

# LOCAL EDUCATION SPENDING IN SCOTLAND AND ENGLAND: PROBLEMS OF COMPARISON IN THE LACE STUDY

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## SYNOPSIS

This paper discusses the findings of the LACE report on comparable education expenditure in Scotland, England and Wales, which was commissioned by the Secretary of State for Scotland. This shows that Scottish expenditure was 23% higher than in England but that a large part of this excess arose from the higher incidence of local authority-educated children in Scotland. The article goes on to argue that the LACE report is better at accounting than analysis and that it excluded a number of important variables that can further explain the higher levels of expenditure in Scotland.

The article concludes that variations can be further explained by consideration of differences in Government policy, such as provision of teachers in small rural schools and in deprived areas in Scotland.

## INTRODUCTION

Scotland has long enjoyed higher levels of per capita expenditure on education spending than England. Whilst the political rhetoric has defended this on grounds of greater social need, in practice successive governments have adopted an incremental approach to determine education funding in Scotland. Initially, resources were allocated via the Goschen formula from 1918 to 1958, which allocated resources according to population shares as they applied in 1918. This worked to Scotland's advantage as the population ratio clearly declined from the initial 11/80ths of the England and Wales grant.<sup>1</sup> From 1958, the approach was changed to one of political bargaining over historic totals which maintained the Scottish advantage.<sup>2</sup>

From 1978, in anticipation of devolution, the Scotland programme became treated as a block, with marginal changes again agreed on the basis of population shares, and known as the Barnett formula. Once again, the population ratio deteriorated, but the question of the Scottish proportion was revisited in 1993.<sup>3</sup> This remains the basis of the Scottish allocation, which the Secretary of State is then free to allocate according to his political priorities.

Ministerial concern over the levels of local government spending in Scotland relative to the rest of Great Britain has been voiced since 1990, when the then Scottish Secretary, Malcolm Rifkind, announced that Scottish community charge levels could be reduced to £9 if Scottish authorities reduced their spending levels to those pertaining in England and Wales. As the political conflict over both local government spending and devolution finance deepened, Rifkind's successors continued to raise questions about these differences, and a joint study between the Scottish Office and the Convention of Scottish Local Authorities (COSLA) was proposed. This did not materialise, and Scottish ministers continued to utilise arguments over the differential as justification for reducing expenditure provision in the Aggregate Exchequer Finance settlement. By 1992, progress in processing the matter in the Working Party on Local Government Finance was limited to COSLA producing a list of factors 'adversely affecting local government expenditure in Scotland in relation to those in England and Wales'. At the same time, the Scottish Secretary, Ian Lang, told the House of Commons, that he could

see no reason why central taxpayers should continue to support 'excessive' expenditure.

Thereafter, little progress was made in reaching agreement on the scope of such a study. When the new local authority system was implemented in an atmosphere of fiscal crisis and the Government forced to make an unprecedented last minute concession to ease the problems faced by the new authorities, ministers returned to the issue, and unilaterally announced the Government would fund a study into all aspects of 'spending, efficiency and differentials' between the three countries, and specifically forbade the researchers from contacting local authorities. The contract for this work was eventually awarded to Coopers and Lybrand and Peda, two experienced accounting and management consultancy firms, to undertake a comparative study of local authority current expenditure (the LACE study). The terms of reference for the study were as follows:

1. to compare the levels of current expenditure in recent years by Scottish local authorities with those in England and Wales, to identify how far higher spending in Scotland can be attributed to:
  - differences in the range of services provided;
  - differences in standard of service;
  - differences in costs, because of external factors such as distance, population change or larger numbers of clients, in providing the same level of service;
  - the differences in costs, because of internal factors such as variable practices or staffing in providing the same level of service;
  - more favourable terms and conditions of service, which have the force of statute, e.g. school teachers';
  - other factors; and
2. to identify implications from the findings for improving value-for-money in the provision of services by local authorities in Scotland.

The study focused on the most recent available information which was for financial years 1993–94 and 1994–95. It was a desk exercise, drawing on data in the public domain. The researchers' approach was therefore fourfold:

- identification and confirmation of actual expenditure levels;
- identification and interpretation of factors external to authorities which influence expenditure; and
- identification and interpretation of factors internal to authorities which influence service levels and expenditure.

The study was published in February 1997.<sup>4</sup>

The consultants' approach to the comparisons was twofold. Firstly, through accounting analysis, they identified a range of administrative and statutory differences which provide some explanation for the variations. Secondly, they tested a range of demographic and social variables through statistical analysis with spending patterns. The first approach was more successful.

