

# **The Oversubsidized Periphery – Who Benefits?**

*Dave Byrne*

Under the Barnett formula the UK's peripheral sub-nations receive considerably more in public expenditure per head than is the case in England. Whilst relative need indices provide some justification for this in the case of Northern Ireland and to a lesser extent Wales, Scotland as a whole benefits very substantially in comparison with the three regions of the North of England - North East, North West, and Yorkshire and Humberside which together have more than three times Scotland's population and are substantially more deprived in total on need indicators. These issues are now on the political agenda as was demonstrated in a House of Commons debate initiated by Graham Stringer, a Manchester MP, in November 2007. The interesting question is who benefits from this comparative largesse towards Scotland? There is clear evidence that the primary beneficiaries in Scotland are middle and higher income households who have access to better health care, free social care, and free higher education. This paper will review the relationship between need indices and resource allocation across English regions, Wales, Scotland and Northern Ireland and then examine available spatial and social structural data on public expenditure to explore just who in Scotland actually benefits from the resource allocation imbalance.

The history of this issue goes back to 1888 when the George Goschen introduced a resource allocation formula which gave 80% of the revenue support grant to local authorities to England and Wales, 11% to Scotland and 9% to Ireland. This mechanism continued to operate until 1959 but between 1959 and 1978 it was replaced by the incorporation of Scottish Office expenditure into the Public Expenditure Survey arrangements introduced as part of the Plowden reforms. In other words the Scottish Office budget was determined in the same way as that of other government departments by bilateral negotiation. However, as Heald and MacLeod (2002) note it seems likely that there was a legacy of Goschen with 11/80ths of the England and Wales provision being seen as a floor minimum for the Scottish total.

The Labour Government of 1974-1979 attempted unsuccessfully to introduce devolved government in Scotland and Wales. In the run up to legislation Joel Barnett, the Chief Secretary to the Treasury, devised

a modern version of Goschen's formula to be used until a full needs based resource allocation mechanism could be worked out. In effect Barnett's formula was simply based on a mild adjustment downwards of the Scottish proportion to reflect the relative decline in Scottish population as a proportion of the UK population. The Thatcher government continued to use the formula and gave the Secretary of State for Scotland complete control over the allocation of the resultant 'Scottish block' derived from it, without having to go through a detailed approval process with the Treasury, in contrast to all service specific UK departments.

Originally, the Barnett formula<sup>1</sup> allocated 10/85ths<sup>2</sup> of the increases in comparable English provision to the Scotland programme. This was based on rounded percentages of the Great Britain population (85 per cent England, 10 per cent Scotland and 5 per cent Wales<sup>4</sup>). The formula applied, and still applies, not to the total provision, but only to the increases (or decreases) in allocations made in successive Public Expenditure Surveys, now Spending Reviews (SRs). The greater expenditure in Scotland per head of population comes not from the formula, but from the existing expenditure levels when the block and formula arrangements were established. The formula itself was adjusted in 1992 to reflect the actual relative populations, though there is in practice a lag<sup>5</sup>, and it is now updated annually on the basis of mid-year population estimates. (Heald and MacLeod 2002 565)

Post devolution after 1998 an adjusted version of the Barnett formula has been used to determine the 'Assigned Budget' which is managed by the Scottish Executive. In principle the formula is supposed to lead to a convergence of per capital expenditure across the UK nations but there is little evidence of this in practice. In effect the level of public expenditure in England determines the volume of expenditure in the devolved sub-nations. The actual mechanism has three components viz:

1. The change in planned spending by UK government departments
2. The comparability percentage – this reflects the degree to which a UK department spends its budget in England alone – nearly 100% for Health, much less for some other departments.
3. The population factor.

The Barnett formula works by multiplying these three factors together. For example, if the change to health spending in England was £100 million, the increase for Wales would be:

$$£100m \times 99.3\% \text{ [health comparability percentage for Wales]} \times 5.84\% \text{ [Wales population percentage]} = £5.8 \text{ m.}$$

This £5.8 million (and figures calculated in an analogous way) is sometimes referred to as “Barnett consequentials.” (Webb 200712)

The consequence in terms of expenditure per head can be seen in Table 1

**Table 1 Expenditure per capita – UK =100 – Regional Trends 2006**

| <u>FUNCTION</u>             | <u>ENGLAND</u> | <u>N. EAST</u> | <u>LONDON</u> | <u>SCOTLAND</u> |
|-----------------------------|----------------|----------------|---------------|-----------------|
| <u>Public Safety</u>        | <u>95</u>      | <u>111</u>     | <u>154</u>    | <u>100</u>      |
| <u>Economic Development</u> | <u>86</u>      | <u>135</u>     | <u>64</u>     | <u>199</u>      |
| <u>Employment Policies</u>  | <u>83</u>      | <u>123</u>     | <u>80</u>     | <u>240</u>      |
| <u>Transport</u>            | <u>98</u>      | <u>105</u>     | <u>153</u>    | <u>118</u>      |
| <u>Housing</u>              | <u>79</u>      | <u>34</u>      | <u>207</u>    | <u>232</u>      |
| <u>Health</u>               | <u>97</u>      | <u>103</u>     | <u>114</u>    | <u>116</u>      |
| <u>Education</u>            | <u>97</u>      | <u>103</u>     | <u>143</u>    | <u>116</u>      |
| <u>Total</u>                | <u>98</u>      | <u>108</u>     | <u>110</u>    | <u>117</u>      |

