

## **Annex B: Expenditure methodology (online)**

This extended online annex outlines the methodologies used to estimate public sector expenditure for Wales.

### **Overview**

Figures for UK and Welsh public sector expenditure are taken directly from official UK Government sources.

The primary data source used to estimate Welsh public sector expenditure is the Country and Regional Analysis (CRA) database, published by HM Treasury. In this annual statistical exercise, UK Government departments and devolved administrations allocate expenditure programmes to Wales, Scotland, Northern Ireland and the English regions.

GERW uses expenditure classed as identifiable to Wales in the CRA, with some minor amendments. The report also apportions non-identifiable expenditure and expenditure occurring outside the UK to Wales according to different methodologies. An accounting adjustment is also introduced to produce a Total Managed Expenditure (TME) measure of total expenditure.

### **Methodologies for Apportioning Non-identifiable Expenditure**

The different methodologies used for apportioning non-identifiable expenditure to Wales by function are listed in table B.I below. Each methodology aims to capture most appropriately the 'who benefits' principle (see Introduction in main report).

**Table B.1: Apportionment Methodologies for categories of Non-Identifiable Expenditure: Wales 2010-11 to 2014-15<sup>1,2</sup>**

<b>Expenditure category</b>	<b>Non-Identifiable UK Expenditure</b>	<b>Outside the UK</b>
General public services		
Public and common services	Population	Population
International services	Population	Population
Public sector debt interest	Population	n/a
Defence	Population	n/a
Public order and safety	Population	n/a
Economic affairs		
Enterprise and economic development	Population	Population
Science and technology	GVA	Population
Employment policies	n/a	Population
Agriculture, forestry and fisheries	Population	Population
Transport	GVA	Population
Environment protection	GVA	Population
Housing and community amenities	Population	n/a
Health	Population	Population
Recreation, culture and religion	Population	Population
Education and training	n/a	Population
Social protection	Population	Population
Accounting adjustments	Various (see table B.2)	Various (see table B.2)

1: n/a (not applicable) denotes that there is no UK non-identifiable expenditure.

2: Identifiable expenditure outside the UK, except EU transactions, is primarily apportioned on a per capita basis.

## **Amendments to CRA Data**

A small number of supplementary amendments to the CRA 2015 dataset were made. These amendments do not significantly change the level of expenditure estimated for Wales.

Some expenditure relating to the 2012 London Olympics appears in the CRA data as non-identifiable expenditure in the 'Recreation, culture and religion' function category. As such, without amendment, this spending would be allocated to Wales according to a population share. The GERS report has developed an alternative methodology to better capture the 'who benefits' principle in relation to this spending. Capital expenditure is deemed to benefit primarily London and the surrounding area and therefore Wales is not allocated a share of this spending. Current expenditure has been apportioned to Wales according to an estimated share of the impact of tourism expenditure (as estimated in an Oxford Economics report).

In the CRA data, expenditure on nuclear decommissioning is classified as identifiable to the region where nuclear facilities are located. As nuclear facilities (when operational) benefit all UK residents, it is deemed that this expenditure is best captured as non-identifiable expenditure, and therefore is re-allocated to Wales according to a population share.

Public sector debt interest payments data in the CRA were also updated with more recent data.

Research and Development expenditure classified as current expenditure in the CRA was also reclassified as capital expenditure, to be consistent with ESA10 definitions.

## Accounting Adjustments

As mentioned previously, an accounting adjustment is introduced alongside the estimate of TES to produce a measure of expenditure on a TME basis. The main difference between TES and TME is that TES does not include general government capital consumption and does not reverse the deduction of certain VAT refunds in the budget-based expenditure. It also contains a number of items that are in budgets but are not in TME, for example the grant equivalent element of student loans.

The accounting adjustments required to reconcile TME and TES for Wales and the UK are set out in Table B.2.

Table B.2 Accounting Adjustments and apportionment methodologies	
Accounting Adjustment line	Apportionment Methodology
of which current expenditure:	
Central government capital consumption	Wales' share of non-market capital consumption
Local government capital consumption	Wales' share of non-market capital consumption
Current VAT refunds	See revenue methodology
VAT receipts paid to EU	VAT receipts share
Student loans subsidy	Population
Imputed subsidy from Local Authorities to the Housing Revenue Account	Population
Imputed flows for Renewable Obligation Certificates	Energy consumption (as on revenue side)
Local authority pensions	Public Sector GVA share (see revenue methodology)
Tax credits	HMRC data
Current expenditure residual	Population
of which capital expenditure:	
Capital VAT refunds	See revenue methodology
Royal Mail pension plan	Population
Capital expenditure residual	Population

The accounting adjustment is first calculated for the UK as a whole, as the difference between TES from the CRA and TME from ONS data. Individual spending lines that constitute this accounting adjustment are then estimated. The difference between the sum of these individual spending lines and the total accounting adjustment forms the current and capital expenditure residuals. Some of the residual is explained by a lack of data. For example, included in this residual will be revenue and expenditure by Network Rail.

The methodologies used to apportion spending lines of the accounting adjustment to Wales are outlined in table B.2. Most lines included here (such as government capital consumption, VAT refunds, and imputed flows for renewable obligations certificates) also appear on the revenue side of the accounts, and therefore do not affect the net fiscal balance calculations.

## **EU Transactions**

Also included as an accounting adjustment are EU Transactions. It is important to note that the expenditure reported in this line is a balancing item in order to reach TME, and does not report Wales' total EU receipts or notional contribution.

Data on EU receipts for Wales are taken from the Welsh Government Consolidated Accounts. This relates to spending by the Welsh Government financed by the EU, such as the Common Agricultural Policy and European Structural Funds. As Wales receives a relatively high share of this spending, these negative spending lines outweigh the estimated Welsh contribution to the EU. This is the reason why the overall EU transactions line for Wales is negative, whilst the line for the UK as a whole is positive.

## **Longer time-series from 1999-00**

The CRA is produced annually, and each publication contains data for the previous five financial years. Between each publication, changes are made to HM Treasury guidelines and methodologies for apportioning different expenditure as identifiable or non-identifiable, as capital or current spending, and to different functions. Coverage and classification therefore differ greatly between publications, which means building a consistent data series for years before the years covered by the latest CRA publication is difficult (in this case before 2010-11).

As most revenue streams could be consistently estimated back further than 2010-11, it was seen as desirable to include some estimate of public sector expenditure for Wales, to provide a rough estimate of Wales' fiscal position before 2010-11. To do this, a headline level of expenditure in each previous financial year was estimated. The latest published source was used for each financial year before 2010-11, i.e. data for 2009-10 was taken from CRA 2014 and data for 2008-09 was taken from CRA 2013. Non-identifiable expenditure in each category was apportioned according to the methodology outline above. This is done on the assumption that although some spending programmes will be reclassified between functions or reclassified as identifiable expenditure in other years, an aggregate figure will give some indication of the level of public sector expenditure for Wales in previous years.

Due to lack of available data, some of the amendments to the CRA discussed above were not made to years before 2008-09.

Data on EU receipts for Wales from the Welsh Government Consolidated Accounts were only available from 2009-10 onwards. EU receipts for Wales for previous years have been estimated by applying the average Welsh share of total UK EU receipts (from 2009-10 to 2011-12) to total UK EU receipts for previous years.