

L.E.K.

*Department for*  
**Transport**

Review of Bus Profitability in England  
Final Report - Updated  
27 July 2010

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To: Department for Transport, Great Minster House, 76 Marsham Street, London SW1P 4DR (the "Customer")

Project: Review of Bus Profitability in England - L.E.K. Final Report- Updated Dated 27 July 2010 (the "Final Report")

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## Agenda

- Scope of project
- Executive summary
- Summary of project findings
- Appendix

## Scope of project

- Following the Office of Fair Trading (“OFT”) study into the effect of competition in local bus services and subsequent referral to the Competition Commission (“CC”), the Department for Transport (“DfT”) commissioned a study to understand profitability in the bus sector and the key drivers of and influences on profitability
- The key objective of the study was to gain a better understanding of bus profitability across England based on publically available information only. To do this, the research and analysis focused on three key areas:
  - analysis of bus operator returns
  - commentary and analysis on how reasonable these returns are
  - commentary on potential barriers or features of the market which affect the sustainability of these returns
- Feedback on the previous version of this report was received from some of the major operators. The questions and issues received have been appropriately reflected in this updated report whilst maintaining the original objectives of the study, i.e., to assess bus profitability based on publically available data only
- The analysis was to include as much variation in returns as possible by operator based on the available data. The work was also to compare the returns of the deregulated bus market outside of Greater London to the franchised bus market in Greater London. Consultation with bus operators was not included by the DfT in the scope of this project
- The local authority-based area classifications used in this work are consistent with those used by the DfT in local transport analysis
- In addition to this project, the DfT separately commissioned ITS to review the development of bus costs over time and how costs vary by area

## The following sources of information have been used

### Company data

- Financials and operating data on 102 individual bus operating companies from 2003–2009 in subsidiary accounts
  - 86 subsidiary companies by the operating divisions of the ‘big-5’ (First Group, Arriva, Stagecoach, Go Ahead and National Express)
  - 16 other companies
- Group annual accounts and analysts presentations

### Other reports and sources

- The Bus Industry Monitor
- Broker reports for all operators

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## Executive summary (1 of 4)

- The Department for Transport (“DfT”) commissioned L.E.K. Consulting to undertake a study to gain a better understanding of bus profitability across England. The primary focus of this report was on industry returns and the variation of these by area. The analysis used publically available information only
- This work is an historical analysis. An analysis of current returns, the sustainability of historical returns given current market dynamics and any potential changes to the level of bus industry profitability was out of the scope of this project. We have also not analysed the impact that any remedies the Competition Commission may impose would have on the bus industry and have recommended to the DfT that such analysis is carried out in due course
- In 2008 total bus industry revenues in England were c.£4bn
  - the big-5 operators (First, Go Ahead, Arriva, Stagecoach and National Express) generated revenues from their bus operations in England of £2.9bn in 2008, 72% of the market by revenue
- L.E.K. has used the cost of capital (WACC) as a benchmark reference for the returns in the bus industry
  - financial theory indicates that operators should earn this level of return, on average, in a fully competitive market
  - the assumptions used in recent regulatory reviews for the risk free rate and market risk premium, previous L.E.K. analysis of group and divisional asset betas, and current cost of debt for the bus operators, gives a benchmark cost of capital range of 8-11% (nominal, pre-tax) for the bus industry in this report
  - feedback from some of the big-5 bus operators indicates that they believe their cost of capital is at the upper end of this range
- L.E.K. has assessed the profitability and value creation of bus operations in England using four measures
  - return on sales (ROS), return on capital employed (ROCE), cash IRR and the multiple of the market to book valuations of the big-5 bus operators (overall group and estimated broker valuations for the bus divisions)



## Executive summary (2 of 4)

- L.E.K. has used the UK bus profits reported in the Group accounts as the baseline for the analysis. The bottom-up analysis of subsidiary accounts does not fully reconcile to the profits reported in the Group accounts and a number of adjustments to the bottom-up subsidiary accounts analysis have been made to address this difference, namely:
  - reallocating a proportion of group overhead costs to UK bus
  - adjusting the bottom-up analysis for items held at the Group level and not included in the subsidiary accounts (e.g., management intercompany charges, inter company leasing of vehicles, maintenance and repair services)
  - making an adjustment for differences in accounting standards between the Group and the subsidiaries
- In addition, all operating leases have been capitalised as if they were owned assets (“brought back on balance sheet”), to remove the impact of different mix of operating leases and owned assets across the companies analysed
- Finally, the pension P&L charges of the big-5 bus operators were reviewed. These are all accounted for in 2007 and 2008 using the generally accepted FRS17 and this would appear reasonable in terms of the analysis we are conducting
- The return on sales for bus operators in England averaged 10.6% in 2007 and 2008
  - the average return on sales in 2007 and 2008 was lower in Greater London (at 9.4%) than outside of London (at 11.2%)
  - outside of London, the average return on sales varied from 8.1%-13.0%, with PTE areas generating the highest return and Large & Medium Urban LAs the lowest return
  - the big-5 operators in England incl. London delivered an average return on sales margin of 11.2%, compared to 5.8% for other operators. In England excl. London this was 11.4% and 9.0% respectively
  - within the big-5 operators in England excl. London, the average return on sales margins varied from 8.1%-13.1%
  - the stated UK bus return on sales margins for the big-5 integrated transport operators were typically higher than the return on sales earned from the other sectors in which they are active

## Executive summary (3 of 4)

- Based on publically available information, the return on capital employed for bus operators in England averaged 16.3% in 2007 and 2008
  - this analysis is based on property values as stated in published accounts, which may not reflect current market values since property has generally not been recently re-valued. L.E.K. considers that the basis for this analysis, i.e., that of using book values/actual capital invested, is the way in which bus operators report their results, and it is internally consistent with the P&L statement. However, we are aware of the issue of property valuation, and, as such, have included an indicative analysis to explore the potential impact of property revaluation, the results of which are discussed below
- The average return on capital employed was marginally lower in Greater London (at 15.9%) than outside of London (at 16.5%)
- Outside of London, the average return on capital employed varied between 11.5%-19.8% in 2007 and 2008, with PTE areas generating the highest return and Large & Medium Urban LAs the lowest return. In all areas outside of London, the ROCE was higher than the cost of capital
  - the big-5 delivered an average return on capital employed of 16.8%, compared to 13.6% for other operators. These returns are above the estimated range of bus operator cost of capital
  - within the big-5, the average return on capital employed varied from 9.5%-26.2%. Four of the big-5 operators had return on capital employed above the estimated range of bus operator cost of capital
- The internal rate of return (IRR) of the cash flows generated by an incremental new bus over its economic life is above the cost of capital in all areas, with a range of 15% to 21% depending on area and cascading assumptions. However, the short term return on capital for new buses in England excl. London appears typically to be around the cost of capital range (although our earlier analysis shows that an incremental bus earns average returns above the cost of capital over its life in all areas which is consistent with the IRR analysis)
- Overall, the bus industry in England appears to be earning average returns above the cost of capital based on the publicly information available (i.e., the returns are higher than financial theory would suggest should be earned in a fully competitive market in the time period analysed). This is evidenced by:
  - the pre-tax return on capital employed is above the cost of capital for all of the big-5 operators in England incl. London, four of the big-5 operators in England excl. London and in all geographic areas in aggregate (although certain operators have operations in some areas which earn below the cost of capital). The results of an indicative sensitivity analysis show that if property is re-valued from book to market value for the three big-5 bus operators which have not recently re-valued their property, their average ROCE in 2007 and 2008 would still be above the cost of capital range of 8-11%
  - the internal rate of return on the cash flows generated by an incremental new bus over its economic life is above the cost of capital in all areas

## Executive summary (4 of 4)

- The market is valuing the bus operations of the big-5 above the book value of their assets. This supports the finding that the big-5's bus operations are generating returns greater than the cost of capital
- There are a number of barriers that prevent new operators from entering into the market and potentially support returns in excess of the cost of capital, including:
  - lack of available depot infrastructure for large scale entry
  - ability of a new entrant to scale up routes sufficiently to support the economics of a new depot
  - large operators have the scale and finances to respond to a new entrant attempting to take share from them
  - large operators have purchasing power to acquire buses at a discount with more features
  - large operators have access to Smartcard technology, can implement or resist integrated ticketing given their existing networks, and can install more efficient back office and IT systems
  - large operators can transfer best developed practice from other areas in the group to the bus division
- Some, but not all, of the barriers to entry are also present in London (e.g., availability of depot infrastructure and the requirement to build scale in a depot) which may partially explain why returns in London are also above the cost of capital
- There are significant differences in the levels of profitability generated across all the subsidiaries analysed within a geographic area. In addition, within each of these subsidiaries there will be significant variations in the levels of profitability by route
  - given this, it is difficult to generalise on the impact at a local level of any changes in policy
  - it will therefore be important that a full evaluation of the impact of any changes proposed by the Competition Commission is undertaken to fully understand the potential bus operators' reactions and to avoid any unintended consequences

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## Project output

### 1. Profitability and value creation

- Framework and approach
- Return on sales assessment
- Return on capital employed assessment versus cost of capital
- Cash IRR assessment versus cost of capital
- Market to book multiples for UK bus

### 2. Assessment

- To what extent can the return on capital employed and cash IRRs be considered “reasonable”?
- What are the potential barriers which may be affecting new entrants from entering the market and competing for any profits in excess of the cost of capital?

## L.E.K. has examined four measures of profitability and value creation

### Definition

A  
Return on sales  
(ROS)

- Earnings before interest and tax (EBIT) / revenue

B  
Return on capital employed  
(ROCE)

- Earnings before interest and tax (EBIT) / capital employed
- Capital employed = tangible fixed assets + non current operating debtors - non current operating creditors + working capital (stocks / inventory + operating cash + trading debtors – trading creditors)

C  
Internal rate of return  
(IRR)

- The rate at which the investment and associated cashflow has a zero net present value

D  
Market to book valuation  
multiple

- Market valuations of UK Bus operations of the big-5 versus the book value of assets

Comparison to the  
pre-tax nominal  
cost of capital

**A range of 8-11% nominal pre-tax WACC has been calculated for bus operators. This is a level of returns financial theory indicates operators should earn on average in a fully competitive market**

Based on recent UK regulatory reviews	CAA	OFGEM	OFWAT	Implied range	L.E.K Estimate used to Calculate the WACC for Bus Operators
Real Risk Free Rate	2.0	2.1 – 2.4	1.8	1.8 – 2.4	2.0 Inflation: 2.0
Market Risk Premium	3.0 – 5.0	4.0 – 6.0	5.0 – 6.0	3.0 – 6.0	4.0 – 6.0
Cost of Debt					3.5 - 6.0
Debt to equity ratio					70
Asset beta of bus operations*					0.7
Real Cost of capital 2009 (pre tax)					6.5 – 9.3
<b>Nominal Cost of Capital 2009 (pre tax)</b>					<b>8.2 – 10.9</b>

Benchmark level of returns that financial theory indicates bus operators should earn on average in a fully competitive market. Individual companies will aim to exceed this to generate an increase in shareholder value



Feedback received from major operators indicates that they believe their respective WACC values to be at the top end of this range

\* : Based on previous L.E.K. analysis of operator group equity betas, and estimates of divisional asset betas

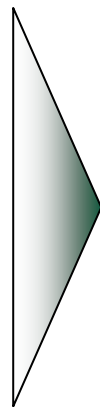
Source: Regulators Price Determination, L.E.K. Analysis

DfT. Review of Bus Profitability in England – Final Report

## L.E.K. has undertaken the profitability analysis in three stages, refining the profitability assessment at each stage (1 of 2)

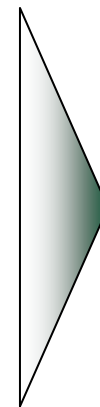
### Step 1: As reported

- Profitability assessment as reported in company accounts



### Step 2: Bringing operating leases back on balance sheet

- Profitability assessment after bringing operating leases (i.e., PSVs, land and building leased assets) back onto the balance sheet



