Executive Summary

Background and history

- 1. This research was commissioned by the then DTLR (now Office of the Deputy Prime Minister ODPM) with support from the Treasury and Department for Environment, Food, & Rural Affairs (DEFRA), in April 2002. The sponsors asked us to identify the form and level of public expenditure (domestic and European) flowing into individual English regions. They envisaged this as "in large part ... a feasibility study: to identify what expenditure data exist and what methodological techniques might be applied to enable regional estimates to be produced".
- 2. The first known data on this are from the Kilbrandon Commission on the Constitution, which reported in 1973. Several other attempts were made in the 1970s and early 1980s. The then-current discussions on devolution to Scotland and Wales led to research into the spending patterns both there and in the English regions. When Scottish and Welsh devolution temporarily dropped out of the policy agenda after 1979, so did funding to study spending in the English regions, leading to a gap in the time series. Data restart in 1990, but there is another break when the boundaries of the English standard regions were changed in 1994.
- 3. Studies of regionally relevant public expenditure based on the pre-1994 regions of Great Britain show a consistent rank-ordering of public expenditure per head. Scotland is first in all studies except one, and second in that one. Wales and the North are never lower than third. Next, in roughly equal average positions, are North West and South East (which then included London). Next on average is the South West. The two Midlands regions, East Anglia, and Yorkshire & Humberside vie for the last places, with West Midlands at the bottom.
- 4. Studies based on the post-1994 regions show a similar pattern, except that spending in the English regions other than London has a clearer negative correlation with their GDP per head than the earlier series. London remains a positive outlier.
- 5. The only known study of the regional incidence of Defence spending showed a quite different pattern. The South West had the highest Defence spending per head, followed by the South East, East Anglia, and the East Midlands. Yorkshire & Humberside and Wales had the lowest.
- 6. These studies introduced the now-standard distinction between expenditure 'in' and expenditure 'for' a region. Expenditure is 'in' a region if it physically takes place there. Expenditure is 'for' a region if, wherever it takes place, it is for the benefit specifically of that region. Expenditure

for public goods at the UK level or beyond, such as defence and scientific research, is therefore deemed not to be 'for' any individual region. Both of these concepts of regional public expenditure are important for policy. The Office of National Statistics (ONS) uses the 'in' concept in its publications; the Treasury (HMT) uses the 'for' concept.

Methods

- 7. This research is based on analysis of data that the Treasury collect annually from departments and publishes in *Public Expenditure: Statistical Analyses* (PESA). The Treasury data are the only series that reports expenditure by the financial year, which is more relevant for policy than the calendar year. We were given access to the Treasury's raw data as submitted by spending departments and agencies.
- 8. Therefore our primary focus is on expenditure 'for' the regions of England; but we asked our field researchers to look for differences between expenditure 'for' and 'in' the regions when they visited their host departments. We also examined Defence, the largest 'in but not for' programme.
- 9. Our analysis mostly proceeds from the 'top down' rather than from the 'bottom up'. The 'top down' approach begins with national expenditures and breaks them down into their regional components. The 'bottom up' approach, embodied in a recent DTLR research project, begins with individual recipients, and builds expenditure totals up to wards, local authorities, and (in principle) regions. A complete 'bottom up' analysis of public expenditure in England would cost millions of pounds and was far beyond us. However, 'bottom up' and 'top down' analysis are both possible for *Social security* (now *Social protection*), the largest of the eleven standard functions of government for which PESA gives an English regional breakdown. Some 'bottom up' analysis is also possible for the 25% of English public expenditure incurred by local authorities, much of which is expenditure of grant they received from central government departments.
- 10. We received the Treasury's raw data in July 2002, in the shape of approximately fifty spreadsheets. Each spreadsheet constituted the return for three financial years by one Department or directly-reporting agency. The most recent financial year on the spreadsheets was 2000-01, which was therefore the base year for this analysis.
- 11. The basic unit of analysis was the sub-programme (SPROG). The Treasury gave Departments and agencies a list of the England total expenditure for each of their SPROGs for each of the three financial years, and asked them to break these totals down (if possible for each SPROG) into nine columns, one for each English region.

