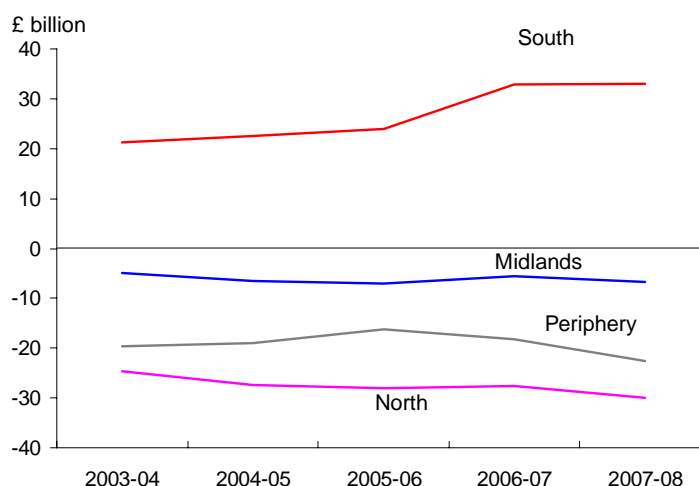


Regional winners and losers in UK public finances

Key points

- This article updates earlier Oxford Economics analysis of the extent to which different regions of the UK contribute to or draw on the UK fiscal balance by looking at available information on the regional allocation of public spending and on the regional distribution of tax receipts.
- The latest outturn data for regional spending is for 2006-07, and this is the main focus of the analysis. We have also looked, though, at what would be implied by plan-based data for 2007-08.
- As in previous years, the analysis shows that it is only the wider South East (Greater London, the South East and the Eastern Region) that made a positive net contribution to the UK public finances in 2006-07, with the Northern regions, the Midlands and the South West joining Northern Ireland, Wales and Scotland as a net drain on the Exchequer.
- Relative to its population, Northern Ireland gains the most from the unequal regional composition of the UK public finances, with a net balance of spending over receipts of more than £4,000 per person. This is followed by Wales, the North East and Scotland.
- There has been a persistent pattern throughout the years compared here of the Southern regions providing fiscal support to the rest of the UK, which is not surprising given the relative strengths of the different regional economies and the broadly redistributive nature of government policies towards taxation and spending. But it is also clear that the scale of regional fiscal redistribution from the South to the rest of the UK has been increasing over recent years.
- Looking forward, we expect the UK fiscal deficit to rise to £55 billion by 2009-10. This is likely to be reflected disproportionately in the South, and in London in particular, given the impact of the credit crunch on financial services. But we still expect the South to make a net positive contribution to the Exchequer.

Contributions to UK public finances by regional grouping



Introduction

Discussions over regional spending priorities are sometimes put in the context of how important public spending is in supporting activity in some regions compared with others – and this may be quite significant for regional economic prospects at a time when public finances nationally are under increasing pressure. But it is not easy to know just how much public spending takes place in each region within the UK, or where tax receipts come from, since the bulk of taxes and spending are not the responsibility of regional bodies.

Perhaps not surprisingly, therefore, there has been widespread interest in previous research by Oxford Economics into London's contribution to UK public finances, subsequently extended to look at each of the countries and regions of the UK. This article therefore updates the earlier analysis using the latest available information on the regional allocation of public spending¹, and 2008 Budget figures on the revenue raised from different types of taxes, in order to look at the extent to which previous regional patterns of net contributions to and receipts from the UK Exchequer have been maintained.

Defining regional public expenditure

The bulk of public spending in the UK is undertaken by central government departments, with only a small fraction of spending made directly by regional authorities themselves. In estimating the regional distribution of public expenditure, there are two possible options. The first is on the basis of where the spending actually physically occurs ("in" the region) and, second, on the basis of which regions actually benefit from the expenditure ("for" the region). Here, we adopt the Treasury's approach, which identifies regional expenditure on a "for" basis, as far as possible. "Identified expenditure" accounts for approximately 83% of all UK public expenditure.