### Step 3: Post group adjustments

- Profitability assessment post reallocation of central group bus profits and group revenue
- Additional adjustments to reconcile assets at the group level and to account for third party leases held by the group



## L.E.K. has undertaken the profitability analysis in three stages, refining the profitability assessment at each stage (2 of 2)

### Step 1: As reported

- Profitability assessment as reported in company accounts

- Operating profits sourced directly from Companies House accounts (EBIT) before exceptionals
  - exceptional items located in the notes have also been excluded
- Restated accounts where available have been consistently used, in particular:
  - the requirements of FRS 17 (pensions accounting standards) became mandatory for accounting periods on or after 1 January 2005. Many subsidiaries restated their 2005 accounts to reflect the change in pensions
  - any other restatements have also been captured

### Step 2: Bringing operating leases back on balance sheet

- Profitability assessment after bringing operating leases (i.e., PSVs, land and building leased assets) back onto the balance sheet

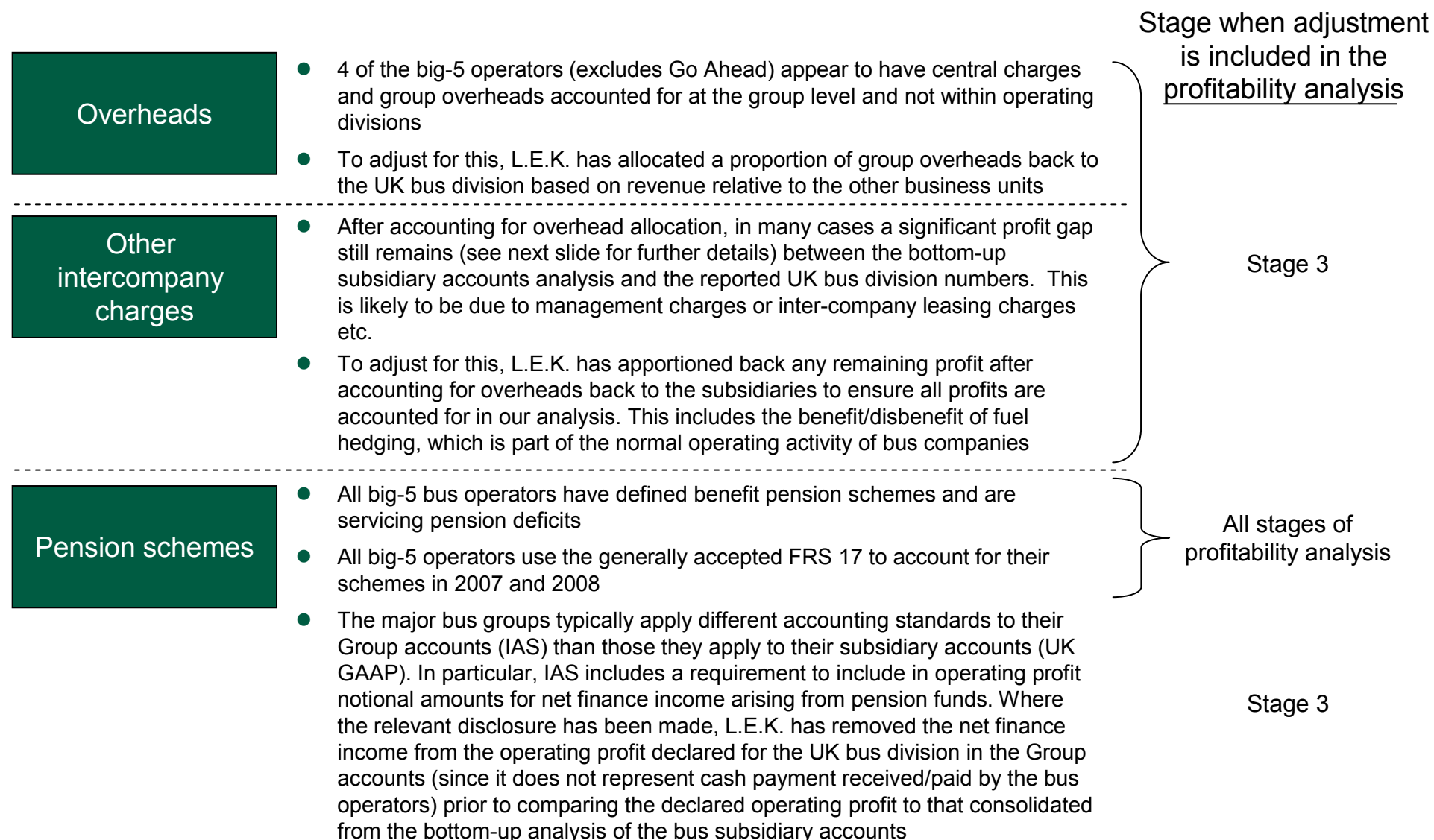
- The process of adding back the operating leases and capitalising the lease liability normalises the accounts for variations in owned assets versus leased assets
  - undertaken for both land and buildings and vehicles

### Step 3: Post group adjustments

- Profitability assessment post reallocation of central group bus profits and group revenue
- Additional adjustments to reconcile assets at the group level and to account for third party leases held by the group

- Reconciliation between the group segmental P&L statement and the sum of the subsidiary accounts indicates that there is profit realised at the group for the UK bus operations of the big-5. This is likely to arise from a number of areas such as fuel charges, pension costs, management charges, charges for intercompany lease and maintenance services and differences in accounting policy between Group and subsidiary accounts. L.E.K. has included all relevant bus subsidiaries to assess the profit gap
- L.E.K. has reapportioned any revenue and profitability gap between the group and the sum of the subsidiary accounts to the bus operating subsidiaries based on revenue (for the purposes of the segmental analysis)
- In addition, L.E.K. has adjusted for differences in total assets reported by the group and the sum of the subsidiaries and any operating leases held with third parties have been capitalised

## Treatment of potential financial issues in the statutory accounts in this project



## Accounting for central overheads and differences in accounting standards reduces the profitability gap between the bottom-up UK subsidiary accounts analysis and the reported UK bus divisional results in the Group Accounts

UK 2008 figures £m	First Group	Arriva	Go Ahead	Stage-coach	National Express	
Consolidated group EBIT for UK bus division	122	88	64	104	42	From Group Accounts
Group overhead / central charges reallocated to UK Bus division	(5)	(7)	Included	(5)	(2)	
Differences in accounting standards in relation to pensions in UK Group accounts versus subsidiaries*	Not disclosed	Not disclosed	(6)	Not disclosed	(4)	
Restated consolidated group EBIT for UK bus division	117	81	58	99	36	From bottom-up UK subsidiary analysis
Sum of the bus operating companies subsidiary accounts	66	51	50	46	37	
Sum of other bus related operations subsidiary accounts	2	6	4	1	1	
Restated total bus subsidiary profit based on bottom-up subsidiary analysis	68	57	54	47	39	
Profitability difference added back to subsidiaries	49	24	4	52	(2)	
Percent of UK Bus division revenues in England bus subsidiaries	78%	94%	74%	100%	95%	
Profitability difference added back to English subsidiaries	38	23	3	52	(2)	

L.E.K. has reapportioned this profitability gap (between the restated consolidated group EBIT for each UK bus division and restated total bus subsidiary profit from the company accounts) based on revenue generated by each of the subsidiary businesses. This has been done to ensure that the results from the bottom-up subsidiary analysis reconcile to the UK bus reported Group results. The adjusted results for individual companies including this re-apportionment have been used in our reporting of regional results in Stage 3

Note: Totals do not add due to rounding; \*Group accounts use IAS which requires inclusion of net finance income from pension funds, whereas subsidiary accounts use UK GAAP which does not include this income in operating profit. Making this adjustment has reduced ROCE by c.0.7-1.7 percentage points in 2008 for National Express and Go Ahead (the operators which disclose this information)

## L.E.K. has examined four measures of profitability and value creation

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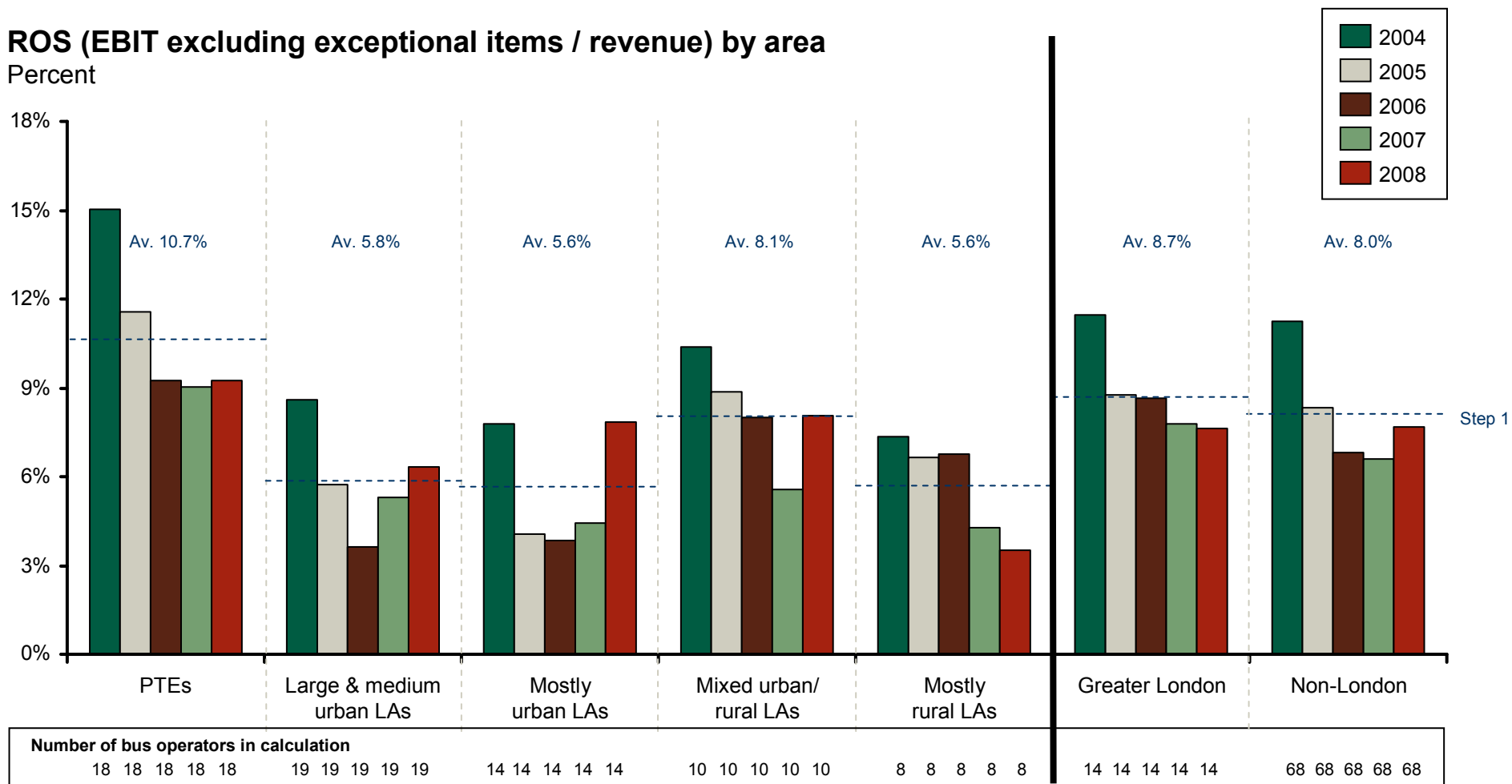
- Market valuations of UK Bus operations of the big-5 versus the book value of assets

Comparison to the  
pre-tax nominal  
cost of capital

**PTEs generate the highest return on sales (ROS) compared to other areas.  
Reported profitability has generally been trending down over the period**

