gross Trading Surpluses, Rental and FISIM) was assigned to Scotland. Public corporations classified as 'Not Scotland' were excluded. For 'UK' public corporations, revenue was apportioned to Scotland on the basis of the relevant industry GVA share.

Gross trading surpluses relating to artistic originals in general arise from the BBC and Channel 4. Scotland is apportioned a population share of this revenue.

For the Housing Revenue Account, figures were obtained directly for local authority rents in Scotland from ONS.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in approach since the previous edition of GERS.

## **Estimates**

Estimates of Scotland's share of UK gross operating surplus have been revised up in all years. This reflects the reclassification of English housing associations into the private sector, which decreased GOS for the rest of the UK compared to Scotland.

Table 25: Gross Operating Surplus (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	44,193	45,650	47,036	47,783	45,901		
Scotland	4,243	4,400	4,412	4,473	4,625		
Scotland/UK (%)	9.6%	9.6%	9.4%	9.4%	10.1%		
Estimated ratios in previo	us GERS publications						
Scotland/UK (%)	9.3%	9.1%	9.0%	9.1%	n/a		
Revision (% point)	0.3%	0.6%	0.4%	0.3%	n/a		

# Other receipts

### **Background**

This revenue covers other non-tax revenue received by central government, local government and public corporation trading activity. The largest component is local government rental income.

The UK figure for rents and other current transfers is taken from ONS' database underlying the Public Sector Finances.

Rents and other current transfers for central government, local governments and public corporations are estimated separately.

Central government rents and other current transfers comprise the following elements:

- 1. Revenues for spectrum use in relation to licences for 3G mobile telephones
- 2. Rents on land
- 3. Water abstraction
- 4. Other spectrum revenues
- 5. Court fines
- 6. Other, e.g. speed camera fines, charitable contributions to NHS trusts

Local government other receipts comprise income of insurance and pension funds allocated to local authorities as beneficial owners.

Public corporation other receipts relate to the activities of the Export Credits Guarantee Department.

A number of revenue items are netted off in this line, as part of consolidating revenue across the public sector:

- 1. Business rates paid by local authorities in England
- 2. Corporation tax paid by public corporation

## Methodology

The methodology for apportioning these revenues to Scotland is shown below.

Other receipts	Apportionment Methodology
Rents on land	Public sector GVA
Water abstraction	Public sector GVA
Other spectrum revenues	Public sector GVA
Court fines	Separate identification of 'Scotland' and 'Non-Scotland' revenues
Other, e.g. speed camera fines, charitable contributions to NHS trusts	Public sector GVA
3G and 4G spectrum receipts	GVA
Local Government and public corporation receipts	Public sector GVA
Business rates paid by local authorities in England	None
Corporation tax paid by public corporations	As corporation tax

# <u>Differences from Previous Year's Methodology</u>

There has been no change in approach since the previous edition of GERS.

# **Estimates**

As shown in the table below, Scotland's estimated share of UK other receipts has been revised down in the latest edition of GERS. This reflects the upward revision in UK rents, of which Scotland gets a smaller share.

Table 26: Other receipts (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK	2,733	3,956	3,300	3,226	2,774		
Scotland	362	483	419	416	373		
Scotland/UK (%)	13.2%	12.2%	12.7%	12.9%	13.4%		
Estimated ratios in previo	us GERS publications						
Scotland/UK (%)	7.2%	6.2%	6.3%	6.1%	n/a		
Revision (% point)	-0.8%	-0.7%	-0.3%	-0.5%	n/a		

### North Sea Revenue

### Background

North Sea revenue in GERS comes from three sources: petroleum revenue tax, corporation tax, and licence fees. The taxation or charging regime for each of these elements is as follows:

• Petroleum revenue tax (PRT): The PRT regime has changed significantly in recent years. Historically, PRT was charged at a rate of 50% on field-based profits from oil and gas extraction on fields given development approval prior to March 1993 at which time it was abolished for all new fields. There were deductions for all exploration, appraisal, and development costs on a 100% first year basis with an uplift of 35% for field investment costs prior to field payback. There were also volume and safeguard allowances.

In the March 2015 Budget, the rate of PRT was reduced from 50% to 35%, with effect from 1 January 2016. This change was then superseded by a reduction in the rate to 0% in the March 2016, which applied retrospectively from 1 January 2016. As companies are still able to claim refunds on PRT paid in previous years against current trading losses and decommissioning spending, PRT receipts will only be negative in the future under the current tax regime.

- Corporation tax (CT): Ring-fenced corporation tax was charged at a rate of 30% on profits net of any PRT payments. A Supplementary Charge (SC) is levied on top of CT. The SC was increased from 20% to 32% in March 2011 resulting in an overall corporation tax rate (CT + SC) of 62%. The SC has subsequently been decreased to:
  - 30% from December 2014;
  - 20% from January 2015;
  - 10% from January 2016;

which means the overall rate from this date is 40%.

