## **GLA**ECONOMICS

# Working Paper 6: Calculating London's Tax Export

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March 2004







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#### Greater London Authority March 2004

#### Published by Greater London Authority City Hall The Queen's Walk London SE1 2AA www.london.gov.uk enquiries 020 7983 4000 minicom 020 7983 4458

#### ISBN 1 85261 600 8

This publication is printed on recycled paper.

For more information about this publication, please contact: GLA Economics telephone 020 7983 4922 email glaeconomics@london.gov.uk

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### Background

Discussion of regional economic disparities in the UK has stimulated debate about the level of public expenditure in each region, compared to the amount of taxation they pay to the central government.

It is widely known that London pays more in taxation than it receives in public expenditure. For the last two years, the Corporation of London has produced estimates of public spending and taxation in London.<sup>1</sup> The difference between taxes and public expenditure in 2001/02 was between  $\pounds$ 7 billion and  $\pounds$ 17 billion.

GLA Economics has also calculated estimates of public expenditure and taxation in London – known as London's tax export – for *The Case for London*, the Mayor's Submission to Spending Review 2004.<sup>2</sup> This working paper explains the methodology used to calculate London's tax export in 2000/01 and 2001/02.

#### 1. Public expenditure on services in London

When measuring the difference between tax receipts and public spending in London there are two main issues to consider. First, there is a part of public expenditure that is not identifiable or allocated to regions. There is no simple way to allocate this non-identifiable expenditure, but plausible assumptions can be made about its regional distribution. Second, there is no official data at the regional level for many taxes. However, it is possible to estimate tax revenues in London, using UK tax receipts and various mechanisms to allocate them to London.

Public expenditure on services is divided into identifiable and non-identifiable expenditure.<sup>3</sup> Identifiable expenditure is the spending which is recognised as incurred on behalf of a particular population and allocated to regions/countries in the UK. The non-identifiable expenditure is that part which is incurred on behalf of the United Kingdom as a whole such as defence or overseas aid.

Public spending within a given region might not benefit just citizens of that region. For example, spending on hospitals in London may benefit people from other regions using the hospitals.

Total public expenditure in London is calculated by adding together two components:

- (1) Identifiable expenditure on services in London
- (2) The estimated proportion of remaining UK public expenditure which has not been classified to any region.

Public Expenditure Statistical Analysis (PESA), produced by HM Treasury, provides data on identifiable public expenditure (1) by region and for the UK. PESA also provides total UK public expenditure, or total managed expenditure.<sup>4</sup>

Remaining public expenditure in London (2) needs to be estimated. First, the amount of public spending not classified to regions is calculated, and second, the various mechanisms are used to allocate part of this to London. The difference between total managed expenditure and identifiable expenditure on services in the UK is the total amount of public spending which has not already been classified to UK regions.

Table 1 shows how public expenditure not classified to any region is calculated for 2000/01 and 2001/02.

#### Table 1. UK public sector expenditure (£ billion)

	2000/01	2001/02
Total UK managed expenditure (a)	366.8	389.6
Total identifiable expenditure in the UK (b)	278.1	306.4
(a) minus (b) is public expenditure not classified to any region	88.7	83.2

Source: PESA, 2003, HM Treasury.

#### The GLA Economics approach to estimating tax receipts in London

In order to classify the appropriate part of public expenditure to London for these two years, four different mechanisms were considered:

- a. Share of spending on identifiable services in London
- b. Share of population in London
- c. Share of household consumption in London
- d. Share of household income in London.

#### Table 2. London's shares of total UK tax receipts using mechanisms (a) to (d)

	(a)	(b)	(c)	(d)
	(%)	(%)	(%)	(%)
1999			15.2	15.4
2000	13.3		N.A.	N.A.
2001	13.8	12.2 *	N.A.	N.A.

Source: Budget 2002 and 2003, Public Finances, HM Treasury; Public Expenditure Statistical Agency (PESA), HM Treasury; and GVA regional figures, Office of National Statistics, September 2003.

\* Uses revised mid-year population estimates based on the 2001 Census.

Public expenditure in London for 2000/01 and 2001/02 is shown in Table 3.

# Table 3. Public expenditure in London – GLA Economics 2000/01 and 2001/02 (£ billion)

2000/01	(a)	(b)	(c)	(d)
Identifiable expenditure on services in London	37.1	37.1	37.1	37.1
Plus estimated proportion of other spending classified to London	11.8	10.8	13.5	13.7
Total public expenditure in London	48.9	47.9	50.6	50.8
2001/02	(a)	(b)	(c)	(d)
Identifiable expenditure on services in London	42.2	42.2	42.2	42.2
plus estimated proportion of other spending classified to London	11.5	10.2	12.6	12.8
Total public expenditure in London	53.7	52.4	54.8	55.0

Source: GLA Economics

GLA Economics estimates for total public expenditure in London (Table 3) are very similar to those produced by the Corporation of London (Table 4).