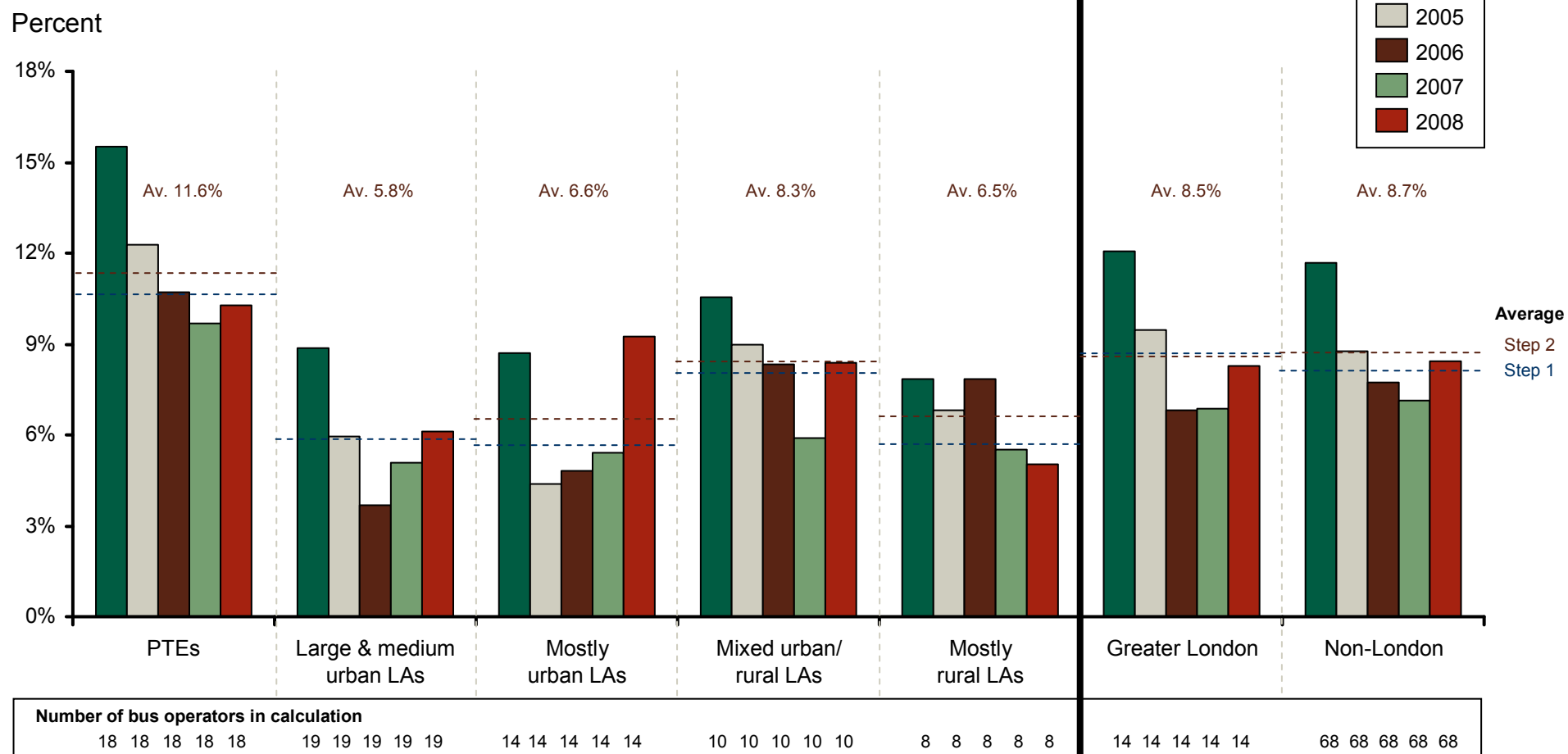
### ROS (EBIT excluding exceptional items / revenue) by area

Percent



## Even post the operating lease adjustments, operators in the PTE areas generate higher returns (ROS) compared to the other areas

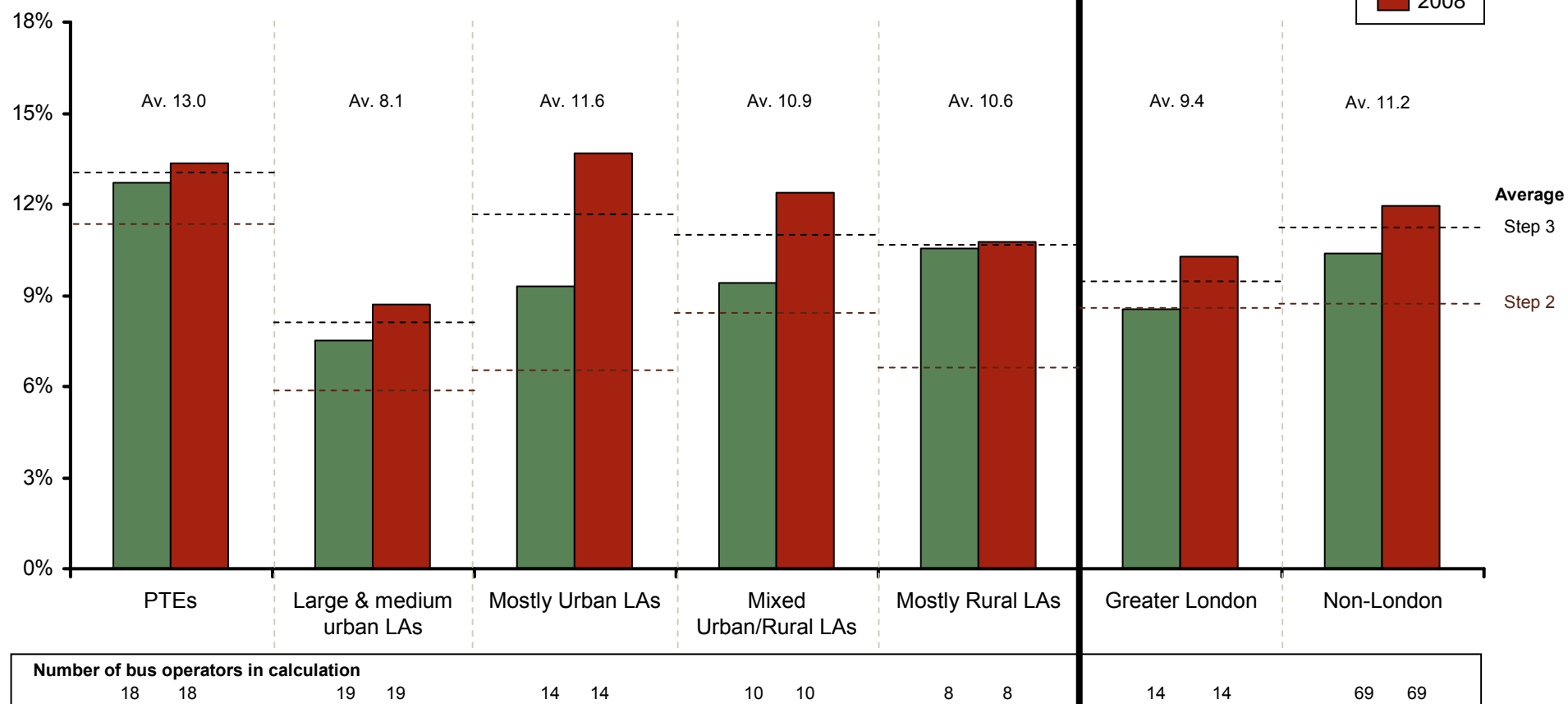
### ROS (EBIT excluding exceptional items / revenue) by area



**After all adjustments (step 3), operators in the PTE areas still generated higher average returns (ROS) in 2007 and 2008 compared to the other areas**

### ROS (EBIT excluding exceptional items / revenue) by area

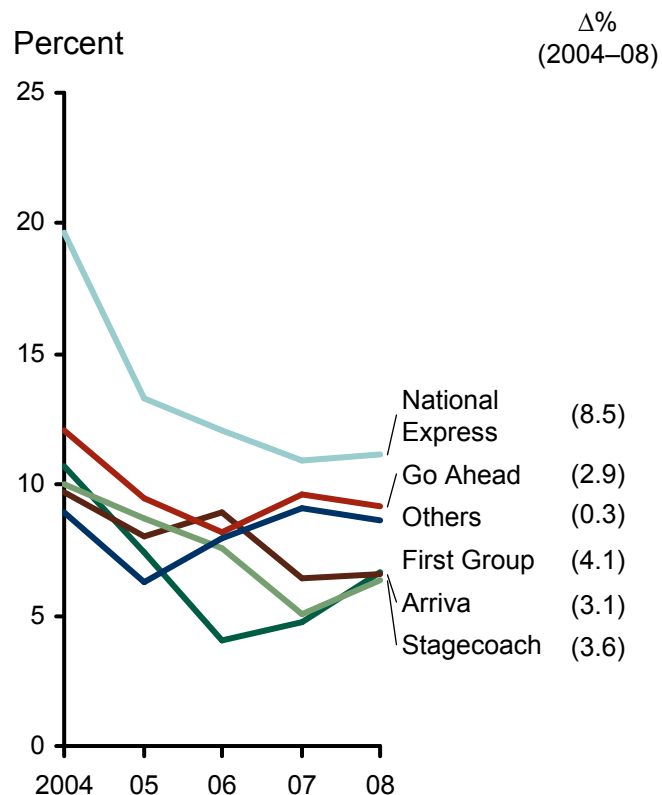
Percent



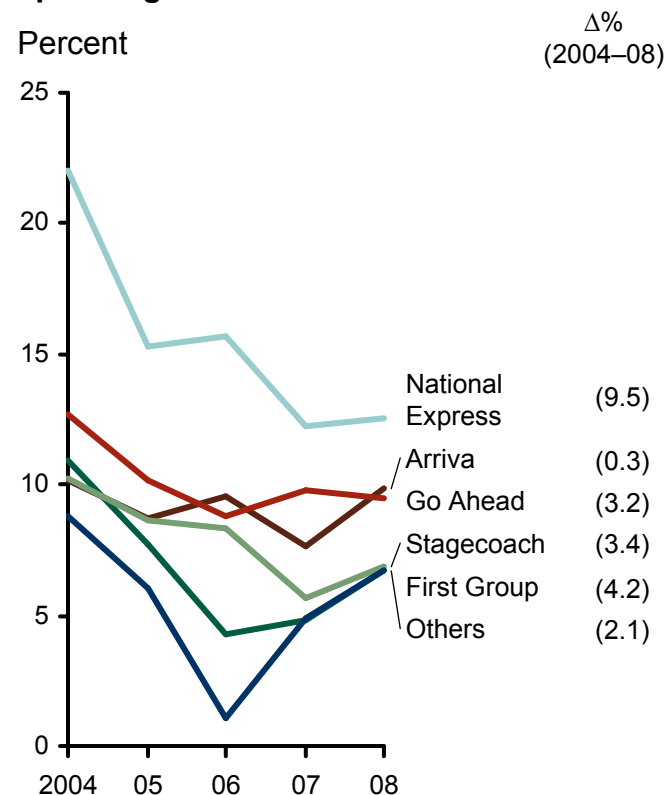
**After all adjustments (step 3), the big-5 return on sales margins in 2008 range from c.10-14% with others significantly lower at c.6%**

