

Government Expenditure and Revenue Wales 2019

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Government Expenditure and Revenue Wales

(GERW) presents a comprehensive analysis of Wales' public sector spending, revenues and the nation's overall fiscal balance.

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Preface

Declaration of funding

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About us

Wales Fiscal Analysis (WFA) is a new research body within Cardiff University's Wales Governance Centre that undertakes authoritative and independent research into the public finances, taxation and public expenditures of Wales.

The WFA programme adds public value by commenting on the implications of fiscal events such as UK and Welsh budgets, monitoring and reporting on government expenditure and tax revenues in Wales, and publishing academic research and policy papers that investigate matters of importance to Welsh public finance, including the impact of Brexit on the Welsh budget and local services, options for tax policy, and the economics and future sustainability of health and social care services in Wales.

Working with partners in Scotland, Northern Ireland, the UK and other European countries, we also contribute to the wider UK and international debate on the fiscal dimension of devolution and decentralisation of government.

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£27.1bn

Estimated current revenues to Wales in 2017-18

£40.8bn

Estimated current expenditure for Wales in 2017-18

£13.7bn

Wales' estimated net fiscal deficit in 2017-18

54.4%

Devolved and local expenditure as % of total managed expenditure in 2017-18

£6.4bn

Amount raised in Wales through VAT in 2017-18

108%

Spending per person for Wales, as a % of UK average

£14.8bn

Spending on social protection for Wales in 2017-18

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Executive Summary

About GERW

Government Expenditure and Revenue Wales 2019 presents a comprehensive multi-year analysis of Wales' public sector spending, public sector revenues and the nation's overall net fiscal balance. The findings reflect Wales' current fiscal position according to the accounting conventions of the UK government. Using data sourced from the Country and Regional Public Sector Finances datasets published by the ONS, it is designed to enhance public understanding of Wales' fiscal position and contribute to the continuing debate over Wales' fiscal and economic future.

Wales' revenue and expenditure

Figure E1 provides headline estimates of total public sector revenue in Wales as well as total public sector expenditure for Wales, from 2013-14 to 2017-18.

Figure E1
Wales' revenue and expenditure, 2013-14 to 2017-18 (current prices)

	2013-14	2014-15	2015-16	2016-17	2017-18
Current Revenue					
Total (£ million)	23,175	24,074	24,741	26,099	27,081
Per person (£ per head)	1,457	1,517	1,486	1,553	1,575
Per person (UK = 100)	75.9	76.2	76.0	75.7	76.0
As a share of UK total (%)	3.7%	3.7%	3.6%	3.6%	3.6%
As a share of estimated GDP (%)	37.6%	38.1%	37.8%	38.3%	38.3%
Total Expenditure					
Total (£ million)	37,663	38,323	38,710	39,464	40,776
Per person (£ per head)	13,002	13,025	13,015	12,916	13,030
Per person (UK = 100)	106.9	106.8	107.6	107.9	108.4
As a share of UK total (%)	5.1%	5.1%	5.1%	5.1%	5.1%
As a share of estimated GDP (%)	61.1%	60.6%	59.1%	57.8%	57.7%

Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Gross Value Added; and authors' calculations

Total current public sector revenue in Wales is estimated at £27.1 billion in 2017-18, around 3.6% of total UK revenues of £751.8 billion. Revenues per head in Wales were around £8,650, significantly less than the average UK figure of approximately £11,350. Revenues as a share of estimated GDP were 38.3%,

compared with 36.4% across the UK, reflecting Wales' relatively low estimated GDP levels. Total per capita revenues in Wales have trailed all other UK countries and English regions every year since 1999-00.

VAT was the largest source of public revenue in 2017-18 (raising £6.4 billion in Wales), followed by Income Tax (£4.9 billion) and National Insurance contributions (£4.5 billion). The composition of revenues in Wales markedly differs from the UK as a whole. Large direct taxes (e.g. Income Tax and Corporation Tax) comprise a smaller share of Welsh revenue, whilst a greater share is raised through indirect taxes (e.g. VAT and excise duty).

Total Managed Expenditure for Wales is estimated at £40.8 billion in 2017-18, around 5.1% of total UK expenditure of £794.9 billion. Non-identifiable expenditure and expenditure outside the UK attributed to Wales accounted for £5.2 billion of this total (mainly defence and debt interest payments).

Social protection (which includes all benefits, social care spending and the state pension) is by far the largest expenditure area for Wales, accounting for £14.8 billion, followed by health spending (£7.3 billion) and education (£4.3 billion).

Total spending for Wales increased by 8.3% in nominal terms between 2013-14 and 2017-18, most notably on health, which increased by nearly £1.1 billion over these years. However, total spending remains below its 2011-12 level both in real terms and on a per person basis.

Total spending per person for Wales was 108% of the UK average in 2017-18, or 111% of the level in England alone. This is significantly lower than the estimated relative funding per person received through the block grant (120% of the English level). An attempt to reconcile these figures suggests that on a per person basis, non-social protection spending by the UK government is significantly lower for Wales compared with England. Capital spending per person for Wales was 4.8% lower than the UK average in 2017-18. In particular, capital spending on transport and science and technology was markedly lower.

In the international context, general government expenditure for Wales is broadly in line with the average among OECD countries, similar to Ireland and Italy. However, when expressed as a share of GDP, expenditure for Wales is significantly higher. Total revenue per head in Wales is lower than the OECD average but is comparable with Hungary and South Korea. The tax-to-GDP ratio is broadly in line with the OECD average but significantly lower than the Euro-area average.

Estimated fiscal balances for Wales

Figure E2 provides estimates of key fiscal aggregates for assessing the strength of public finances in Wales in recent years. The balance between Welsh revenues and expenditure – or Wales' net fiscal balance – is influenced by a range of economic factors, including the various policy decisions of the UK and Welsh governments as well as the relative performance of the Welsh economy over time.

In 2017-18, Wales' net fiscal balance was £13.7 billion, equating to 19.4% of estimated GDP. This deficit has reduced from a peak of £15.9 billion in 2009-10 (equal to 30% of GDP).

The current budget balance measures the difference between current revenues and current expenditure (excluding net investment of £1.7 billion). This current budget balance for Wales is estimated at £12.0 billion in 2017-18, down from the £14.0 billion deficit recorded in 2011-12. The recent improvement in Wales' fiscal aggregates is attributable to a reduction in total managed expenditure as a share of GDP rather than increases in revenue.

Figure E2
Current Budget and Net Fiscal Balance: Wales and UK, 2013-14 to 2017-18 (current prices)

	2013-14	2014-15	2015-16	2016-17	2017-18
Wales					
Current Budget Balance					
£ million	-13,152	-12,696	-12,464	-11,883	-12,031
% of estimated GDP	-21.3%	-20.1%	-19.0%	-17.4%	-17.0%
Net Fiscal Balance					
£ million	-14,488	-14,249	-13,969	-13,365	-13,695
% of estimated GDP	-23.5%	-22.5%	-21.3%	-19.6%	-19.4%
UK					
Current Budget Balance					
% of GDP	-3.8%	-2.9%	-2.0%	-0.3%	0.0%
Net Fiscal Balance					
% of GDP	-5.5%	-4.8%	-3.8%	-2.3%	-2.0%

Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Gross Value Added; and authors' calculations

All four UK countries had a negative net fiscal balance in 2017-18, while only three regions of England (London, the South East and East of England) had an estimated positive net fiscal balance. Nevertheless, on a per person basis, Wales' net fiscal deficit amounts to £4,370 per person, significantly greater than the UK average of £632.

The main driver of Wales' worse fiscal position is lower revenue, particularly from the major direct taxes. Revenue per person raised through Income Tax and National Insurance Contributions was £1,690 lower in Wales in 2017-18 compared to the UK as a whole. Had revenue per person from these taxes in Wales matched the UK average, it would have yielded around £5.3 billion in additional revenue.

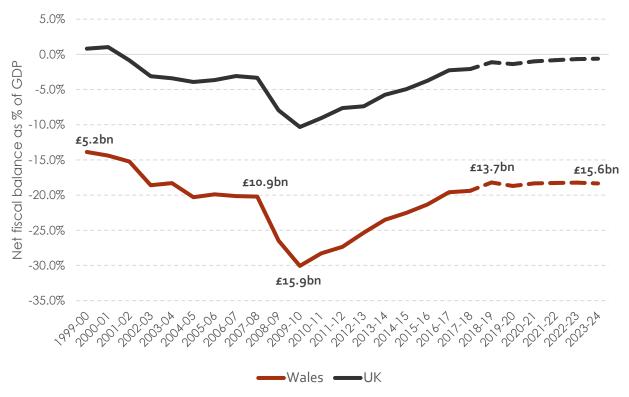
The outlook for Wales' finances up to 2023-24

Total revenues in Wales are projected to grow by an average of 3.5% a year in nominal terms between 2018-19 and 2023-24. This is slower than the average growth rate of 3.8% over the previous five-year period. Council Tax revenues are expected to grow strongly over the forecast period, increasing by 39.6% between 2017-18 and 2023-24.

On a per person, real terms basis, total expenditure is set to recover its 2011-12 level by 2023-24. After significant reductions in the size of Wales' net fiscal deficit since 2009-10, it is now projected to reduce only slightly relative to estimated GDP, from 19.4% in 2017-18 to 18.3% in 2023-24, as shown in Figure E3.

Of course, given considerable economic and political uncertainties, not least the continued uncertainty surrounding the terms of the UK's departure from the European Union, trends in total revenues and expenditure could substantially deviate from the projections contained in this report.

Figure E3
Net fiscal balance of Wales and UK as a share of GDP, 1999-00 to 2017-18, and projections to 2023-24



1 Introduction

Government Expenditure and Revenue Wales 2019

Government Expenditure and Revenue Wales (GERW) 2019 is a second edition report presenting a comprehensive multi-year analysis of Wales' public sector spending, revenues and the nation's overall net fiscal balance. It follows a similar format to the first edition of Government Expenditure and Revenue Wales published in 2016, with updated data and analysis. This publication is designed to enhance public understanding of Wales' fiscal position and contribute to the continuing debate over Wales' fiscal and economic future.

In contrast to the annual fiscal balance reports published and disseminated in the two other devolved countries of the UK (*Government Expenditure and Revenue Scotland*, or GERS, and the *Northern Ireland Net Fiscal Balance Report*), there has historically been only a small amount of disaggregated public spending, taxation and other economic data pertaining to Wales.

In 2016, the Wales Governance Centre published an inaugural report, *Government Expenditure and Revenue Wales 2016*, analysing levels of public sector revenues, expenditure and Wales' fiscal gap, following the framework established by the GERS publication for Scotland.¹

More recently, the Office for National Statistics (ONS) has started publishing public sector revenues and expenditure estimates for the four UK nations and nine regions of England in their *Country and Regional Public Sector Finances* release, which uses a similar approach and are deemed as Experimental Statistics (or statistics that are within their development phase). This is the source for most of the data underlying the analysis presented in this report. By basing the analysis on ONS data, it allows for a consistent comparison to be made between Wales' fiscal balance and that of other UK nations and English regions.

We also supplement ONS data with more detailed analysis using HM Treasury data on public expenditure, OECD data for international comparisons, and Office for Budget Responsibility (OBR) forecasts to project revenues and spending for Wales over the coming years.

Aims and objectives

This report aims to present a comprehensive overview of public sector finances for Wales, including an estimate of Wales' net fiscal balance over time. We aim to provide key information on Welsh public finances to interested parties in order to promote wider debate and understanding of public finances in Wales.

Public finance in Wales has undergone significant changes in recent years, with substantial devolution of own-sourced taxes to the Welsh Government and National Assembly. In 2019-20, around £5 billion worth of taxes are under the control of the Welsh Government and local authorities in Wales. These developments mark a significant shift from historic arrangements.

¹ Poole, E.G., Ifan, G. and Wyn Jones, R. (2016) *Government Expenditure and Revenue Wales 2016.* Cardiff University: Wales Governance Centre.

Historically, the UK has retained a highly centralised revenue structure, with tax policy standardly applied across the UK and a high percentage of tax revenues collected and pooled centrally. Trends in expenditure for Wales have also been highly linked to UK-wide expenditure, both in terms of non-devolved expenditure for Wales (spending by Whitehall departments), and devolved expenditure by Welsh and local government. Although policy-makers in Wales have had the freedom to allocate funds according to different policy priorities, they have had limited influence on changing the overall level of devolved expenditure. Fiscal devolution will, within limits, allow for more divergence in expenditure and revenue patterns in Wales and the UK. As argued by the Silk Commission (2012) which recommended fiscal devolution to Wales, the powers are intended to bring increased financial accountability and empowerment.

Chapters 2,3 and 4 of this report contain data up to 2017-18, the latest year for which complete outturn data is available. This is prior to the devolution of Land Transaction Tax and Landfill Disposals Tax in 2018-19 as well as the introduction of Welsh Rates of Income Tax in 2019-20. Nevertheless, Chapter 5 does present the outlook for devolved and reserved revenues and expenditure up to 2023-24.

We publish this report at a time of considerable economic, fiscal and political uncertainty. The outcome of the Brexit process and its impact on Welsh public finances are yet unknown. Furthermore, delays in UK government decision-making mean that there are currently no firm spending plans set for most departments, and fiscal policy could change significantly with the new Prime Minister and Chancellor. This report will outline what will be at stake for Wales' public finances over coming years and address the following questions:

- How much public sector revenue is raised in Wales? (Chapter 3)
- What is the cost of providing the full range of public services that benefits Wales? (Chapter 4)
- To what extent do the revenues raised cover the costs of these public services? (Chapter 2)
- What is the outlook for expenditure and revenue to Wales over the coming years? (Chapter 5)

Approach to accounting

There is no formally agreed set of accounting concepts and definitions for the formulation of country and regional fiscal accounts in the UK. Several key elements of data necessary for constructing such accounts are also unavailable at a disaggregated level. This report uses data published by the ONS in their *Country and Regional Public Sector Finances* release, which itself follows the framework established by the GERS publication for Scotland which is certified as a National Statistics document in the UK.

The accounts are estimated for Wales on the basis of the national accounting standards adopted by the UK government, namely the European System of Accounts 2010 (ESA10).

The approach taken by the ONS to both the revenue and expenditure sides of the public sector fiscal accounts follows established principles in the methodology adopted for the Scotland and Northern Ireland fiscal reports and is outlined below.

Revenue – the 'who pays' principle

Public sector revenue in Wales is estimated for taxes where a financial burden is imposed on residents and enterprises in Wales. The estimate is therefore based on an assessment according to the 'who pays' principle.

The vast majority of public sector revenue in the UK is collected centrally. Under current UK Treasury accounting procedures, precise revenue collection figures for each country and region of the UK are unavailable. As with existing reports elsewhere in the UK, the ONS' estimates Welsh public sector revenue by considering each revenue stream separately. The general approach is to take UK level data and apportion revenues to Wales using available data and various methodologies.

Expenditure – the 'who benefits' principle

Although it is relatively straightforward to account for Welsh Government and local government expenditure in Wales, deciding how a share of public expenditures that benefit Wales as well as other parts of the UK should be allocated is fraught with difficulties. Following GERS and the *Northern Ireland Net Fiscal Balance Report*, the ONS estimates public sector expenditures for Wales based on an assessment of what is referred to as the 'who benefits' principle. Public sector expenditure is deemed to be for Wales if the benefit of the service or transfer derived from the expenditure is thought to accrue to residents of Wales.

Other methods of allocating public sector expenditure across regions of the UK are possible and would yield different estimates to those in this report. Notably, estimates of expenditures made for a region will differ from estimates of expenditure in a region – that is, apportionment of spending according to where the expenditure actually took place.

While these two different approaches yield similar results in most cases (social protection payments or health expenditure, for example), there is greater difference in allocations for public sector spending that has broader (often UK-wide) impact. For example, the 'in' approach would attempt to locate UK defence expenditure to where the expenditure actually takes place. Alternatively, as in this report, the 'who benefits' approach apportions defence expenditure across the UK, as it is deemed that all UK residents benefit from the defence service provided.

Allocating spending according to the 'who benefits' principle is not without its challenges. In a 1998 critique of the original Welsh Office *Government Expenditure and Revenue: Wales* report, Professor Phil Williams argued persuasively that the share of actual Ministry of Defence spending in Wales was significantly lower than Wales' share of the UK population that formed the basis of the *for* Wales spending allocation.² Although tracing UK expenditure to the region or nation in which the expenditure actually takes place would be of real interest, detailed and exact estimates of spending in Wales by every UK government department and agency are simply not available. Consequently, in order to provide an estimate of the full range of public services consumed for the benefit of Wales and to ensure consistency with comparable publications, this report uses ONS data which follows the *for Wales* methodology of apportioning public sector expenditure. Notably, this may mean that some of the expenditure allocated *for the benefit of Wales* and included in total expenditure in this report may have been spent outside of Wales. Such expenditure will have different effects to expenditure made inside Wales; namely, it will not lead to local economic multiplier effects and will not directly increase the tax revenues collected in Wales.

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² Williams, P. (1998) Cyfres y Cynulliad 3: The Welsh Budget. Talybont: Y Lolfa.

Understanding Wales' Net Fiscal Balance and Regional Transfers in the UK

The balance between Welsh revenues and expenditure – or Wales' net fiscal balance – is influenced by a range of economic factors, including various policy decisions made by the UK and Welsh governments and the relative performance of the Welsh economy over time. Public sector revenues and expenditure are highly related to Wales' demographics and relative economic performance; for example, lower income and company earnings are associated with lower tax revenues, and vice versa. The net result of these various factors will determine Wales' net fiscal balance.

Large inter-regional fiscal transfers are not unusual internationally. Economic shocks and common economic policies will impact regions in asymmetric ways and will trigger various stabilising forces. In single currency areas, the absence of exchange rate adjustments requires other mechanisms to bring about regional stabilisation.³ In economic and political unions, fiscal transfers will often meet this requirement.

In some countries, there is an explicit system of fiscal equalisation between regions. A good example of this is the system of redistribution between German Länder (states), developed in the aftermath of the Second World War.⁴ Fiscal equalisation between countries and regions in the UK however will be largely implicit and automatic, due to centralisation of UK public finances. The redistributive effect of transfer payments (e.g. higher levels of social protection expenditure) and the progressivity of direct taxes (e.g. income tax) means that the lower levels of economic activity in Wales are somewhat offset by transfers from elsewhere in the UK.

It is important to note that the net fiscal balance reported in Chapter 2 does not constitute a direct measure of 'regional transfers' from other parts of the UK. This is because the UK as a whole was also in deficit during the analysed time period, and therefore borrowing funded some of the overall UK expenditure.

The estimates presented in this report reflect Wales' fiscal position under current constitutional arrangements, and as such, are not a reflection of the finances of an independent Wales.

Overview of this report

The remainder of the report is structured as follows:

Chapter 2: presents a summary of Wales' public sector balances using estimates of public sector revenue to Wales and public sector expenditure for Wales. Key fiscal aggregates to assess the strength of public finances in Wales (the current budget balance and net fiscal balance) are presented and analysed. Also provided is a discussion of some of the reasons for Wales' higher fiscal deficits compared to the rest of the UK.

Chapter 3: provides detailed estimates, analysis and discussion of public sector revenue in Wales. Detailed disaggregated estimates of individual revenue streams for the years 1999-00 to 2017-18 are presented. The chapter also includes discussion of revenues that have been fully or partially devolved to Wales and some international comparisons to put Wales' current fiscal position in a wider context.

Chapter 4: provides an estimate of public sector expenditure for Wales. The composition of public expenditure by policy function and by current and capital spending is presented an analysed. Estimates are also presented of the expenditure by Welsh Government and local government in Wales, against expenditure by UK government departments. Also included is a discussion of EU transactions in Wales

³ See, Mundell, R. (1961) "A Theory of Optimal Currency Areas," American Economic Review, 51 (4): 657-65.

⁴ Zimmerman, H. (1989) "Fiscal Equalization between States in West Germany," Government and Policy, 7: 385-93.

as well as an attempt to reconcile the relative funding Wales receives through the block grant from the UK government with relative levels of total spending. Lastly, some international comparisons are presented to put Wales' expenditure levels in a wider context.

Chapter 5: projects trends in revenues and expenditure for Wales as well as the fiscal balance up to 2023-24. It also includes a discussion of some of the factors that could impact these projections. Given substantial political and economic uncertainties, trends in total revenues and expenditure could deviate substantially from projections outlined in this chapter.

The report also includes annexes detailing the methodology for estimating Welsh GDP, generating international comparisons and projections, the components of the accounting adjustment as well as a comprehensive glossary.

2 Estimated fiscal balances for Wales

This chapter presents a summary of Wales' estimated public sector balances, using estimates of current and capital public sector expenditure for Wales and current public sector revenues to Wales. The first section presents key fiscal aggregates and analyses how Wales' fiscal balances have changed over time. Also included is a discussion of some of the reasons for Wales' higher fiscal deficits compared with the UK as a whole. The second section examines how Wales' fiscal balances compares with other countries and regions of the UK.

Key findings:

- Wales' net fiscal balance in 2017-18 was a deficit of £13.7 billion, equating to 19.4% of
 estimated GDP. Excluding net investment of £1.7 billion, Wales' current budget balance
 in the same year amounted to a deficit of £12.0 billion.
- The estimated net fiscal deficit for Wales peaked at £15.9 billion in 2009-10, equal to 30% of GDP, when the UK's deficit reached almost 10% of GDP.
- Revenues raised in Wales as a share of GDP has remained constant since 1999-00, at an average of 38.1% (higher than the UK average of 35.6%). This reflects Wales' relatively low GDP.
- As a share of GDP, total expenditure grew from 52% in 1999-00 to 59% at the onset of the financial crisis in 2007-08, and then peaked at 68% in 2009-10.
- The reduction in Wales' deficit since 2009-10 has resulted from a reduction in total managed expenditure as a share of GDP to 58%, rather than an increase in revenue.
- Wales' net fiscal deficit amounts to £4,370 per person, compared with the UK average of £632. The main driver of Wales' worse fiscal position is lower revenue, particularly from the major direct taxes (Income Tax, National Insurance contributions and Corporation Tax).
- All four countries of the UK had a negative net fiscal balance in 2017-18. Only three regions of England – London, the East of England and the South East of England – had an estimated positive net fiscal balance.