# Table 4. Public expenditure in London – Corporation of London 2000/01 to 2001/02 (£ billion)

	2000/01	Range	2001/02	Range
ldentifiable expenditure	37.4	_	42.2	_
Plus debt interest, pensions, etc	6.0		5.1	
Plus defence, overseas, etc.	5.3	2.65 to 7.95	6.5	3.25 to 9.75
Total public expenditure	48.7	46.1 to 51.4	53.8	50.55 to 57.05
GLA Economics estimates	48.9	47.9 to 50.8	53.7	52.4 to 55.0

Source: London's Place in the UK Economy, Corporation of London, 2002 and 2003

### 2. Tax receipts in London

The Treasury provides information on overall tax receipts and its various components for the UK as whole. However, at regional level, data is only available for income tax, vehicle taxes, council taxes and social contributions for 1999 from a special study by the ONS.<sup>5</sup>

ONS estimates of social contributions in London include employees' and employers' national insurance and contributions to other pension schemes. Some of these pension schemes are private, and are do not accrue to the public purse. No further breakdown of these social contributions was available at the regional level, so they cannot be used to estimate revenue receipts in London.

The Corporation of London uses a detailed methodology to classify UK tax receipts to London.

The allocation of corporation taxes to London needs to consider where profits have been generated. The most obvious approach is to allocate them using output or gross value added (GVA) on a residence or workplace basis. For value added tax and customs and excise duties, the most appropriate method is to allocate them in line with household consumption.

#### The GLA Economics approach to estimating tax receipts in London

Table 5 displays the mechanisms used to allocate the different UK tax receipts to London:

Tax receipts	Mechanism used
1. Income tax (gross of tax credits)	Compensation of employees at residence level and workplace level <sup>6</sup>
2. Council tax	London figures available
3. Vehicle excise duties	Compensation of employees at residence level and workplace level
4. National insurance contributions (employees and employers)	Part using employment and part using compensation of employees (on alternatively a residence and workplace basis)
5. Value added tax	Household consumption
6. Corporation tax	GVA residence and workplace bases
7. Stamp duty	Population
8. Tax credits (includes personal and corporate)	GVA residence and workplace bases
9. Fuel duties	Household consumption
10. Tobacco duties	Household consumption
11. Spirits duties	Household consumption
12. Wine duties	Household consumption
13. Beer and cider duties	Household consumption
14. Betting and gaming duties	Household consumption
15. Air passenger duty	Household consumption
16. Insurance premium tax	Compensation of employees at residence level and workplace level
17. Landfill tax	GVA residence and workplace bases
18. Climate change levy	GVA residence and workplace bases
19. Aggregates levy	GVA residence and workplace bases
20. Customs duties and levies	Household consumption
21. Petroleum revenue tax	GVA residence and workplace bases
22. Oil royalties	GVA residence and workplace bases
23. Capital gains tax	GVA residence and workplace bases
24. Inheritance tax	Population
25. Business rates	London figures available
26. Other taxes and royalties	GVA residence and workplace bases
27. Interest and dividends	GVA residence and workplace bases
28. Other receipts	GVA residence and workplace bases

Source: Budget 2003, Public Finance, HM Treasury.

For income tax, the total UK income tax paid by employees in 2000/01 and 2001/02 (set out in Budget 2002<sup>7</sup> and 2003<sup>8</sup>) is multiplied by the London's share of the compensation of employees (ie wages and salaries) for 2000 and 2001 respectively. However, compensation of employees in London is only available on a residence basis. This is estimated by multiplying the compensation of employees on a residence basis by the ratio of GVA on a workplace basis to GVA on a residence basis.

UK employers' national insurance contributions are allocated using compensation of employees, and UK employees' national insurance contributions using workplace based employment.<sup>9</sup>

Business (non-domestic) rates and council tax in London for 2000 are taken from Local Government Financial Statistics 2000.<sup>10</sup> The same figures are assumed for 2001.

GLA Economics estimates of the value of tax receipts in London are displayed in Table 6.

	2000/01		2001/02	
	Residence basis	Workplace	Residence basis	Workplace
Income tax plus tax credits	17.5	20.2	18.2	21.0
Council tax	2.0	2.0	2.0	2.0
Vehicle tax	0.7	0.8	0.7	0.8
Social contributions	9.4	10.2	9.9	10.8
Valued added tax	8.9	8.9	9.3	9.3
Corporation tax	5.1	6.0	5.2	6.0
Stamp duty	1.0	1.0	0.9	0.9
Total customs and excise duties excluding value added tax	6.6	6.6	6.7	6.8
Petroleum tax and oil royalties	0.3	0.4	0.3	0.3
Capital gains tax and inheritance tax	0.8	0.9	0.8	0.9
Business rates	3.2	3.2	3.2	3.2
Other taxes and royalties	1.4	1.7	1.6	1.8
Interest and dividends	0.9	1.1	0.7	0.8
Other receipts	3.1	3.6	2.9	3.3
Total public sector taxes receipts	61.0	66.5	62.2	67.8

# Table 6. Tax receipts in London – GLA Economics 2000/01 and 2001/02 (£ billion)

Source: Budget 2002 and 2003, HM Treasury; Economic Trends, of Office of National Statistics May 2002 in table 5E and Office of National Statistics the Blue Book.