### Return on sales (ROS) by operator in England

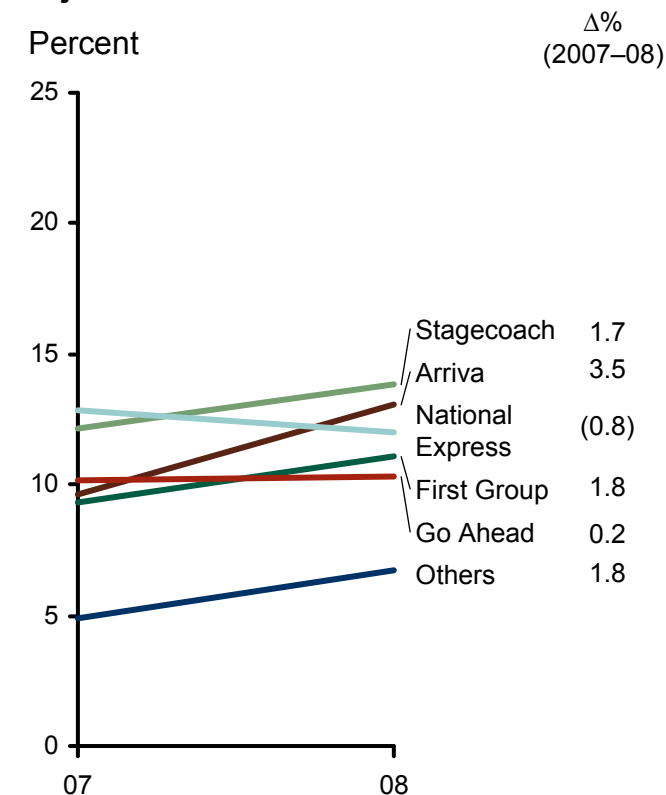
**Step 1: Profitability as reported**



**Step 2: Profitability post bringing operating leases back on balance sheet**



**Step 3: Profitability post group adjustments**

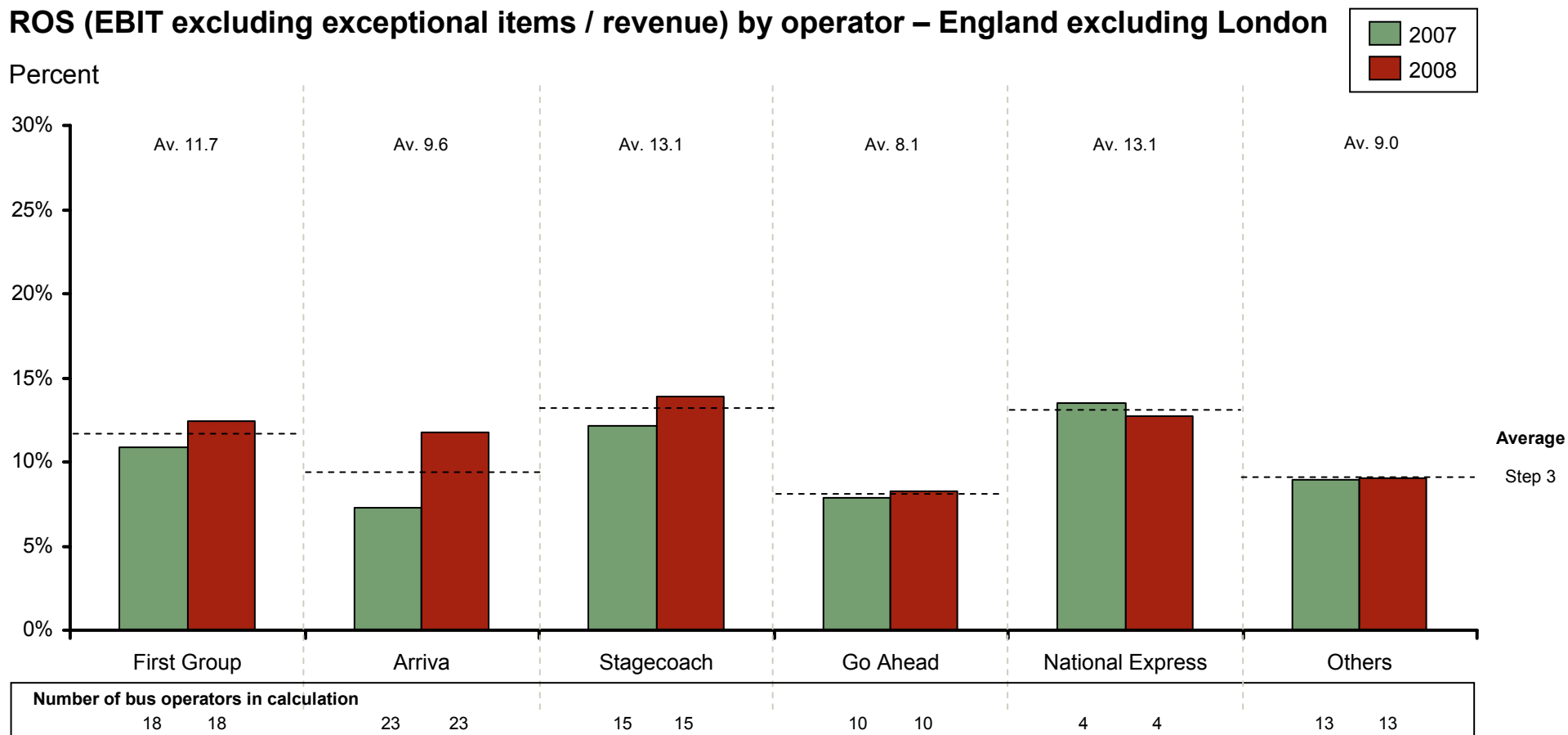




## Average return on sales margins for the big-5 (England excluding London) range from c. 10-13%

### ROS (EBIT excluding exceptional items / revenue) by operator – England excluding London

Percent



Source: L.E.K. analysis

## Return on sales margins vary considerably by operator and by area

Return on sales (ROS) in England		First	Arriva	Stage-coach	Go Ahead	National Express	Others
<b>Step 1:</b>  <b>Profitability as reported</b>	Average (2004–08)						
	PTEs	10.8%	5.7%	9.9%	6.0%	14.8%	4.8%
	Large & Medium Urban LAs	3.4%	8.7%	10.2%	8.8%	n/a	5.3%
	Mostly Urban LAs	3.8%	5.9%	7.3%	n/a	n/a	4.5%
	Mixed Urban/Rural LAs	3.6%	9.7%	5.9%	6.4%	n/a	15.6%
	Mostly Rural LAs	4.5%	8.4%	5.2%	n/a	n/a	7.1%
	Greater London	5.3%	8.6%	n/a	11.2%	7.2%	9.4%
<b>Step 2:</b>  <b>Profitability post bringing operating leases back on balance sheet</b>	Average (04–08)						
	PTEs	10.9%	7.2%	10.3%	5.7%	17.0%	9.5%
	Large & Medium Urban LAs	3.8%	9.5%	10.7%	8.9%	n/a	4.3%
	Mostly Urban LAs	4.0%	6.8%	7.7%	n/a	n/a	12.8%
	Mixed Urban/Rural LAs	3.9%	10.6%	6.2%	6.6%	n/a	15.6%
	Mostly Rural LAs	5.1%	9.5%	5.8%	n/a	n/a	12.3%
	Greater London	5.5%	10.3%	n/a	12.0%	9.1%	0.7%
<b>Step 3:</b>  <b>Profitability post group adjustments</b>	Average (07–08)						
	PTEs	14.3%	9.2%	16.1%	6.3%	13.1%	13.3%
	Large & Medium Urban LAs	8.0%	11.3%	17.4%	9.9%	n/a	3.7%
	Mostly Urban LAs	12.8%	8.3%	13.7%	n/a	n/a	16.1%
	Mixed Urban/Rural LAs	4.9%	11.6%	10.0%	7.6%	n/a	18.5%
	Mostly Rural LAs	9.3%	9.1%	11.0%	n/a	n/a	14.2%
	Greater London	5.8%	13.4%	n/a	11.7%	10.2%	0.4%

## Revenue by operator and area

Average 2007-08 revenue in England (£m)		First	Arriva	Stage-coach	Go Ahead	National Express
<b>Step 3:</b> <b>Profitability post group adjustments</b> (Average 2007-08)	PTEs	299	90	143	76	227
	Large & Medium Urban LAs	188	67	29	76	-
	Mostly Urban LAs	89	116	89	-	-
	Mixed Urban/Rural LAs	17	32	121	51	-
	Mostly Rural LAs	34	24	115	-	-
	Greater London	215	320	-	313	70

**UK bus return on sales margins for the big-5 integrated transport operators are generally higher than the other sectors they are active in. However, these other businesses also have different capital intensity and risk profiles to UK bus**

Group 2009 ROS*	First	Arriva	Stage-coach	Go Ahead	National Express
UK Bus	11.3	10.8	15.1	11.4	11.8
UK Coach					11.3
US Bus	11.1		8.5		8.7
US Coach	7.5				
European Bus & Coach					17.2
European rail and bus		5.4			
UK Rail	4.4	4.0	5.7	4.0	6.1
Aviation				(2.1)	
Group total**	8.0	6.0	9.3	5.3	9.2

The profitability of UK bus versus other operations is similar to prior years (see appendix for further details)

Note: \*Pre exceptionals, goodwill impairment and intangible amortisation; \*\* Includes the group overhead charges held centrally

Source: Statutory Accounts; L.E.K. analysis

DfT. Review of Bus Profitability in England – Final Report

## L.E.K. has examined four measures of profitability and value creation

### Definition

A  
Return on sales  
(ROS)

- Earnings before interest and tax (EBIT) / revenue

B  
Return on capital employed  
(ROCE)

- Earnings before interest and tax (EBIT) / capital employed
- Capital employed = tangible fixed assets + non current operating debtors - non current operating creditors + working capital (stocks / inventory + operating cash + trading debtors – trading creditors)

C  
Internal rate of return  
(IRR)

- The rate at which the investment and associated cashflow has a zero net present value

D  
Market to book valuation  
multiple

- Market valuations of UK Bus operations of the big-5 versus the book value of assets

Comparison to the  
pre-tax nominal  
cost of capital

**After all adjustments (step 3), returns above the benchmark cost of capital range are earned in all areas**

England		PTEs	Large & Medium Urban LAs	Mostly Urban LAs	Mixed Urban / Rural LAs	Mostly Rural LAs	Greater London
Step 1: Profitability as reported	Average (2004–08)						
	EBIT (£m)	85	26	16	20	10	82
	Capital Employed (£m)	427	242	142	107	83	319
	Pre-tax ROCE (%)	19.8%	10.7%	11.3%	18.3%	11.7%	25.6%
Step 2: Profitability post bringing operating leases back on balance sheet	Average (04–08)						
	EBIT (£m)	92	26	19	20	11	80
	Capital Employed (£m)	484	283	184	126	109	542
	Pre-tax ROCE (%)	18.9%	9.1%	10.2%	16.1%	10.4%	14.7%
Step 3: Profitability post group adjustments	Average (07–08)						
	EBIT (£m)	111	40	36	29	19	98
	Capital Employed (£m)	560	347	192	178	146	616
	Pre-tax ROCE (%)	19.8%	11.5%	18.6%	16.5%	13.4%	15.9%
WACC Range		8-11%	8-11%	8-11%	8-11%	8-11%	8-11%

Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued. L.E.K. considers that the basis for this analysis, i.e., that of using book values/actual capital invested, is the way in which bus operators report their results, and it is internally consistent with the P&L statement. However, we are aware of the issue of property valuation, and, as such, have included an indicative analysis to explore the potential impact of property revaluation, the results of which are shown on p.32.