Some of the remaining 17% of unidentified expenditure which is not allocated to regions by PESA is best regarded as not affecting regions in any way, such as that identified as being 'outside the UK' and specifically of benefit to non-UK residents. The remainder of non-identifiable spending on services, totalling some £69.6 billion (12.7% of TME), refers to services provided by the government that are of benefit to the UK as a whole. This sum is dominated by Defence, with significant shares also accounted for by the Home Office and the Chancellor's Departments and Central Exchequer Functions. Such services are clearly of some benefit to all UK residents and we regard it as preferable to estimate a distribution across regions.

This non-identifiable expenditure, along with £26.1 billion of accounting adjustments, can be allocated across regions using three alternative methods. These are: (i) using the same proportions that the Treasury adopts in allocating expenditure on a "for" basis; (ii) adopting an "in" basis approach through estimating the relative shares of public sector pay; (iii) using population shares. No single estimate is definitive, and we produce a range of estimates which are subsequently added to identified expenditure. We report a maximum and minimum value, and an average is taken to report total regional expenditure.

¹ *Public Expenditure Statistical Analyses (PESA) 2008, HMT April 2008*

Table 1: Total identifiable expenditure on services by region (2006-07)

	Identifiable spending £ billion	Identifiable spending % of UK	Total spending % of UK
North East	20.2	4.4	3.7
North West	53.2	11.7	9.7
Yorks & Humber	36.6	8.0	6.6
East Midlands	28.2	6.2	5.1
West Midlands	38.1	8.4	6.9
Eastern	34.6	7.6	6.3
Greater London	64.2	14.1	11.7
South East	50.8	11.2	9.2
South West	33.4	7.3	6.1
Wales	24.2	5.3	4.4
Scotland	43.7	9.6	7.9
Northern Ireland	15.7	3.4	2.8
UK	442.8	97.4	80.5
Outside UK	11.7	2.6	2.1
Total identifiable	454.5	100.0	82.6
Non-identifiable	69.6		12.7
Total spend on services	524.0		95.3
Accounting adjustments	26.1		4.7
TME	550.1		100.0

Source: PESA 2008

Table 2: Non-identifiable expenditure (2006-07) apportioned according to...

	As table 1 "for" basis £ billion	Pay costs on "in" basis £ billion	Population shares £ billion	Expenditure range £ billion
North East	4.4	2.8	4.0	2.8 - 4.4
North West	11.5	4.5	10.8	4.5 - 11.5
Yorks & Humber	7.9	5.2	8.1	5.2 - 8.1
East Midlands	6.1	4.1	6.9	4.1 - 6.9
West Midlands	8.2	3.9	8.5	3.9 - 8.5
Eastern	7.5	8.4	8.9	7.5 - 8.9
Greater London	13.9	16.3	11.9	11.9 - 16.3
South East	11.0	18.9	13.0	11 - 18.9
South West	7.2	18.4	8.1	7.2 - 18.4
Wales	5.2	2.5	4.7	2.5 - 5.2
Scotland	9.4	7.5	8.1	7.5 - 9.4
Northern Ireland	3.4	3.0	2.7	2.7 - 3.4
UK	95.7	95.7	95.7	

Source: PESA 2008, Oxford Economics calculations

Regional expenditure

London receives a far greater share of public spending than any other UK region, estimated at between £76.1 billion and £80.6 billion in 2006-07. London is, though, one of the most highly populated regions. While spending per capita in London remains the highest in England, it is lower than Northern Ireland and similar to Scotland. In England, spending per capita outside of London is highest in the North East followed by the North West, with the South East region amongst the lowest. London is unique as a Government Office Region (GOR) in that it is an urban area. In contrast, other regions have both urban and non-urban areas. The relative needs of the regions clearly differ, and this will have implications for public sector spending. Looking at a wider southern region, including London as the metropolitan centre, spending per capita is actually below that for the UK as a whole.