2.1 Wales' estimated fiscal balances

Figure 2.1 provides estimates of the main fiscal aggregates for Wales for the financial years 2013-14 to 2017-18, as reported by the ONS in their 2019 edition of the *Country and Regional Public Sector Finances* release.

Current revenue is the sum of all revenue raised by the entire public sector in Wales, of which the main component is tax revenues. **Public sector current expenditure** refers to spending on goods and services that are 'consumed' in a given year, while **public sector capital expenditure** refers to spending that adds to fixed assets. Public sector capital expenditure less capital consumption is referred to as **net investment**.

The **current budget balance for Wales** is the difference between its current revenues and current expenditure, including depreciation. This measures the extent to which current Welsh taxpayers meet the cost of paying for the public services they consume in the current year. Capital investment by the public sector is excluded from this figure. The current budget balance is often seen as an indicator of intergenerational fairness and of the sustainability of current policies.

Wales' net fiscal balance measures the difference between total public sector expenditure (including capital expenditure) and public sector revenue. At the UK level this gap reflects public sector borrowing (or saving). In Wales however, this gap reflects Wales' place in the overall fiscal arrangements of the UK public sector.

Figure 2.1

Net fiscal balance and current budget balance for Wales and UK, 1999-00 to 2017-18

		£ mill	lion, current p	orices	
	2013-14	2014-15	2015-16	2016-17	2017-18
Current budget					
Current revenue	23,175	24,074	24,741	26,099	27,081
Current expenditure	34,404	34,828	35,192	35,903	37,008
Capital consumption	1,923	1,942	2,013	2 , 079	2,104
Current budget balance	-13,152	-12,696	-12,464	-11,883	-12,031
As share of estimated GDP	-21.3%	-20.1%	-19.0%	-17.4%	-17.0%
Capital budget					
Capital expenditure	3,259	3,495	3,518	3,561	3,768
Capital consumption	-1,923	-1,942	-2,013	-2,079	-2,104
Net investment	1,336	1,553	1,505	1,482	1,664
Net fiscal balance	-14,488	-14,249	-13,969	-13,365	-13,695
As share of estimated GDP	-23.5%	-22.5%	-21.3%	-19.6%	-19.4%

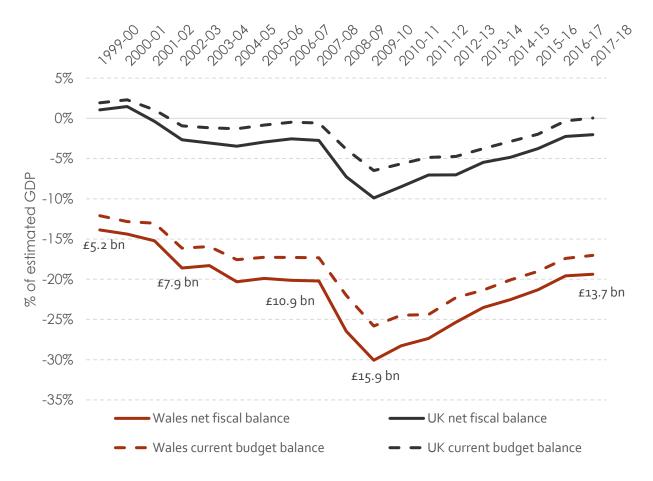
Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Gross Value Added; and authors' calculations

As presented in Figure 2.1, Wales' current budget balance in 2017-18 amounted to a deficit of £12.0 billion. This equates to 17.0% of Wales' estimated GDP. Net investment (capital expenditure less capital consumption) of £1.7 billion leaves an estimated net fiscal balance of £13.7 billion in 2017-18 (equating to 19.4% of GDP). Though the deficits on both balances grew in the year leading up to 2017-18, both fell as a share of estimated GDP, continuing recent trends of deficit reduction.

Figure 2.2 shows a long-run series for both of these fiscal aggregates for Wales and the UK as a share of estimated GDP (net fiscal balance in solid lines and current budget balance in broken lines), from 1999-00 to 2017-18. At the turn of the century, while the UK as a whole had a fiscal surplus, the estimated net fiscal balance for Wales was a deficit of £5.2 billion, equating to 14% of estimated GDP. The net fiscal deficits of both the UK and Wales deteriorated rapidly during the recession, reflecting higher spending and lower revenues. Wales' net fiscal deficit peaked at approximately £15.9 billion in 2009-10, equal to approximately 30% of GDP, while the UK's deficit reached almost 10% of GDP.

Figure 2.2

Net fiscal balance and current budget balance for Wales and UK, 1999-00 to 2017-18



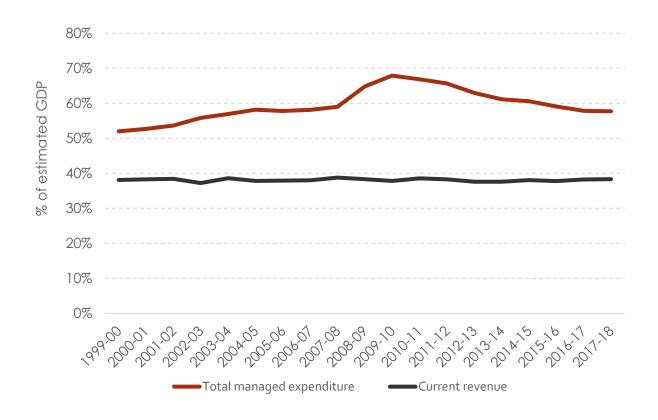
Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Gross Value Added; and authors' calculations

The deficit on Wales' net fiscal balance has reduced significantly since 2009-10, both in absolute terms and as a share of GDP. Figure 2.3 shows the trend in both total managed expenditure (current and capital) and current revenue as a share of GDP from 1999-00 to 2017-18. As a share of GDP, revenues to Wales has remained broadly constant across the whole of the analysed period, at an average of 38.1% (higher than the UK average of 35.6%). Total managed expenditure has varied significantly however, growing from 52% of GDP in 1999-00 to 59% at the onset of the financial crisis in 2007-08. A fall in GDP

and growth in spending (particularly social protection) meant spending spiked, as a share of GDP, to just under 68% in 2009-10. The reduction in Wales' deficit since 2009-10 has been a result of a reduction in total managed expenditure as a share of GDP to 58%, rather than an increase in revenue.

Figure 2.3

Total managed expenditure for Wales and current revenues to Wales as a share of estimated GDP, 1999-00 to 2017-18

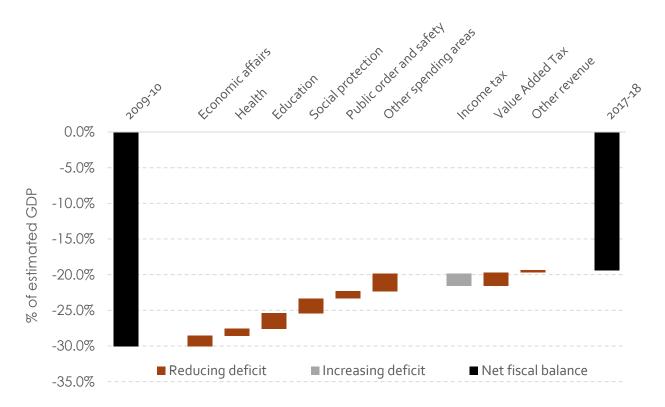


Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Gross Value Added; and authors' calculations

Figure 2.4 analyses the factors which have contributed to the reduction in Wales' deficit from 2009-10 to 2017-18. As a share of GDP, spending has fallen across most areas. Spending on economic affairs peaked in 2008-09 and 2009-10, partly reflecting the effects of the UK government's financial sector interventions apportioned to Wales (see Chapter 4), and has since declined by around 1.5% percentage points of GDP. Over the first few years of austerity from 2009-10 to 2013-14, health spending for Wales as a share of GDP fell by around 1.3% percentage points, and broadly grew in line with GDP thereafter. The largest reductions in spending as a share of GDP are attributable to education (2.2% of GDP) and social protection spending (2.1%).

The increase in VAT revenues since 2009-10 amounted to around 1.9% of GDP, reflecting the recovery of spending levels and the increase in rates. However, this was largely offset by a decrease in Income Tax revenues of around 1.7% of GDP. This means that increasing revenues have contributed very little to the overall deficit reduction since 2009-10.

Figure 2.4
Changes in Wales' net fiscal balance as share of estimated GDP from 2009-10 to 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances

Figure 2.5 presents data on Wales' current revenues, total managed expenditure and net fiscal balance on a per person basis. Per person revenues raised in Wales stood at £8,653 in 2017-18. This amounts to 76% of the UK average, a figure which has stayed broadly constant over recent years, though down from a peak of 80.6% in 2003-04.

Figure 2.5
Revenue, spending and net fiscal balance for Wales and UK, 2013-14 and 2017-18

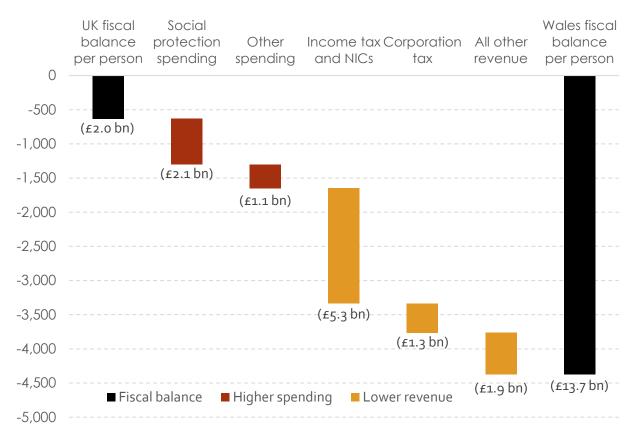
	2013-14	2014-15	2015-16	2016-17	2017-18
Current revenue					
Per person (£)	7,5 1 3	7,781	7,974	8,375	8,653
Per person (UK=100)	75.9	76.2	76.0	75.7	76.0
Total Managed Expenditure					
Per person (£)	12,209	12,387	12,477	12,664	13,030
Per person (UK=100)	106.9	106.8	107.6	107.9	108.4
Net Fiscal Balance					
Wales - per person (£)	-4,697	-4,606	-4,502	-4,289	-4,376
UK - per person (£)	-1,521	-1,388	-1,101	-683	-632

Total managed expenditure per person was estimated to be £13,030 in 2017-18, or 108.4% of the UK average. Relative spending per person for Wales has grown compared with the UK average from a low of 105.8% in 2009-10.

Because of higher levels of spending and lower estimated revenues per person, Wales' net fiscal balance per person amounts to £4,370, compared with the UK average of £632.

Figure 2.6 disaggregates the difference in the per person net fiscal balances of Wales and the UK, while the figures in parenthesis show how much each element contributes to Wales' overall net fiscal deficit of £13.7 billion. Most of Wales' higher spending (red bars) is attributable to higher social protection spending per person, which is approximately £668 higher in Wales compared with the UK average. All other spending is around £346 per person higher in Wales.

Figure 2.6
Disaggregating Wales' net fiscal balance compared with the UK average, 2017-18 (£ per person)



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

However, the graph clearly shows that the main driver of Wales' worse fiscal position is lower revenue (yellow bars). Wales considerably lags behind the UK average in revenue per person from the major direct taxes including Income Tax, National Insurance contributions and Corporation Tax. Revenue raised per person through Income tax and National Insurance contributions was £1,690 lower in Wales in 2017-18. If revenue per person from these taxes in Wales matched the UK average, it would yield £5.3 billion in additional revenue. As discussed in Chapter 3, per person revenues from other taxes in Wales are closer to the UK average.

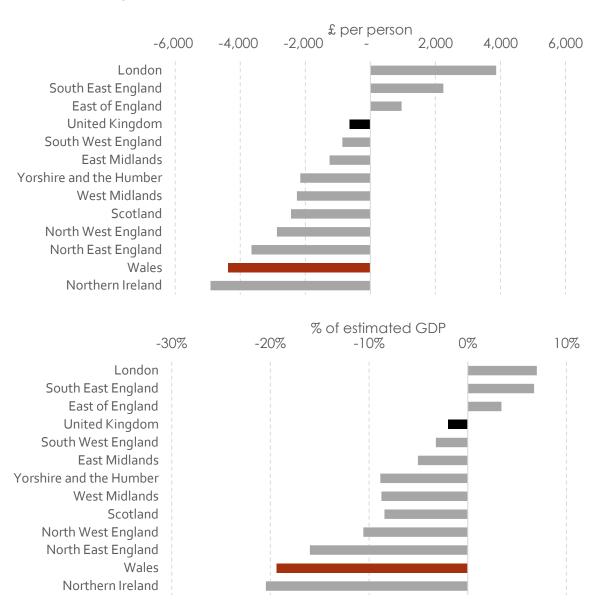
The shortfall in large direct tax revenues and higher social protection spending per person for Wales compared with the UK average also corresponds to ONS data on regional gross disposable household income. This data shows that the primary incomes of Welsh households from wages, profits, property

and mixed incomes was around 74% of the UK average per person in 2017. Gross disposable income however, after accounting for taxes and benefits, was 81% of the UK average per person. This is because current taxes on income and wealth and social contributions are around £1,700 per person lower in Wales, and transfers and benefits to households are around £460 higher.

2.2 National and regional fiscal balances across the UK

Figure 2.7 and Figure 2.8 show the net fiscal balance of the countries and regions of the UK, on a per person basis and as a share of their estimated GDP.

Figure 2.7
Net fiscal balance by region, 2017-18 (£ per person and % of estimated GDP)

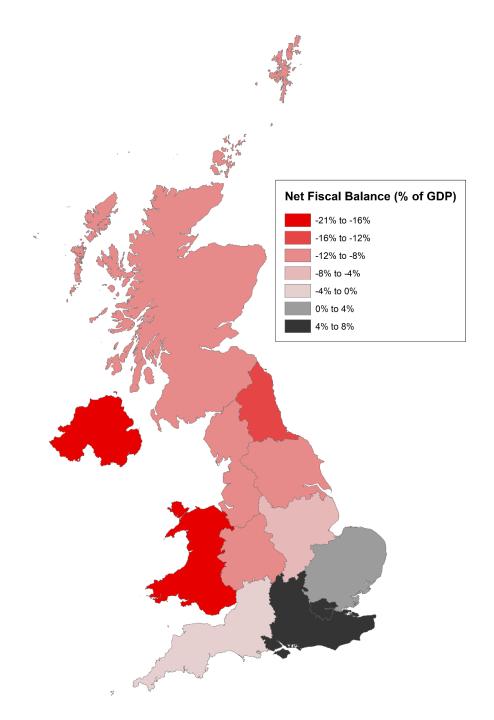


Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Accounts; and authors' calculations

In 2017-18, all four countries of the UK had a negative net fiscal balance, and only three regions of England had an estimated positive net fiscal balance. From 1999-00 onwards, only London and South East England have consistently had a positive net fiscal balance (except for 2009-10). Spending per person ranges from £10,970 (or 91% of the UK average) in the East of England and £14,195 (117% of the UK average) in Northern Ireland. There is greater variation in revenues per person between the countries and regions, ranging from 76% of the UK average in Wales to 149% in London.

Figure 2.8

Net fiscal balance by country and region, 2017-18 (% of estimated GDP)



Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018) Regional Accounts; and authors' calculations

3 Public sector revenue

This third chapter looks at public sector revenues in Wales, beginning with an analysis of recent and historical trends. We then look at those revenues that have been fully or partially devolved to Wales before presenting some international comparisons to put the Welsh figures in context.

Current public sector revenue, as defined in the UK National Accounts, refers to the sum of all revenue raised in a particular year by the entire public sector, excluding the sale of assets and interest received. The main component of this is tax revenue. The amount of tax revenues collected in a given year will depend on the performance of the tax base (for example, on incomes, profits, value of transactions), as well as tax policy.

The majority of public sector revenue payable by Welsh residents and businesses is collected at a UK level. The Welsh Revenue Authority, the tax agency responsible for administering and collecting the newly devolved Land Transaction Tax (LTT) and Landfill Disposals Tax (LDT) in Wales, had not begun collecting taxes in 2017-18, the latest year for which complete outturn data on public sector finances is available. This means that for most revenue sources, it is not possible to identify precisely the proportion receivable from Wales. Instead, the ONS estimates these shares by using different methodologies to apportion revenues to Wales in their *Country and Regional Public Sector Finances* release.

Key findings:

- Total current public sector revenue in Wales is estimated at £27.1 billion in 2017-18, around 3.6% of total UK revenues of £751.8 billion.
- Revenues per head in Wales were around £8,650, significantly less than the average UK figure of around £11,350.
- VAT was the largest source of public sector revenue (raising £6.4 billion), followed by Income Tax (£4.9 billion) and National Insurance contributions (£4.5 billion). In the UK as a whole, Income Tax is the largest source of public sector revenue.
- Large direct taxes (e.g. Income Tax and Corporation Tax) comprise a smaller share of Welsh revenue, whilst a greater share is raised through indirect taxes (e.g. VAT and excise duties).
- On a per capita basis, Council Tax revenues to Wales have increased from £250, or 79.4% of the UK level, in 1999-00 to £475, or 97.6% of the UK level, in 2017-18.
- Total per capita revenues in Wales have trailed all other NUTS1 regions every year since 1999-00.

3.1 Composition and trends in public sector revenues for Wales

3.1.1 Composition of current revenues in Wales, 2017-18

Figure 3.1 overleaf presents an estimate of public sector revenue in Wales and the UK for 2017-18. Also highlighted is the estimated share of total revenue that each component represents, as well as how much of the UK total is raised in Wales.

Current public sector revenue in Wales is estimated at £27.1 billion in 2017-8. This equated to 3.6% of total UK current revenues of £751.8 billion. This share is significantly below Wales' population share (4.7%) but is slightly greater than its share of UK GVA (3.4%).

Although Income Tax has historically been the single largest source of public revenue in Wales, more recently this has been surpassed by Value Added Tax (VAT), which at £6.4 billion, accounted for 23.6% of all current revenues in 2017-18. This figure includes VAT refunds of £0.9 billion, which are offset as expenditure in the National Accounts. In 2017-18, revenues from Income Tax in Wales amounted to £4.9 billion, accounting for 18.2% of total revenue. Income raised from National Insurance contributions amounted to £4.5 billion (16.8% of the total). Collectively, these three sources of revenue accounted for 58.6% of total current revenues for Wales.

In 2017-18, Wales raised more than its per capita share of the UK total in fuel duties (4.8%), tobacco duties (5.4%), betting and gaming duties (4.9%), climate change levy (5.9%), aggregates levy (9.7%), vehicle excise duty (5.0%) and gross operating surplus (5.0%). Excise duties on alcohol and tobacco are not income contingent and therefore revenues raised from these taxes are not directly affected by relatively lower income levels in Wales.

On the other hand, Wales raises significantly less than its per capita share in Income Tax (2.7%), Corporation Tax (2.3%), National Insurance contributions (3.5%) and Capital Gains Tax (1.8%). These taxes are paid on income and profit and so one would expect that Wales, with lower household income levels and GVA than the UK average, contributes less than its population share to the UK total.

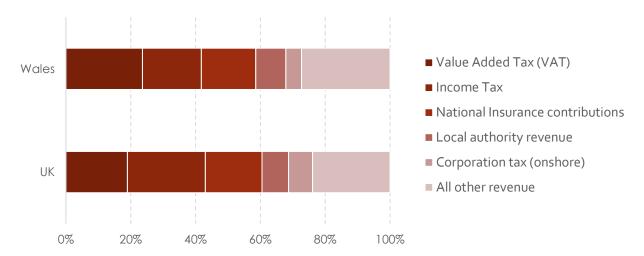
Gross operating surplus (GOS) refers to the operating (or trading) surpluses (or losses) of central government, local government and public corporations. Since central and local government do not generate profit, their GOS will be equal to their capital consumption, or depreciation – a measure of the fixed capital resources used up in the production process. This is treated as revenue in the National Accounts system, but is also balanced by an offsetting item within the accounting adjustment included in total managed expenditure for Wales (see Chapter 4). For public corporations however (for example Cardiff International Airport and Cardiff City Transport Services Ltd in Wales), the GOS figure includes their gross trading surpluses and various income streams. Total GOS is estimated to be £2.3 billion in Wales and is the fourth largest revenue source. This represents a higher proportion of total revenue (8.4%) in Wales than the UK as a whole (6.1%).

Figure 3.1 Current revenue: Wales and UK, 2017-18

	WA	LES	U	K	
	£ million	% of total	£ million	% of total	Wales as % of UK
VAT	6,389	23.6%	142,771	19.0%	4.5%
Income Tax	4,930	18.2%	180,592	24.0%	2.7%
National Insurance contributions	4,547	16.8%	131,547	17.5%	3.5%
Gross operating surplus	2,273	8.4%	45,854	6.1%	5.0%
Council Tax	1,485	5.5%	32,137	4.3%	4.6%
Fuel duties	1,344	5.0%	27,878	3.7%	4.8%
Corporation tax (excl. North Sea)	1,306	4.8%	55,722	7.4%	2.3%
Non-domestic rates	1,031	3.8%	29,296	3.9%	3.5%
Other taxes, royalties and adjustments	892	3.3%	21,385	2.8%	4.2%
Tobacco duties	472	1.7%	8,766	1.2%	5.4%
Alcohol duties	457	1.7%	11,585	1.5%	3.9%
Interest and dividends	327	1.2%	7,062	0.9%	4.6%
Vehicle excise duty	316	1.2%	6,362	0.8%	5.0%
Insurance premium tax	253	0.9%	5,898	0.8%	4.3%
Rent and other current transfers	231	0.9%	5,369	0.7%	4.3%
Stamp duty land tax	230	0.8%	13,450	1.8%	1.7%
Capital gains tax	139	0.5%	7,794	1.0%	1.8%
Inheritance tax	119	0.4%	5,277	0.7%	2.3%
Betting and gaming duties	113	0.4%	2,316	0.3%	4.9%
Climate change levy	109	0.4%	1,860	0.2%	5.9%
Aggregates levy	36	0.1%	372	0.0%	9.7%
Other taxes on income and wealth	33	0.1%	691	0.1%	4.8%
Landfill tax	32	0.1%	893	0.1%	3.6%
Stamp duty on shares	10	0.0%	3,519	0.5%	0.3%
Air passenger duty	7	0.0%	3,360	0.4%	0.2%
Total current revenue (excluding North Sea revenue)	27,081	100.0%	751,756	100.00%	3.6%
North Sea revenue					
Per capita share	61		1,297		4.7%
Geographical share	0		1,297		0.0%
Total current revenue (including North Sea revenue)					
Per capita share	27,142		753,053		3.6%
Geographical share	27,081		753,053		3.6%

Source: ONS~(2019)~Country~and~Regional~Public~Sector~Finances~and~authors'~calculations

Figure 3.2
Main revenues as % of total current (onshore) revenue: Wales and UK, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

As shown in Figure 3.2, the composition of revenues differs between Wales and the rest of the UK. Large direct taxes, such as Income Tax, Corporation Tax and National Insurance contributions, make up a greater share of total revenues at a UK level than in Wales. For instance, while Income Tax represents 24.0% of total UK onshore revenues, it only accounts for 18.2% of revenues in Wales. This means that even if a tax policy is applied uniformly across the UK, it may have different effects on revenues in Wales compared to the rest of the UK.