Source: Annual accounts; L.E.K. analysis

**After all adjustments (step 3), all of the big-5 operators appear to be earning returns above the cost of capital range across their bus operations in England (incl. London). By contrast, the other operators are earning returns at the low end of the cost of capital range**

### England

		First	Arriva	Stage-coach	Go Ahead	National Express	Others
Step 1: Profitability as reported	Average (2004–08)						
	EBIT (£m)	51	45	35	44	36	26
	Capital Employed (£m)	440	239	249	152	126	114
	Pre-tax ROCE (%)	11.7%	19.0%	13.9%	28.9%	28.7%	22.9%
Step 2: Profitability post bringing operating leases back on balance sheet	Average (04–08)						
	EBIT (£m)	53	53	37	46	42	17
	Capital Employed (£m)	496	343	295	215	157	223
	Pre-tax ROCE (%)	10.6%	15.6%	12.4%	21.4%	26.5%	7.7%
Step 3: Profitability post group adjustments	Average (07–08)						
	EBIT (£m)	86	71	65	53	37	21
	Capital Employed (£m)	459	321	486	369	155	248
	Pre-tax ROCE (%)	18.7%	22.2%	13.4%	14.4%	23.8%	8.5%
WACC Range		8-11%	8-11%	8-11%	8-11%	8-11%	8-11%

Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued. L.E.K. considers that the basis for this analysis, i.e., that of using book values/actual capital invested, is the way in which bus operators report their results, and it is internally consistent with the P&L statement. However, we are aware of the issue of property valuation, and, as such, have included an indicative analysis to explore the potential impact of property revaluation, the results of which are shown on p.32.

Source: Annual accounts; L.E.K. analysis

**After all adjustments (step 3) and excluding London from the analysis, four of the big-5 operators and the aggregate of the other operators appear to be earning returns above the cost of capital**

**England excluding London**

		First	Arriva	Stage-coach	Go Ahead	National Express	Other
Step 1: Profitability as reported	Average (2004–08)						
	EBIT (£m)	41	21	35	14	32	15
	Capital Employed (£m)	346	121	249	90	107	95
	Pre-tax ROCE (%)	11.7%	17.2%	13.9%	15.0%	30.0%	15.9%
Step 2: Profitability post bringing operating leases back on balance sheet	Average (04–08)						
	EBIT (£m)	42	24	37	14	37	16
	Capital Employed (£m)	374	169	295	102	121	132
	Pre-tax ROCE (%)	11.2%	14.1%	12.4%	13.3%	30.2%	12.4%
Step 3: Profitability post group adjustments	Average (07–08)						
	EBIT (£m)	73	30	65	18	30	20
	Capital Employed (£m)	352	147	486	188	114	150
	Pre-tax ROCE (%)	20.8%	20.7%	13.4%	9.5%	26.2%	13.6%
	WACC Range	8-11%	8-11%	8-11%	8-11%	8-11%	8-11%

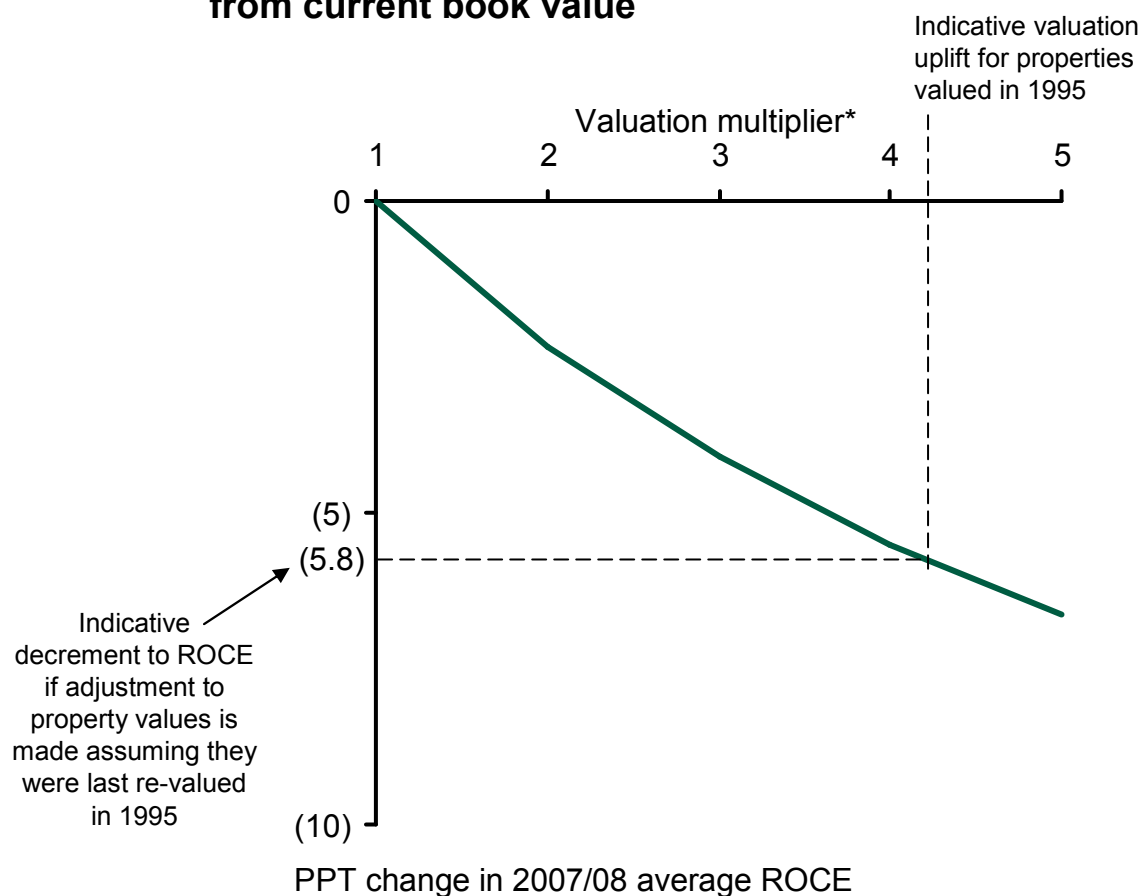
Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued. L.E.K. considers that the basis for this analysis, i.e., that of using book values/actual capital invested, is the way in which bus operators report their results, and it is internally consistent with the P&L statement. However, we are aware of the issue of property valuation, and, as such, have included an indicative analysis to explore the potential impact of property revaluation, the results of which are shown on p.32.

Source: Annual accounts; L.E.K. analysis



## ROCEs are sensitive to any difference between the market and book value of land and building assets

### Illustrative sensitivity of ROCE to revaluation of property from current book value



- The land and buildings assets in three of the big-5 bus companies (National Express, FirstGroup and Arriva) in general appear not to have been re-valued for some time, typically since the mid 1990s. As such, these assets are not valued at current market prices
  - however, two of the big-5 companies (Stagecoach and Go Ahead) have created property holding companies more recently and are likely to have re-valued their assets during this process
- L.E.K. has considered the sensitivity of ROCE performance to potential changes in the value of land and buildings if these assets were re-valued today (but on an indicative basis only)
  - this sensitivity analysis includes an uplift on profit in the year as a result of the land and buildings revaluation
- This indicative analysis shows that, as an example, if property for bus companies had not been re-valued since 1995, then this might decrease ROCE by approximately 6ppt
  - if this decrement 6ppt reduction were applied to the ROCE performance of the three big-5 companies which have not recently re-valued their property, their average ROCE in 2007 and 2008 would still be above the cost of capital range of 8-11%

Note: \*Multiplier represents the extent to which property values would be uplifted on revaluation – the range selected is illustrative

Source: L.E.K. Analysis; National Express accounts

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**The specific performance by operator and area is quite variable, making it difficult to generalise on the local impact of any changes in policy**

Pre-tax ROCE England		First	Arriva	Stage-coach	Go Ahead	National Express
Step 1 and 2 revenue (Average 2004-08)	PTEs	272	82	136	71	215
	Large & Medium Urban LAs	176	58	28	64	-
	Mostly Urban LAs	83	104	84	-	-
	Mixed Urban/Rural LAs	16	30	110	43	-
	Mostly Rural LAs	31	24	108	-	-
	Greater London	201	284	-	278	57
Step 1: Profitability as reported (Average 2004-08)	PTEs	18.9%	10.3%	17.2%	12.3%	30.0%
	Large & Medium Urban LAs	6.2%	16.3%	21.7%	17.6%	n/a
	Mostly Urban LAs	4.8%	19.5%	13.8%	n/a	n/a
	Mixed Urban/Rural LAs	4.7%	38.7%	12.8%	17.1%	n/a
	Mostly Rural LAs	9.2%	35.9%	9.0%	n/a	n/a
	Greater London	11.4%	20.9%	n/a	45.4%	21.7%
Step 2: Profitability post bringing operating leases back on balance sheet (Average 2004-08)	PTEs	18.1%	9.6%	15.7%	10.5%	30.2%
	Large & Medium Urban LAs	6.0%	13.9%	19.7%	16.0%	n/a
	Mostly Urban LAs	4.8%	13.6%	11.6%	n/a	n/a
	Mixed Urban/Rural Las	4.6%	33.9%	10.7%	14.5%	n/a
	Mostly Rural Las	9.1%	29.8%	8.8%	n/a	n/a
	Greater London	9.1%	17.0%	n/a	27.5%	14.4%
Step 3: Profitability post group adjustments (Average 2007-08)	PTEs	27.5%	14.7%	14.5%	6.8%	26.2%
	Large & Medium Urban LAs	12.9%	25.1%	22.0%	11.2%	n/a
	Mostly Urban LAs	21.9%	18.5%	13.9%	n/a	n/a
	Mixed Urban/Rural LAs	6.1%	56.1%	11.7%	11.2%	n/a
	Mostly Rural LAs	22.0%	32.9%	11.2%	n/a	n/a
	Greater London	11.7%	23.5%	n/a	18.8%	17.2%

Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued

Source: Annual accounts; L.E.K. analysis

**L.E.K. has also assessed the implied ROCE based on new fleet instead of the 8–10 year old buses which is the average life across the industry currently. On this basis, ROCE is within or below the cost of capital range except for PTEs which is above**

England		PTEs	Large & Medium Urban LAs	Mostly Urban LAs	Mixed Urban / Rural LAs	Mostly Rural LAs	Greater London
<b>Step 3:</b> <b>Profitability post group adjustments</b>	<b>Step 3. Average (07–08)</b>						
	EBIT (£m)	111	40	36	29	19	98
	Capital Employed (£m)	560	347	192	178	146	616
	Pre-tax ROCE (%)	19.8%	11.5%	18.6%	16.5%	13.4%	15.9%
	<b>Step 3b. New buses (07–08)</b>						
	EBIT (£m)	111	40	36	29	19	98
	Capital Employed (£m)	954	589	350	312	234	1,250
	Pre-tax ROCE (%)	11.6%	6.8%	10.2%	9.4%	8.3%	7.8%
	<b>WACC Range</b>	8-11%	8-11%	8-11%	8-11%	8-11%	8-11%



Except for PTEs, the ROCE for new buses is typically within or below the cost of capital range for the first year of operation. However, the previous analysis indicates that a bus should earn average returns above the cost of capital over its full life

Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued

Source: Annual accounts; L.E.K. analysis

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**Based on a full new fleet, the implied ROCE in England excl. London is typically around the cost of capital range**

England		First	Arriva	Stagecoach	Go Ahead	National Express	Others
Step 3: Profitability post group adjustments	Step 3. Average (07–08)						
	EBIT (£m)	86	71	65	53	37	21
	Capital Employed (£m)	459	321	486	369	155	248
	ROCE* (%)	18.7%	22.2%	13.4%	14.4%	23.8%	8.5%
	Step 3b. New buses (07–08)						
	EBIT (£m)	86	71	65	53	37	21
	Capital Employed (£m)	792	609	725	691	279	591
	ROCE* (%)	10.8%	11.7%	9.0%	7.7%	13.2%	3.6%
	WACC Range	8-11%	8-11%	8-11%	8-11%	8-11%	8-11%
England excluding London		First	Arriva	Stage-coach	Go Ahead	National Express	Others
Step 3: Profitability post group adjustments	Step 3. Average (07–08)						
	EBIT (£m)	73	30	65	18	30	20
	Capital Employed (£m)	352	147	486	188	114	150
	ROCE* (%)	20.8%	20.7%	13.4%	9.5%	26.2%	13.6%
	Step 3b. New buses (07–08)						
	EBIT (£m)	73	30	65	18	30	20
	Capital Employed (£m)	648	338	725	308	203	248
	ROCE* (%)	11.3%	9.0%	9.0%	5.8%	14.7%	8.3%
	WACC Range	8-11%	8-11%	8-11%	8-11%	8-11%	8-11%