Table 3: Total government expenditure by region (2006-07)

	£ billion		£ per capita	
	Min	Max	Min	Max
North East	23.0	24.5	9,000	9,600
North West	57.6	64.6	8,400	9,400
Yorks & Humber	41.8	44.7	8,100	8,700
East Midlands	32.3	35.1	7,400	8,000
West Midlands	42.0	46.5	7,800	8,700
Eastern	42.1	43.5	7,500	7,800
Greater London	76.1	80.6	10,100	10,700
South East	61.8	69.7	7,500	8,500
South West	40.6	51.8	7,900	10,100
Wales	26.7	29.5	9,000	9,900
Scotland	51.2	53.2	10,000	10,400
Northern Ireland	18.4	19.0	10,600	10,900
<i>Memo: London, East & S. East</i>	<i>182.0</i>	<i>180.7</i>	<i>8,500</i>	<i>8,500</i>
UK	550.1	550.1	8,457	8,457

Source: PESA 2008, Oxford Economics calculations

There are other ways of looking at public spending in different regions besides relative to population. Public expenditure attributable to London is less than the UK average in terms of per person employed, and also relative to the personal disposable income of Londoners. In terms of spending relative to GVA, London receives almost 25% less than the UK average in 2006-07.

Table 4: Total government expenditure by region (2006-07)

	Total expenditure £ billion	Expenditure relative to...		
		Employment (£ per employed)	GVA (UK=100)	Income (UK=100)
North East	23.9	20,500	129	122
North West	62.1	18,300	117	113
Yorks & Humber	43.7	17,200	112	107
East Midlands	33.9	15,900	96	95
West Midlands	44.9	16,600	106	104
Eastern	42.9	15,200	90	81
Greater London	78.3	16,900	76	93
South East	65.1	15,100	81	80
South West	44.6	17,000	105	99
Wales	28.4	20,700	139	121
Scotland	52.1	19,700	120	120
Northern Ireland	18.7	22,400	149	139
UK	550.1	17,300	100	100

Source: PESA 2008, Oxford Economics calculations

Calculating regional tax contributions

Just as regional shares of public spending depend on whether these are estimated on the 'in' basis or the 'for' basis, estimates of regional contributions to tax receipts depend on whether these are based on a residential or workforce approach. The residential approach looks as far as possible at taxes paid by the people who live in a particular region. Similarly, the workforce approach looks as far as possible at taxes paid by the people who work in a particular region. This has a significant impact on London where in net terms 400,000-500,000 people a day commute into the capital from surrounding regions.

In practice, we estimate different payments on a residential and workforce basis for income tax, national insurance contributions and VAT and present totals on both bases. For other taxes, the distinction is either not very meaningful or the difference is too small to worry about. While there are no regular and exhaustive official data that provide a regional breakdown of tax revenue, we have made detailed estimates by collating relevant official sources and applying robust assumptions.

(i) Income Tax

Income tax data on a residence basis are derived from the HM Revenue and Customs (HMRC) Survey of Personal Incomes (SPI). In 2005-06 (the latest year for which data are available), London had the highest contribution to total UK income tax revenue at 20.0% with the South East having the second highest contribution of 18.3%. This ratio can be applied to the UK total for 2006-07 from the Budget report to give total residence-based income tax payments in London and the South East of £28.6 billion and £26.2 billion respectively. Under the same methodology, the North East and Northern Ireland had the lowest residence based income tax contributions of £4.2 billion and £2.8 billion respectively.

The Annual Population Survey (APS) gives employment numbers on both a workforce and residential basis. Using this, ratios of resident employees and workplace employees were constructed and applied to the residence income tax estimates therefore accounting for commuters in each region. From this we estimate that London and the South East again had the highest contributions to UK total income tax in 2006-07 at £31.9 billion and £25.1 billion respectively.