On a per capita basis, public sector revenues is considerably higher across the UK than in Wales. The gap in public sector revenues per head between Wales and the UK was around £2,700 in 2017-18. However, current revenue as a share of estimated GDP was 38.7% in Wales in 2017-18, compared with 36.7% across the UK.

Box 3.1: Apportioning North Sea oil and gas revenues

The ONS allocates North Sea oil and gas revenues (mainly received from the Petroleum Revenue Tax and Corporation Tax) using two distinct methodologies. The first involves allocating a population share of all revenues raised to the countries and regions of the UK. The second approach involves allocating revenues on a geographic basis according to where the oilfields that generate the revenue are located.



In this chapter, we exclude North Sea oil and gas revenue from our analysis. Since Wales is not allocated a geographical share of North Sea revenue, this means that total current revenue raised in Wales is equal to total revenue if North Sea oil was apportioned on a geographical basis.

3.1.2 Recent and historical trends in current revenue in Wales

Figure 3.3 shows the main components of revenue for Wales from 1999-00 to 2017-18. The effect of the financial crisis can be clearly seen on the graph as total revenues fell by nearly £1 billion in Wales between 2007-08 and 2009-10. Revenues have since recovered, growing by 19% in real terms since 2009-10.

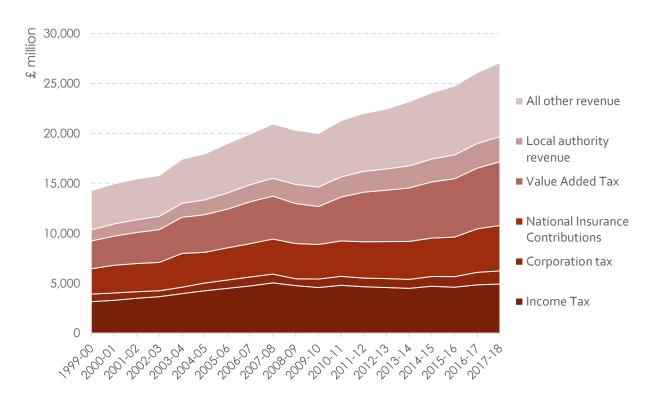
There are however large differences in the growth trends of the key revenue components. These reflect changes in tax policy, largely set by the UK government, as well as changes in the tax base in Wales.

Total Income Tax revenues peaked at £5.0 billion in 2007-08, having previously steadily increased each year. This means that Income Tax revenues in 2017-18 were 18% below their 2007-08 level in real terms. Analysis by the Office for Budget Responsibility (OBR) suggests that the main reason for this downward trend has been the effects of UK Government policy, particularly the significant increases in the personal allowance, in addition to stagnant real wages.

In 2017-18, VAT accounted for 23.6% of total revenue for Wales, up from 19.5% in 1999-00. The share of revenue generated by more regressive taxes such as VAT and excise duties has therefore increased, while the share raised from more progressive direct taxes has fallen. This suggests that Wales' tax regime may have become more regressive over the past two decades.

Corporation tax now accounts for a smaller share of total revenue (4.8%) for Wales than it did in 1999-00 (5.3%). However, the share of revenue raised via corporation tax has increased over the most recent decade, having fallen to a low of 3.4% in 2008-09, at the time of the financial crisis.

Figure 3.3
Total current revenue for Wales, 1999-00 to 2017-18, by main revenue source (nominal terms)



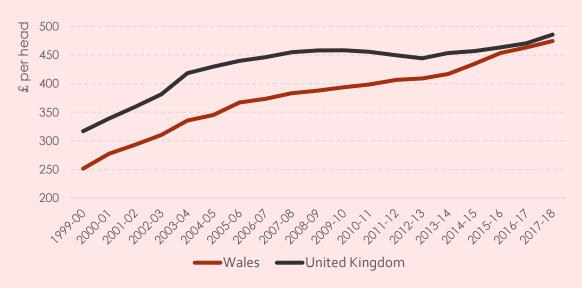
Box 3.2: Convergence in Council Tax revenues

In recent years, per capita Council Tax revenues collected in Wales have nearly converged with the UK level. Figure 3.4 shows the amount of Council Tax revenue raised per person in real terms from 1990-00 to 2017-18 for Wales and the UK. In 1999-00, just over £250 per person was raised through Council Tax in Wales, 79.4% of the UK level. Although revenues grew in real terms over the next decade, they remained below 85% of the UK level throughout this period. However, following the financial crisis, these levels started to converge. By 2017-18, £475 per head was raised via Council Tax in Wales, 97.6% of the UK level (£486). Between 1999-00 and 2017-18, revenues per person in Wales had increased by 88.7% in real terms, or 169% in nominal terms.

This convergence is a direct consequence of different policy decisions made by the Welsh, Scottish and UK governments. Since 2012-13, the Council Tax system has operated under an effective cap in England following the introduction of a local referendum requirement for 'excessive' increases. In Scotland, a Council Tax freeze was followed by a 3% cap on annual increases, which was only lifted in 2019-20. In contrast, the Welsh Government did not impose a formal cap on Council Tax levels. Facing deep cuts in the value of Welsh Government grants from 2013-14 onwards, many Welsh local authorities authorised significant increases to Council Tax bills to mitigate some of the spending cuts. This has meant that funding for local services has been relatively better protected in Wales compared to other parts of the UK, but it has also meant that a larger share of the tax burden has been shifted onto Council Tax payers.

In 1999-00, Council Tax accounted for 3.6% of total revenue for Wales. By 2017-18, this share had increased to 5.5%. Although Council Tax revenues per person in Wales are still only 97.6% of the UK average, gross disposable household income in Wales is 80.7% of the UK level. This means that people in Wales are seeing a significantly larger share of their household income going towards Council Tax bills. This may be particularly troubling given that Council Tax, which is based on property values, is a relatively regressive form of taxation (Ifan & Poole 2018: 71-75).

Figure 3.4
Council Tax revenues per persons: Wales and UK, 1999-00 to 2017-18 (2017-18 prices)



Between 1999-00 and 2017-18, total current revenue for Wales has grown by 89.9% in nominal terms, markedly slower than the 106.2% growth across the UK (if London is excluded, the UK figure falls to 97.7%). The rate of population growth in Wales, particularly since 2004, has been considerably slower than across the UK. On a per capita basis (thereby conditioning for slower population growth), the growth rate in total revenue for Wales over the period is 76.1%, compared to 82.2% for the UK.

Figure 3.5 shows the annual year-on-year growth rate in current revenues for Wales and the UK over this time period. Between 2000-01 and 2007-08, the average annual growth rate for Welsh revenues was 4.9%, compared to 5.4% across the UK. Both Wales and the UK saw a contraction in revenues around the time of the financial crisis. From 2011-12 onwards, the average annual rate of growth in Welsh revenues has been 3.5% compared to 4.0% across the UK. This is slower than the rate of growth experienced during the middle of the previous decade.

As a percentage of estimated GDP, total revenue raised in Wales has remained relatively consistent. This is expected since, in most cases, taxes are related to economic activity so if the GDP grows, tax revenue should also increase. Revenues reached a high of 38.8% of Welsh GDP in 2007-08 and in 2017-18, they accounted for 38.3% of GDP. Declining Income Tax revenues means that the proportion of Welsh GDP collected through this tax reached a historic low of 7.0% in 2017-18, down from a peak of 9.3% in 2007-08. This has been offset by an increase in the share of GDP collected through VAT in Wales

In 2017-18, total current revenues per head was £8,653 in Wales, 76.0% of the UK level. Figure 3.6 offers a detailed breakdown of Welsh current revenue as a percentage of GDP, on a per capita basis and as a share of the UK level between 1999-00 and 2017-18. Figure 3.7 offers a breakdown of current revenues by source between 2013-14 and 2017-18.

Figure 3.5
Annual (nominal) growth rate of current revenues: Wales and UK, 1999-00 to 2017-18

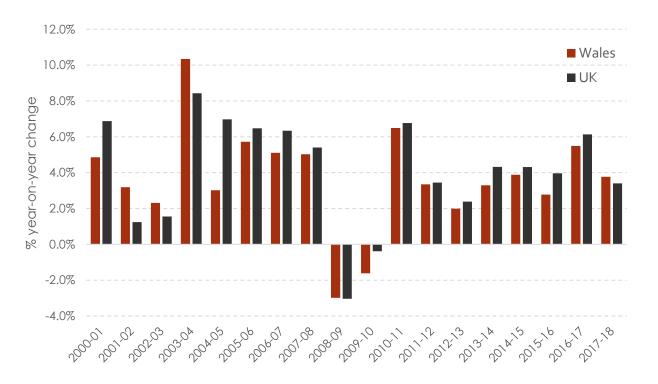


Figure 3.6 Total current revenue in Wales, by main source, 1999-00 to 2017-18

	1999-	2000-	2001-	2002-	2003-	-4002	2005-	-9002	2007-	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-
	00	10	02	60	40	90	90	07	80	60	10	11	12	13	14	1.5	16	17	18
Current revenue by main source (£ million)	y main so	ource (£ n	(uoilliu																
Income tax	3,154	3,295	3,496	3,660	3,968	4,256	4,487	4,736	5,035	4,764	4,574	4,791	4,657	4,563	4,495	769′7	4,610	4,839	4,930
Corporation tax	757	733	654	596	641	761	837	894	874	687	850	900	855	906	896	984	1,056	1,257	1,306
NI contributions	2,540	2,768	2,817	2,834	3,379	3,084	3,213	3,339	3,515	3,527	3,461	3,535	3,639	3,707	3,789	3,851	3,946	4,362	4,547
VAT	2,782	2,919	3,111	3,284	3,610	3,760	3,888	4,188	4,303	600,4	3,788	4,396	4,976	5,138	5,360	5,618	5,854	6,064	6,389
LA revenue	1,103	1,222	1,284	1,322	1,405	1,484	1,609	1,704	1,796	1,908	1,957	2,015	2,075	2,138	2,208	2,292	2,385	2,477	2,516
Other revenue	3,926	4,018	4,070	4,093	4,418	4,601	4,939	5,081	5,421	5,454	5,359	2,649	962'5	5,984	6,427	6,635	068'9	7,100	7,393
Total	14,262	14,955	15,432	15,789	17,421	17,946	18,973	19,942	20,944	20,319	19,989	21,286	21,998	22,436	23,175	24,074	24,741	660'92	27,081
Current revenue by main source (% of GDP)	y main so	onrce (%	of GDP)																
Income tax	8.4%	8.4%	8.7%	8.6%	8.8%	%0.6	%0.6	%0.6	9.3%	%0.6	8.7%	8.7%	8.1%	7.6%	7.3%	7.4%	7.0%	7.1%	7.0%
Corporation tax	2.0%	1.9%	1.6%	1.4%	1.4%	1.6%	1.7%	1.7%	1.6%	1.3%	1.6%	1.6%	1.5%	1.5%	1.5%	1.6%	1.6%	1.8%	1.8%
NI contributions	6.8%	7.1%	7.0%	6.7%	7.5%	6.5%	6.4%	6.4%	6.5%	6.7%	%9.9	6.4%	6.3%	6.2%	6.1%	6.1%	%0.9	6.4%	6.4%
VAT	7.4%	7.5%	7.7%	7.7%	8.0%	7.9%	7.8%	8.0%	8.0%	7.6%	7.2%	8.0%	8.7%	8.6%	8.7%	8.9%	8.9%	8.9%	%0.6
LA revenue	2.9%	3.1%	3.2%	3.1%	3.1%	3.1%	3.2%	3.2%	3.3%	3.6%	3.7%	3.7%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Other revenue	10.5%	10.3%	10.1%	9.6%	9.8%	9.7%	9.6%	9.7%	10.0%	10.2%	10.1%	10.2%	10.1%	10.0%	10.4%	10.5%	10.5%	10.4%	10.5%
Total	38.1%	38.3%	38.4%	37.5%	38.6%	37.8%	37.9%	38.0%	38.8%	38.3%	37.8%	38.6%	38.3%	37.6%	37.6%	38.1%	37.8%	38.3%	38.3%
Current revenue by main source, per person (2017-18 prices, £ per head)	y main so	ource, per	person (2017-18	orices, £ p	oer head)													
Income tax	1,552	1,583	1,660	1,688	1,783	1,851	1,893	1,929	1,988	1,820	1,716	1,758	1,680	1,608	1,551	1,595	1,549	1,583	1,575
Corporation tax	373	352	310	275	288	331	353	364	345	263	319	330	308	319	309	334	355	411	417
NI contributions	1,250	1,330	1,337	1,307	1,518	1,341	1,356	1,360	1,388	1,348	1,299	1,297	1,312	1,306	1,308	1,308	1,326	1,427	1,453
VAT	1,369	1,402	1,477	1,514	1,622	1,635	1,640	1,706	1,699	1,532	1,421	1,613	1,795	1,811	1,850	1,909	1,967	1,984	2,042
LA revenue	543	587	610	610	631	645	629	694	709	729	734	739	748	753	762	779	802	810	804
Other revenue	1,932	1,930	1,932	1,887	1,985	2,001	2,084	2,070	2,140	2,073	2,011	2,073	2,090	2,109	2,218	2,254	2,316	2,323	2,362
Total	7,019	7,185	7,326	7,281	7,827	7,804	8,005	8,124	8,269	7,764	7,500	7,811	7,934	7,907	7,998	8,179	8,315	8,539	8,653
Current revenue by main source, per person (UK = 100)	y main so	ource, per	person (UK = 100	_														
Income tax	0.99	62.4	65.4	67.1	6.89	68.3	67.1	62.9	65.4	9.49	63.8	64.4	63.0	62.1	59.4	0.09	57.4	97.6	57.7
Corporation tax	46.2	46.1	9.54	45.9	47.1	45.8	8.44	8.44	6.44	47.5	50.6	51.2	50.6	50.0	48.7	7.87	49.1	49.5	49.5
NI contributions	90.3	90.4	90.6	90.6	91.2	77.3	76.4	74.8	75.2	74.6	73.5	74.5	74.0	73.6	73.5	73.1	72.8	72.9	73.1
VAT	90.6	91.1	92.5	93.1	92.5	93.2	94.8	94.8	95.0	93.4	91.6	91.0	91.8	93.1	92.9	94.1	94.2	94.4	94.6
LA revenue	82.3	84.1	82.1	9.6/	79.7	80.7	83.0	83.6	84.8	85.5	85.7	87.5	87.7	87.8	87.5	89.1	90.6	90.8	88.6
Other revenue	87.3	82.6	83.7	83.4	86.2	84.5	82.2	83.3	81.5	80.5	83.1	79.3	79.4	81.5	83.5	83.9	84.9	84.7	85.7
Total	78.6	76.9	78.4	0.62	80.6	77.4	76.5	76.1	75.8	75.8	75.6	75.5	75.7	76.1	75.9	76.2	76.0	75.7	76.0

Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

Figure 3.7 Total current revenue in Wales, by source, 2013-14 to 2017-18

			WALES					UK		
£ million	41-5102	2014-15	2015-16	2016-17	2017-18	2013-14	2014-15	2015-16	2016-17	2017-18
Income tax	4,495	4,694	4,610	6,839	026′4	157,616	163,620	168,874	177,248	180,592
Corporation tax (excl. North Sea)	968	984	1,056	1,257	1,306	38,332	42,523	45,183	53,621	55,722
Capital gains tax	69	86	119	149	139	3,910	5,558	090'/	8,379	7,794
Other taxes on income and wealth	67	19	31	25	33	265	807	655	532	691
National insurance contributions	684′€	3,851	3,946	4,362	4,547	107,306	110,260	114,061	126,241	131,547
VAT	92'3	5,618	5,854	6,064	6,389	120,167	124,846	130,715	135,590	142,771
Fuel duties	1,351	1,364	1,333	1,347	1,344	26,882	27,156	27,622	27,937	27,878
Stamp duty land tax	145	170	155	210	230	9,272	10,736	11,095	12,232	13,450
Stamp duty on shares	9	8	5	11	10	3,108	2,925	3,323	3,715	3,519
Tobacco duties	877	795	491	468	472	9,556	9,251	901,6	8,681	8,766
Alcohol duties	984	399	407	440	457	10,308	10,449	10,697	11,117	11,585
Betting and gaming duties	9/	96	104	107	113	1,645	1,776	2,147	2,200	2,316
Air passenger duty	7	7	9	7	7	3,003	3,205	3,040	3,236	3,360
Insurance premium tax	125	128	160	209	253	3,018	2,973	3,717	4,872	5,898
Landfill tax	62	49	45	36	32	1,179	1,125	1,029	992	893
Climate change levy	29	94	106	113	109	1,200	1,626	1,797	1,932	1,860
Aggregates levy	26	34	33	39	36	294	357	348	411	372
Inheritance tax	132	90	101	111	119	4,417	3,879	4,712	4,897	5,277
Vehicle excise duty	308	295	294	297	316	6,105	5,894	906′5	5,981	6,362
Non-domestic rates	1,000	1,013	1,035	1,061	1,031	26,478	27,013	27,755	28,599	29,296
Council tax	1,208	1,279	1,350	1,416	1,485	27,364	28,144	28,986	30,361	32,137
Other taxes, royalties and adjustments	601	692	750	758	892	14,611	16,605	17,671	18,298	21,385
Interest and dividends	289	307	315	295	327	6,183	6,691	898'9	6,443	2,062
Gross operating surplus	2,058	2,058	2,197	2,228	2,273	44,193	45,650	47,036	47,770	45,854
Rent and other current transfers	212	271	241	250	231	4,902	6,214	5,609	5,754	5,369
Total current revenue (excl. North Sea)	23,175	24,074	24,741	26,099	27,081	631,646	658,884	685,012	727,039	751,756
Total current revenue (incl. North Sea)										
Per capita share	23,391	24,155	24,736	26,100	27,142	636,145	660,575	684,927	727,075	753,053
Geographical share	23,175	24,074	24,741	56,099	27,081	636,145	92/5/99	684,927	727,075	753,053

Source: ONS (2019) Country and Regional Public Sector Finances; and authors' calculations

3.2 Devolved revenue streams

The recent devolution of Stamp Duty, Landfill Tax and a portion of Income Tax to Wales means that the share of total revenue under the control of the Welsh Government has increased since the last iteration of GERW was published in 2016.

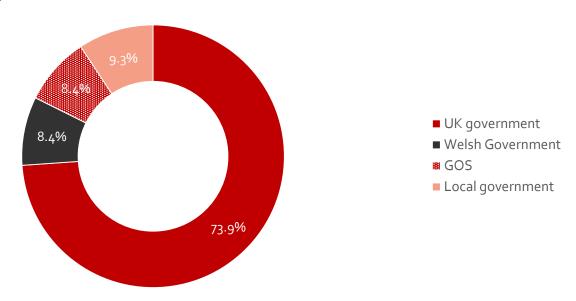
In 2018-19, the Welsh Revenue Authority started administering and collecting Land Transaction Tax (LTT), which replaced Stamp Duty, and Landfill Disposal Tax (LDT), which replaced the Landfill Tax. Additionally, in 2019-20, around £2.1 billion in income tax revenue was devolved to Wales. Although Income Tax is still administered centrally by HMRC, the Welsh Government has powers to set its own rates on 10p of each band and the relative performance of the Welsh tax base will directly impact the size of the Welsh budget.

In 2017-18, the latest year for which complete outturn data is available, Council Tax and non-domestic (business) rates were the only significant revenue streams that were not reserved to the UK government. Local authorities have powers to set their own Council Tax levels while the Welsh Government has control over business rates (although local authorities can provide discretionary reliefs). In 2017-18, these devolved revenue streams raised £2.5 billion and accounted for 9.3% of total revenue to Wales.

Figure 3.8 offers a breakdown of total revenue in 2017-18 based on the level of government responsible in 2019-20. Had the Welsh Rates of Income Tax, Stamp Duty and Landfill Tax been devolved in 2017-18, these would have accounted for £2.3 billion (8.4%) of total revenue. When we include revenue streams that were already devolved at the time, devolved revenue accounts for 17.7% of the total and 73.9% is reserved to the UK government. The remaining 8.4% comprises of gross operating surplus (GOS). This is offset by an equivalent amount in the accounting adjustments on the expenditure side and is included here for completeness.

Figure 3.8

Breakdown of total current revenue to Wales (2017-18), by level of government responsible in 2019-20



Source: ONS (2019) Country and Regional Public Sector Finances; OBR (2019) Economic and Fiscal Outlook: devolved tax forecasts; and authors' calculations

3.3 International and regional comparisons

3.3.1 UK countries and English regions

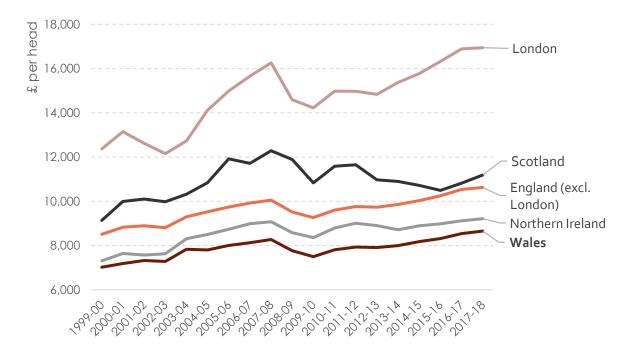
Figure 3.9 presents total current revenue per head, by country between 1999-10 and 2017-18. Data for London is shown separately to highlight the fact that this region is an outlier. In general, trends in revenue for Wales, England (excluding London) and Northern Ireland follow a similar pattern. There is more variance in the Scottish figures given the effect of North Sea Oil & Gas revenues (including offshore corporation tax and petroleum revenue tax). Given that the Scottish Government has introduced its own tax bands from 2019-20 onwards, we can expect Scottish onshore revenue trends to diverge further from the UK average in the future.