Note: analysis based on property values as stated in published accounts. These may not reflect current market values since property has generally not been recently re-valued

Source: Annual accounts; L.E.K. analysis

DfT. Review of Bus Profitability in England – Final Report

## L.E.K. has examined four measures of profitability and value creation

### Definition

A  
Return on sales  
(ROS)

- Earnings before interest and tax (EBIT) / revenue

B  
Return on capital employed  
(ROCE)

- Earnings before interest and tax (EBIT) / capital employed
- Capital employed = tangible fixed assets + non current operating debtors - non current operating creditors + working capital (stocks / inventory + operating cash + trading debtors – trading creditors)

C  
Internal rate of return  
(IRR)

- The rate at which the investment and associated cashflow has a zero net present value

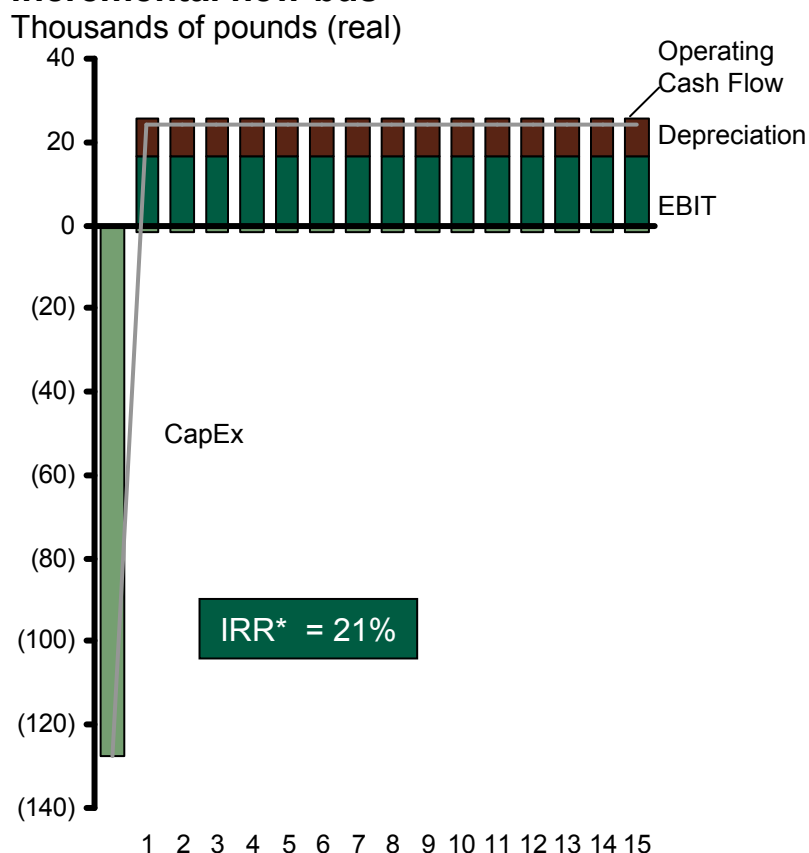
D  
Market to book valuation  
multiple

- Market valuations of UK Bus operations of the big-5 versus the book value of assets

Comparison to the  
pre-tax nominal  
cost of capital

**L.E.K. has developed an IRR model in real terms for an incremental new bus. In this example, the IRR of an incremental new bus that operates for its whole life in a PTE area is 21%**

**Example: PTE area – Pre tax cashflow per incremental new bus**



Based on 2008 data	£k	Comments
<b>Revenue per bus (pa)</b>	122	Derived using the average revenue per subsidiary in the area divided by the average number of buses
<b>ROS (implied costs p.a.)</b>	13.7% (105)	ROS margin as calculated in the prior ROCE analysis
<b>Bus capex (upfront)</b>	128	Derived using the mix of cost for each bus type for the area
<b>Other capex (ongoing pa)</b>	1.6	Estimated by calculating the average additions of plant & machinery historically and for land and buildings for subsidiaries in the area divided by the average number of buses
<b>Depreciation (ongoing pa)</b>	9	Derived using the stated depreciation rates for PSVs, plant & machinery and land & buildings

Note: Assumes mid-year cashflows, except initial investment, which is assumed to occur at the start of year 1

Source: Annual accounts; L.E.K. analysis

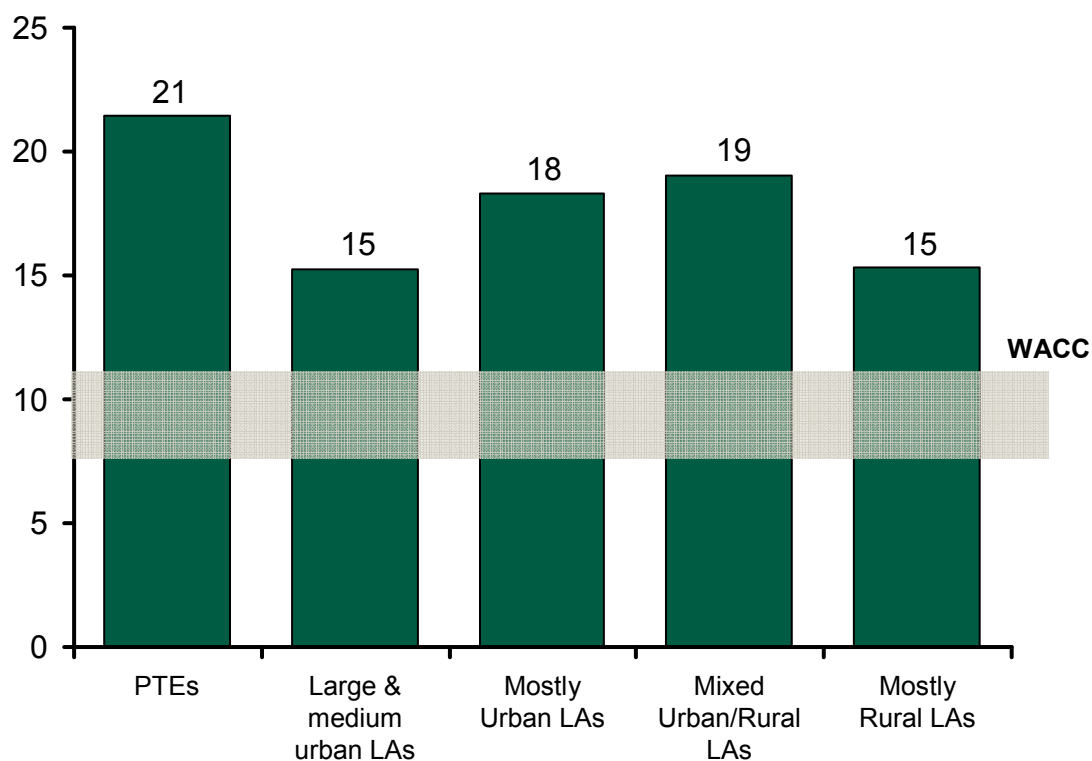
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## The IRRs for an incremental new bus are above the cost of capital in all areas

### Without cascading buses between areas

Pre tax cashflow IRR (15 years)

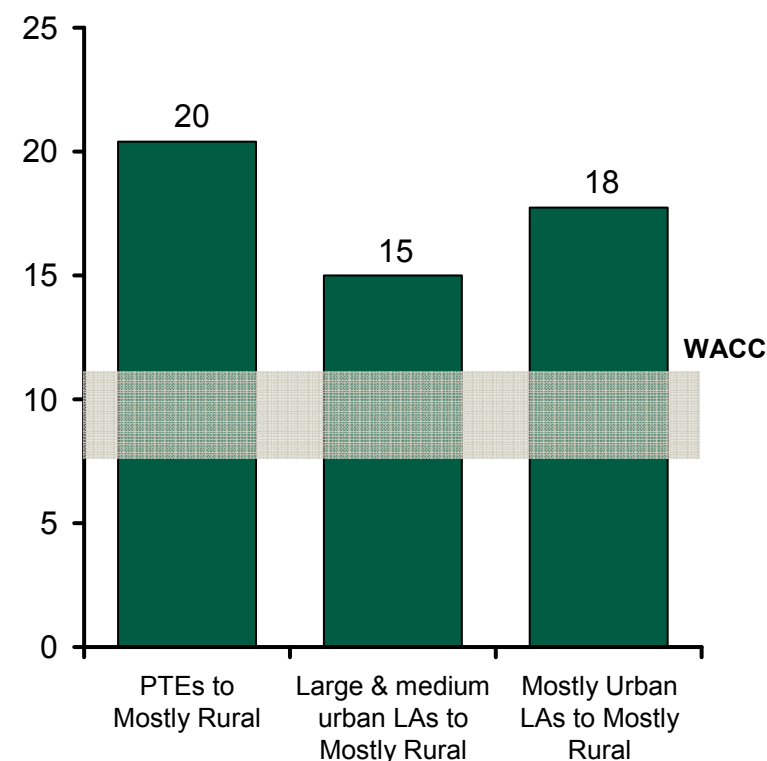
Percent



### With cascading buses between areas

Pre tax cashflow IRR (15 years)

Percent



Hybrid model designed to simulate the cascading of new buses from PTE and Urban areas to Rural areas after 7 years

## L.E.K. has examined four measures of profitability and value creation

### Definition

A  
Return on sales  
(ROS)

- Earnings before interest and tax (EBIT) / revenue

B  
Return on capital employed  
(ROCE)

- Earnings before interest and tax (EBIT) / capital employed
- Capital employed = tangible fixed assets + non current operating debtors - non current operating creditors + working capital (stocks / inventory + operating cash + trading debtors – trading creditors)

C  
Internal rate of return  
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- The rate at which the investment and associated cashflow has a zero net present value

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Market to book valuation  
multiple

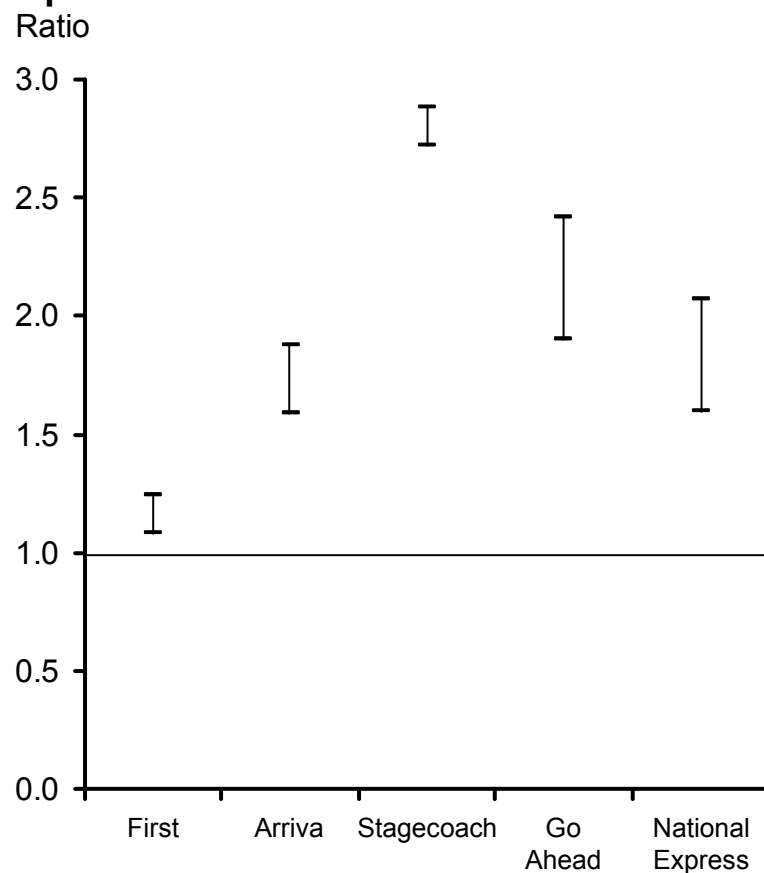
- Market valuations of UK Bus operations of the big-5 versus the book value of assets

Comparison to the  
pre-tax nominal  
cost of capital



**The market valuation of the bus operations of the big-5 is greater than the replacement cost of their assets. This supports our analysis which shows they are generating returns greater than the cost of capital**

**Broker valuation of UK bus operations to  
reported bus assets**



- A ratio of  $>1$  means that the market is valuing UK bus operations at above their asset value, meaning that they expect the UK bus operations to earn returns above the cost of capital over the life of the asset

## Project output

### 1. Profitability and value creation

- Framework and approach
- Return on sales assessment
- Return on capital employed assessment versus cost of capital
- Cash IRR assessment versus cost of capital
- Market to book multiples for UK bus

### 2. Assessment

- To what extent can the return on capital employed and cash IRRs be considered “reasonable”?
- What are the potential barriers which may be affecting new entrants from entering the market and competing for any profits in excess of the cost of capital?