(ii) National Insurance Contributions (NICs)

We use reported UK Budget data and split this using shares of the UK total calculated from average weekly expenditure data taken from the Expenditure and Food Survey (EFS). This only looks at the household contribution share, but the employers' contribution is expected to be symmetric. Using this, we estimate London's NICs payments on a residence basis in 2006-07 to have been the highest amongst the regions at £15.3 billion followed by the South East at £13.0 billion. Northern Ireland had the lowest contribution of NICs at £1.8 billion and the North East was second lowest at £3.6 billion.

A similar adjustment to that for income tax using APS data can be performed to give National Insurance Contributions based on commuting in the regions. This suggests that London and the South East remain the highest contributors, with London's shares of UK NICs rising from 17.6% on a residential basis to 19.5% on a workforce basis. In contrast, the South East falls from 14.9% on a residential basis to 14.2% on a workforce basis due to those who commute to London for work.

(iii) VAT

VAT represented around 14.8% of total tax receipts in 2006-07 and needs to be carefully split across regions to reflect different regional spending patterns.

On a residence basis we use data on consumer spending by region from the Regional Accounts produced by ONS. However, this data on regional spending is only available up to 1999 and Oxford Economics regional consumer spending forecasts are used for later periods.

Consumer spending data by region reported by ONS and used as the basis for this calculation are derived from surveys of household spending. This share relates to the share of consumer spending and therefore the share of VAT on a residence basis. London and the South East have shares of 16.0% and 15.6% of total UK VAT respectively, which equates to £12.4 billion and £12.1 billion on a residence basis.

Further calculation is undertaken based on shares of retail turnover in each region reported by the Annual Business Inquiry (ABI). This share relates to the amount of consumer spending incurring VAT that takes place by region, regardless of where the person spending is resident. This business-based estimate of VAT is larger than the residence-based calculation for London at 17.9% of the total, or £13.9 billion. In the South East, similar to income tax and NICs, the workforce or 'business-based' estimate is lower than the residence-based estimate at 14.7% of the UK total, equating to £11.4 billion. This reflects the strength of the London economy in terms of attracting business and workers.

(iv) Council Tax

Actual figures are available for London's council tax revenues from Local Government Financial Statistics. In 2006-07 the South East had the highest contribution of £3.7 billion (16.7% of the UK total), with London having the second highest contribution of £2.9 billion (13.0% of the UK total), compared with 12.9% in 2005-06. The North East and Wales had the lowest shares of the UK total (3.7% and 4.1% respectively). Figures for Northern Ireland, where domestic rates are still paid rather than council tax, are not directly comparable here. District rates are included here under this heading, but regional domestic rates are treated in the government accounts as negative public spending rather than tax receipts.

(v) Vehicle Excise Duty

Vehicle Excise (VED) is only a small part of total taxes paid, but is calculated separately since London has a very different pattern of car usage from other regions. Driver and Vehicle Licensing Agency (DVLA) and Department for Transport (DfT) data are used to derive vehicle taxes based on average rates and the number

of registered vehicles. The number of registered cars and other vehicles are available for all regions from DfT. Rates for different types of vehicles are available from the DVLA. Applying these rates gives total revenue from this stream. As before, this is calculated as a share of the UK total, and applied to UK total revenue as reported in the Budget.

London stands out since it actually pays less per capita on this form of tax than the UK average. The share of total UK VED paid is only 8.8% in 2006-07, compared with a population share of 12.4%, as car ownership is relatively low and public transport is used more widely.

(vi) Corporation tax

Corporation tax is another large component of total UK tax receipts, which can be split across regions according to the number of firms within regions. The most straightforward method to calculate a region's contribution is to use the Annual Business Inquiry to calculate profits from both the region's firms and the UK by subtracting purchasing and employment costs from turnover. The region's percentage of the UK total is taken and applied to UK corporation tax take as reported in the Budget. Before allocating the UK total, however, we have subtracted an estimate of the corporation tax due to North Sea operations, derived from comparing HMT figures on the overall North Sea tax take with the amount being paid in petroleum revenue tax. North Sea taxes themselves have been attributed to Scotland, although this does not necessarily represent the fiscal position for Scotland that could be expected in the event of greater independence from the rest of the UK.

