Appendix 1

Comparison of estimates of the City's "output"

Calculations of the City's "output" are complex. Part of the problem is definitional, with the most basic question being "what is the City?". In this appendix the most natural answer is "industrial", i.e. the City is to be understood as international financial services and the headquarters operations of UK financial services, where such services are located in London. However, the "geographical" definition (i.e., the Square Mile) is also valid.

Two main approaches are available. The first is income-based. The procedure is, first, to find information about the number of people working in the City and their incomes, and, secondly, to obtain as much information as possible about other factor incomes (i.e., profits and rents). The second is output-based. In this method an attempt is made to calculate the value added in each of the City's various industries. The value added in all the industries is then added up to arrive at the City's total output. (Conceptually, there is a third approach, the expenditure-based approach, where data are collected on expenditure on the City's services. However, in the case of the City this is not realistic, because of the unusual character of many of the income streams. For example, the notion of client "expenditure" on the difference between the purchase and sale price of securities is unmanageable. The proper treatment of interest in the national accounts is another area of controversy.)

In Lombard Street Research's opinion, the simplest and best approach is income-based. Reasonably good information is available about both the number of people working in the City and the incomes they receive. Further, this information goes back - on a fairly continuous basis - for a few decades. The key source on incomes is the New Earnings Survey, which has been published since 1968. The main difficulty is to get a handle of profits earned in the City.

In the City Research Project adopted both the income-based and the output-based methods, although its income-based work was more sketchy than its output-based work. Pages 2 - 3 to 2 - 5 of the Final Report set out its income-based analysis. For 1991 it proposes a figure of 148,000 working in wholesale and bank head office business, out of a London total in 301,000 working in banking, insurance and other financial institutions. "With an average national wage per capita of £17,900 in 1991 and a likely higher figure for London, this suggests a total London wage bill in excess of £5.4 billion for these financial services [i.e., the 301,000] and £2.6b. for London's extra financial employment." In other words, the City Research Project's income-based assessment of a large part of the City's output is a little above £2 1/2b. A reference to data on invisible exports follows, although the total value of such exports is very much higher than £2 1/2b.

Lombard Street Research has doubts about the City Research Project's comments in these pages. First, our estimates of City-type employment in 1991 are higher than 148,000, although of course there is scope for discussion about which occupations ought to be included. Secondly, very specific information about incomes in the City of

London is available from the New Earnings Survey, but the City Research Project has not mentioned it. The differential between City incomes and incomes in other financial services is wider than the City Research Project recognises, while it has also changed substantially over the years. Finally, some allowance is needed for rent and profit incomes.

As suggested in the main text, Lombard Street Research believes that City-type employment in 1995 was close to 250,000. The New Earnings Survey had a figure of almost £42,000 as the average annual income of non-manual, full-time males working in the Square Mile. It seems unlikely that the average income for all employees in the Square Mile was much less than £30,000 and it may have been £35,000. If it was £30,000, the total value of labour incomes in City-type employment was £7.5b.; if it was £35,000, total labour incomes become almost £9b. The higher figure is probably more appropriate, as some of the very high profit-related incomes in City trades may not be captured by the New Earnings Survey. (There are particular problems with partnership incomes, which remain of great importance in the legal and accountancy professions.)

Rental income is relatively easy. The office space absorbed by City-type employment was about 70m. sq. ft. in 1995. Assuming that the average rent paid was £30 per sq. ft., rental income was £2.1b. Profit income is far more elusive, because in principle it is necessary to split out City-located profit figures in company accounts. An important point is that much of the profits are earned in foreign-owned organizations. One approach would be to guesstimate the amount of capital devoted to City activities and to assume an average rate of return. This would be very ad hoc, particularly in view of the known cyclicality of returns in the industries involved. A very rough guesstimate is that the total amount of capital used to support activities in the City is somewhere between £75b. and £150b., with two-thirds of foreign origin. At an average rate of return of 10% the implied figure for profits earned in the City is between £7.5b. and £15b., but the amount attributable to UK-owned operations is between £2.5b. and £5.0b. The total "output" of the City in 1995 then becomes

	£b.
Wage and salary incomes	7.5 - 9
Rental income	2 - 2.25
Profit income, attributable to UK-owned operations	2.5 - 5
Total (attributable to UK GDP at factor cost)	12 - 16.25
Profit income, attributable to foreign-owned operations	5 - 10
Total (overall)	17.0 - 26.25

Numbers as high as these are easier to reconcile with other data than the City Research Project's much lower estimate. For example, our numbers do not look out-of-line with official statistics on the City's invisible exports.

GDP at factor cost in 1995 was £603.5b. If our numbers are broadly correct, the City employs about 1% of the working population, but contributes about 2 1/2% - 3% to GDP. Of this, at least 1 1/4% and perhaps more may be net exports.

The City Research Project's analysis of City output on the output-based approach is detailed and rigorous, but arguably it is less than definitive and in many respects it is rather opaque. It consists in obtaining turnover series for various City activities and then guesstimating the gross margin (or "spread") on the turnover total. A deduction is made for trading between financial institutions in the UK. The resulting figure for "net revenues" constitutes "the sum of the value added by financial services and intermediate inputs".(p. 2 - 9) Value added is split between financial services and intermediate inputs, according to an Input/Output Matrix from the 1990 Census of Production. Financial services are said to account for 46% of the combined value added.

Net revenues in 1991 for "selected" City activities are estimated at £11.1b. (This figure is presumably after deduction of the value added of intermediate inputs, although the text is far from clear.) Deductions then have to be made for, first, inter-dealer and inter-bank business, and, secondly, for inventory losses in trading. The implied figure for the City's output is evidently under £10b and perhaps not much more than £5b. In other words, the City contributes little more than 1% of the UK's GDP. The City Research Project's analysis is undoubtedly helpful and thought-provoking. However, Lombard Street Research's view is that the City's output is significantly higher than assessed by the City Research Project.