**Based on publically available information, the bus industry as a whole appears to have earned average returns in excess of the cost of capital for the time period analysed (i.e., returns are above the level financial theory suggests should be expected in a fully competitive market)**

- The bus industry as a whole appears to be earning returns in excess of the cost of capital (assumed to be 8-11% nominal, pre-tax). This is evidenced by:
  - pre-tax return on capital employed is above the cost of capital for all of the big-5 operators in England incl. London, four of the big-5 operators in England excl. London and in all geographic areas
  - internal rate of return on the cash flows generated by an incremental new bus over its economic life is above the cost of capital in all areas
  - broker valuations of the UK bus operations to assets ratio is greater than 1 which supports the generation of returns in excess of the cost of capital
- Whilst the return on capital employed exceeds the cost of capital in all geographic areas, these are average returns and there will be important variations that need to be analysed further if data becomes available
  - ROCE, both absolute and relative to the cost of capital, varies considerably by operator by area
  - variations between subsidiaries of an operator with the same area classification
  - although not analysed with this project scope, variations are likely within an individual subsidiary where there will be a range of profitability by route
- As such, there will be a range of bus operator reactions that could cause potential unintended consequences to any proposed changes. There is a need to consider in detail bus operator reactions to any proposed changes as part of any option evaluation
  - in addition, operators may impose hurdle rates on their businesses which are higher than the theoretical cost of capital
- Further, it should be noted that the big-5 companies have raised some issues which may be relevant to the interpretation of these results:
  - some of the major operators have indicated that their respective WACC values are at the top end of this range
  - to the extent that it has not been re-valued recently, the value of property in capital employed may be understated
  - in Group accounts pensions are typically assessed via IAS, which requires that notional values for pension 'interest' are included in operating profit. L.E.K. has removed this impact where data is available, but it has not been possible to do this in all cases

## There are a number of barriers that prevent new operators from entering the market and therefore potentially support returns in excess of the cost of capital

### Infrastructure (depots)

- Depot location impacts the routes that operators are able to run economically as there is a point where the dead miles become too great for the route to be operated viably (OFT states this to be a 20 minute drive time from depot to route)
- This infrastructure issue is likely to be a problem in the more densely populated PTE and Urban areas where it is difficult for new operators to secure appropriate sites for their depots. However there are some LTA owned sites which could be provided to new entrants to overcome this issue

### Route scalability

- Even if a depot is secured in an appropriate location, there can be an issue for a new operator being able to scale up to enough routes quickly enough to make the depot viable

### Large operators ability to respond

- Larger operators are unlikely to allow a new entrant to take share easily of their profitable routes. These larger players have the scale and resources and therefore potential ability to sustain intense competition (e.g. through fares, frequency of service)

### Purchasing power

- The larger operators are able to secure their new buses at a discount to the smaller players (estimated at c.5% even when including additional features such as CCTV, GPS, low floor etc.). In addition to the lower capital costs, there is evidence that these additional features do generate additional passengers giving the majors a further competitive advantage

### Smartcard / integrated ticketing / back office / IT

- There is limited incentive for operators with an established network to enter into integrated ticketing with other players. The larger players also have the financial base to invest in smartcard technology, efficient back office and IT systems further giving them an advantage over the smaller players

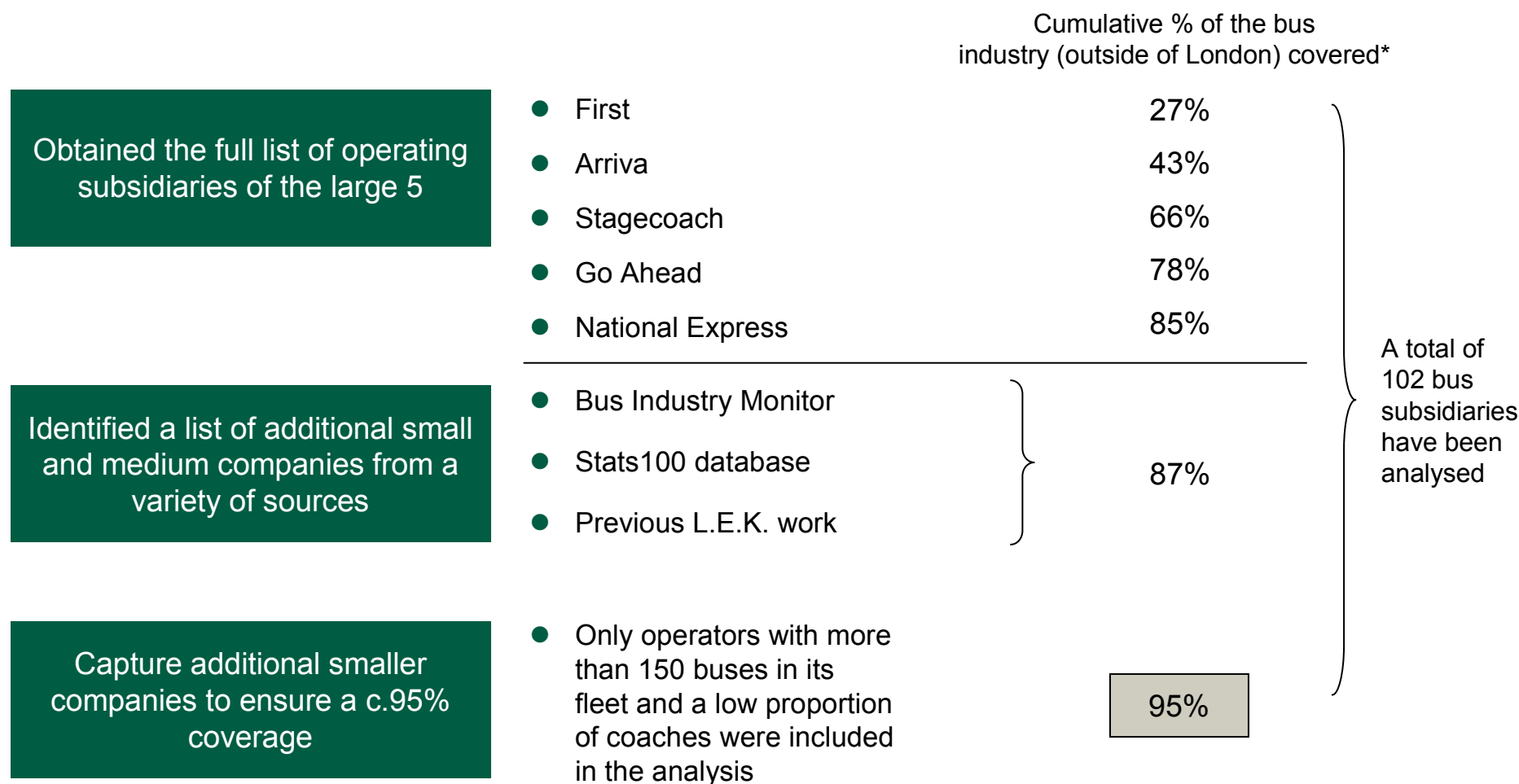
### Transfer of BDP across group

- The large operators have the advantage to transfer best demonstrated practice both to and from the bus division with other areas of business within the group. Access to this knowledge is an advantage for the larger players

## Agenda

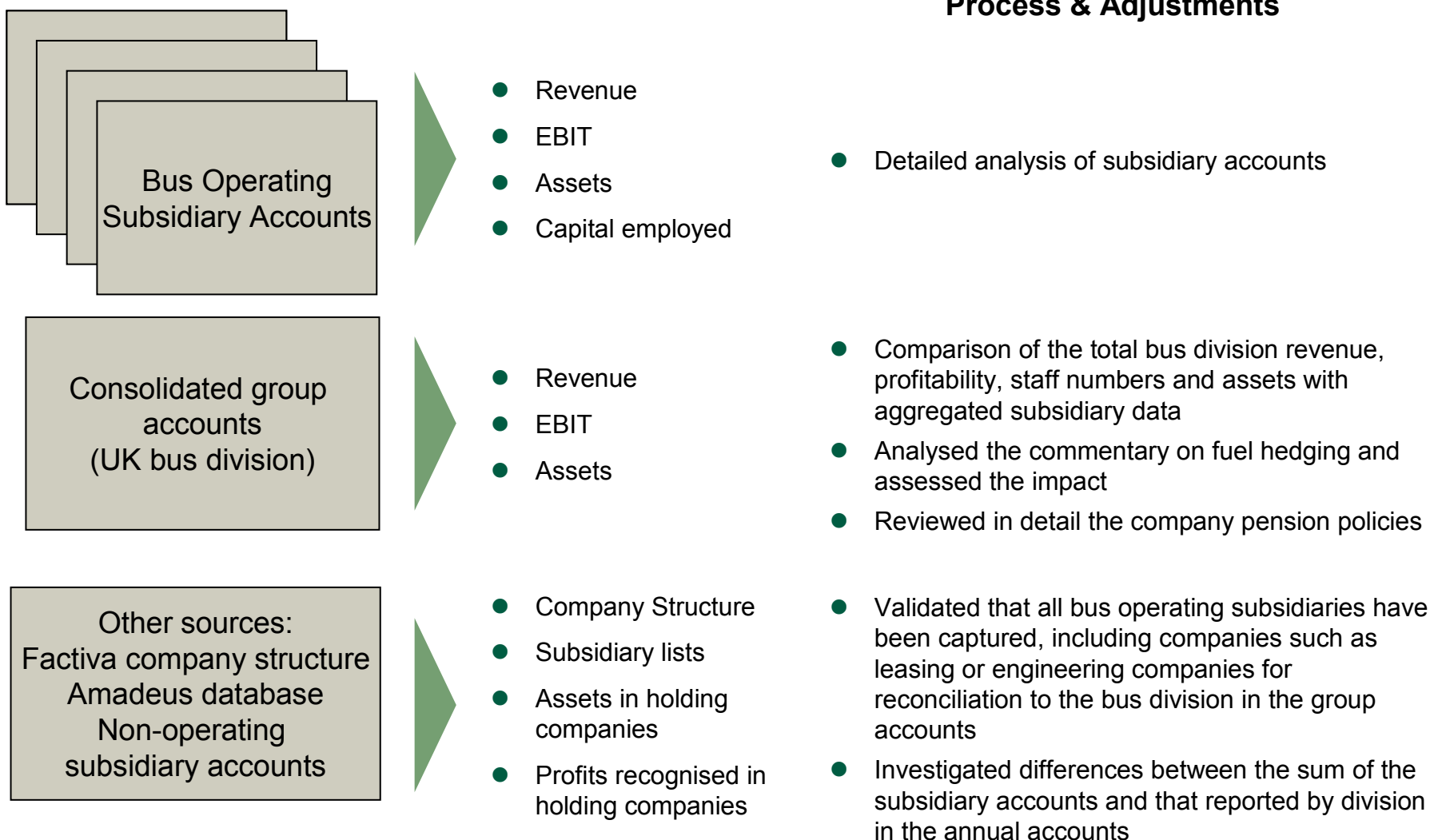
- Scope of project
- Executive summary
- Summary of project findings
- Appendix
  - Analytical process
    - Detailed analysis of fuel hedges and pensions
    - Asset turn analysis
    - Detailed ROCE analysis over time
    - Operator profitability by division
    - Revenue development by geographic area / operator