The report records the net expenditure differences (i.e. publicly financed spending), and suggests that this is the 'headline figure' usually quoted in political debate. The Scottish excess over England for the years 1993–94 and 1994–95 was 38.2% and 37.5%; and for Wales 31%. This has since fallen to 30% and 22% in 1996–97, possibly due to the transfer of functions from Scottish local government to the Scottish Office budget at 1 April 1996.

The authors argue, however, that these figures do not provide a clear picture as they reflect different ways of accounting for expenditure, including capital charges, grants and income from charges. When these are excluded, and the sums

for Total Service Expenditure calculated, the Scottish excess falls to 16.5% and 18.2% over England, and 8.2% and 9.0% over Wales. However, the report also notes that English councils generated £30 per capita more through user fees than their Scottish counterparts, and the Welsh authorities some £61 more. These differences are attributed to differences of *policy*. This reduction of the excess is of considerable political significance, as it brings the Scottish excess relatively well below that for the Scottish programme as a whole (which is some 26% above England on a per capita basis).

We turn now to consider the findings regarding education, which accounts for around 40% of Scottish local government spending. The report records that in terms of comparable education expenditure, Scottish local authorities spent 23% more than their English counterparts, and 10% more than in Wales. (See Tables 1, 2 and 3.) For the purposes of argument, we shall concentrate on the English comparisons. The report also disaggregates the data by authorities and authority type. It then concludes that:

What is most striking about these results is that Scottish spending is above the English figure for every type of authority and for every geographical area except Inner London. If special characteristics of Scotland account for its higher spending levels these are not those associated with broad factors of the economy or geography. Education spending is higher in Scottish authorities in predominantly urban or rural areas of England; it is higher than in English regions which have lower income levels and higher unemployment levels than in Scotland (p. 26).

*Table 1: Education Expenditure by Country*

1993/4					
Scotland		England		Wales	
£'000	% of total service expenditure	£'000	% of total service expenditure	£'000	% of total service expenditure
2,369,497	39.74	20,385,347	42.05	1,322,061	42.29

  

1994/5					
Scotland		England		Wales	
£'000	% of total service expenditure	£'000	% of total service expenditure	£'000	% of total service expenditure
2,403,133	38.3	20,261,435	40.22	1,330,876	40.75

*Table 2: Education Expenditure per Capita*

1993/4			
	£ per head	Scottish excess £ per head	%
<b>Scotland</b>	462.78	—	—
<b>England</b>	420.05	42.73	10.2
<b>Wales</b>	458.32	4.46	1.0

Table 2: Education Expenditure per Capita (Continued)

1994/5			
	£ per head	Scottish excess £ per head	%
<b>Scotland</b>	468.19	—	—
<b>England</b>	415.99	52.20	12.5
<b>Wales</b>	456.83	11.36	2.5

Table 3: Comparable Education Expenditure per Capita

1993/4			
	£ per head	Scottish excess £ per head	%
<b>Scotland</b>	420.86	—	—
<b>England</b>	341.23	79.09	23.1
<b>Wales</b>	379.91	40.95	10.8

1994/5			
	£ per head	Scottish excess £ per head	%
<b>Scotland</b>	427.46	—	—
<b>England</b>	347.23	80.23	23.1
<b>Wales</b>	389.24	38.22	9.8

However, in an important finding, the Report shows that a large part of the excess in education is attributable to the 'higher proportion of the population' (or client group) educated in Scottish schools. This of itself reduces the education excess from 23% over England to 9%; and if applied to the total excess (which is not presented in the report) from 18.2% to 13%. That is because of the high number of pupils educated in government-maintained or private schools in England — which the report calculated as 18% in secondary education compared with nil in Scotland. Thus local authority expenditure in England is much less. The absence of any provision for sparsity costs is surprising, and merits greater consideration.

#### SPARSITY AND COSTS IN SCOTTISH EDUCATION

Sparsity is well-established in governmental funding as a factor which influences the cost of public services.<sup>5</sup> The consultants' conclusions, therefore (that there is little evidence of such effects is surprising) although they make the caveat that this may be revealed through a disaggregated approach *below* the level of the local authority. Sparsity weightings exist (in different operational measures) in both Scottish Grant Aided Expenditure assessments, and English and Welsh Standard Spending Assessments.