In 2006-07 London businesses contributed 20.8% of UK corporation tax, a third higher than the South East, and more than twice as much as any other region.

(vii) Stamp duty

Stamp duty paid is reported for regions by HMRC. Data for 2006-07 from HMRC showed that the amount of duty paid in all but two regions experienced growth greater than 10%, with East Midlands growing by 7.6% and the North East falling by 1.3%. Again, Northern Ireland had the highest growth of 97.5%. This was largely due to the high growth in house prices across the UK (particularly in Northern Ireland) during this time. However, the latest data released for 2006-07 shows a slowdown in stamp duty contributions with some regions experiencing falls – only the London, Eastern and South East regions saw positive growth. Despite this, when the HMRC shares are allocated to the overall stamp duty total for the UK as reported in the Budget report all regions show positive growth, with some performing better than others. The share of UK stamp duty derived in London fell from over 27.8% to 26.7% in 2006-07, as house price rises elsewhere in the country have increased their proportion of houses liable to the higher rates of stamp duty.

(viii) Excise duties

The number of vehicle registrations are used to estimate each region's contributions to fuel duty revenue. Similarly, the ONS' Expenditure and Food Survey (EFS) gives implied shares of UK spending on different types of goods accounted for by consumers living in each region, which is then applied to relevant tax receipts to estimate the share contributed by the region.

(ix) Business rates

Business rates data, like council tax figures, are taken from Local Government Financial Statistics, and in 2006-07 London had the highest share with 21.8% of total business rates paid in the UK.

(x) Other taxes and duties

There are a variety of other taxes and duties that are individually generally less important than the above, but nevertheless provide a significant sum in total to the UK Exchequer. Estimated regional shares in each case are based on a simple rule of thumb related to the region's share of the UK's population, GVA, household income or similar aggregate. (The appendix table provides detailed results for these taxes).

Regional tax payments

On a residence basis (Table 5), London and the South East provide the largest tax contributions, accounting for over £80 billion each of tax receipts in 2006-07 and together contributing one-third of UK revenues. At the other extreme, Northern Ireland and the North East between them contributed less than 6% of the total. On a workplace basis (Table 6), London and the South East contributed an even bigger share of the UK total, but the impact of commuting means that the South East's share of tax payments was lower on a workplace than a residence basis, while London's contribution to overall receipts amounted to £98 billion.

Table 5: Receipts summary - residence based (2006-07)

	Income tax £ billion	NICs £ billion	VAT £ billion	Other £ billion	Total £ billion
North East	4.2	3.6	2.6	6.8	17.1
North West	12.7	8.5	8.1	20.5	49.8
Yorks & Humber	9.3	6.1	5.7	14.1	35.3
East Midlands	8.7	6.1	5.2	13.1	33.1
West Midlands	10.0	7.8	6.3	16.0	40.1
Eastern	15.2	7.7	7.2	19.3	49.4
Greater London	28.6	15.3	12.4	34.2	90.5
South East	26.2	13.0	12.1	31.5	82.8
South West	10.6	6.9	6.3	17.3	41.1
Wales	4.7	3.6	3.2	7.8	19.3
Scotland	10.4	7.0	6.5	26.5	50.4
Northern Ireland	2.8	1.8	1.9	5.0	11.4
UK	143.4	87.3	77.4	212.0	520.1

Sources: HMT (UK); Oxford Economics estimates (regions)

Table 6: Receipts summary - workplace based (2006-07)

	Income tax £ billion	NICs £ billion	VAT £ billion	Other £ billion	Total £ billion
North East	4.1	3.5	2.7	6.8	17.1
North West	12.8	8.5	8.9	20.5	50.6
Yorks & Humber	9.3	6.1	6.2	14.1	35.7
East Midlands	8.3	5.8	4.7	13.2	31.9
West Midlands	10.1	7.8	5.9	16.0	39.7
Eastern	14.1	7.1	7.3	18.7	47.3
Greater London	31.9	17.0	13.9	35.1	98.0
South East	25.1	12.4	11.4	31.1	80.0
South West	10.8	6.9	5.9	17.3	40.9
Wales	4.6	3.5	3.0	7.8	18.9
Scotland	10.5	7.0	5.5	26.5	49.5
Northern Ireland	2.7	1.7	2.1	5.0	11.5
UK	143.4	87.3	77.4	212.0	520.1