Barnett was an ad hoc formula adopted until: ‘ ... a needs based resource allocation mechanism could be worked out.’ The obvious allocative unit i.e. unit which would receive resources, would necessarily be territorial and we can argue that the allocative objective should be territorial justice as defined by Davies;

‘ ... in the services for which the most apparent appropriate distribution between individuals is “to each according to his need”, the most appropriate distribution between areas must be “to each area according to the needs of the population of the area”. Since the former criterion is

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synonymous with social justice, we can call the latter “territorial justice”.’ (1968 16)

We do not have UK wide needs based indicators but we can use existing statistics published in Regional Trends as a basis for reviewing inequalities across the UK as a whole, which necessarily means that we examine the situation of English regions, the majority of which have very considerably larger populations than Scotland, all but one of which have larger populations than Wales, and all of which have larger populations than Northern Ireland. [The ten deprivation indicators for the twelve regions and sub-nations are shown in Table 2](#) given overleaf.

To this end I conducted a cluster analysis<sup>1</sup> [of the UK regions and sub-nations which generated three “deprivation” clusters High, Medium and Low, as indicated in the first column of Table 2.](#)

So whilst we can see that Wales and Northern Ireland would receive high public expenditure on a needs based allocation founded on territorial justice principles, this is not the case for Scotland which receives substantially more than the North East of England which is much more deprived overall.

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<sup>1</sup> [The cluster analysis was carried out using the ten deprivation indicators shown in Table 2 using Ward's method with squared Euclidean distance. Cluster analysis is used to summarise a data set and its success should be judged by whether the clusters it produces seem sensible.](#)

**Table 2. Deprivation Indicators used in the Cluster Analysis**

| Cluster     | Region         | SMR |     | 17s | 17e | E    |      | UnE   | AEA  | HI  | GVA   |
|-------------|----------------|-----|-----|-----|-----|------|------|-------|------|-----|-------|
|             |                | M   | F   | %   | %   | M %  | F %  | all % | %    | £   |       |
| <b>High</b> | <b>NE</b>      | 111 | 109 | 21  | 31  | 71.9 | 67.5 | 6.4   | 74.5 | 454 | 79.9  |
| <b>Mid</b>  | <b>NW</b>      | 109 | 109 | 20  | 36  | 76.0 | 69.6 | 4.3   | 76.2 | 527 | 88.9  |
| <b>Mid</b>  | <b>Y&amp;H</b> | 102 | 101 | 24  | 30  | 77.7 | 69.6 | 5.1   | 77.7 | 511 | 88.8  |
| <b>Mid</b>  | <b>EM</b>      | 100 | 100 | 30  | 26  | 80.2 | 71.5 | 4.1   | 79.3 | 552 | 91.5  |
| <b>Mid</b>  | <b>WM</b>      | 103 | 101 | 26  | 31  | 79.7 | 69.1 | 4.4   | 78.0 | 525 | 91.2  |
| <b>Low</b>  | <b>E</b>       | 90  | 94  | 33  | 27  | 83.7 | 73.3 | 3.7   | 81.7 | 625 | 108.7 |
| <b>Low</b>  | <b>Lon</b>     | 97  | 97  | 34  | 33  | 75.1 | 63.1 | 6.9   | 74.6 | 743 | 132.2 |
| <b>Low</b>  | <b>SE</b>      | 89  | 92  | 32  | 31  | 83.3 | 73.6 | 3.7   | 81.6 | 661 | 116.1 |
| <b>Mid</b>  | <b>SW</b>      | 89  | 92  | 32  | 30  | 82.5 | 75.1 | 3.3   | 81.7 | 543 | 92.9  |
| <b>High</b> | <b>W</b>       | 104 | 103 | 30  | 28  | 72.8 | 68.7 | 4.5   | 74.2 | 477 | 79.1  |
| <b>Mid</b>  | <b>Scot</b>    | 119 | 113 | 26  | 18  | 77.6 | 71.6 | 5.9   | 79.3 | 523 | 96.2  |
| <b>High</b> | <b>NI</b>      | 101 | 99  | 44  | 27  | 73.4 | 62.4 | 4.7   | 71.4 | 478 | 80.2  |