The theoretical case for sparsity effects is highly plausible. Rural areas with small, scattered communities face a combination of high unit costs of service delivery and high dependency on public services because of the limited availability of private sector alternatives. The consultants tested for a relationship between sparsity and spending through regression analysis. Despite the existence of greater recognition of sparsity in primary teaching staff costs in Scotland, the consultants found little difference in spending per capita. The report concludes:

While sparsity of population affects school costs by impacting on school size, the analysis shows that the link from size to unit cost is quite weak. Moreover, relatively densely populated Scottish regions such as Lothian have higher expenditure than many relatively rural English counties. (p. 39)

There are, however, problems with this analysis. If we deal firstly with primary schools, there are a number of difficulties regarding the unit of analysis. The consultants are constrained by the fact that in England data is only available for nursery/secondary schools *in combination*. In Scotland, the fundamental difference between the two tiers is that nursery provision is highly discretionary — and there is minimal provision in rural Scotland — whilst primary provision is heavily influenced by the SOEID staffing standards which provide for additional teachers in smaller schools, with differential weightings for schools with <20 and <150 pupils. As a COSLA report argued:

In England, circumstances are quite different. The Education (Teachers) Regulations 1989 stipulates that there shall be ‘a staff of teachers suitable and sufficient in numbers for the purposes of securing the provision of education appropriate to the ages, abilities, aptitudes and needs of the pupils’ but there would appear to be no statutory regulations defining absolute limits on the sizes of taught classes, or the maximum Pupil/Teacher ratio.<sup>6</sup>

This report concludes that the number of primary teachers in England would need to be increased by 11%, and the numbers of secondary teachers by 22%, to reach Scottish standards. The LACE study provides confirming empirical evidence, finding that 99% of the difference between Scottish and English teaching costs is attributable to higher staffing levels (p. 31). In this case, however, the combination of nursery and primary spending together *conceals* sparsity effects as there is considerable variation in the scale and equality of nursery provision, but consistent evidence of links between sparsity and spending in primary education. This is revealed in Table 4 below:

*Table 4: Sparsity and Costs in Nursery Education 1994/5*

	<b>Sparsity</b> (persons per hectare)	<b>Cost per pupil</b> £	<b>Cost per capita</b> £
Borders	0.2	2110	4.86
Central	1.0	2213	12.92
Dumfries	0.2	2186	6.88
Fife	2.7	1602	10.52
Grampian	0.6	2152	9.75
Highland	0.1	3021	4.63
Lothian	4.2	2266	15.37
Strathclyde	1.6	3205	14.29
Tayside	0.5	2130	12.68
Orkney	0.2	2409	8.04
Shetland	0.2	3546	18.92
Western Isles	0.1	0	0.00
Scotland	0.7	2571	12.64

This table shows the much higher levels of spending pertaining in the urban authorities, with the exception of oil-rich Orkney and Shetland. When we turn to primary education, however, the evidence of high rural costs is clear (Table 5).

Table 5: Sparsity and Costs in Primary Education

	Sparsity (persons per hectare)	Cost per pupil £	Cost per capita £
Borders	0.2	1954	159.74
Central	1.0	1733	146.69
Dumfries	0.2	1729	149.87
Fife	2.7	1764	155.28
Grampian	0.6	1787	152.30
Highland	0.1	2032	186.65
Lothian	4.2	1706	131.25
Strathclyde	1.6	1820	159.92
Tayside	0.5	1774	147.46
Orkney	0.2	2564	255.26
Shetland	0.2	2642	255.26
Western Isles	0.1	2896	256.28
Scotland	0.7	1812	155.00

It is also necessary to note that there is a greater level of nursery provision in England with around 6% more in nursery education than Scotland. In Wales, the difference is even more marked at 69%. Only Scotland has a level of provision *below* the UK average, providing the service to only 45% of 3 and 4 year old pupils, compared with 53% in England, and 73% in Wales.<sup>7</sup> This will further distort the pattern of expenditure in nursery/primary education, and it is not surprising that no supportive statistical evidence emerged in the analysis.

The analysis is also problematic when it attempts to examine the relationship between school size and expenditure. The measure of school size used is the *average* for the authority, and concludes that Scottish costs are higher than those in Wales or non-metropolitan England at the same size of school. It appears, however, that this judgement is made using average school size by average nursery/primary costs per authority. These averages will be distorted by the combination of nursery and primary costs. But of greater importance, given the practice in Scotland of appointing and funding additional teachers in smaller schools, is the *proportion* of pupils in small schools.<sup>8</sup> Similar arguments would pertain over attempts to compare Scottish spending with 'rural' authorities in England. This takes *no account* of authorities in Scotland whose rural areas are submerged in a larger urban authority, e.g. Moray and Aberdeenshire in Grampian, Argyll in Strathclyde, East Lothian in Lothian, Angus and Perth in Tayside. Using one of the measures of supersparsity used in government (districts with a population density of <0.5 person per hectare) no fewer than 23% of the Scottish population live in super-sparse (in remote) areas, compared with 0.2% in England and 13% in Wales.<sup>9</sup>

The LACE report analysis of the impact of sparsity on education costs is clearly unsatisfactory. A more direct approach would be to quantify the financial impact of SOEID policy on schools in Scotland and to quantify the costs of school transport separately. The COSLA study assessed the cost of meeting SOEID staffing standards as a whole as at £135 millions, or by my calculations £26 per capita. As the LACE study concluded that Scottish spending on education was only £29 per capita above England, that is a highly significant calculation, which suggests government policy could almost fully explain the variation. This approach should be pursued in the next stage of the study. It is clear that when

account is taken of the poor level of nursery provision and the higher staffing and transport costs of rural Scotland, then the impact of sparsity is more significant than the LACE study has recognised.