Sources: HMT (UK); Oxford Economics estimates (regions)

Regional winners and losers

Looking at the balance of both public spending in a region and the tax contribution from a region (Table 7), there were three regions – London, the South East and the Eastern region – that made a net positive contribution to the UK exchequer in 2006-07, despite the negative overall balance of the UK public finances.

Table 7: Regional contributions to UK public finances (2006-07)

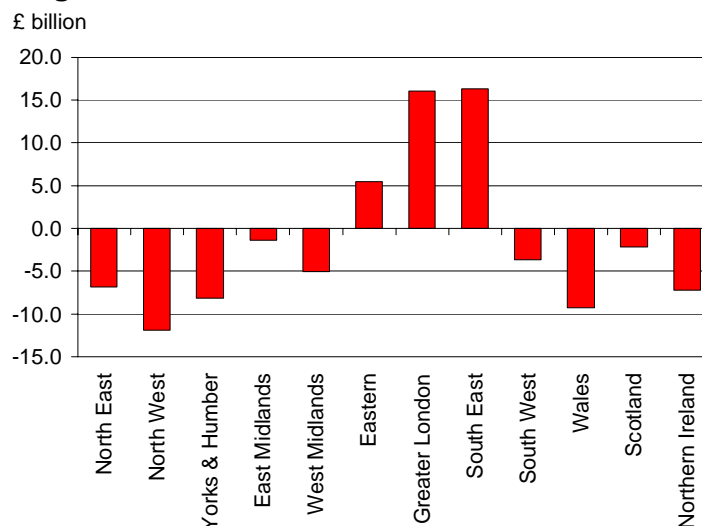
	Revenue		Expenditure £ billion	Balance		
	Residence £ billion	Workplace £ billion		Residence £ billion	Workplace £ billion	Mid-point £ billion
North East	17.1	17.1	23.9	-6.8	-6.8	-6.8
North West	49.8	50.6	62.1	-12.3	-11.5	-11.9
Yorks & Humber	35.3	35.7	43.7	-8.4	-8.0	-8.2
East Midlands	33.1	31.9	33.9	-0.8	-2.0	-1.4
West Midlands	40.1	39.7	44.9	-4.8	-5.2	-5.0
Eastern	49.4	47.3	42.9	6.5	4.4	5.4
Greater London	90.5	98.0	78.3	12.3	19.7	16.0
South East	82.8	80.0	65.1	17.7	14.9	16.3
South West	41.1	40.9	44.6	-3.5	-3.7	-3.6
Wales	19.3	18.9	28.4	-9.1	-9.4	-9.3
Scotland	50.4	49.5	52.1	-1.7	-2.6	-2.1
Northern Ireland	11.4	11.5	18.7	-7.3	-7.2	-7.2
UK	520.1	520.1	538.5	-18.4	-18.4	-18.4
UK + Exp outside UK			550.1	-30.0	-30.0	-30.0