**Key to Regions**

|                          |                |               |            |                  |             |
|--------------------------|----------------|---------------|------------|------------------|-------------|
| North East               | <b>NE</b>      | West Midlands | <b>WM</b>  | South West       | <b>SW</b>   |
| North West               | <b>NW</b>      | East          | <b>E</b>   | Wales            | <b>W</b>    |
| Yorkshire and the Humber | <b>Y&amp;H</b> | London        | <b>Lon</b> | Scotland         | <b>Scot</b> |
| East Midlands            | <b>EM</b>      | South East    | <b>SE</b>  | Northern Ireland | <b>NI</b>   |

**Key to the Deprivation Indicators**

|                               |            |                                 |            |
|-------------------------------|------------|---------------------------------|------------|
| Standardised Mortality Ratio  | <b>SMR</b> | Unemployment rate (all)         | <b>UnE</b> |
| Retention to age 17 at school | <b>17s</b> | Adults Economically Active      | <b>AEA</b> |
| In any education at age 17    | <b>17e</b> | Average Weekly Household Income | <b>HI</b>  |
| Employment rate               | <b>E</b>   | Gross Value Added per capita    | <b>GVA</b> |

An alternative allocative principle would be you eat what you kill. In other words, as Ken Livingstone frequently argued when Mayor of London, resource allocation should follow tax revenue generation patterns. This is also the basis of the SNPs argument to the effect that as it is 'Scotland's Oil' then the revenues from North Sea Oil taxation justify higher levels of expenditure in Scotland. Since these revenues are a pure rent which derive from no effort, this would put Scotland in the same position as feudal lords who took a shilling a ton on all coal mined as it has of course been placed under their land at the time of the Norman conquest for their exclusive benefit. It is also worth noting that an allocation of sea bed to an independent Scotland under the International Law of the Sea would, on a projection of the general tendency of the Anglo-Scottish border which runs at a 60 degree angle, mean that much of the oil would become North East England's oil! Eat what you kill is somewhat different from eat your rents but it is worth examining the sources of tax revenue on a regional basis in the UK as against expenditure. This has been done by Webb and Oxford Economics (see Webb 2007, 21) and a version of their conclusions is presented in Table 3.

**Table 3. - Expenditure Versus Tax Revenues**

| Region                   | Deficit [Public Expenditure minus Tax Revenue]<br>£ thousands per capita |
|--------------------------|--|
| North East               | 3.1  |
| North West               | 1.5  |
| Yorkshire and the Humber | 1.5  |
| East Midlands            | 0.3  |
| West Midlands            | 0.9  |
| East                     | - 0.8  |
| London                   | - 1.7  |
| South East               | - 1.6  |
| South West               | 1.3  |
| Wales                    | 2.9  |
| Scotland                 | 0.1 with Oil : 1.2 without Oil   |
| Northern Ireland         | 4.2  |

**Comment:** dave - I am a little confused by this - should not the deficit (D)= TR-PE where TR = Tax revenue and P{E = Public Expenditure? The word 'over' is confusing here

Despite the much higher levels of public expenditure in relation to overall need, and these exist whether we regard Scotland as over-subsidized or as a rentier nation, there are extreme levels of deprivation in Scotland. The nature of internal Scottish inequalities was well summed up in an article in The Scotsman (April 1<sup>st</sup> 2004)

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Using NHS data, The Scotsman newspaper compiled an extensive deprivation index, with data for the country's 830 postcode areas, and separated the top and bottom 100 neighbourhoods to show for the first time the scale of inequality in Scotland.

The Scotsman has disentangled the data and concentrated on two blocks: "Prime Scotland", which comprises the best 100 neighbourhoods, and "Third Scotland", where life expectancy is closer to the third world.

If Prime Scotland were a country, it would have the longest life expectancy in the world. The top international spots are occupied by Iceland (79.0 years), Japan (78.4 years) Sweden (77.9 years), Australia and Canada (both 77.8 years).

Third Scotland, by contrast, has an average male life expectancy of only 64.4 years - meaning an eighth of the men in the country can expect to die before the official pension age. This life expectancy is lower than in Bosnia, Lebanon, the Gaza Strip, Iran or North Korea.