• Licence Fees: The UK Government grants licences for operators to "search and bore for and get" petroleum in specified areas for a set period of time. Operators pay an annual fee for holding these licences. Licence fees are charged at an escalating rate on each square kilometre that the licence covers.

#### Methodology

Three estimates of Scotland's share of North Sea revenue are adopted in the GERS report:

- 1. Zero share
- 2. A population share
- 3. An illustrative geographical share

Under the zero share approach, Scotland is allocated none of the revenues associated with the North Sea.

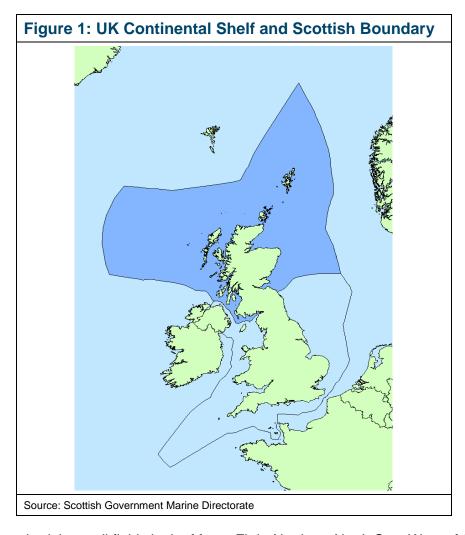
Under the population share approach, Scotland is allocated a share of the revenues associated with the North Sea based on its share of the UK population.

<sup>&</sup>lt;sup>1</sup> Petroleum Act 1998 - http://www.opsi.gov.uk/ACTS/acts1998/ukpga 19980017 en 1

The illustrative geographical share is consistent with that used by the ONS in their Country and Regional Public Sector Finances publication.

https://www.ons.gov.uk/releases/countryandregionalpublicsectorfinances

This bases the Scottish boundary of the UKCS on the median line principle as employed in 1999 to determine the boundary between Scotland and the rest of the UK for fishery demarcation purposes. Other alternatives are possible. Scotland's estimated geographical share of the North Sea sector, used in this report, is highlighted in Figure 1 below. Demarcation by the median line is highlighted by the dark shaded area. UKCS production, costs and revenue is allocated on a field by field basis to either the rest of the UK or Scotland using this boundary.



Using this methodology, all fields in the Moray Firth, Northern North Sea, West of Shetland regions of the UKCS are allocated to Scotland. Fields in the Southern North Sea and Irish Sea are assigned to the rest of the UK. The Scottish boundary, based on the median line principle, intersects the Central North Sea (CNS) region. Fields in the CNS region to the north of the median line are assigned to Scotland and fields lying to the south assigned to the rest of the UK. No fields are intersected by the median line.

# <u>Differences from Previous Year's Methodology</u>

There has been no change in approach since the previous edition of GERS.

### **Estimates**

Information on Scotland's estimated illustrative geographical share of the North Sea is provided below.

As shown in Table 27 below, Scotland's estimated share of UK North Sea revenue has been revised in the latest edition of GERS. This reflects relatively small changes in UK revenues, which are distributed differently depending on the type of revenue. The fact that Petroleum Revenue Tax is negative from 2015-16 means that Scotland's share of the UK total can change by relatively large amounts, even when the cash revision is small. Table 28 below also shows the revisions in cash terms for reference.

Table 27: North Sea Revenue (£ million)							
	2013-14	2014-15	2015-16	2016-17	2017-18		
Population share							
UK	4,499	1,691	-85	36	1,192		
Scotland	374	140	-7	3	98		
Scotland/UK (%)	8.3%	8.3%	8.2%	8.3%	8.2%		
Estimated ratios in previous GERS publication	ations						
Scotland/UK (%)	8.3%	8.3%	8.2%	8.2%	n/a		
Revision (% point)	0.0%	0.0%	0.0%	0.1%	n/a		
Illustrative geographical share							
UK	4,499	1,691	-85	36	1,192		
Scotland	3,446	1,377	50	266	1,327		
Scotland/UK (%)	76.6%	81.4%	-59.2%	739.7%	111.3%		
Estimated ratios in previous GERS publications							
Scotland/UK (%)	76.6%	81.3%	-69.6%	247.9%	n/a		
Revision (% point)	0.0%	0.2%	10.4%	491.7%	n/a		

Table 28: Revisions to North Sea Revenue: 2013-14 to 2016-17						
		£ million				
	2013-14	2014-15	2015-16	2016-17		
Scotland (illustrative geographical share)						
Estimates published in GERS 2016-17	3,448	1,374	56	208		
Estimates published in GERS 2017-18	3,446	1,377	50	266		
Revision	-2	3	-5	58		
UK						
Estimates published in GERS 2016-17	4,499	1,691	-80	84		
Estimates published in GERS 2017-18	4,499	1,691	-85	36		
Revision	0	0	-5	-48		