Source: Oxford Economics calculations

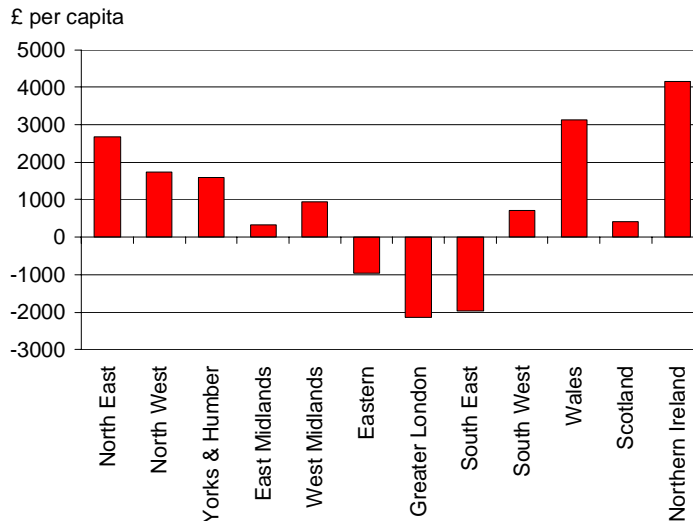
Note: The -£30.0bn UK balance is the Budget 2008 figure for Net Borrowing (deficit on current budget + net investment)

This conclusion is unaffected by whether tax contributions are estimated on a residence or workplace basis, although the magnitudes differ – the chart below illustrates the net contributions based on the average of the two bases. Offsetting these positive contributions, the regions with the biggest balance of spending over and above tax receipts were the North West and the three non-English elements of the UK – Scotland, Wales and Northern Ireland.

Regional fiscal contributions, 2006-07



Who benefits? - net regional balance per head, 2006-07



In terms of the per capita balance of spending over tax payments, it is clear that Northern Ireland gains the most from the unequal regional composition of the UK public finances, with a net balance of spending over receipts of over £4,000 per person. This is followed by Wales, the North East and Scotland. Although the non-English parts of the UK stand out as significant beneficiaries of the unequal pattern of UK regional spending, whether the figures are looked at in total or per head, it is the relatively small but economically less successful North East that benefits most out of the English regions when looking at the figures per person, rather than the much more heavily populated North West.

How is the position changing?

We have also looked at how regional contributions to UK public finances have changed over time (see the chart at the beginning of this article). This analysis includes an estimate for 2007-08 based on a regional allocation of spending plans, rather than the outturn data used in the analysis for 2006-07 in the rest of this article. The trends over time make clear that there has been a persistent pattern of the Southern regions providing fiscal support to the rest of the UK, which is not surprising given the relative strengths of the different regional economies and the broadly redistributive nature of government policies towards taxation and spending. But it is also clear that the scale of regional fiscal redistribution from the South to the rest of the UK has been increasing over recent years.

It will be interesting to see how this is affected by the impact of the credit crunch on the south, and on London's financial centre in particular. We expect the UK fiscal deficit to rise to £55 billion by 2009-10 as the economy grows below trend. This is likely to be reflected disproportionately in the South, and in London in particular, given the impact of the credit crunch on financial services. But we still expect the South to make a net positive contribution to the Exchequer.

Conclusions

There are inevitable simplifying assumptions needed to estimate regional contributions to UK public finances in some of the details of the calculations, given limitations in the availability of data. It is also worth bearing in mind that our use of a more or less common approach across all UK regions means that our estimates may not necessarily agree with the views of those who have looked specifically at estimating the fiscal position that Scotland might enjoy under independence, for example. But our calculations show clearly that the widely recognised picture of England 'subsidising' other parts of the UK does not tell the full story. In practice, it is not England as a whole that is subsidising other parts of the UK, but the most prosperous parts of the UK 'subsidising' both the non-English parts of the UK and the rest of England as well. It is only the wider South East (Greater London, the South East and the Eastern Region) that made a positive net contribution to the UK public finances in 2006-07, with the Northern regions, the Midlands and the South West joining Northern Ireland, Wales and Scotland as a net drain on the exchequer.

There is nothing wrong with this pattern of regional winners and losers – expecting the more prosperous parts of the country to help finance spending elsewhere in the country is consistent with most notions of natural justice. But it does highlight the importance of supporting the economic competitiveness of the South for the sake of the whole country. Projects such as CrossRail may involve significant amounts of public spending in the already relatively prosperous South, but the benefits should support economic activity that helps pay for spending elsewhere in the UK, too.