Strong growth in corporation tax revenues means that per capita revenues in London have grown at a rapid pace in recent years. In 2017-18, total revenues collected per head for London was £16,942, nearly twice the Welsh level (£8,653). Since 1999-00, total revenues raised in Wales have fallen relative to the UK level although this is partly attributable to the strong growth in London revenues, which puts upward pressure on the UK average.

The map in Figure 3.10 presents similar data on total revenue raised per head in 2017-18 on a NUTS1 level. The North East is the English region with revenue levels most closely resembling that of Wales. Nevertheless, in 2017-18, revenues per head in the North East of England were still £260 higher than the Welsh figure. Total per capita revenues in Wales have trailed all other NUTS1 regions every year since 1999-00.

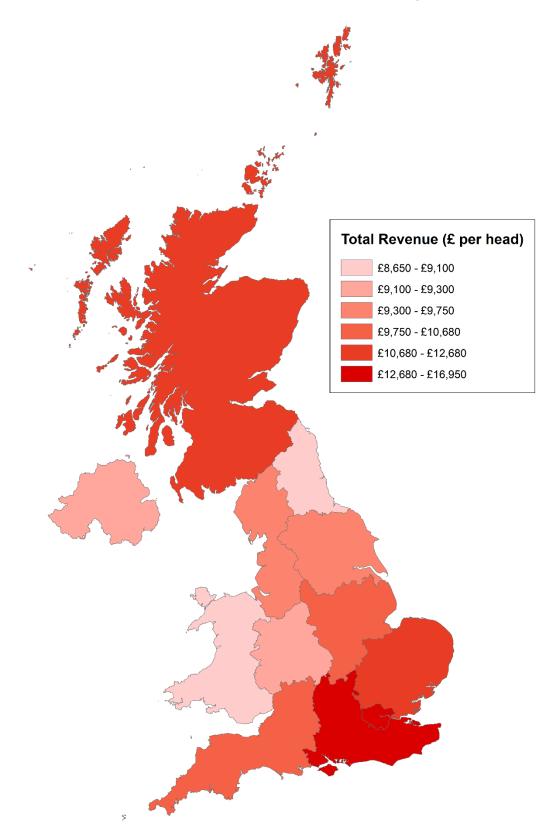
Figure 3.9

Total current revenue (North Sea revenue by geographic share) per head, 1999-00 to 2017-18 (2017-18 prices)



Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

Figure 3.10
Total current revenue (excl. North Sea revenue) per head, by NUTS1 region, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

Since 1999-00, Wales has seen a 23.3% real terms growth in per capita revenues, ranking seventh among NUTS1 regions on this measure. The West Midlands (17.9%) and Yorkshire and the Humber (18.5%) have seen the slowest growth, while London (37.0%), South East England (30.8%) and the East of England (30.1%) rank highest. The three regions with the highest real-terms per capita growth rates since 1999-00 were the only three regions with a positive net fiscal balance in 2017-18 (see Chapter 2).

3.3.2 OECD countries

This section compares levels of spending for Wales with other OECD countries. The figures presented in the ONS (2018) *Country and Regional Public Sector Finances* report include data for the public sector as a whole and on a financial year basis. In contrast, international organisations such as the European Commission and the International Monetary Fund (IMF) report countries' finances on a calendar year basis and for general government only (excluding public corporations). **Figure 3.11** below presents estimates of general government revenue for Wales and the UK on this basis.

Figure 3.11
General Government receipts, Wales and UK, 2017

Total current receipts	2013	2014	2015	2016	2017
Wales	22,799	23,619	24,222	25,423	26,588
United Kingdom	633,161	645,201	669,457	705,740	746,489

Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates; and authors' calculations. See Annex A for details of methodology.

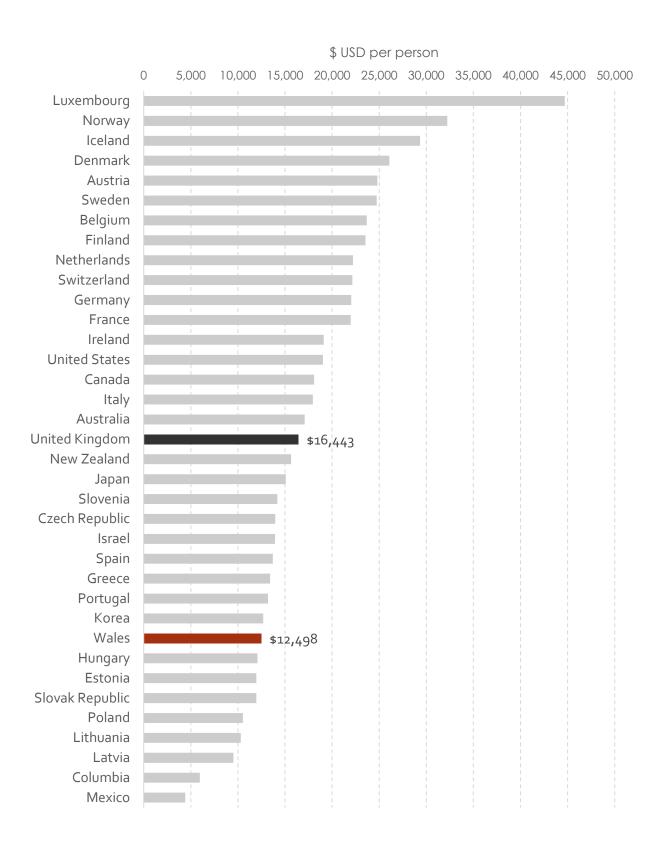
The Organisation for Economic Cooperation and Development (OECD) is an intergovernmental economic organisation aimed at stimulating economic progress and world trade. Most OECD members are high-income countries and are regarded as developed economies. In this section, we present illustrative international comparisons of Wales' revenue levels by referencing data for OECD countries.

Note that the OECD data is not wholly comparable with the data presented earlier in this chapter. For instance, total revenue as a share of GDP is slightly higher compared to the data presented earlier. This is because of differences in what the ONS and OECD include in their calculations of total revenue. A full methodology explaining how GDP figures for Wales have been calculated can be found in Appendix A of this report.

As shown in Figure 3.12, Wales appears in the fourth quartile of OECD countries in terms of revenues raised per person. Based on OECD data, total revenues per head in Wales are \$12,498, roughly comparable with South Korea (\$12,688) and Hungary (\$12,072). This is \$5,934 below the OECD average of \$18,432. Although Wales does not appear grossly out of line with other OECD countries based on these figures, when taking into account Wales' expenditure levels, its revenue levels per person are low by international standards. A discussion of expenditure levels in Wales and other OECD countries can be found in Chapter 4.

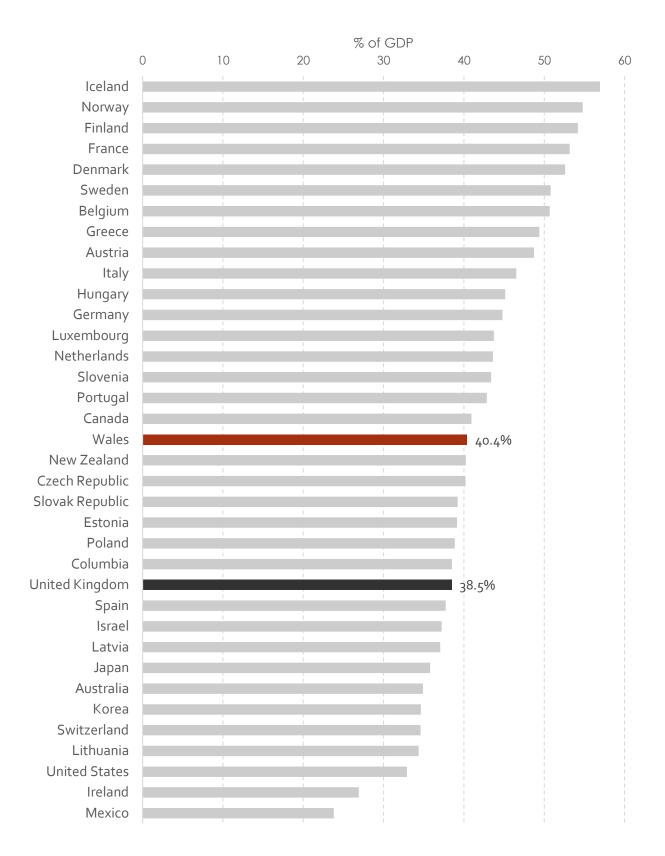
The tax-to-GDP ratio refers to the share of a country's output that is collected by the government through taxes and it is one measure of the degree to which the government controls resources. As a percentage of GDP, revenues to Wales are much closer to the middle of the table at 40.4% (Figure 3.13). This is still significantly below the Euro-area average of 46.0%.

Figure 3.12
Total revenues of OECD countries (\$USD per person)



Source: OECD (2016) General Government Estimates and authors' calculations. See Annex A for details of methodology.

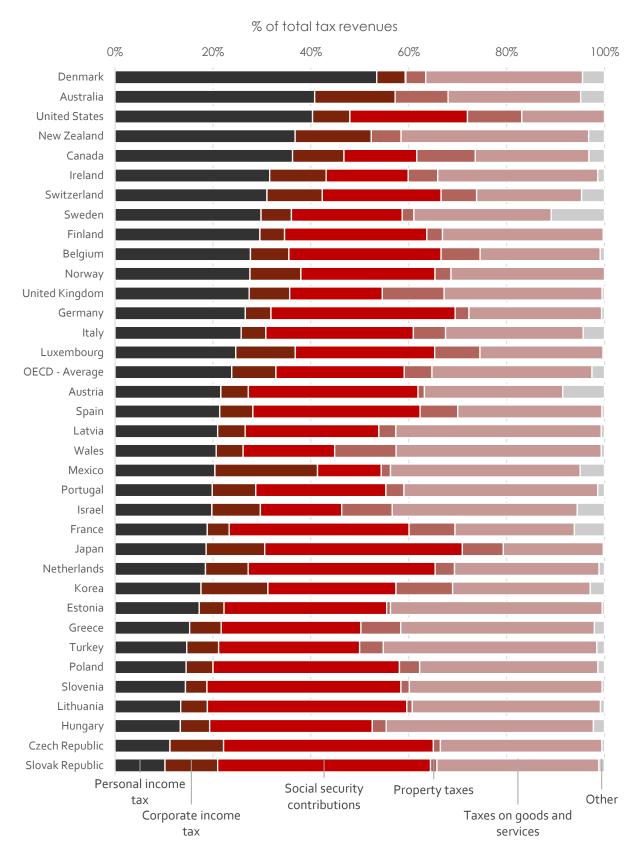
Figure 3.13
Total revenues of OECD countries as % of GDP



Source: OECD (2016) General Government Estimates and authors' calculations. See Annex A for details of methodology.

Figure 3.14

Tax structures of OECD countries (main tax sources as % of total tax revenues), 2016



Source: OECD (2016) General Government Estimates and authors' calculations

Tax structures and the prominence of specific types of taxes vary significantly across countries. Figure 3.14 shows the main sources of tax revenues as a share of total taxes.⁵ In 2016, sixteen OECD countries raised the largest share of their revenues from income taxes (both corporate and personal), including the UK, while eleven countries raised the largest share of their revenues from Social Security Contributions (SSCs). Eight countries raised the largest share of their revenues from consumption taxes (including VAT) - as was the case for Wales in 2016.

⁵ This figure looks at tax revenues only and therefore excludes gross operating surplus, interest and dividends, rents and other current transfers included in earlier figures in this chapter. For Wales, income taxes (both corporate and personal) mainly consists of Income Tax, corporation tax and capital gains tax. Social security contributions consist of National Insurance contributions. Property taxes consist of Council Tax, non-domestic rates, Stamp Duty Land Tax and Inheritance Tax. Taxes on goods and services mainly consist of VAT revenues and excise duties.

Public sector expenditure

Public sector expenditure, also referred to as government spending, refers to the total amount spent by the public sector for Wales, including by the UK government, Welsh Government, local authorities and public corporations.

This chapter begins by analysing the composition of and trends in Welsh public expenditure. We then examine the share of expenditure for Wales that is reserved and devolved. We then attempt to reconcile the relative funding Wales receives through the block grant from the UK government with relative levels of total spending. Lastly, we provide comparisons of Welsh government spending with other countries of the UK and with OECD countries.

Key findings:

- Total public sector expenditure for Wales in 2017-18 was an estimated £40.8 billion, around 5.1% of total UK public sector expenditure of £794.9 billion. Non-identifiable expenditure and expenditure outside the UK attributed to Wales accounted for £5.2 billion of this total (mainly defence and debt interest payments).
- Social protection is by far the largest expenditure area for Wales, accounting for £14.8 billion, followed by health spending (£7.3 billion) and education (£4.3 billion).
- Total public sector spending for Wales increased by 8.3% from 2013-14 to 2017-18, most notably on health, which increased by nearly £1.1 billion over these years. However, total spending remains below its 2011-12 level both in real terms and on a per person basis.
- Total public sector spending per person for Wales was 108% of the UK average in 2017-18, or 111% of the level in England only. This is significantly lower than the estimated relative funding per person received through the block grant (120% of the English level). An attempt to reconcile these figures suggests that, on a per person basis, non-social protection spending by the UK government is significantly lower for Wales compared with England.
- Capital spending per person for Wales was 4.8% lower than the UK average in 2017-18.
 Capital spending per person on transport was only 76% of the UK level, and was also lower for education and training, environment protection and science and technology.
- On a National Accounts basis, estimated transactions with the EU for Wales was a net contribution of -£211 million, meaning public sector receipts from the EU (through CAP and structural funding) outweighed Wales' notional contribution to the EU budget.
- Spending per person for Wales is relatively close to the average across OECD countries.

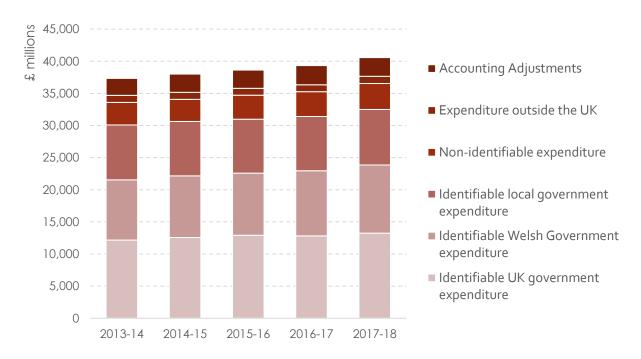
4.1 Composition and trends in public sector expenditure for Wales

4.1.1 Identifiable, non-identifiable and expenditure outside the UK

The main source of data for public expenditure on a country and regional basis in the UK is HM Treasury's (2018) *Country and Regional Analysis* (CRA). This is a statistical exercise aimed at identifying where resources were spent depending on where those who benefitted were located. It is presented on a Total Expenditure on Services (TES) basis and is formed by two types of spending. **Identifiable expenditure** refers to spending which can be identified as benefitting particular countries or regions. For instance, expenditure on health services or on social protection can be identified as benefitting individuals in Wales. The CRA also includes **non-identifiable expenditure** and expenditure outside the UK. This refers to expenditure that is deemed to be incurred on behalf of the United Kingdom as a whole, for example, public debt interest payments and defence spending. The ONS (2019) *Country and Regional Public Sector Finances* publication allocates non-identifiable expenditure to Wales using various methodologies (see Box 4.1).

The ONS (2019) presents expenditure for countries and regions on a **Total Managed Expenditure (TME)** basis, the headline measure of aggregate public sector spending in the UK public sector finances. TME includes TES and an accounting adjustment. The main component of this accounting adjustment is capital consumption (or depreciation), which is a measure of the reduction in the value of assets over time. For example, the value of the road network is assumed to decline over time as weather and traffic cause potholes to emerge. Alongside VAT refunds, this spending in the accounting adjustment also gets counted as increased current revenue, and therefore does not influence Wales' net fiscal balance estimates discussed in Chapter 2 (see Annex A for more information).

Figure 4.1
Estimated Public Sector Expenditure for Wales, 2013-14 to 2017-18



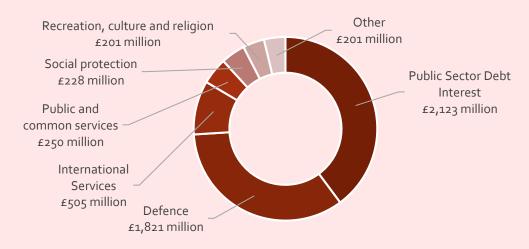
Source: ONS (2019) Country and Regional Public Sector Finances

Box 4.1: Composition of non-identifiable and spending outside the UK apportioned to Wales

Non-identifiable expenditure and expenditure outside the UK refers to spending which cannot be identified as benefitting particular countries and regions within the UK. When producing their annual *Country and Regional Public Sector Finances* tables, the ONS apportions most of this spending to countries and regions based on population share. In 2017-18, Wales' population accounted for 4.73% of the UK total.

In 2017-18, total non-identifiable and spending outside the UK apportioned to Wales was roughly £5.4 billion. As shown in Figure 4.2, public sector debt repayments constituted £2.1 billion of this total. UK government spending on defence apportioned to Wales amounted to £1.8 billion. The £505 million spent on international services reflects the UK government's commitment to spending 0.7% of its GDP on international aid. Social protection expenditure includes state pension payments for UK nationals living abroad. Spending on the BBC accounts for a significant share of the recreation, culture and religion category. Other spending includes UK border agency costs and transfers to European Economic Area countries to cover the cost of healthcare for British citizens who are admitted to hospital whilst abroad.

Figure 4.2
Breakdown of non-identifiable and expenditure outside the UK apportioned to Wales, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances

Total public sector expenditure for Wales in 2017-18 is estimated to be £40.8 billion. This amounts to 5.1% of the total UK public sector expenditure of £794.9 billion. Identifiable expenditure accounted for £32.5 billion or 79.7% of total expenditure in 2017-18. Non-identifiable expenditure and expenditure outside the UK combined amounted to £5.2 billion, or 13.1 %. The remainder of the total is made up of accounting adjustments and EU transactions (see Section 4.1.4).

Figure 4.3 provides a breakdown of total public sector expenditure for Wales and the UK by policy area. Despite being a largely non-devolved policy area (see Box 4.2), social protection is by far the largest expenditure programme for Wales, accounting for £14.8 billion or 36.3% of total expenditure. Health

spending is also a large component of total expenditure at £7.3 billion, followed by education at £4.3 billion. When taken together, these three largest areas of expenditure account for nearly two-thirds of total expenditure for Wales.

Approximately 90% of total expenditure for Wales in 2017-18 was classified as current expenditure. Capital expenditure accounted for the remaining $\pounds_3.8$ billion. Capital expenditure accounted for a slightly smaller share of total expenditure in Wales when compared to the UK as a whole.

Figure 4.3
Total Expenditure: Wales and UK, 2017-18

	WA	LES	U	K	
	£ million	% of total	£ million	% of total	Wales as % of UK
General public services					
Public and common services	776	1.9%	12,220	1.5%	6.4%
International services	507	1.2%	10,707	1.3%	4.7%
Public sector debt interest	2,123	5.2%	44,798	5.6%	4.7%
Defence	1,833	4.5%	38,653	4.9%	4.7%
Public order and safety	1,450	3.6%	31,558	4.0%	4.6%
Economic affairs					
Enterprise and econ development	536	1.3%	9,591	1.2%	5.6%
Science and technology	239	0.6%	5,063	0.6%	4.7%
Employment policies	134	0.3%	2,613	0.3%	5.1%
Agriculture, forestry and fisheries	503	1.2%	5,192	0.7%	9.7%
Transport	1,303	3.2%	32,460	4.1%	4.0%
Environment protection	646	1.6%	12,014	1.5%	5.4%
Housing and community amenities	714	1.8%	11,496	1.4%	6.2%
Health	7,263	17.8%	145,812	18.3%	5.0%
Recreation, culture and religion	743	1.8%	11,918	1.5%	6.2%
Education and training	4,279	10.5%	87,907	11.1%	4.9%
Social protection	14,800	36.3%	268,658	33.8%	5.5%
Accounting adjustments ⁶	2,926	7.2%	64,214	8.1%	4.6%
Total Expenditure ⁷	40,776	100.0%	794 , 876	100.0%	5.1%
of which:					
Current Expenditure	37,008	90.8%	711,164	89.5%	5.2%
Capital Expenditure	3,768	9.2%	83,712	10.5%	4.5%

Source: ONS~(2019)~Country~and~Regional~Public~Sector~Finances~and~authors'~calculations

⁶ Most items included here are offset by increased current revenue. Includes EU transactions line (see Section 4.1.4).

⁷ Total expenditure presents Total Managed Expenditure.

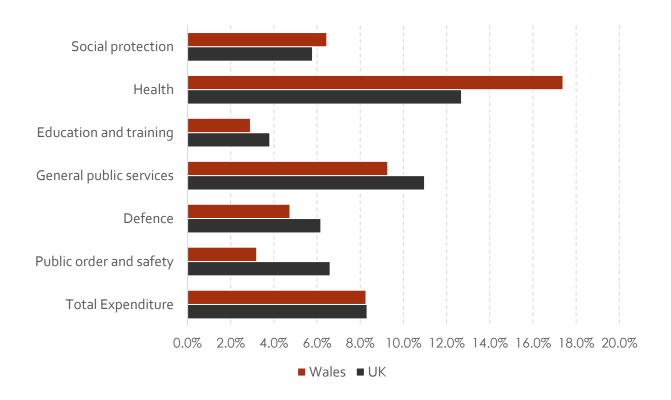
4.1.2 Trends by expenditure programmes, 2013-14 to 2017-18

Figure 4.4 shows the change in expenditure for Wales and the UK from 2013-14 to 2017-18, by largest categories of expenditure.