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Using standard epidemiological approaches Doran et al. show that Scotland is even more unequal than London, which is widely recognised to be a grossly unequal world city:

In each of the seven social classes, Wales and the North East and North West regions of England had high rates of poor health. There were large social class inequalities in self rated health, with rates of poor health generally increasing from class 1 (higher professional occupations) to class 7 (routine occupations). The size of the health divide varied between regions: the largest rate ratios for routine versus higher professional classes were for Scotland (2.9 for men; 2.8 for women) and London (2.9 for men; 2.4 for women). Women had higher rates of poor health compared to men in the same social class, except in class 6 (semi-routine occupations). (2004, 1043)

In Stringer's debate several Scottish MPs defended the present pattern of resource allocation on the grounds of the extreme deprivation of 'Third Scotland'. However, if we examine the actual beneficiaries of Scotland's higher expenditure we find that they are primarily located in the middle and upper middle classes, since the major differences

between Scotland and England are in terms of free higher education (no tuition fees), substantial and in principle free social care whether residential or domiciliary, and free prescriptions. These are all areas in England which are subject to means tests so the net effect in Scotland is to provide them on a universal basis, and hence to those who would be considered too affluent in England.

In Higher Education, the Scottish Executive paid out some £262 million in 2006-7, of which the great bulk was in fee remission. (Student Awards Agency for Scotland Annual report and accounts 2006-2007). Callender (2005) shows that Scottish University Students are drawn overwhelmingly from the middle and upper classes, as is the case for the UK as a whole.

**Social class of Origin of Students at Scottish Universities**

Managerial & Professional 52%  
Intermediate 22%  
Routine and manual +unemployed 20%  
Missing 6%  
-----  
Family member studied at university - Yes 68%

The total cost of payments for elderly social care to people who would not receive this in England was £218 million in 2004-5. So together these payments to the more affluent total £480 million or some £94 per head for the Scottish population. Scotland's projected public expenditure per capita in 2006-7 was £8623. This compares with £8177 for the North East – the poorest English region, and an average of £7381 for the 'Middle Deprivation' cluster regions, the set of which Scotland is a member. So about 20% of Scotland's 'surplus' over the poorest English region and about 8% if its surplus over its own deprivation set can be assigned purely to the benefit of its more affluent citizens. When prescription charges are made free across Scotland, which is currently in process, this will add £57 million to the bill for benefits to the more affluent or another £11 per head of the Scottish population.

Free tuition, free social care and free prescriptions – all without a means test – are unequivocal benefits to Scotland's more affluent. It is not possible to easily identify the benefits of higher spending on generally universal services but is worth noting that Scotland spends 13% more on health and 8% more on education in general than the UK average. It is true that Scotland has [a high Standardised Mortality Ratios](#) but that means that many of its poorer population die young of



cheap heart attacks and lung cancer. Much of the extra health expenditure will be going on more affluent people who live into old [age](#). Since middle class children are more likely to remain in school [past](#) the minimum school leaving age higher educational expenditure might well be regarded as also benefit skewed towards the more affluent. Indeed Ianelli (2008) using data from the Scottish School leavers' survey and the England and Wales Youth Cohort study has recently demonstrated that Scotland has higher class related educational inequalities at upper secondary and tertiary level than in England and Wales and that whilst these inequalities are declining in the English / Welsh system, they are not declining in Scotland. She points to the 'remarkable educational success of the Scottish Middle Class' as significant here. There is a real need for a careful social audit of who benefits from Scotland's privileged position in relation to social expenditures in general.

The politics of Barnett at this point in time are simple. The SNP will demand its retention. Labour, which has a real political presence in Scotland, cannot afford to attack it. The Liberal Democrats have called for a review of it which reflects the poor position of the English South West and perhaps even some notion of equity in resource allocation. A Conservative government with nothing much to lose in Scotland could abolish it, but perhaps abolition would reinforce the political basis of Scottish independence. Would that lead to a re-run of Flodden over the allocation of the North Sea's bed? One can only hope – not, especially [for the](#) Scots given the result of that event last time around.

### **References**

Barnett Parliamentary Debate 21<sup>st</sup> November 2007

<http://www.theyworkforyou.com/whall/?id=2007-11-21b.145.1&m=1428>

Callender, C. (2005) Higher and further education student's income, expenditure and debt in Scotland 2004-5: A report to the Scottish Executive. London South Bank University. Policy Studies Institute

Davies, B. (1968) Social Needs and Resources in Local Services. London: Michael Joseph.

Tim Doran, Frances Drever, Margaret Whitehead, 'Is there a north-south divide in social class inequalities in health in Great Britain? Cross sectional study using data from the 2001 census'. *BMJ* 2004;328:1043-1045 (1 May), doi:10.1136/bmj.328.7447.1043.

Heald, D. and McLeod, A. (2002), 'Public Expenditure', in Constitutional Law, 2002, *The Laws of Scotland: Stair Memorial Encyclopedia*, Edinburgh, Butterworths, paras 530, 532-536.

Ianelli, C. (2008) 'Expansion and social selection in Education in England and Scotland' *Oxford Review of Education*, 34, 2 179 - 202

Webb, D. (2007) The Barnett Formula House of Commons Library Research Paper 07/91

<http://www.parliament.uk/commons/lib/research/rp2007/rp07-091.pdf>.

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