APPENDIX

Appendix: Other taxes paid in each region, 2006-07 (£ billion)													
	North East	North West	York & Humber	East Midlands	West Midlands	Eastern	London	South East	South West	Wales	Scotland	Northern Ireland	United Kingdom
Council Tax	0.83	2.35	1.68	1.59	1.83	2.37	2.90	3.74	2.18	0.92	1.80	0.11	22.3
Vehicle Excise Duty	0.18	0.58	0.40	0.39	0.51	0.52	0.45	0.80	0.49	0.25	0.39	0.14	5.1
Corporation Tax	1.19	3.80	2.14	2.32	2.60	3.43	7.81	5.72	2.47	1.06	3.92	1.04	37.5
Petroleum Revenue Tax											9.00		9.0
Stamp Duty	0.19	0.69	0.52	0.50	0.64	1.33	3.58	2.83	2.09	0.26	0.52	0.26	13.4
Fuel duty	0.84	2.66	1.85	1.80	2.31	2.40	2.10	3.67	2.28	1.19	1.82	0.67	23.6
Tobacco duty	0.33	0.97	0.70	0.51	0.68	0.63	0.97	0.87	0.54	0.53	1.02	0.36	8.1
Alcohol duties	0.34	0.95	0.64	0.56	0.69	0.70	0.88	1.14	0.75	0.39	0.81	0.17	8.0
Business rates	0.66	2.06	1.49	1.24	1.63	1.75	4.58	2.81	1.39	0.71	1.99	0.68	21.0
Capital gains taxes													3.8
residence	0.13	0.37	0.28	0.25	0.30	0.37	0.66	0.60	0.30	0.14	0.31	0.09	
workplace	0.13	0.37	0.28	0.25	0.30	0.33	0.73	0.57	0.30	0.14	0.31	0.09	
Inheritance tax	0.15	0.41	0.31	0.26	0.32	0.33	0.45	0.49	0.30	0.18	0.30	0.10	3.6
Betting and gaming duties	0.06	0.17	0.11	0.10	0.12	0.12	0.15	0.20	0.13	0.07	0.14	0.03	1.4
Air passenger duty	0.02	0.15	0.07	0.07	0.08	0.04	0.21	0.13	0.10	0.04	0.06	0.03	1.0
Insurance premium													2.3
residence	0.08	0.23	0.17	0.15	0.18	0.22	0.40	0.36	0.18	0.09	0.19	0.05	
workplace	0.08	0.23	0.17	0.15	0.18	0.20	0.44	0.34	0.18	0.09	0.19	0.05	
Landfill tax	0.03	0.08	0.06	0.05	0.06	0.07	0.15	0.12	0.06	0.03	0.06	0.02	0.8
Climate change levy	0.02	0.07	0.05	0.05	0.06	0.07	0.12	0.11	0.06	0.03	0.06	0.02	0.7
Customs duties and agricultural levies	0.08	0.24	0.17	0.15	0.19	0.21	0.37	0.36	0.19	0.09	0.19	0.06	2.3
Aggregates levy													0.3
residence	0.01	0.03	0.02	0.02	0.02	0.03	0.05	0.05	0.02	0.01	0.02	0.01	
workplace	0.01	0.03	0.02	0.02	0.02	0.03	0.06	0.04	0.02	0.01	0.02	0.01	
Other taxes and royalties													13.9
residence	0.48	1.37	1.01	0.91	1.10	1.35	2.42	2.18	1.10	0.53	1.12	0.33	
workplace	0.48	1.36	1.01	0.92	1.09	1.22	2.67	2.07	1.10	0.53	1.12	0.33	
Other receipts													33.9
residence	1.16	3.34	2.47	2.23	2.67	3.30	5.91	5.32	2.69	1.28	2.73	0.79	
workplace	1.17	3.32	2.46	2.25	2.66	2.97	6.50	5.06	2.69	1.29	2.74	0.80	
Congestion charge							0.10						0.1

Sources: HMT (UK); Oxford Economics estimates (regions)