#### THE IMPACT OF SOCIAL NEED

A second area of weakness in the report is its treatment of the impact of differences in social need on local spending. The work is theoretically superficial and conceptually inadequate, as the authors fail to provide either a convincing model of cause and effect, or convincing measures for operationalising social need. Indeed, the references to and evidence of social need is cursory, reflecting the report's strength in accounting rather than analysis.

The superficiality of the underlying theory is reflected in the discussion of the issue. In the summary in paragraph 34, there is a reference to 'relative poverty', and to 'socioeconomic conditions', which could affect expenditure. On page 8, para. 30, the authors note that:

to take account of deprivation as a factor, we have assembled relevant information concerning unemployment rates, average earnings, and Gross Domestic Product (GDP) per capita. Deprivation impacts upon some services, such as Social Work and Education, more than others. This measure has been applied selectively, therefore, to specific services only. (p. 8)

The only subsequent reference to deprivation in the empirical analysis with reference to education, concludes:

The remaining expenditure difference does not appear, despite the existence of local level policies, to be related to levels of prosperity or relative deprivation. Statistical analysis has failed to reveal any relationship between education spending and unemployment or incomes at the regional or county levels. (p. 39)

Using the concept of deprivation as a factor in such analysis is problematic. In policy terms it was developed as a means of 'positive discrimination' and programmes were created to deal with it. Deprivation is seen as a multi-dimensional problem in which differing types of deprivation compound household disadvantage. The major weakness in this report is that the measures of 'deprivation' are not those which any specialist in the field could recognise. Unemployment and low income clearly are manifestations of deprivation, but the measures used for them are inadequate for explanation of variations in spending on programmes not designed wholly or even mainly for deprived groups. Average incomes, by definition, *exclude* a wide range of groups in social need who are dependent on benefits. Unemployment is far too broad a category to measure social need. What is required is a set of service-specific factors which are recognised as being relevant to the particular programmes. These may be multiply-deprived households, or more narrowly defined social groups. It is not surprising therefore, given the limitations to using regression analysis identified above, that no relationship was found between a set of inadequate variables and local expenditure. We require a more sensitive set of indicators, in a more disaggregated framework.

In the case of *education* the report uses only teaching costs and property costs as units of analysis. Whilst it notes the higher level of staffing standards in Scotland, it does not record the existence of a *teachers for deprivation* category in Scotland which provides £25 millions of expenditure for additional teachers in areas of deprivation, and a further £5 millions for ethnic minorities (a measure

often used in social deprivation indices). It does not record that £6 millions of spending on school needs is on school clothing distributed on the basis of families dependent on income support. This accounts for some £36 millions of expenditure reflecting Scottish Office policy, amounting to £7 per capita of education spending, for which we do not know if there is any English equivalent, and which could of itself reduce the unexplained excess of Scottish spending.

## CONCLUSIONS

The LACE Study makes a valuable contribution to the political debate over comparative costs in education, showing that the major part of the Scottish excess arises from a higher incidence of local authority educated school children, reducing the excess from £80 to £31.

Its weakness is its analysis of the impact of geography and social need on education costs. The Scottish excess can be further reduced if account is taken of the impact of government policy on provision of teachers in small rural schools and on providing teachers in deprived areas in Scotland.

In short, the relativity can be explained in terms of larger client numbers, higher sparsity and social need. The last official attempt to compare education spending by HM Treasury concluded that Scottish needs were 6% higher for revenue expenditure, again mainly because of higher client group numbers.<sup>10</sup> Since then, of course, the growth of self-governing schools in England has reduced the proportion of the school population attending the local authority sector, and affected the need differential. This study also found important sparsity effects, confirming the stability of factors influencing expenditure.

The LACE Study, when subject to reinterpretation and further analysis, provides strong support for Scottish spending levels relative to England. This could be important if Scottish devolution results in a review of the basis of Scottish funding, as some analyst have forecast finance will be a key source of conflict in relations between St Andrews and Whitehall.<sup>11</sup>

## REFERENCES

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6. COSLA (1997), *The Comparative Expenditure Needs of Local Government in Scotland, England and Wales*, p. 36, Edinburgh: COSLA.
7. See *Social Trends*, 1992.
8. This measure is used in the Scottish GAE assessments (see 5 above).
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