The GLA Economics estimates are very similar to those from the Corporation of London inTable 7.

# Table 7. Tax receipts in London –Corporation of London 2000/01 and 2001/02 (£ billion)

	2000/01	2001/02
Residence based	61.8	64.3
Workplace based	66.6	68.0

Source: London's Place in the UK Economy, Corporation of London 2002 and 2003

# 3. London's tax export – the difference between taxation and public expenditure

The estimated difference between taxation and public expenditure in London for 2000/01 and 2001/02 are shown in Tables 8 and 9, using two mechanisms for allocating public expenditure:

- London's share of identifiable expenditure on services
- London's share of the UK population.

# Table 8. The difference between taxes and public expenditure in London2000/01 (£ billion)

	(A) Using identifiable		(B) Using share of London population		
	Residence level	Workplace	Residence level	Workplace	
Tax receipts	61.0	66.5	61.0	66.5	
Public expenditure	48.9	48.9	47.9	47.9	
Difference between tax receipts and public expenditure	12.1	17.6	13.1	18.6	
Difference between tax receipts and public expenditure as percentage of London's output (%)	9.1	11.4	9.8	12.0	

Source: GLA Economics

# Table 9. The difference between taxes and public expenditure in London 2001/02 ( $\pounds$ billion)

	Using share of identifiable expenditure		Using share of London population	
	Residence level	Workplace	Residence level	Workplace
Tax receipts	62.2	67.8	62.2	67.8
Public expenditure	53.7	53.7	52.4	52.4
Difference between tax receipts and public expenditure	8.5	14.2	9.8	15.5
Difference between tax receipts and public expenditure as percentage of London's output (%)	6.1	8.7	7.0	9.5

Source: GLA Economics

These calculations suggest that London's net contribution to the UK public purse was between £9 and £15 billion in 2001/02. This is equivalent to between 6 per cent and 9.5 per cent of London's annual output.

Part of the explanation for the higher end of the range relates to counting the tax revenues generated by commuters who work in London but reside outside. In principle, these revenues should be divided between London and the commuters' places of residence according to how much public services they consumer in each location. However, this is impossible to do in practice. Consequently, the residence and workplace estimates provide lower and upper bounds for the true estimate of tax receipts accruing to London.

### 4. Conclusions

In 2001/02, London's net contribution to the UK public purse was between £9 and £15 billion. This is equivalent to between 6 per cent and 9.5 per cent of London's output in the same year. These estimates are in line with those previously produced by the Corporation of London.

The fact that London makes a net contribution to the UK public purse is not surprising. London is, *on average*, a relatively welloff region (despite its great disparities in income), and redistribution from London to the rest of the UK is to be expected.

At the same time, investing in London provides immediate and visible returns and further investment in London's physical and social infrastructure would strengthen this contribution to the rest of the UK.

#### References

<sup>2</sup> The Case for London: The Mayor's Submission to Spending Review 2004, Greater London Authority, March 2004

<sup>3</sup> Public Expenditure Statistical Analyses, Chapter 8: Analysis of public expenditure by country and region, HM Treasury, June 2003

<sup>4</sup> Public Expenditure Statistical Analyses, Chapter 8: Analysis of public expenditure by country and region, HM Treasury, June 2003

<sup>5</sup> 'Regional, sub-regional and local area household income', A Linacre, Economic Trends, ONS, May 2002

<sup>6</sup> Residence-based employment measures the number of working people who live in a specific area. Workforce employment measures the number of people who work in a specific geographic area, regardless of where they live.

<sup>7</sup> Budget 2002, Public Finances, HM Treasury, 2002

<sup>8</sup> Budget 2003, Public Finances, HM Treasury, 2003

<sup>9</sup> Blue Book, Household and NPISH sectors, Social Benefits and Contributions, Office of National Statistics

<sup>10</sup> Local Government Financial Statistics, Office of the Deputy Prime Minister, 2000

<sup>&</sup>lt;sup>1</sup> London's Place in the UK Economy, written by the London School of Economics and Political Science for the Corporation of London, September 2002 and September 2003

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## Greek

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## Turkish

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## Punjabi

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### Hindi

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### Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন্ নম্বরে বা ঠিকানায় অনগ্রহ করে যোগাযোগ করুন।

## Urdu

اگر آپ اِس دستاویز کی نقل اپنی زبان میں چامتے ہیں، تو براہِ کرم نیچے دیئے گئے نمبر پر فون کریں یا دیئے گئے پتم پر رابطہ قائم کریں.

## Arabic

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## Gujarati

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