Change in total expenditure over this period was roughly on a par with the UK average, at around 8.3%. However, on a real terms and per person basis, total spending for Wales increased by 0.2%, whereas total spending per head fell by 1.2% on a UK level over the same period. This reflects slower Welsh population growth over the past five years. This is also the reason why allocated spending for defence has grown more slowly for Wales.

The largest increase in expenditure for Wales from 2013-14 to 2017-18 was health spending, which grew by nearly £1.1 billion, or 17.4%. This compares with a 12.7% increase in health spending across the UK. This notable pattern can be attributed to the Welsh Government's decision to increase health spending in Wales from 2013-14. During the early years of austerity from 2009-10, the Welsh Government used its Barnett consequentials from protected English NHS spending to moderate the impact of cuts to other spending areas, including local government, which meant that health spending across the UK outpaced growth in health spending for Wales. Between 2013-14 and 2017-18 however, this trend was reversed, and health spending for Wales grew significantly more quickly than health spending for the UK as a whole.

Figure 4.4
Change in expenditure (nominal) by largest expenditure functions: Wales and UK, 2013-14 to 2017-188



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

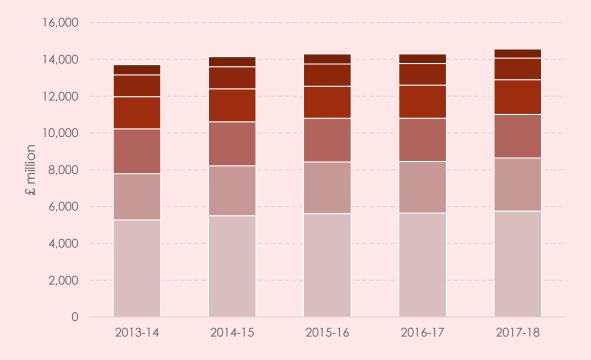
⁸ Other functions line includes economic affairs, environment protection, housing and community amenities and recreation, culture and religion.

In 2017-18, total health spending per head for Wales amounted to £2,321, or 105% of the UK level. This higher per capita figure reflects, in part, greater need arising from having an older, poorer and generally less healthy population. A report by the Holtham Commission (2010) argued that relative need for health expenditure in Wales was around 114% of the English level, based on UK government funding criteria.

Box 4.2: Composition of identifiable Social Protection spending for Wales

Figure 4.5 provides a breakdown of expenditure on social protection for Wales from 2013-14 to 2017-18. The largest growth area was expenditure on pensions, which grew by £480.1 million (9.1%) while the largest percentage increase was seen in expenditure on incapacity, disability and injury benefits, which increased by £375.0 million (14.9%) over this period. In 2017-18, pensions accounted for 39.5% of the social protection bill for Wales, up from 38.5% in 2013-14. This is less than the share of social protection expenditure spent on pensions across the UK, which was 41.4% in 2017-18. Higher prevalence of disabilities and chronic conditions means that incapacity, disability and injury benefits account for a relatively larger share of the total in Wales.

Figure 4.5
Breakdown of identifiable Social Protection spending for Wales, 2013-14 to 2017-18



- Other social protection expenditure
- Housing (Welsh Local Government)
- Social Services (Welsh Government and Local Government)
- Family benefits, income support and tax credits
- Incapacity, disability and injury benefits
- Pensions

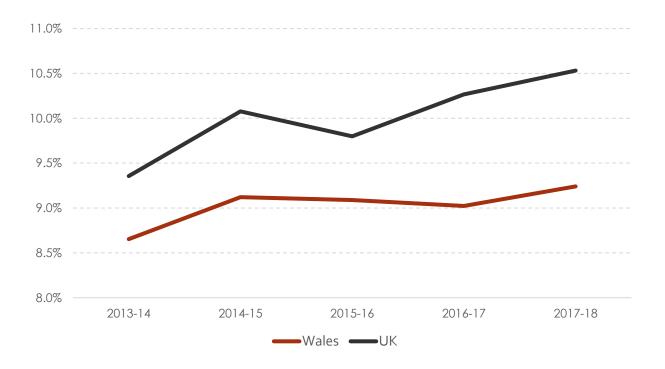
Source: HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

Education expenditure for Wales increased by £121 million (2.9%) between 2013-14 and 2017-18, less than the equivalent percentage increase for the UK (3.8%). However, despite this smaller percentage increase, slower growth in Wales' pupil population has meant that per pupil spending has been relatively better protected in Wales.

4.1.3 Trends in public sector capital expenditure, 2013-14 to 2017-18

Capital expenditure has been increasing more rapidly than current expenditure in recent years. Capital spending grew by 15.6% in nominal terms between 2013-14 and 2017-18, compared with a 7.6% increase in current spending. However, as a share of TME, capital spending for Wales increased by 0.5 percentage points over this time period, compared with a 1.1 percentage point increase at a UK wide level, as illustrated in Figure 4.6.



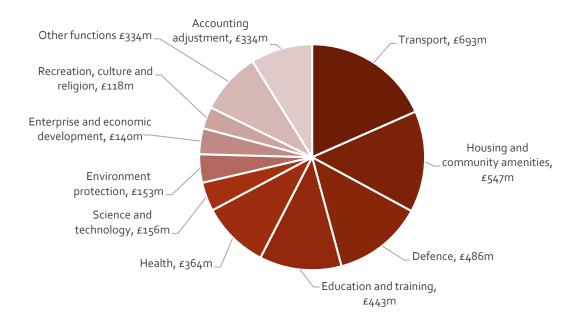


Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

Figure 4.7 provides a breakdown of capital expenditure for Wales by largest expenditure functions. Capital spending on transport projects accounted for £693 million, or 18.4% of total capital expenditure for Wales in 2017-18. In the same year, capital spending on housing and community amenities, mostly by local government, amounted to £547 million, or 15.9% of total capital expenditure.

Capital spending on defence, allocated to Wales on a population basis, was £486 million in 2017-18. This amounted to 41% of the UK government's capital spending for Wales. Accounting adjustment spending included in Figure 4.7 mainly relates to spending by housing associations which are accounted for in TME but not TES.

Figure 4.7
Breakdown of capital expenditure for Wales, by largest expenditure functions, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

Figure 4.8 provides a breakdown of capital expenditure for Wales by level of government. When spending by housing associations is included, local government accounted for the largest share of capital spending for Wales (36%), though its share has been falling.

Figure 4.8

Breakdown of capital expenditure for Wales, by level of government, 2013-14 to 2017-18 (£ million)

£ million	2013-14	2014-15	2015-16	2016-17	2017-18
Local government	979	917	1,016	1,012	1,079
Welsh Government	863	991	808	926	1,117
UK government	947	1,055	1,146	1,137	1,238
Total	2,789	2,964	2,970	3,074	3,434

Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

Capital spending per person for Wales was 4.8% lower than the average for the whole of the UK in 2017-18. Relative levels of capital spending for Wales compared with the UK average varies significantly between functions. **Figure 4.9** shows cumulative identifiable capital spending on various spending functions over the latest five-year period, from 2013-14 to 2017-18, and how this compared with the UK average per person.⁹

⁹ Non-identifiable spending (e.g. defence) is excluded from this analysis.

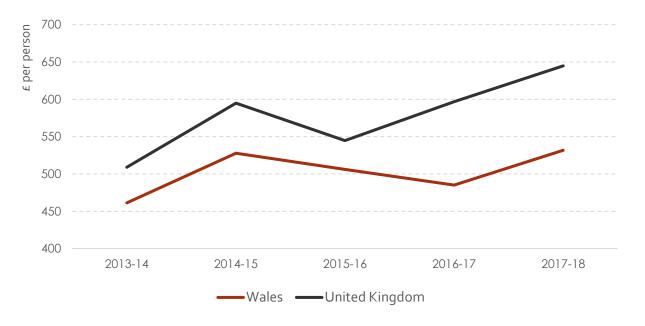
Figure 4.9
Cumulative identifiable capital spending for Wales from 2013-14 to 2017-18, by function

Function	Cumulative identifiable spending, 2013-14 to 2017-18 (£m, 2017-18 prices)	Per person (£, 2017-18 prices)	Per person (UK = 100%)
Transport	3,201	1,031	76%
Housing and community amenities	2,668	859	148%
Education and training	1,805	581	78%
Health	1,431	461	93%
Environment protection	781	252	89%
Enterprise and economic development	684	220	204%
Science and technology	666	214	75%
Recreation, culture and religion	428	138	95%
Public order and safety	363	117	122%
Other functions	664	214	119%
Total capital identifiable expenditure	12,693	4,087	96%

Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

Capital spending per person on transport — the largest area of capital spending — was only 76% of the UK level, while housing and community amenities spending was significantly higher in Wales. Relative levels of capital spending per person were significantly lower for Wales in education and training, environment protection and science and technology, while enterprise and economic development capital spending was significantly higher for Wales.

Figure 4.10
Net investment per person, 2013-14 to 2017-18 (£ per person, 2017-18 prices)



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

Public sector capital expenditure less capital consumption (or depreciation) is referred to as Public Sector Net Investment. Higher levels of estimated capital consumption for Wales means that there is an even greater difference in per person net investment between Wales and the whole of the UK. Net investment per person in Wales amounted to £532 in 2017-18, compared with £645 across the UK (21% higher), a gap which has grown over recent years, as shown in Figure 4.10.

4.1.4 EU Transactions

As a member of the European Union (EU), the UK makes contributions to the EU budget and receives funding from the EU through several programmes. **Figure 4.11** provides a breakdown of these transactions with the EU.

Wales does not make direct contributions to the EU budget and is therefore assigned a share of the UK contribution. The different components of the UK's contribution to the EU budget are assigned as follows:

- Traditional Own Resources (comprising customs, agricultural and sugar levies) are assigned using shares of UK VAT revenue;
- VAT-based own resource (standardised percentage of 0.3% of VAT) are assigned using shares of UK VAT revenue;
- GNI-based own resource (a contribution based on Gross National Income) are assigned using shares of GVA.
- The UK rebate is assigned on the basis of population.

This apportionment methodology used by the ONS closely follows the methodology developed by the Scottish Government for their *Government Expenditure and Revenue Scotland* publication.

Figure 4.11
Transactions with EU institutions, 2013-14 to 2017-18, United Kingdom (£ million)

	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18
GNI based contribution	13,845	14,154	12,570	11,440	11,761
UK abatement (rebate)	-4,130	-4,811	-4,068	-4,757	-4,547
VAT-based contribution to the EU	2,163	2,316	2,751	2,477	2,974
Expenditure transfers to the EU	11,879	11,658	11,253	9,160	10,188
Receipts to cover collection costs of TOR	-733	-743	-771	-357	-698
TOR	2,933	3,006	3,085	3,366	3,413
Gross contribution to the EU budget	14,079	13,921	13,567	12,169	12,903
Public sector EU receipts	-3,856	-4,690	-2,811	-4,081	-4,126
Net contribution to the EU budget	10,223	9,231	10,756	8,088	8,777
less other attributed costs [1]	-79				
Net payments to EU institutions	10,143	9,231	10,756	8,088	8,777
EU transactions (net payments to EU institutions less TOR)	7,210	6,225	7,671	4,722	5,364
[1] UK contribution to EU aid to non-EU states					

Source: Scottish Government (2018) Government Expenditure and Revenue Scotland

Wales receives funding directly from the EU, primarily through the Common Agricultural Policy and European Structural and Development Funds. In the National Accounts, this expenditure is reported as direct payments from the EU to enterprises and households, rather than being included within departmental budgets. To present spending on a Total Managed Expenditure basis, these spending lines are included as negative spending to remove them from departmental spending. Actual amounts are used for these items, reflecting income reported in the Welsh Government's annual consolidated accounts. Wales' estimated transactions with EU institutions are outlined in Figure 4.12.

The EU transactions line which appears in the tables presented in this chapter are produced on a National Accounts basis and therefore exclude Traditional Own Resources (TOR) payments. As shown in **Figure 4.12**, EU transactions for Wales amounted to a contribution of -£211 million, meaning public sector EU receipts outweighed Wales' notional contribution to the EU budget. Out of the 13 NUTS1 regions, this was only true for Wales and Northern Ireland.

However, TOR payments are normally included when reporting the UK's net contribution to EU budgets. Wales' estimated net contribution to the EU in 2017-18 was a benefit of £59 million, compared with a net contribution from the UK as a whole of £8.8 billion. This estimated net benefit has been affected by a recent change in methodology. In 2016, the Wales Governance Centre published an estimate of Wales' net contribution to the EU in which TOR contributions were apportioned by taking Wales' share of imports from outside the EU. A change in methodology for estimating these imports by HMRC means that this share is now considerably greater, and as a result Wales' estimated net benefit from the EU is somewhat smaller.

Figure 4.12
Estimated transactions with EU institutions, 2013-14 to 2017-18, Wales (£ million)

	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18
GNI based contribution	479	483	431	392	402
UK abatement (rebate)	-198	-230	-193	-225	-215
VAT-based contribution to the EU	96	104	123	111	133
Expenditure transfers to the EU	377	357	360	278	320
Receipts to cover collection costs of TOR	-33	-33	-35	-16	-31
TOR	131	135	138	151	153
Gross contribution to the EU budget	475	459	464	412	441
Public sector EU receipts	-684	-650	-429	-401	-500
Net contribution to the EU budget	-209	-191	35	11	-59
less other attributed costs [1]	-4	0	0	0	0
Net payments to EU institutions	-213	-191	35	11	-59
EU transactions (net payments to EU institutions less TOR)	-343	-327	-103	-139	-211
[1] UK contribution to EU aid to non-EU states	•				

Source: Authors' calculations. These estimates differ slightly from the EU transactions line reported in the ONS data, due to differences in amounts apportioned to Wales.

While these figures cover the transactions of the Welsh public sector with the EU, the EU also makes payments to bodies outside the public sector, such as Higher Education Institutions (HEIs). To illustrate the size of these payments, Figure 4.13 provides the latest data from the Higher Education Statistics

Agency (2019) on payments from the EU to HEIs in Wales and the UK. Payments to Welsh HEIs amounted to £48 million in 2017-18, just over 5% of the total for the UK. These payments and Wales' share of the UK total have increased from 2015-16 onwards, as shown in the table.

Figure 4.13 EU payments to Higher Education Institutions, 2015-16 to 2017-18

	2015-16	2016-17	2017-18
UK	841	877	924
Wales	28	35	48
Wales share of UK	3.3%	4.0%	5.2%

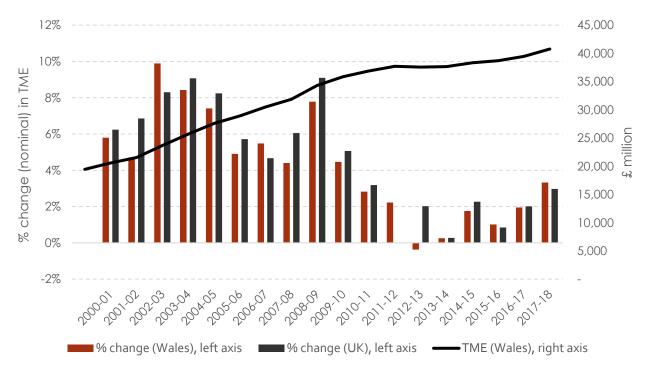
Source: Higher Education Statistics Agency (2019) Table 7 – Income analysed by source

4.1.5 Longer term trends in public sector expenditure

The Country and Regional Public Sector Finances dataset published by the ONS presents TME on an annual basis going back to 1999-00. Due to changes in reporting, classification and accounting procedures, historical breakdowns of this figure by capital and current spending on policy functions are subject to a degree of uncertainty. In contrast, headline historical figures for total expenditure are likely to be of a high level of accuracy. For these reasons, only trends in total expenditure are explored in this section.

Figure 4.14

Total Managed Expenditure for Wales (nominal) and annual percentage change in TME for Wales and UK, 1999-00 to 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances

The grey line in **Figure 4.14** plots the nominal growth in TME for Wales between 2000-01 and 2017-18. The red and grey bars indicate the annual percentage change in TME for Wales and the UK over the same period.

Over the first part of the last decade, Wales saw rapid growth in total expenditure levels, increasing from £19.5 billion in 1999-00 to £27.6 billion in 2004-05. Annual growth in TME for Wales averaged 7.2% over this period, less than the average growth of 7.7% in UK expenditure. Except for 2002-03 and 2006-07, growth in total expenditure for Wales trailed growth in UK-wide expenditure in each year between 1999-00 and 2009-10.

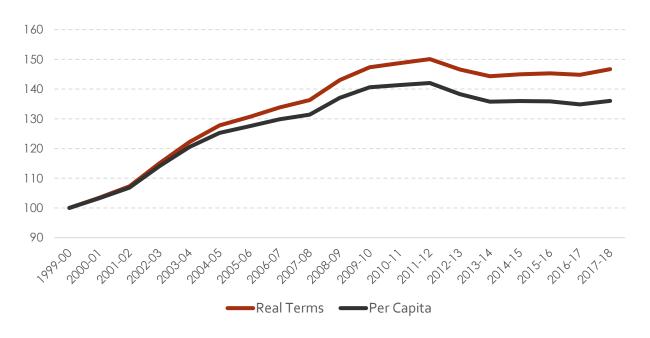
The sharp increase in TME around the time of the 2007-08 financial crisis reflects the financial sector interventions made by the UK government in the form of banking bailouts. In a previous GERW release, we estimated that Wales' population share of the UK Government's financial stability expenditure amounted to £407 million in 2008-09 and £203 million in 2009-10.

Since 2011-12, growth in TME for Wales has slowed and even contracted by 0.4% in nominal terms between 2011-12 and 2012-13. This reflects the austerity measures put in place by the coalition government in Westminster at the time. Between 2009-10 and 2017-18, the average annual rate of growth in TME for Wales was 1.6%, a figure roughly in line with that of the UK as a whole.

Figure 4.15 plots an index of TME for Wales in real terms and on a per capita basis using 1999-00 levels as a baseline. Real-terms increases in TME were sufficiently large to ensure that per capita spending levels grew at the same rate over the first half of the last decade. Between 2011-12 and 2013-14, however, TME for Wales fell by £1.6 billion (3.9%) in real terms. Slower population growth in recent years has protected per capita spending levels from diverging further to some extent. Nevertheless, in 2017-18, total expenditure for Wales remained below its 2011-12 level both in real terms and on a per capita basis.

Figure 4.15

Real-terms and per capita change in Total Managed Expenditure for Wales, 1999-00 to 2017-18 (1999-00 = 100)



Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates; ONS (2017) 2016-based population Projections and authors' calculations

Figure 4.16 shows the trend in total per person spending for Wales relative to the UK as a whole (UK=100). Relative per person expenditure for Wales was at its highest, at 110.6% of the UK level, in 1999-00, fell to 105.9% in 2009-10, but has increased again in recent years. In 2017-18, relative per person expenditure for Wales was 108.4% of the UK level. The recent increase may be partly attributed to relatively slower population growth in Wales compared to the rest of the UK.

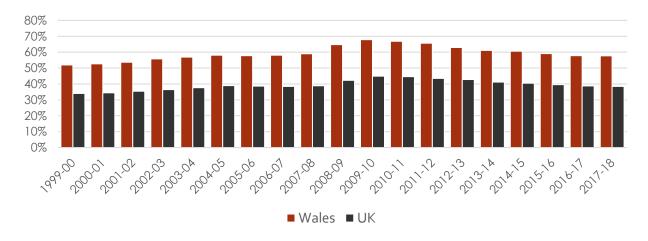
Figure 4.16
Total Managed Expenditure per person for Wales, 1999-10 to 2017-18 (UK = 100)



Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

As previously stated, we estimate that Wales' GDP in 2017-18 was £70.7 billion. Figure 4.17 presents Total Managed Expenditure for Wales and the UK as an estimated share of GDP. In 2017-18, total expenditure in Wales equated to 57.7% of the country's GDP's, significantly higher than the figure for the UK (38.4%). Expenditure for Wales as a share of GDP peaked at 67.9% in 2009-10. Nevertheless, the most recent figures are not wildly inconsistent with equivalent data for some OECD countries. We present further international expenditure comparisons in a later section of this chapter.

Figure 4.17
Total Managed Expenditure for Wales and the UK as an estimated share of GDP



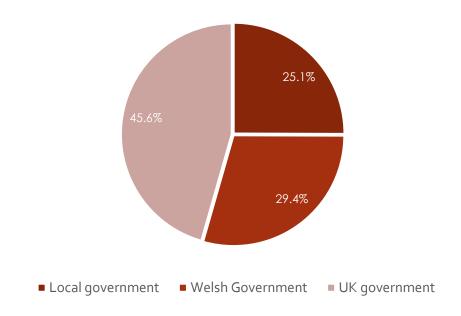
Source: ONS (2019) Country and Regional Public Sector Finances; GDP estimates based on authors' calculations

4.2 Devolved and reserved expenditure

4.2.1 Overview of expenditure by level of government

Figure 4.18 shows the split in Total Managed Expenditure for Wales by level of government. UK government spending accounted for £18.6 billion (45.6%) of government spending for Wales in 2017-18. Welsh Government spending accounted for 29.4% of Total Managed Expenditure, while local government spending accounted for 25.1%.

Figure 4.18
Breakdown of Total Managed Expenditure for Wales, by level of government, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

Figure 4.19 overleaf presents added detail on devolved, local and reserved spending between 2013-14 and 2017-18, breaking this down by government function. Welsh Government spending on health has increased by nearly £1.1 billion (17.2%) over the period, having grown at a slower pace than England over the first years of austerity.