Findings

- 12. Some Departmental returns used real administrative data. Where those were unavailable, Departments were invited to use 'indicator variables'. Many of them used relative populations, available from the Treasury on request. Some were explicit in their choice; in some cases we determined from the Excel formulas in the individual cells that Departments had used relative populations; in yet other cases, although neither an explicit statement nor a set of cell formulas existed, the resulting pattern was proportionate to regional populations. Where Departments used relative population, the effect is to report expenditure on an equal per capita (EPC) basis.
- 13. One Department (the Department of Trade and Industry, DTI), used regional GDP per head as an indicator variable where it lacked real administrative data. The effect of this is to report expenditure as if it was greatest per head in the richest regions of England, and smallest per head in the poorest regions of England.

- 14. In some cases, EPC is the correct way to apportion expenditure 'for' the English regions. For example, expenditure by the Home Office on *Immigration and asylum* no doubt falls differentially into regions with large ports and airports. But the policy is designed to be equally for the benefit of each citizen of England (indeed, of the UK), and therefore EPC seems appropriate in the absence of real data (although we were puzzled that real data were unavailable).
- 15. In other cases EPC was used inappropriately; for instance, in higher education, further education, and payments under the Common Agricultural Policy. The geographical distribution of recipients of such expenditures is known, and it is uneven. There are few farms in London. In all three of these cases, the responsible Departments have devised better apportionment methods, as our field researchers saw in their real-time observations between October 2002 and January 2003.
- 16. We think that regional GDP per head is not a good indicator variable for Trade and Industry expenditure. At least for demand-led and formula-led programmes, expenditure on this function of government should be more like an *inverse* function of regional GDP.
- 17. After the field research was complete, we cleaned the expenditure data and reconstructed the total using our best attempts to impute for missing numbers. At our most pessimistic estimate, just over half the expenditure returned on the regional spreadsheets (and about 2/3 of all expenditure) contained reliable regional breakdowns. However, this low estimate is heavily affected by the Department of Health, whose spreadsheet was uninformative. Our field research there leads us to believe that the Department has good internal data on the regional incidence of its expenditures, and that therefore its regional totals are correct even though it did not supply data by SPROG to the Treasury. If this is so, then the proportion of expenditure for which the reported regional data for 2000-01 rises to about 7/8, and our imputation exercise covered only about 1/8 of expenditure.
- 18. We estimate that the tables published in May 2002 for financial year 2000-01 understated public expenditure in London by £489 million, (£110 per head; 2.12%). They most overstated public expenditure in East of England (by £248 million, £30 per head, 0.72%) and South East (by £336 million, £26 per head, 0.65%).
- 19. These numbers are small in aggregate, but they conceal much bigger disparities in individual functions of government. We believe that in *Education* the published tables understated expenditure in London by £552 million, and overstated it in East of England by £329 million (discrepancies of around 10%); and that in *Law, order & protective services* the published tables understated expenditure in London by £443 million (about 12%) and overstated it in East of England by £110 million (about 7%). In the other direction, in *Agriculture, forestry, fisheries & food* the published tables **over**stated expenditure in London by £226 million and **under**stated it in East of England by £254 million (discrepancies of almost 50%). In *Trade, industry, energy, and employment,* substituting an inverse for a direct GDP indicator implies that the published tables overstated expenditure in the most prosperous regions (London and its surrounds) by between 10 and 20 per cent and understated it in the poorest regions (North East and North West) by similar proportions.
- 20. Our research coincided with the collection and analysis of data for the May 2003 republication of *PESA* (regional tables revised in June 2003). The Treasury invited Departments to resubmit data for earlier years including our sample year of 2000-01. Several did so. The presence of our research teams seems to have spurred Departments to submit fuller and more accurate data. Hence the tables for 2000-01 published in June 2003 differ considerably from the tables for the same year published in May 2002. The differences trend in the same direction as our own estimates. This is a good sign; each process acts as a validity check on the other.
- 21. The one function of government for which we could check the differences between 'top down' and 'bottom up' data compilation was *Social protection*. By both methods, all estimates (ours and those by the Department of Work & Pensions, DWP) are very close.