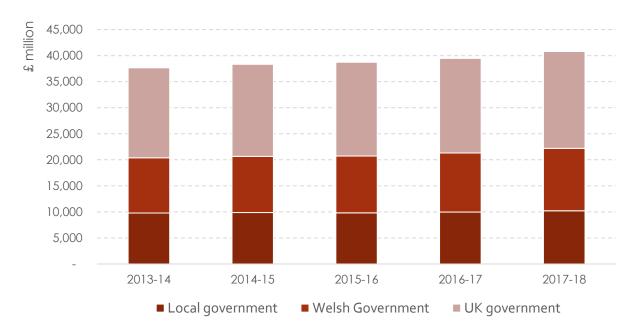
As illustrated in Figure 4.20, Total Managed Expenditure by the Welsh Government grew faster than spending by local and UK government between 2013-14 and 2017-18. Welsh Government spending increased by £1.4 billion (13.0%) in nominal terms over this period, and over three quarters of this increase was diverted towards health spending. UK government spending grew at a relatively slower pace (7.6%) while local government spending grew by only 4.3% in nominal terms and fell by 2.1% in real terms. These trends mean the Welsh Government's share of Total Managed Expenditure has increased slightly from 28.1% in 2013-14, while local government's share has fallen from 26.0%.

Total Expenditure on Services for Wales by level of government, 2013-14 to 2017-18 (₤ million) Figure 4.19

		Loca	Local government	ment			Welsh	Welsh Government	ment			UK	UK government	ent				Total		
£ million	2013-	2014-	7	7	2017-	2013-	2014-		2016-	2017-	2013-	2014-		-9102	2017-	2013-	2014-	2015-	2016-	2017-
	14	15	16	17	18	14	15	16	17	18	14	15	16	17	18	14	15	16	17	18
General public services	221	205	211	205	218	230	250	239	246	248	2,668	2,575	2,572	2,711	2,941	3,117	080′8	3,022	3,163	3,406
Public services	221	205	211	205	218	230	250	239	246	248	270	284	267	294	309	721	07/	718	745	776
International services	-	-	-	-	-	-	1	-	-	-	471	502	967	514	508	470	505	464	515	507
Public sector debt interest	1	-	-	-	1	1	1	-	'	1	1,926	1,789	1,807	1,903	2,123	1,926	684'τ	1,807	1,903	2,123
Defence	4	7	3	2	3	-	1	-	-	-	1,745	1,752	1,740	1,757	1,830	1,750	1,755	1,743	1,760	1,833
Public order and safety	821	<i>L</i> ⁴⁸	811	805	839	1	1	2	1	1	583	598	510	544	610	1,405	944′τ	1,323	1,350	1,450
Economic affairs	491	435	353	339	392	1,259	1,286	1,167	1,222	1,305	715	680	1,006	868	1,019	2,465	2,402	2,527	2,460	2,716
Economic development	112	6	69	17	85	300	328	234	224	224	164	152	207	190	227	575	572	205	455	536
Science and technology	-	-	-	-	-	29	77	37	21	29	138	160	189	186	211	168	504	225	208	239
Employment policies	-	-	-	-	-	2	3	-	0	0	194	155	136	133	134	197	158	136	133	134
Agriculture and forestry	22	20	15	16	14	451	412	403	433	470	16	19	17	16	19	488	451	435	466	503
Transport	358	323	275	283	293	477	499	464	544	580	202	195	457	371	428	1,037	1,017	1,226	1,198	1,303
Environment protection	383	698	361	367	354	195	195	157	149	155	130	144	145	120	136	709	80/	699	989	949
Housing and community	504	203	513	503	644	66	91	177	197	256	11	13	12	12	6	615	209	702	712	714
Health	-	-	-	-	-	6,145	97479	6,574	9'635	7,203	41	39	31	51	59	6,187	9,465	9,605	986'9	7,263
Recreation, culture and religion	314	262	273	253	261	66	108	100	106	124	303	329	311	320	358	717	729	789	678	743
Education	2,892	2,847	2,908	2,984	3,053	1,257	1,125	1,161	1,187	1,211	10	16	14	15	15	4,158	2,987	780'7	4,186	4,279
Social protection	2,914	2,968	2,955	2,991	3,077	94	97	90	92	105	10,895	11,294	11,478	11,442	11,618	13,903	14,360	14,523	14,525	14,800
Total Expenditure on Services	8,543	8,471	8,389	8,449	8,647	9,380	9,578	9,667	10,135	10,607	17,100	17,440	17,821	17,870	18,596	35,026	35,489	35,876	36,456	37,850
Share of TES	24.4%		23.4%		22.8%	26.8%	27.0%	26.9%	27.8%	28.0%	48.8%	49.1%	49.7%	%0.64	49.1%	100%	100%	100%	100%	100%
Accounting Adjustments	1,251	1,414	1,431	1,514	1,569	1,216	1,194	1,222	1,210	1,370	171	225	184	285	-13	2,638	2,833	2,837	3,009	2,926
Total Managed Expenditure	9,794	9,885	9,820	9,963	10,216	10,596	10,772	10,889	11,345	11,977	17,271	17,665	18,005	18,155	18,583	37,663	38,323	38,710	39,464	40,776
Share of TME	26.0%	25.8%	25.4%	25.2%	25.1%	28.1%	28.1%	28.1%	28.7%	29.4%	45.9%	46.1%	46.5%	%0.94	45.6%	100%	100%	100%	100%	100%

Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

Figure 4.20
Total Managed Expenditure for Wales, by level of government, 2013-14 to 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

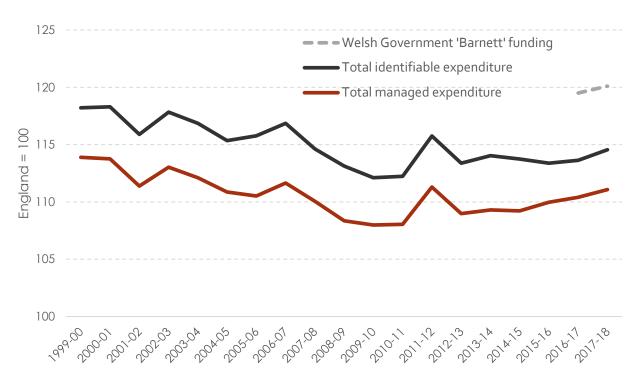
4.2.2 Relative funding and spending levels in Wales

The level of spending and funding per person for Wales relative to England and the rest of the UK has often been a source of contention. The Holtham Commission (2010) estimated that Welsh Government funding received through the block grant from the UK government relative to England had fallen since devolution. The Commission's two reports suggested that relative spending need in Wales was between 114% and 117% of the level of England and noted that relative funding in Wales might fall below this range through the simple application of the Barnett formula over time. The issue of Barnett formula convergence (see Box 5.2) was recognised in a joint statement by the Welsh and UK governments in 2012. The fiscal framework agreement of December 2016 between both governments agreed a methodology for determining relative funding for the Welsh Government, and introduced a 'needs-based factor' of 105% to the Barnett formula for Wales to limit the extent of future convergence (see Poole, Ifan and Phillips 2017).

Figure 4.21 shows estimated Total Managed Expenditure per person for Wales relative to England (=100), as well as total identifiable spending per person in both countries. The relative levels of total identifiable spending (which will include reserved as well as devolved spending) is significantly lower than the estimate of Wales' relative funding through the block grant and Barnett formula. While funding per person received through the block grant is around 120% of the English level, relative total identifiable spending per person stood at 115% in 2017-18.

Total Managed Expenditure per person also includes spending lines which are allocated on the same per person basis for Wales and for England, such as defence. As such, the relative level of TME per person for Wales was lower, at 111% of the English level in 2017-18.





Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

As outlined in the annex of the 2017 Fiscal Framework Agreement, the Welsh Government's block grant funding per head against equivalent UK government funding per head in England is derived by taking the Welsh Government's total Departmental Expenditure Limit before adjustments for tax devolution. Equivalent UK government funding for England is calculated by multiplying each UK government department's DEL by the comparability factor used in the Barnett Formula. Non-domestic rates revenues are added in to the totals to reflect its devolution from 2015-16, with the added assumption that NDR revenues in Wales would have grown at the same rate per head as in England in the absence of devolution.

Figure 4.22 shows an attempt to reconcile the relative funding per person that Wales receives through the block grant (20% higher than in England) and total identifiable spending per person for Wales (15% higher than in England) in 2017-18. Funding from the Welsh Government DEL and non-domestic rates revenue amounted to £5,180 per person, and given this is 20% higher than in England, this would amount to £4,300 per person in England. To get to relative levels of identifiable spending per person, we add in spending financed by Council Tax, housing benefit grants to local authorities from the DWP and the Police Grant from the Home Office (all somewhat below the level in England per person). Wales receives considerably higher levels of European Union funding per person (361% of the English level). We also include UK government spending on social protection per person for Wales and the UK.

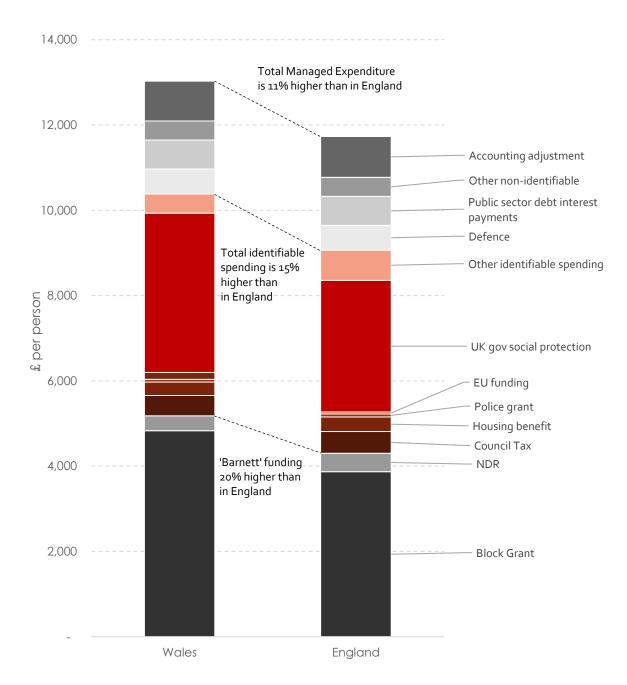
Adding these funding streams together, spending for Wales is around 119% of the English level. This means that for total identifiable spending per person for Wales to be only 115% of the English level, all other identifiable spending per for Wales will be approximately 64% of the level in England. This 'other identifiable spending' category will include non-social protection spending by the UK government,

¹⁰ Comparability factors reflect the proportion of each department's spending on areas that are devolved to Wales.

annually managed expenditure by the Welsh Government, locally financed expenditure (e.g. borrowing and reserves), as well as reflecting other factors such as timing and coverage differences.

Figure 4.22 also shows non-identifiable spending per person assigned to Wales on the same population basis as the rest of the UK, as well as the accounting adjustment (including EU transactions). Total Managed Expenditure in Wales is 111% of the English level.

Figure 4.22
Total managed expenditure per person for Wales and England by source, 2017-18 (£ per person)



Source: ONS (2019) Country and Regional Public Sector Finances; HM Treasury (2018 and previous) Country and Regional Analysis and authors' calculations

4.3 International and regional comparisons

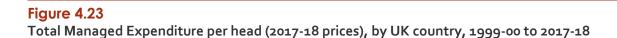
4.3.1 UK countries and regions

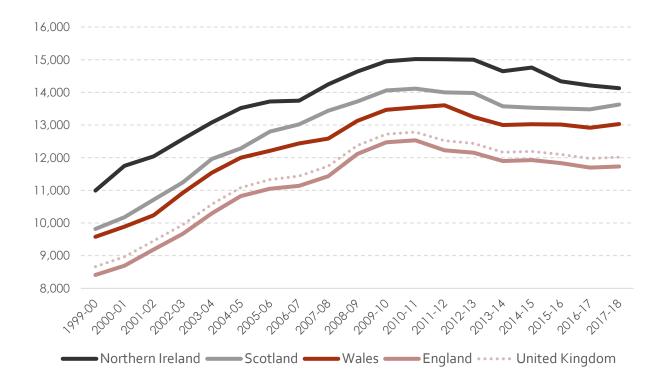
Per capita Total Managed Expenditure levels vary across the United Kingdom. This reflects differences in levels of relative need of the different populations. As shown in **Figure 4.23**, total spending per head in Northern Ireland has remained consistently higher than the UK level over the past two decades. However, between 1999-00 and 2017-18, per capita spending in Northern Ireland has started to converge with the UK average, falling from 126.9% to 117.6% of the UK level over this period.

In the second half of the last decade, a gap started to open between total spending in Scotland and Wales, a gap that has persisted to this day. In 2017-18, spending per head in Wales amounted to £13,030 compared to £13,626 for Scotland.

Between 2009-10 and 2011-12, spending per person increased by £139 in Wales, at a time when expenditure was falling elsewhere. Between 2011-12 and 2013-14, expenditure per head for Wales fell by £602.4 million (4.4%) in real terms.

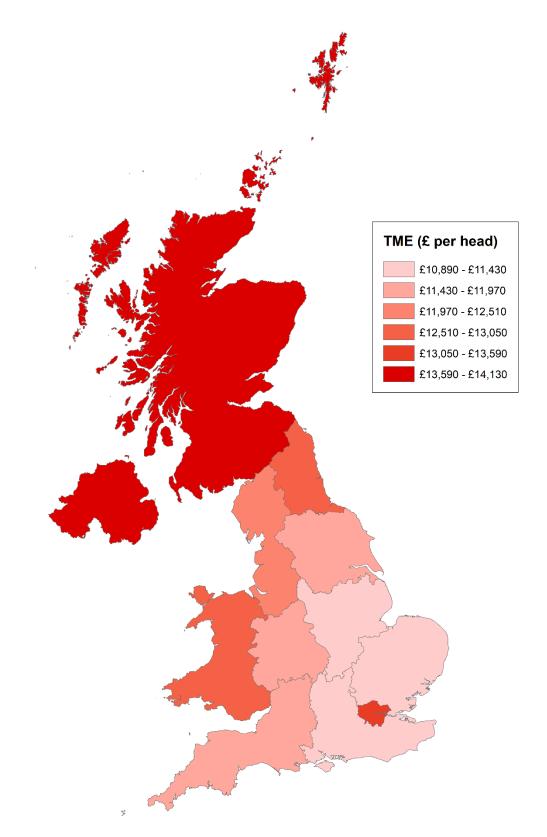
The UK average tends to closely follow English trends given the relative size of England's population.





Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

Figure 4.24
Total Managed Expenditure per head (2017-18 prices), by NUTS1 region, 2017-18



Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

The ONS publishes TME data at a NUTS1 level. The map in Figure 4.24 displays expenditure per head by NUTS1 unit in 2017-18. With the exception of London (£13,071), Wales (£13,030) has higher expenditure levels per head than any other English region. The North East is the English region with the second highest per capita expenditure level at £12,570. The East of England is the region with the lowest expenditure per capita at £10,894. However, it should be highlighted that this data does not condition for levels of relative need of the population in the respective regions.

4.3.2 OECD countries

This section compares levels of spending for Wales with other OECD countries. The figures presented in the ONS Country and Regional Public Sector Finances report include data for the public sector as a whole, and on a financial year basis. In contrast, international organisations such as the European Commission and the International Monetary Fund (IMF) report countries' finances on a calendar year basis and for general government only (excluding public corporations). Figure 4.15 presents total spending for Wales and the UK on this basis.

Figure 4.25
General Government expenditure, Wales and UK, 2017

£ million	2013	2014	2015	2016	2017
Wales					
Current expenditure	34,712	35,143	35,486	36,150	37,230
Capital expenditure	2,834	2,784	2,875	2,877	3,044
Total Managed Expenditure	37,546	37,927	38,361	39,027	40,274
UK					
Current expenditure	672,122	683,722	685,988	700,402	716,499
Capital expenditure	55,080	60,056	63,025	62,414	68,096
Total Managed Expenditure	727,202	743,778	749,013	762,816	7 ⁸ 4,595

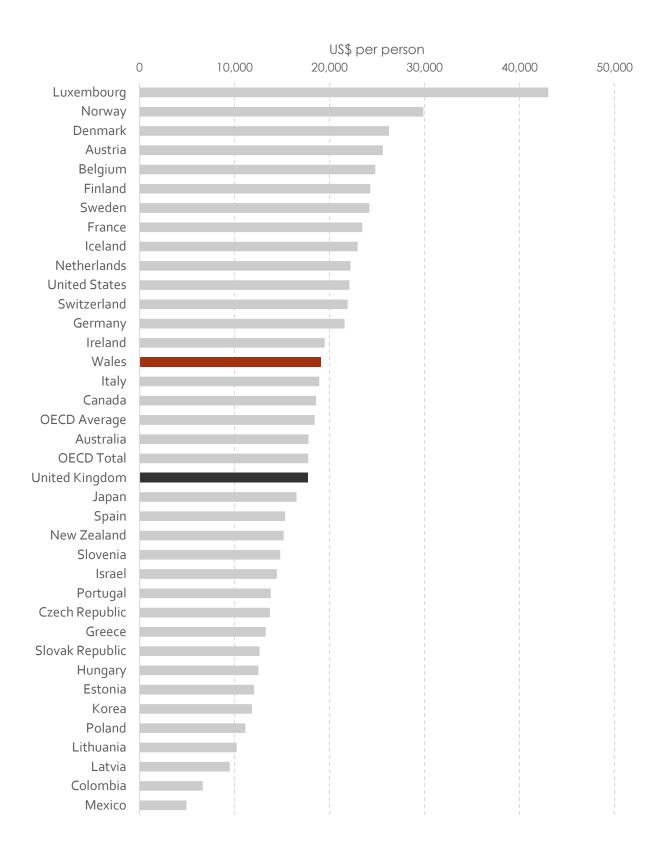
Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

Figure 4.26 provides a broad comparison of the levels of general government spending for Wales in 2016 with other OECD countries, on a US\$ basis. Levels of general government spending per person vary significantly across countries, highlighting the variation in the delivery of public goods and services and social protection provision.

Estimated general government spending per person for Wales is relatively close to the average across OECD countries. The difference in spending per person between Wales and the UK average is relatively small compared with the much larger differences across OECD countries.

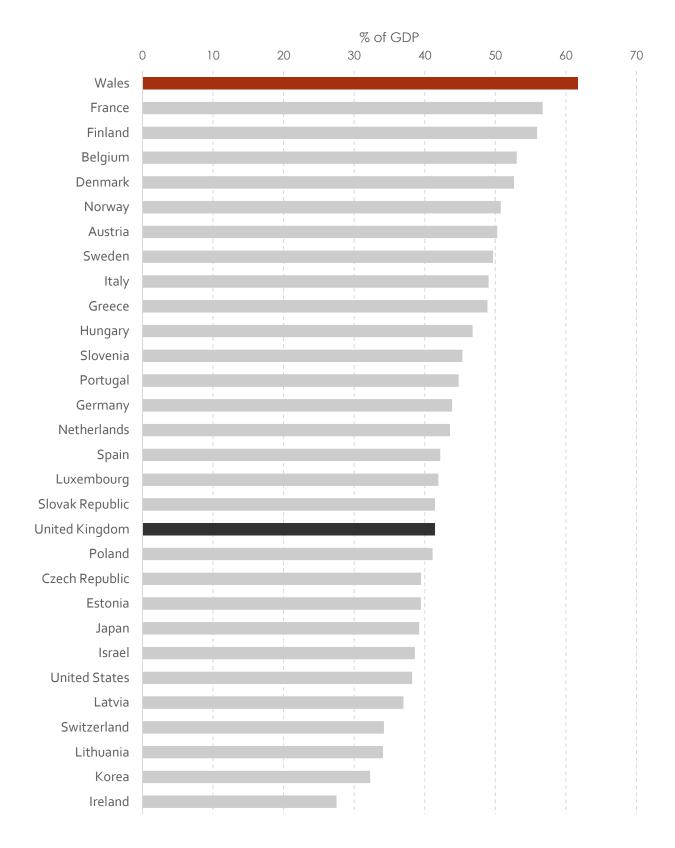
Meanwhile, Figure 4.27 shows levels of general government expenditure as a share of GDP across OECD countries. Wales' significantly lower levels of GDP per person means this measure shows a very large difference between Wales and the UK. This phenomenon is likely to be replicated in other countries with large territorial GDP per capita inequalities.

Figure 4.26
General government expenditure per person, 2016 (US\$ per person)



Source: OECD (2019) General Government Accounts and authors' calculations. See Annex A for details of methodology.

Figure 4.27
General government expenditure per person, 2016 (% of GDP)



Source: International Monetary Fund (2019) World Economic Outlook 2019 and authors' calculations. See Annex A for details of methodology.

5 Outlook for revenues and expenditure

In previous chapters, published outturn data were used to analyse trends in Wales' finances since 1999oo. In this chapter, we present projections of future revenues and expenditure up to 2023-24. We use the Office for Budget Responsibility's (2019) latest forecasts for the UK as a whole, with assumptions about growth in revenues and spending on a Welsh level.

As with any projections, they are underpinned by several assumptions about relative economic performance, UK government fiscal policy and future demographic trends. In particular, the OBR forecasts were published in March 2019 (prior to the extension of Article 50) and are underpinned by the assumption that the UK would leave the EU on 29 March 2019 and enter a transition period until December 2020. Clearly, we now know that this did not transpire. However, there is no obvious alternative on which to base revenue and expenditure projections for Wales. The full methodology behind the projections made in this chapter can be found in Annex A of this report.

First, we present the outlook for Welsh revenues, both devolved and reserved. Second, we present future expenditure forecasts broken down by level of government. Third, we discuss forecast for Wales' net fiscal balance. Lastly, we examine some of the factors that could influence these projections.

Key findings:

- Total revenues to Wales are expected to grow by an average of 3.5% a year in nominal terms between 2018-19 and 2023-24. This is slower than the average growth rate of 3.8% over the previous five-year period.
- Council Tax revenues are expected to grow strongly over the forecast period, increasing by 39.6% between 2017-18 and 2023-24.
- On a per capita, real terms basis, total expenditure is set to recover its 2011-12 level by 2023-24.
- After significant reductions in the size of Wales' net fiscal deficit since 2009-10, it is now projected to reduce only slightly relative to estimated GDP, from 19.4% in 2017-18 to 18.3% in 2023-24.
- If Wales' population was distributed across individual age groups in the same way as the UK average, projected total expenditure in 2022-23 would be over £1 billion lower and tax revenues would be nearly £500 million higher.
- Given considerable economic and political uncertainties, trends in total revenues and expenditure could deviate substantially from projections outlined in this chapter.

5.1 Outlook for revenues to Wales, 2018-19 to 2023-24

In this section, we present the outlook for devolved and reserved revenues to Wales up to 2023-24. Forecasts for most of the revenue sources are based on projections published by the OBR in their March 2019 *Economic and Fiscal Outlook* release.

As outlined in Figure 5.2 overleaf, total revenues to Wales are expected to grow by an average of 3.5% a year in nominal terms between 2018-19 and 2023-24. This is slower than the average growth rate of 3.8% over the previous five-year period. By 2023-24, total revenues to Wales are projected to reach £33.4 billion.

Box 5.1: Council Tax revenue forecasts

Council Tax revenue forecasts used here are underpinned by OBR projections, adjusted to account for actual Council Tax rates set for 2018-19 and 2019-20 (OBR+ / middle line). The baseline OBR projections (bottom line) assumed that Council Tax would grow by 4.2% in 2019-20 whilst the actual figure was 6.6%. If Council Tax continue to grow 2ppt higher than forecast each year up to 2023-24, this would raise an additional £163 million in 2023-24 (top line).

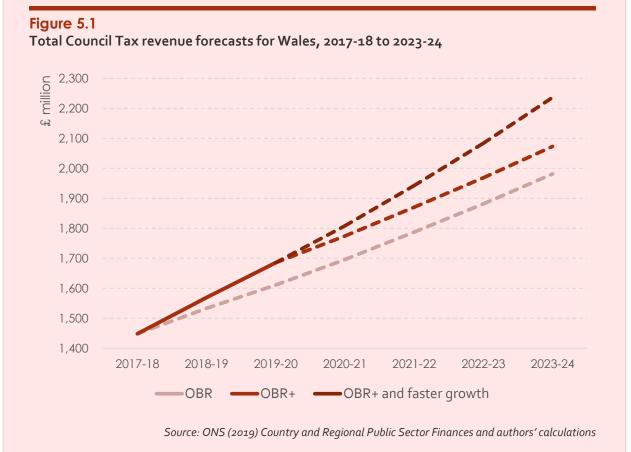


Figure 5.2
Projections of current revenue to Wales, 2018-19 to 2023-24 (excl. North Sea revenue)

£ million	2017- 18	2018-	2019-	2020-	2021-	2022-	2023-
Reserved revenues	10	19	20	21	22	23	24
Income tax (excl. WRIT from 19-20)	4,930	5,210	3,162	3,355	3,472	3,605	3,752
Corporation tax (excl. North Sea)	1,306	1,360	1,362	1,370	1,411	1,472	1,530
National insurance contributions	4,547	4,748	4,935	5,142	5,328	5,511	5,707
VAT	6,389	6,701	6,908	7,134	7,352	7,563	7,780
Fuel duties	1,344	1,357	1,363	1,400	1,442	1,484	1,525
All other revenues	3,776	3,912	4,110	4,192	4,282	4,398	4,566
Total reserved revenue	22,292	23,288	21,840	22,593	23,287	24,033	24,860
Share of total revenue	82.3%	82.5%	75.1%	74.9%	74.7%	74.6%	74.5%
Devolved and local revenues							
Welsh Rates of Income Tax (WRIT)	*	*	2,101	2,229	2,313	2,398	2,487
Land Transaction Tax (LTT)	*	231	231	244	267	292	319
Landfill Disposals Tax (LDT)	*	36	33	30	28	26	25
Council Tax	1,485	1,570	1,686	1,775	1,870	1,969	2,073
Non-domestic rates (NDR)	1,031	1,022	1,033	1,063	1,083	1,105	1,126
Total devolved / local revenue	2,516	2,859	5,084	5,341	5,561	5,790	6,030
Share of total revenue	9.3%	10.1%	17.5%	17.7%	17.8%	18.0%	18.1%
Gross operating surplus	2,273	2,073	2,139	2,229	2,311	2,399	2,494
Total current revenue	27,081	28,220	29,063	30,163	31,159	32,222	33,384
Per capita (£ per head)	8,653	8,980	9,213	9,529	9,813	10,122	10,462

Source: Authors' calculations, see Annex A for full methodology

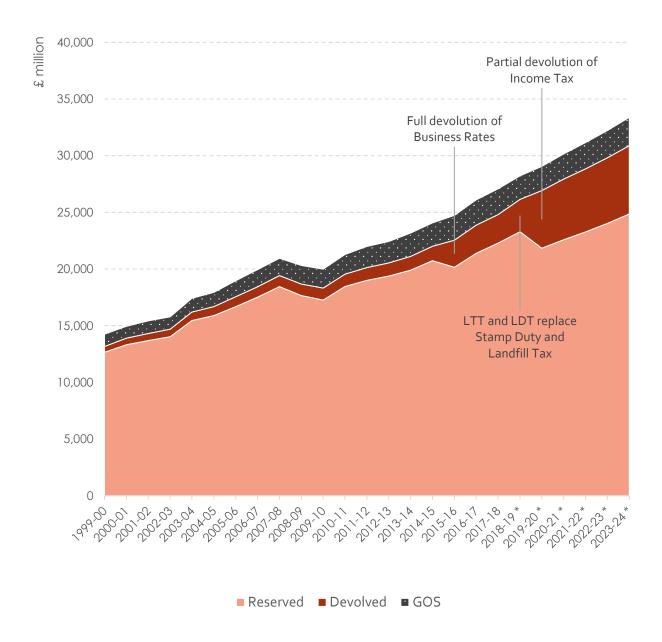
Council Tax revenues are expected to grow strongly over the forecast period, continuing the trend set in recent years. Our forecast suggests that revenues from this source will grow by 39.6% between 2017-18 and 2023-24. As discussed in Box 5.1, if recent trends continue, growth in Council Tax rates may well outstrip the assumptions made in the OBR forecasts which underpin our projections.

Revenues from Income Tax and National Insurance contributions are also expected to see significant growth over the next five years. Our projections indicate that devolved and reserved Income Tax revenue will increase by 26.5%, and revenue from National Insurance Contributions will increase by 25.5% between 2017-18 and 2023-24. This would mark a reversal of recent trends which has seen Income Tax revenues falling, as explained in Chapter 3.

On a per capita basis and in the baseline scenario, revenues are projected to increase by £1,809 (17.3%) per person in nominal terms between 2017-18 and 2023-24. This is equivalent to a £694 (7.9%) increase in real terms.

Figure 5.3

Total current revenue to Wales, 1999-00 to 2017-18, and projections to 2023-24, by level of government (excl. North Sea revenue)



^{*} Data based on projections

Source: Authors' calculations, see Annex A for full methodology

Figure 5.3 offers a breakdown of revenues to Wales, by level of government. In 2023-24, the projected share of devolved and local revenue is set to reach £6.0 billion (18.1%). Even with no additional fiscal powers devolved to Wales from 2019-20, devolved revenue is projected to grow more quickly than reserved revenue, partly because of particularly strong growth forecast for Council Tax revenues over the period.

5.2 Outlook for expenditure for Wales, 2018-19 to 2023-24

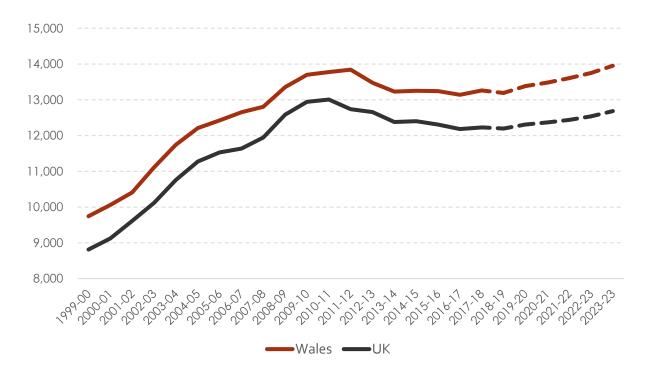
According to the baseline projection based on OBR forecasts, total managed expenditure for Wales was set to fall by 0.1% in real terms in 2018-19 and then increase in real terms in each subsequent year of the forecast period. As illustrated in Figure 5.4, on a per capita, real-terms basis, spending will remain below its 2011-12 level until 2023-24. Per capita spending in Wales is set to recover its pre-austerity level faster than the United Kingdom as a whole, primarily because Wales' population has been growing — and is expected to continue growing — more slowly than that of the UK as a whole.

As discussed in Chapter 4, spending per head for Wales has diverged away from the UK level since the start of austerity. The baseline projection forecasts that this divergence will continue over the next five years, with spending increasing from 108.4% of the UK level in 2017-18 to 110.0% in 2023-24 (the highest level since 2000-01).

Figure 5.5 overleaf offers a breakdown of baseline expenditure projections by year and broad function. Between 2017-18 and 2023-24, TME is expected to grow by £6.3 billion (23.0%) in nominal terms, averaging 3.5% a year. This is markedly lower than the annual increases in expenditure that were experienced over most of the last decade.

Devolved and local spending is projected to grow at a slightly quicker pace than reserved spending (averaging 4.0%), reflecting the strong growth in projected Council Tax revenue (and consequently, spending on local services) and the fact that current plans for health spending in England account for most of the increase in UK government departmental spending, which would result in additional Barnett consequentials for the Welsh Government.

Figure 5.4
Total managed expenditure per head for Wales and UK, 1999-00 to 2023-24 (2018-19 prices)



Source: Authors' calculations, see Annex A for full methodology

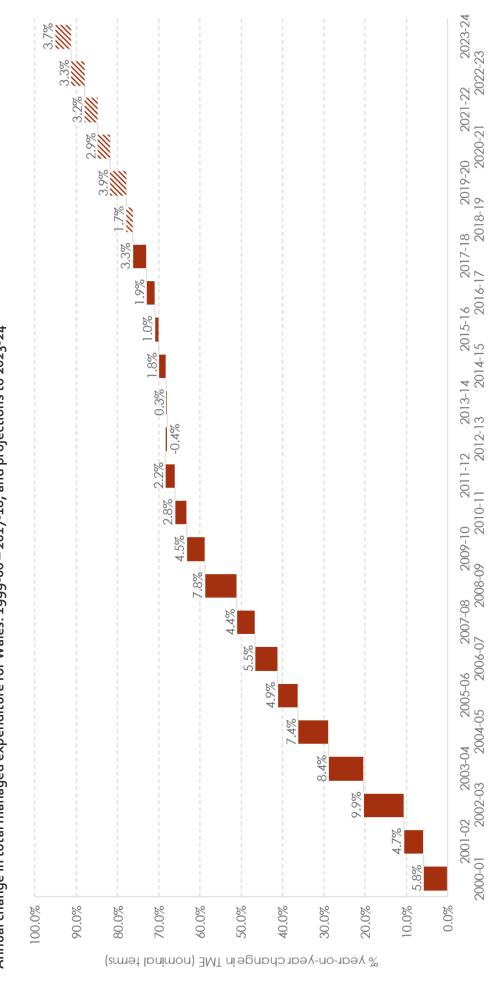
Figure 5.5
Projections of current expenditure for Wales, 2018-19 to 2023-24

£ million	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Reserved expenditure							
Public sector debt interest	2,119	1,885	2,046	1,974	2,041	2,098	2,130
Defence	1,828	1,880	1,937	1,999	2,065	2,134	2,206
Social protection	11,618	11,816	12,024	12,250	12,627	13,088	13,622
Other	3,011	3,118	3,292	3,357	3,402	3,446	3,508
Total reserved expenditure	18,590	18,699	19,299	19,581	20,135	20,766	21,467
Share of total expenditure	45.6%	45.1%	44.8%	44.2%	44.0%	43.9%	43.8%
Devolved and local expenditure							
Capital expenditure	2,196	2,352	2,559	2,780	2,918	3,020	3,199
Current expenditure	17,058	17,384	18,104	18,739	19,344	19,990	20,743
Accounting adjustments	2,467	2,608	2,653	2,724	2,939	3,017	3,098
Total devolved/local expenditure	22,193	22,752	23,761	24,744	25,610	26,488	27,556
Share of total expenditure	54.4%	54.9%	55.2%	55.8%	56.0%	56.1%	56.2%
Total managed expenditure	40,783	41,452	43,061	44,325	45,745	47,254	49,024
Per capita (£ per head)	13,032	13,191	13,651	14,003	14,407	14,844	15,364

Source: Authors' calculations, see Annex A for full methodology

Figure 5.6 illustrates the annual change in TME for Wales since 1999-00 and up to the end of the forecast period. **Figure 5.7** offers an illustrative overview of the various revenues and expenditure streams for Wales in 2019-20.

Annual change in total managed expenditure for Wales: 1999-00 – 2017-18, and projections to 2023-24 Figure 5.6



Source: OBR (2019) Country and Regional Public Sector Finances; projections based on authors' calculations

Defence £19.3bn UK Government Llywodraeth y DU **UK** government European Union approx. €o.5bn departments Illustrative revenue and expenditure flows for Wales, 2019-20 (excluding accounting adjustments) **Block Grant** £13.8bn £19.3bn UK Government Llywodraeth y DU **UK** government Welsh Rates of Income Tax (administered by HMRC) £20.9bn Cyllid & Thollau EM HMRC Land Transaction Tax Landfill Disposal Tax £0.3bn All other taxes £23.0bn government borrowing UK Taxbase and £14.obn Figure 5.7

Environmental protection Health Economic development Justice and prisons Public sector debt Social protection Education Social care Housing Policing £11.7bn £9.obn Local government settlement £5.7bn Welsh Government Local authorities Llywodraeth Cymru Welsh Government Housing benefit and police grants £1.2bn Council Tax (incl. police precept) Re-distributed business rates Welsh Revenue Authority Local authorities acc | wra Council Tax (incl. police precept) **Business rates** The Welsh Taxbase

Source: Authors' calculations; values are illustrative only as they do not account for some revenue and expenditure streams, such as borrowing and reserves

5.3 Projected net fiscal balance, up to 2023-24

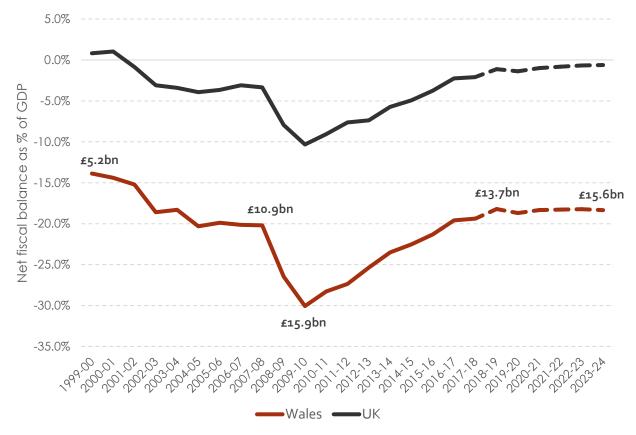
Using projections of total receipts, total managed expenditure and Welsh GDP, we can present a baseline forecast of Wales' net fiscal balance up to 2023-24. Given considerable economic and political uncertainties, it should be stressed that actual trends in the size of the fiscal gap could well deviate substantially from projections outlined in this chapter. We assume GDP per person in Wales grows in line with the UK. Following the significant reduction in the size of the fiscal gap since 2009-10, it is now projected to remain relatively constant as a share of GDP, reducing slightly from 19.4% in 2017-18 to 18.1% in 2023-24. Although the nominal net fiscal balance appears larger in 2023-34 (£15.6 billion), this figure is unadjusted for inflation. The left axis of Figure 5.8 measures the net fiscal balance as a percentage of GDP, which allows for consistent comparisons across the time series.

The UK's overall net fiscal balance is projected to remain negative over the forecast period, although the deficit is expected to fall to 0.6% of GDP by 2023-24, according to the OBR's baseline projection, down from 10.32% in 2009-10.

Wales' future net fiscal balance will be affected by future trends in total revenue (including tax revenues), total expenditure and GDP, which is based on the country's overall economic activity level.

Figure 5.8

Net fiscal balance of Wales and UK as a share of GDP, 1999-00 to 2017-18, and projections to 2023-24



Source: Authors' calculations. See Annex A for full methodology.

5.4 Factors influencing the outlook for revenue and expenditure

5.4.1 Wales' demographics and age profile

Future trends in revenue and expenditure for Wales will continue to be largely determined by fiscal policy at a UK level. However, trends in Wales' population and age profile will also play a role. Faster population growth could see faster convergence in devolved spending levels between England and Wales as a result of the *Barnett Squeeze*. On the other hand, a slower-growing population in Wales, particularly the population aged 16-64, will mean that tax revenues per person will need to grow at a faster rate in Wales for total revenues to keep pace with the rest of the UK.

Box 5.2: What is the Barnett Squeeze?

The block grant consists of Wales' prior year funding carried forward, plus a change to this amount as calculated by the Barnett formula. The aim of the Barnett formula is to provide the same pounds-per-person change in funding for the devolved governments as the change in funding for comparable public services in England.

An in-built property of the Barnett formula is that if spending is growing in England, it results in convergence in per person spending over time between England and Wales. This is because the same pounds-per-person increase in spending in England and Wales represents a smaller percentage increase in Wales (Poole and Ifan 2016: 10). Over time therefore, funding per head in Wales converges to English per capita spending on comparable programmes, irrespective of relative need. This is the infamous *Barnett Squeeze* effect, as emphasised by the Holtham Commission report (2010) in relation to total devolved spending.

The extent to which convergence in relative funding occurs depends on a number of factors. Rapid growth in spending in England accelerates convergence in relative funding, while lower spending growth reduces the rate of convergence. Decreases in spending in England cause a divergence in relative funding levels.

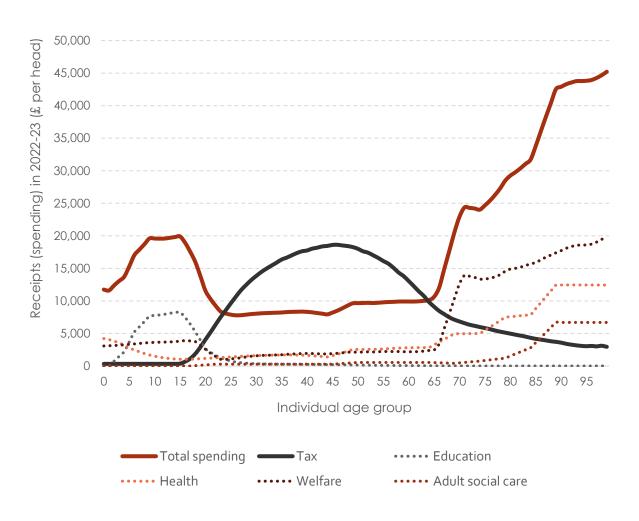
Relative population growth in Wales compared with England also determines the rate of convergence. This is because the Barnett formula only determines changes in the block grant, reflecting the latest population shares; the size of the previous year's grant that constitutes the majority of the current grant is not adjusted to account for the new population ratio. If the Welsh population grows relatively slowly (as it has done for over a decade), the rate of convergence decreases.

As a result of the fiscal framework agreement of 2016 (HM Government & Welsh Government 2016), increments to the Welsh block grant triggered by the Barnett formula are now multiplied by a Needs-Based Factor (NBF) of 105%. This leads to larger increases in the Welsh block grant and thus limits the rate of convergence in relative spending levels.

Another consideration is the spread of Wales' demographics across age groups. Figure 5.9 illustrates the estimated amount spent on individuals of each age group in Wales in 2022-23 and the estimated amount of tax raised. Total spending is highest for the elderly, averaging £45,000 per head among those aged 100 or over. This is a consequence of higher health and social care spending among this age cohort. There is also a smaller peak of £20,000 in total expenditure among the school-age population due to the costs associated with education provision. This reflects trends on a UK level and internationally. Total tax revenues paid by the average person in Wales peaks at £18,600, aged 46.11

Wales has a larger share of its population over 65 (20.6%) and a smaller share of its population aged 25 – 64 (50.2%) compared with the UK average (18.2% and 52.0% respectively). This means that Wales has more people in the age groups requiring the highest spending levels and fewer people in the age groups contributing the most in tax, when compared to the average age profile across the UK. It is unlikely that this trend will be reversed soon; however, higher levels of inward migration — specifically among working-age migrants — could mitigate some of this effect.

Figure 5.9
Representative age profiles for tax, public services and welfare spending: Wales, 2022-23 (£ per head)



Source: Authors' calculations, based on OBR (2018) Fiscal Sustainability Report C3.10

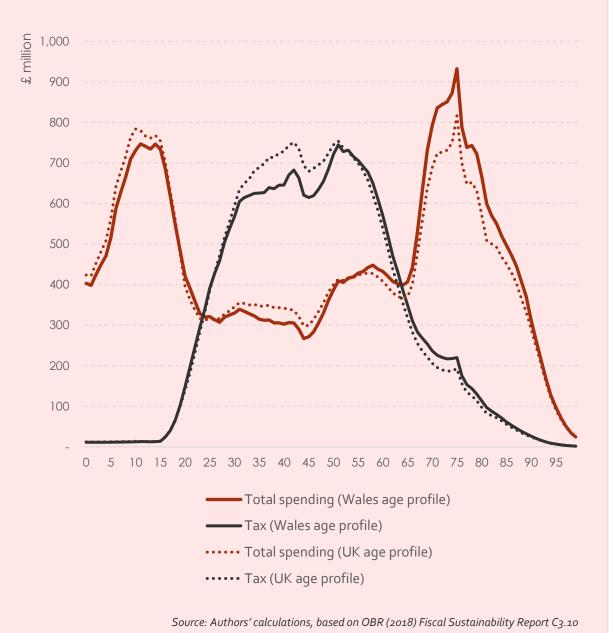
¹¹ Note that spending figures cited here are estimates of spending in 2023-24.

Box 5.3: What if Wales' age profile matched the UK average?

If Wales' population were to be distributed across individual age groups in the same way as the UK average, total expenditure would be over £1 billion lower and tax revenues would be nearly £500 million higher.

As shown in **Figure 5.10**, if Wales' population had the same age profile as the UK average, the country would yield considerably more revenue from those aged 25-55. Conversely, total expenditure would be considerably lower among those aged 65-90, which would more than offset the increased spending on the school-age population.