- 22. In *Defence* the distinctive regional pattern partly persists from the 1970s. Expenditure is disproportionately high in South West and South East (including London). However, it no longer seems to be disproportionately high in East of England, nor disproportionately low in North West.
- 23. We conducted separate field research on the flow of European public expenditure into the English regions. We were surprised at how little outturn data we were able to obtain in the three months that we spent asking for it. In particular, none of the relevant Directorates-General at the European Commission could supply us with UK outturn data. But the Commission wishes to ensure that Structural Fund expenditure in Member States is additional to Member States' own expenditure. If it does not know how much it spends, it cannot calculate 'additionality'.
- 24. If we compare the flow of European public expenditure into the English regions with UK public expenditure to the European Union, and assign the latter flow to the regions of the UK on an EPC basis, then the flow of European public expenditure into all nine English regions is negative. No region receives more per head from Structural (including agricultural) funds than it pays per head for membership of Union. The regions in which the flow is smallest (least negative) are East of England, the largest recipient (by far) of farm expenditure, followed by Yorkshire & Humberside and East Midlands, which also have substantial farm expenditure. The regions that benefit from the Regional Development and Social funds do less well, because they are much smaller than the agricultural funds.

Recommendations

- 25. Policymakers need good English regional expenditure data for many reasons: to know whether regional formulas have the expected effects or not; to know where the demand for demand-driven programmes lies; to check whether regional policy has been implemented appropriately; to assess progress towards PSA targets; and, not least, to honour the 'National Statistics' badge of quality. The Code of Practice for National Statistics lays onerous duties on departmental ministers and Heads of Profession for Statistics to secure the quality and integrity of statistics published as National Statistics. The PESA tables are labelled 'National Statistics', but responsibility for data quality lies awkwardly between the supplying departments and the Treasury.
- 26. The following recommendations flow from the research and are submitted, in the first instance, to the sponsors of this feasibility study. Clearly, however, they potentially involve a wide range of public bodies:

Recommendations to UK Government Departments

- All Departments that make returns in the PESA exercise should study good practice across government.
- ODPM, in conjunction with HM Treasury and ONS, should arrange seminars for senior departmental managers to explain why data on the flow of domestic and European public expenditure into the English regions are needed and how they should be collected.
- Each Department's Head of Profession for Statistics should draw up a protocol for the collection and return of territorial and regional expenditure data for the Department, and the Department should ensure that a senior manager is in charge of the process.
- Each Department should ensure that all regional boundaries used for reporting its own and its agencies' expenditure conform to the NUTS (Nomenclature of Units for Territorial Statistics) hierarchy.

- The Treasury should amalgamate the present TA (Territorial Analysis) and RA (Regional Analysis) exercises, and give Departments more time than at present to produce their returns.
- The Treasury and ONS should jointly produce a memorandum on the rules for coding expenditure as 'for' and 'in' and publish it for consultation with users of National Statistics on the technical issues involved in the definitions of expenditure 'in and for', 'in but not for' and 'neither in nor for' a particular region.
- the UK Government reviews the responsibility for the monitoring of the flow of European public expenditure into the English regions, with a view to locating the responsibility in just one Department.
- ONS and other contributing departments should be fully funded to produce regional statistics of a quality sufficient to enable the productivity performance of the underperforming regions of England to be measured and analysed accurately.

Recommendation to Parliamentary Committees

• The Clerks and Chairs of the Treasury and ODPM Committees should discuss responsibility for parliamentary monitoring of the collection and reporting of public expenditure statistics for the English regions, and agree the respective coverage of the two committees.

Recommendation to the European Commission

• the European Commission decides which of its DGs is responsible for monitoring the additionality of European funds spent by general governments in Member States; and to make that DG responsible for producing annual tables of expenditure outcomes for each programme in each Member State.