Figure 5.10
Total expenditure (receipts), by age group in Wales, 2022-23



5.4.2 Economic and policy uncertainty

The forecasts produced by the OBR and used for the projections in this chapter were made at a time of significant economic and political uncertainty. In fact, the assumptions underpinning the forecasts produced in March 2019 were that the UK would leave the European Union on 29 March 2019 and enter a transition period until December 2020; during which time there would be no change to the terms of trade between the two partners. Over the 10 years following the transition period, the OBR assumed slower import and export growth and lower inward migration trends. Of course, the UK has not left the European Union as projected by these forecasts, following an agreed six-month extension of the process to 31 October 2019.

The OBR has previously noted that a disorderly exit from the EU would have a 'severe short-term impact on the economy'. Renewed uncertainty would further depress demand, raise inflation and the combination of a weaker pound and higher tariffs would result in higher import prices. Given the uncertainty around both the economic impact and the nature and effectiveness of any fiscal and monetary policy response, the OBR concludes that the effect on the public finances are currently unknowable. Such an economic hit would likely increase public sector spending (particularly social protection) and lower tax receipts, leading to higher borrowing levels from the UK government.

Even if the UK avoids a 'No Deal' scenario, UK government fiscal policy decisions could have a significant impact on the path of expenditure and revenues outlined above. At the Spring Statement in March 2019, the UK Chancellor Phillip Hammond announced that he would be commencing a Spending Review before the Summer recess, provided the UK leaves the European Union with a deal. This Spending Review would have set firm departmental spending totals for the next three fiscal years, but has since been delayed.

The spending projections used in this chapter are based on indicative UK government spending plans for the years to 2023-24 provided to the OBR for their forecasts. The government has already committed an extra £20.5 billion a year to NHS England by 2023-24 which — along with existing commitments on defence and international aid — provide a path for more than half of day-to-day spending. On current projections, spending outside these areas would continue to fall slightly in real terms. The state of UK public finances does however leave some *fiscal head-room*: the UK government's 'fiscal mandate' requires the structural deficit to be below 2 per cent of GDP by 2020-21, and on current OBR forecasts, it is set to be around £26.6 billion lower than this target in 2020-21. Several suggestions made during the 2019 Conservative leadership election suggests the incoming Prime Minister may well consider increasing planned spending on priorities such as education or introducing substantial tax cuts, paid for by increased borrowing. Future UK government spending decisions will influence the size of the Welsh budget, and tax cuts could also have different effects on Welsh current revenues given the differences in the tax base explored in Chapter 3.

A final assumption is that GDP per person in Wales grows in line with UK forecasts. Faster or slower growth in per person GDP in Wales could influence the Welsh tax base, some spending areas, as well as the size of Wales' net fiscal balance relative to the size of the economy. For the devolved and local government taxes, slower or faster relative growth in the Welsh tax base will have a negative impact on future growth in devolved spending. However, for the most part, slower or faster growth in the Welsh tax base would influence Wales' net fiscal balance, since most spending is influenced by UK government fiscal policy.

¹² Sibieta, L. (2019) Extra spending on education in England – the numbers explained, Institute for Fiscal Studies. Available at: https://www.ifs.org.uk/publications/14194

Johnson, P. (2019) Promises, promises: Tory leadership candidates are horrifying Whitehall, Institute for Fiscal Studies. Available at: https://www.ifs.org.uk/publications/14159



Accounting adjustments

An accounting adjustment is introduced alongside the estimate of Total Expenditure on Services to produce a measure of expenditure on a Total Managed Expenditure 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 several items that are in budgets but are not in TME.

The accounting adjustments required to reconcile TME and TES for Wales are set out in **Figure A1**. As shown in the bottom row of the table, these adjustments largely cancel each other out on the expenditure and revenue sides of the fiscal balance calculation.

Figure A1
Accounting adjustments (excluding EU transactions): Wales, 2017-18

	£ million		
	Expenditure	Revenue	Revenue line
Current expenditure			
Central government capital consumption	462	462	Gross Operating Surplus
Local government capital consumption	1,130	1,130	Gross Operating Surplus
Current VAT refunds	794	794	VAT
Imputed subsidy from LA to the HRA	171		n/a
Imputed flows for Renewable Obligation Certificates	305	305	Other taxes, royalties and adjustments
Local authority pensions	4		n/a
Current expenditure residual	- 76		n/a
Capital expenditure			
Capital VAT refunds	114	114	VAT
Network Rail	2	-	n/a
Housing associations	264	-	n/a
Other items and capital residual	-46	-	n/a
Total accounting adjustment (excl. EU Transactions)	3,124	2,805	

Source: ONS (2019) Country and Regional Public Sector Finances and authors' calculations

Apportioning revenues and expenditure to Wales

There is no formally agreed set of accounting concepts and definitions for the formulation of country or regional fiscal accounts in the UK. Several key elements of data are necessary for constructing such accounts are also unavailable at a disaggregated level. In this report, revenues and expenditure are apportioned to Wales on the basis presented by the ONS in their *Country and Regional Public Sector Finances* release (2019). Expenditure is determined to be for Wales if the benefit of the service derived from the expenditure is thought to accrue to the residents of Wales. Revenue is allocated according to whether the financial burden falls on residents or enterprises in Wales. Further information on the ONS' approach to accounting can be found in Chapter 1.

As most public sector revenue in the UK is collected centrally, the general approach is to take UK level data and apportion revenues to Wales using available data and various methodologies. Estimates of Welsh revenues based on survey data will be subject to a degree of uncertainty. For example, based on underlying HMRC data, the lower 95% confidence interval for Welsh income taxes is £110m below the central estimate, while the upper 95% confidence interval is £110 million above. However, such confidence intervals are not reported in the ONS data and are therefore not included in this report.

Classification of the Functions of Government (COFOG)

The Classification of the Functions of Government (COFOG) is a general classification of government functions as defined by the United Nations Statistics Division to facilitate easier comparisons between countries. As Figure A2 illustrates, first-level COFOG splits expenditure into ten 'functional' groups and second level COFOG further splits each level into sub-groups.

Figure A2
Breakdown of COFOG functions by first and second level

First-level COFOG	Second-level COFOG
1. General public services	Executive and legislative organs, financial and
	fiscal affairs, external affairs
	Foreign economic aid
	General services
	Basic research
	R&D general public services
	General public services n.e.c
	Public debt transactions
	Transfers of a general character between levels of
	government
2. Defence	Military defence
	Civil defence
	Foreign military aid
	R&D defence
	Defence n.e.c
3. Public order and safety	Police services
,	Fire-protection services
	Law courts
	Prisons
	R&D public order and safety
	Public order and safety n.e.c.

4. Economic affairs	General economic, commercial and labour affairs
4. ECOHOTHIC attairs	
	Agriculture, forestry, fishing and hunting
	Fuel and energy
	Mining, manufacturing and construction
	• Transport
	Communication
	Other industries
	R&D economic affairs
	Economic affairs n.e.c
5. Environmental protection	Waste management
	Wastewater management
	Pollution abatement
	 Protection of biodiversity and landscape
	R&D environmental protection
	Environmental protection n.e.c.
6. Housing and community amenities	Housing development
	Community development
	Water supply
	Street lighting
	R&D housing and community amenities
	Housing and community amenities n.e.c
7. Health	Medical products, appliances and equipment
,	Outpatient services
	Hospital services
	Public health services
	R&D health
	Health n.e.c
8. Recreation, culture and religion	Recreational and sporting services
o. Recreation, contoile and rengion	Cultural services
	Broadcasting and publishing services
	Religious and other community services
	R&D recreation, culture and religion
	Recreation, culture and religion n.e.c.
9. Education	Pre-primary and primary education
g. Edocation	Secondary education
	•
	Post-secondary non-tertiary education Tartiary advanting
	Tertiary education
	Education not definable by level
	Subsidiary services to education
	R&D education
	Education n.e.c.
10. Social protection	Sickness and disability
	Old age
	Survivors
	Family and children
	Unemployment
	Housing
	Social exclusion n.e.c.
	R&D social protection

n.e.c: "not elsewhere classified"

Source: OECD (2011) Government at a Glance

GDP estimates for Wales

Public finance statistics are often presented as a share of GDP. GDP is a measure of the value added in the production of goods and services within a country's borders, including the value added in the production of intermediate inputs. By controlling for the size of the economy, these statistics can help illustrate the relative size of fiscal aggregates between countries and between different years.

In June 2019, the ONS announced plans to release quarterly GDP estimates for Wales and each region of England calculated almost exclusively using VAT returns. These figures are expected to be available from September 2019.¹³ In order to facilitate comparisons with other publications and countries, this report estimates Welsh GDP based on GVA. These figures should be viewed as rough approximations only.

The ONS currently produces annual Regional Accounts containing estimates of Welsh GVA (balanced). GDP equates to GVA plus taxes less subsidies on products.

Wales' GVA data is first converted from calendar years into financial years. From these, Wales' share of UK GVA for each financial year is calculated. These shares are then applied to UK GDP figures. This methodology essentially assumes that Wales' share of UK taxes less subsidies on products equates to Wales' share of UK GVA. Estimates of GDP for Wales are presented in Figure A3.

Figure A3
GDP approximations for Wales, 2013-14 to 2017-18

	£ million						
	2013-14	2014-15	2015-16	2016-17	2017-18		
UK GDP ¹⁴	1,781,350	1,855,049	1,912,472	1,989,398	2,067,387		
Estimated Wales GDP	61,621	63,257	65,524	68,226	70,651		
Wales share of UK GVA ¹⁵	3.5%	3.4%	3.4%	3.4%	3.4%		

Source: Authors' calculations

The GDP figures cited in Chapter 5 of this report for 2018-19 onwards are projections. These are calculated by assuming that per person growth in Welsh GDP tracks per person growth in forecast UK GDP. Projections of Welsh GDP from 2018-19 to 2023-24 are presented in Figure A4.

Figure A4
GDP projections for Wales, 2018-19 to 2023-24

	£ million					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
UK GDP ¹⁶	2,130,611	2,199,839	2,274,802	2,355,229	2,439,946	2,528,665
Estimated Wales GDP	72,659	74 , 860	77,243	79,797	82,465	85,254

Source: Authors' calculations

¹³ https://www.ons.gov.uk/news/news/newgdpestimateswillrevealtheeconomichealthofthenationsandregions

¹⁴ Taken from ONS (March 2019) Quarterly National Accounts

¹⁵ Share of UK GVA (including Extra-Regio i.e. GVA that can't be assigned to regions)

¹⁶ Taken from OBR (March 2019) Economic and Fiscal Outlook

General government estimates

The headline GERW figures cover the whole of the public sector. As such, they include revenue and expenditure associated with public corporations such as Cardiff International Airport and Cardiff City Transport Services Ltd. They are also presented on a financial year basis. When conducting international comparisons, bodies such as the International Monetary Fund (IMF) and Organisation for Economic Cooperation (OECD) present figures on a calendar year basis and covering only general government (i.e. excluding public corporations).

In order to aid comparisons with such figures, the table below presents total revenues and expenditure for Wales on this basis. As revenue and expenditure are primarily estimated on a financial year and public sector basis, the calendar year estimates in **Figure A5** below are approximations only. General Government figures for the UK are taken from the ONS (2019) Public Sector Finances February 2019 publication. Wales is then apportioned a population share of Public Corporations expenditure and revenue, which is subtracted from the ONS' public sector estimates.

Figure A5
General Government expenditure and receipts, Wales and UK, 2013-2017

£ million	2013	2014	2015	2016	2017
Wales					
Total current receipts	22,799	23,619	24,222	25,423	26,588
Total managed expenditure	37,546	37,927	38,361	39,027	40,274
Current expenditure	34,712	35,143	35,486	36,150	37,230
Capital expenditure	2,834	2,784	2,875	2,877	3,044
United Kingdom					
Total current receipts	633,161	645,201	669,457	705,740	746,489
Total managed expenditure	727,202	743,778	749,013	762,816	784,595
Current expenditure	672,122	683,722	685,988	700,402	716,499
Capital expenditure	55,080	60,056	63,025	62,414	68,096

Source: ONS (2019) Country and Regional Public Sector Finances; ONS (2018 and previous) Mid-year population estimates and authors' calculations

For international comparisons, we use OECD National Accounts data. There are some differences between the OECD and ONS data. For example, some figures (mainly related to social security and public sector pensions) are presented on a net basis in UK public sector finances data but on a gross basis in OECD figures. This means that figures for both expenditure and revenue for the UK are slightly higher in OECD data. To get Welsh estimates on a comparable basis, Wales' share of general government expenditure and revenue from Figure A5 is applied to UK figures from the OECD data.

Projections methodology

Revenue projections

The forecasts presented in Chapter 5 are largely underpinned by projections made by the OBR in their *Economic and Fiscal Outlook* release (March 2019). For most taxes, we assume that per capita growth in Welsh revenues will track per capita percentage growth on a UK level (using OBR projections of UK revenues). It is worth emphasising that the projections published by the OBR are predicated on the assumption that the UK would leave the EU with a deal in March 2019 and immediately enter a two-year transition period.

Forecast revenue from the Welsh Rates of Income Tax and Aggregates Levy are based on the OBR's *Devolved Tax Revenue* projections, published in March 2019. For Land Transaction Tax and Landfill Disposals Tax, provisional data published by the Welsh Revenue Authority on 25 April 2019 was used for 2018-19. For subsequent years, the forecasts were generated by applying the percentage year-on-year change projected in the *Devolved Tax Revenue* forecasts published by the OBR.

Council Tax projections were made using data on Band D equivalent dwellings and rates for 2018-19 and 2019-20, adjusted to account for historical collection rates. For subsequent years, the forecasts were generated by applying the percentage year-on-year change projected for Wales is the OBR's *Economic and Fiscal Outlook* (March 2019) release.

When per capita figures are used, they are based on the ONS' principal population projections, adjusted to give mid-financial year estimates, as presented in Figure A6 below.

Figure A6
Mid-financial year population estimates: Wales and UK, 2018-19 to 2023-24

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Wales	3,142,373	3,154,407	3,165,479	3,175,252	3,183,401	3,190,864
UK	66,566,086	66,964,200	67,344,991	67,702,607	68,043,436	68,370,212

Source: Authors' calculations based on ONS (2016-based) Principal population projections

Expenditure projections

The OBR's March 2019 *Economic and Fiscal Outlook* release contains forecasts for the UK's Resource Departmental Expenditure Limit (DEL) up to 2023-24. To get an estimate of the departmental allocations, we use figures published in July 2018 on the NHS England funding settlement and assume spending on defence and international development are maintained as a constant share of the UK economy over future years.¹⁷ Deducting these elements from the total gives an estimate of future changes in the DEL for all other departments. We assume that the changes are distributed evenly across these departments.

¹⁷ The five-year NHS funding plan for England is available here: https://www.gov.uk/government/news/prime-minister-sets-out-5-year-nhs-funding-plan

By calculating annual cash-changes for each department, we apply a model of the Barnett formula so that the Wales DEL grows by a population share of changes in spending in England on programmes devolved to Wales, adjusted by the needs-based factor of 105%. This gets us to an estimate of the amount made available in the Welsh Government DEL through the block grant, up to 2023-24.

Lastly, we add projections of NDR, Council Tax and police grant revenue, according to the methodology described in the previous section, to get to an estimate of devolved and local spending, up to 2023-24.

Reserved UK government expenditure mainly covers social security spending. We assume that spending per person on benefits grows at the same per person rate for Wales as the UK as a whole. For some agerelated spending, such as on pensions, we assume spending for Wales grows at the same per-person-over-65 rate.

B Glossary

Accounting adjustment: the difference between Total Expenditure on Services provided in the CRA and Total Managed Expenditure. The largest element of the accounting adjustment is capital consumption (depreciation). The accounting adjustment is largely offset by balancing items on the revenue side and thus does not have a significant effect on the net fiscal balance.

Annually Managed Expenditure (AME): components of government expenditure that are largely driven by demand and macroeconomic indicators. On a UK level, AME spending includes most social security payments and debt interest. Spending on these areas is more difficult for a government to plan in advance.

Capital consumption: the amount of assets used up in an accounting period as a result of normal wear and tear, foreseeable obsolescence and losses from accidental damage.

Capital expenditure: spending on investment including the provision, acquisition and enhancement of fixed assets such as land, buildings and vehicles.

Common Agricultural Policy (CAP): a European Union policy that provides financial support to farmers in member states.

Country and Regional Analysis (CRA): an annual dataset published by HM Treasury aimed at identifying where resources were spent depending on where those who benefitted were located.

Classification of the Functions of Government (COFOG): a general classification of government functions defined by the United Nations Statistic Division to facilitate easier comparisons between countries.

Current budget balance: the difference between current revenues (including taxes on capital) and current expenditure (including capital consumption). This measures the extent to which current Welsh taxpayers meet the cost of paying for the public services they consume in the current year. Excluded from this is capital investment by the public sector. The current budget balance is often seen as an indicator of intergenerational fairness and of the sustainability of current policies.

Current expenditure: the sum of current expenditure by central and local government, as well as interests and dividends payable by public corporations to the private sector and abroad. Public sector current expenditure is net of any transfers between parts of the public sector. It includes items such as public sector salaries and transfer payments.

Current revenue: revenues raised by the public sector from taxation and other sources, excluding the sale of assets or interest received.

Departmental Expenditure Limits (DELs): spending on items that can be planned over extended periods and are not overly demand-driven. The UK government's DEL expenditure is subject to limits set in Spending Reviews.

Depreciation: See *Capital consumption*.

European Structural and Investment Funds: a European Union programme aimed at rebalancing regional social and economic disparities in member states by providing funds to promote economic development.

European System of Accounts 2010 (ESA10): The newest, internationally compatible, EU accounting framework for a systematic and detailed description of an economy. This is the basis on which accounts are estimated for Wales in this report.

European Union (EU) Transactions: public sector transactions with the EU, excluding those associated with customs duties. See Chapter 4 for further information about how EU Transactions are treated in this report.

Fiscal framework: the set of rules and institutions that are used to set and coordinate sustainable public policy. The December 2016 fiscal framework agreement between the UK and Welsh Government set out the legislative framework for the devolution of tax and borrowing powers to Wales and the mechanism for calculating the block grant adjustment.

Government Expenditure and Revenue Scotland (GERS): an annual publication by the Scottish Government that estimates the contribution of revenue raised in Scotland toward the goods and services provided for the benefit of Scotland.

Gross Disposable Household Income (GDHI): the amount of money that all the individuals in the household sector have available for spending or saving after income distribution measures (for example, taxes, social contributions and benefits) have taken effect.

Gross Domestic Product (GDP): a measure of the value added in the production of goods and services within a country's borders before providing for capital consumption. This includes the value added in the production of intermediate inputs, even if the final goods are produced outside of Wales. It is commonly used to measure the size of a country's economy.

Gross Operating Surplus (GOS): the surplus generated by operating activities after the labour factor input has been recompensed. This is largely offset by the depreciation component of the accounting adjustment on the expenditure side. For public corporations, such as Cardiff International Airport, GOS includes their gross trading surplus and various revenue streams.

Gross Value Added (GVA): the value generated by any unit engaged in the production of goods and services.

Identifiable expenditure: spending which can be identified as benefitting particular countries or regions in the CRA.

Landfill Disposals Tax (LDT): a tax on waste disposed of to landfill that is collected by the Welsh Revenue Authority. LDT replaced Landfill Tax when it was devolved to Wales in 2018-19.

Land Transaction Tax (LTT): a tax on property transactions that is collected by the Welsh Revenue Authority. LTT replaced Stamp Duty Land Tax when it was devolved to Wales in 2018-19.

Local government: all 22 local authorities in Wales, three national parks and three fire and rescue authorities. Most expenditure by police forces is also categorised as local government spending in the CRA data published by the UK Treasury.

National Accounts: a full set of economic accounts, produced by the ONS, that record and describe economic activity in the UK.

Net Fiscal Balance: the difference between estimated total public sector spending for Welsh residents and estimated total public sector revenue raised in Wales. At the UK level this gap between revenue and expenditure will be reflected by public sector borrowing (or saving). In Wales however, this gap reflects its place in the overall fiscal position of the UK public sector.

Net investment: total public sector expenditure less capital consumption.

Non-identifiable expenditure: spending which is deemed to be incurred on behalf of the UK as a whole in the CRA.

Nomenclature of Territorial Units for Statistics (NUTS): a geocode standard by Eurostat for referencing the subdivisions of the UK for statistical purpose. There are 12 first level (NUTS1) regions within the UK: Wales, Scotland and Northern Ireland as well as 9 English regions: North East, North West, Yorkshire and the Humber, East Midlands, West Midlands, East of England, London, South East and South West.

Office for Budget Responsibility (OBR): an arm's length body set up as an independent fiscal watchdog to forecast public spending. It is mandated by law to scrutinise the UK government's fiscal targets, costing of Budget measures and produce forecasts for the economy and public finances, including forecasts of devolved tax revenue.

Office for National Statistics (ONS): a public body which provides independent authoritative statistics for the UK.

Organisation for Economic Co-ordination and Development (OECD): an intergovernmental economic organisation aimed at stimulating economic progress and world trade. In 2018, the organisation had 36 member countries. Most OECD members are high-income economies and are regarded as developed countries.

Outturn: expenditure (revenue) actually incurred (received) to date.

Public Corporations: a sector from the National Accounts which consist of publicly controlled market entities.

Public Expenditure Statistical Analyses (PESA): an annual statistical exercise which provides information on government spending by Department, function and region over a number of years.

Public sector debt interest: interest payable by the UK government to holders of government bonds. This is the cost of servicing public sector debt.

Public sector expenditure: total amount spent by the UK government, Welsh Government and local authorities on programmes in Wales.

Public Sector Finances (PSF): a monthly statistical release on the public sector produced jointly by the ONS and HM Treasury.

Spending Review: a review of future UK government spending plans held every few years. Spending Reviews set out the proposed Resource (Current) and Capital DEL limits for each government department for future years.

Total Expenditure on Services (TES): an aggregate used in CRA to analyse public sector expenditure.

Total Managed Expenditure (TME): a definition of total expenditure in the UK public finances that covers all current and capital spending carried out by the public sector. It comprises the sum of DEL and AME, less depreciation.

Welsh Block Grant: the portion of funds allocated to Wales to fund devolved programmes.

Welsh Rates of Income Tax (WRIT): the portion of Income Tax revenue devolved to the Welsh Government as set out in the Wales Act (2016).

Welsh Revenue Authority (WRA): the tax collection agency set up to administer LTT and LDT in Wales.

Notes

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