## L.E.K. has undertaken the following process to select the bus companies to analyse as part of this project



Note: \* Based on 2006 bus numbers from the Stats100 database. The number of buses has been cross checked with revenue to ensure a similar level of coverage

## L.E.K.'s approach to analysing the company accounts has been bottom up and rigorous (1 of 2)



## L.E.K.'s approach to analysing the company accounts has been bottom up and rigorous (2 of 2)

Number of UK subsidiary accounts interrogated each year	First Group	Arriva	Go Ahead	Stagecoach	National Express
Total number of subsidiaries reviewed	202	281	68	186	78
Number of subsidiaries excluded as dormant	49	68	6	90	4
Number of subsidiaries excluded as holding companies	13	1	8	10	5
Number of subsidiaries excluded as not bus related	112	169	34	56	62
Total number of bus related subsidiaries used in the reconciliation process	28	43	20	28	7
Of which are operating companies	23	25	12	19	5
Of which are bus related e.g., leasing companies, too recently acquired, coach company	5	18	8	11	2

Note: Subsidiaries may be excluded on the basis of being dormant, holding companies or non-bus related, but may well fall into more than one of these categories

Source: Company house, L.E.K. analysis

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Other bus companies have also been reviewed in addition to the pure bus operating companies as part of the reconciliation process for revenue and operating profit

Profit (EBIT) (Including exceptionals)	2005	2006	2007	2008
<b>Bus operating companies</b>				
Arriva Cymru Limited	2,201	3,529	2,150	2,376
Arriva Derby Limited	1,528	1,506	1,141	1,574
Arriva Durham County Limited	2,449	2,416	2,135	1,506
Arriva East Herts & Essex Limited	941	802	863	986
Arriva Guildford & West Surrey Limited	739	714	430	601
Arriva Kent & Sussex	-3,744	710	-380	924
Arriva Kent Thameside Limited	2,220	1,863	867	2,830
Arriva London North Limited	13,373	15,362	15,312	12,271
Arriva London South Limited	9,454	9,476	8,108	6,928
Arriva Manchester Limited	777	822	145	-247
Arriva Medway Towns Limited	742	1,018	592	1,326
Arriva Merseyside Limited	5,243	4,942	3,870	4,141
etc...				
<b>Total of the bus operating companies</b>	<b>52,522</b>	<b>61,309</b>	<b>49,907</b>	<b>51,815</b>
<b>Additional bus related companies</b>				
TGM	0	0	0	0
The Original London Sightseeing Tour Ltd	1,463	917	1,845	2,448
London Pride Sightseeing	1,056	534	366	545
Arriva Southern Counties	113	366	724	-228
British Bus Ltd	2,703	-1,208	246	49
etc ...				
<b>Total of the bus operating companies</b>	<b>8,213</b>	<b>3,718</b>	<b>7,157</b>	<b>5,535</b>
<b>Total of the bus operating + related comp</b>	<b>60,735</b>	<b>65,027</b>	<b>57,064</b>	<b>57,350</b>

Example

**L.E.K. has re-aligned the operators accounts to a March / April year end to reflect the actual year in which the majority of operations occurred**

Group	Typical financial year end	Example: accounts used for March / April end 2009
First Group	31 March	31 March 2009
Arriva	31 December	31 December 2008
Go Ahead	30 June	30 June 2009
Stagecoach	30 April	30 April 2009
National Express	31 December	31 December 2008

All information in this presentation is after this year end adjustment

## L.E.K. has made the following adjustments to bring the leased assets back on balance sheet in order to improve comparability

### Adjustments Made

#### Operating Profit

- Operating lease costs added back
- Depreciation costs on capitalised operating leases included

#### Capital Employed

- Operating leases capitalised at the cost of debt according to the average period of the lease remaining

This process has been undertaken for all assets (both vehicles and land and property)

#### Definitions

Operating lease costs	O
Depreciation	D
Interest cost	I
Net book value	N
Interest rate	R
Length of the lease remaining	L

**Operating lease costs = Depreciation + Interest payments**

$$O = D + I \quad \text{Or } D = O - I$$

**Interest payments = Net book value x Interest Rate**

$$I = N \times R$$

**Net book value = (Operating lease costs – interest payments) x length left**

$$N = (O - I) \times L$$

**Solving for I**

$$I = \frac{O}{(1+1/LR)}$$

## Example calculation of the impact of bringing operating PSV leases back on balance sheet

Example	Units	2008	
		Unadjusted	Adjusted for operating leases
As per accounts			
Sales	£k	68,532	68,532
EBIT*	£k	1,780	1,858
Capital employed	£k	28,653	31,000
ROS	%	2.6	2.7
ROCE	%	6.2	6.0
Asset Turn	times	2.4	2.2
Operating lease expense in P&L	£k		(366)
Operating lease annual expense due next year			
Within 1 year	1		(8)
Within 2 to 5 years	3.5		(85)
Within >5 years	10		(324)
Debt Rate			5.50%
Calculation of interest charges			
Within 1 year	£k		(0.4)
Within 2 to 5 years	£k		(14)
Within >5 years	£k		(115)
Calculation of depreciation charges for assets			
Within 1 year	£k		(8)
Within 2 to 5 years	£k		(71)
Within >5 years	£k		(209)
Total	£k		(288)
Calculation of net book value			
Within 1 year	£k		8
Within 2 to 5 years	£k		249
Within >5 years	£k		2,090
Total	£k		2,347

Impact of bringing PSV  
leases back onto the  
balance sheet

L.E.K. has used the long  
term borrowing rate as  
stated in the group accounts  
for the debt rate (shown on  
the next slide)

## L.E.K. has used the following debt rates for the capitalisation of lease costs

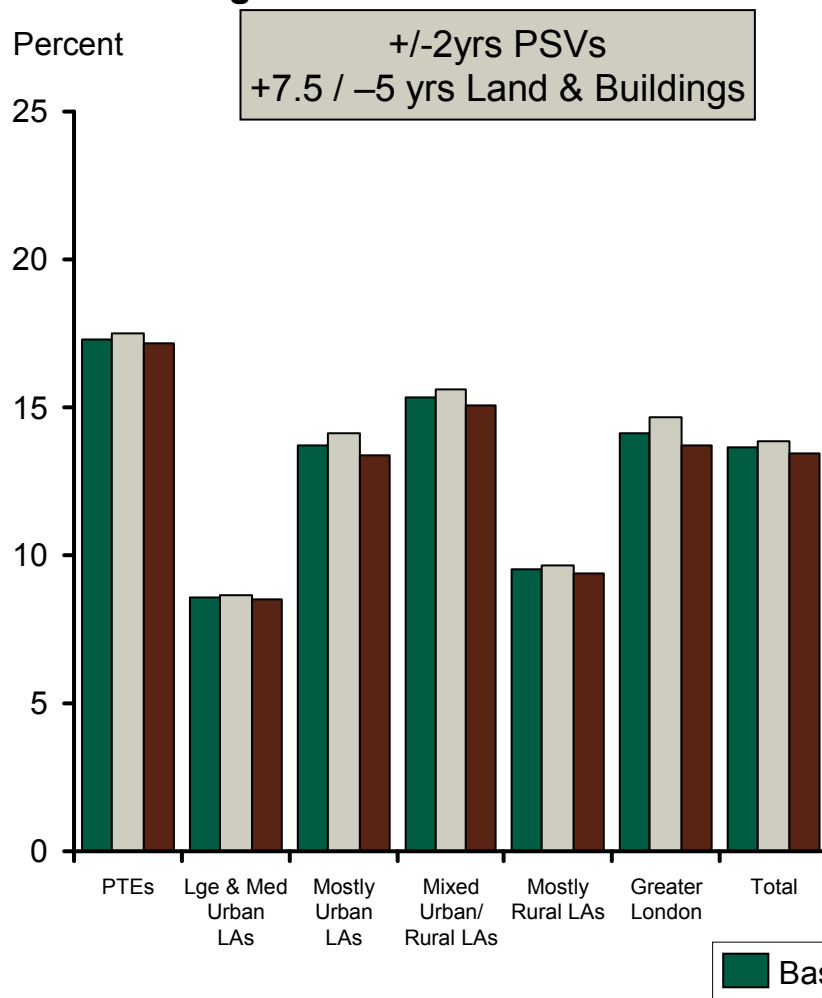
Rate %	2004	2005	2006	2007	2008
<b>First</b>	4.1	5.8	6.3	5.4	3.4
<b>Arriva</b>	5.1	4.8	5.8	6.3	5.4
<b>Stagecoach</b>	7.1	6.8	6.7	6.4	5.8
<b>Go Ahead</b>	5.8	5.8	6.3	5.6	5.7
<b>National Express</b>	5.4	5.4	5.4	5.4	5.4

L.E.K. has undertaken sensitivity analysis on the debt rates used which shows that the analysis is not sensitive to the debt rates used (see next slide)

## This ROCE analysis is not very sensitive to the debt rate and lease length assumptions

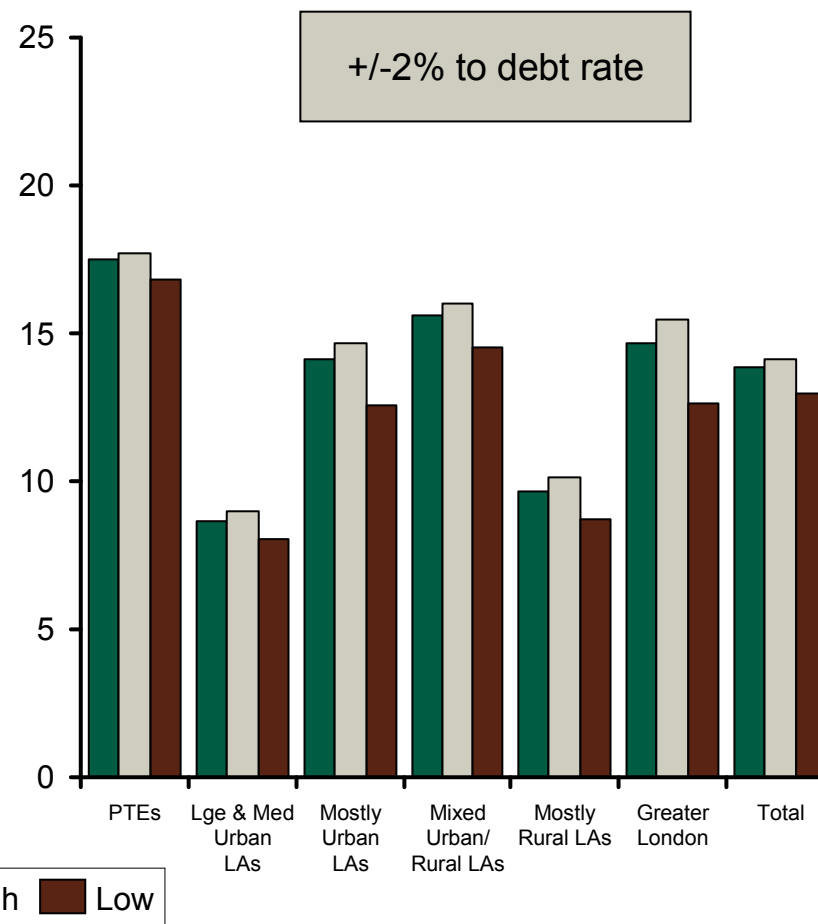
ROCE average 2007–08

Percent



ROCE average 2007–08

Percent



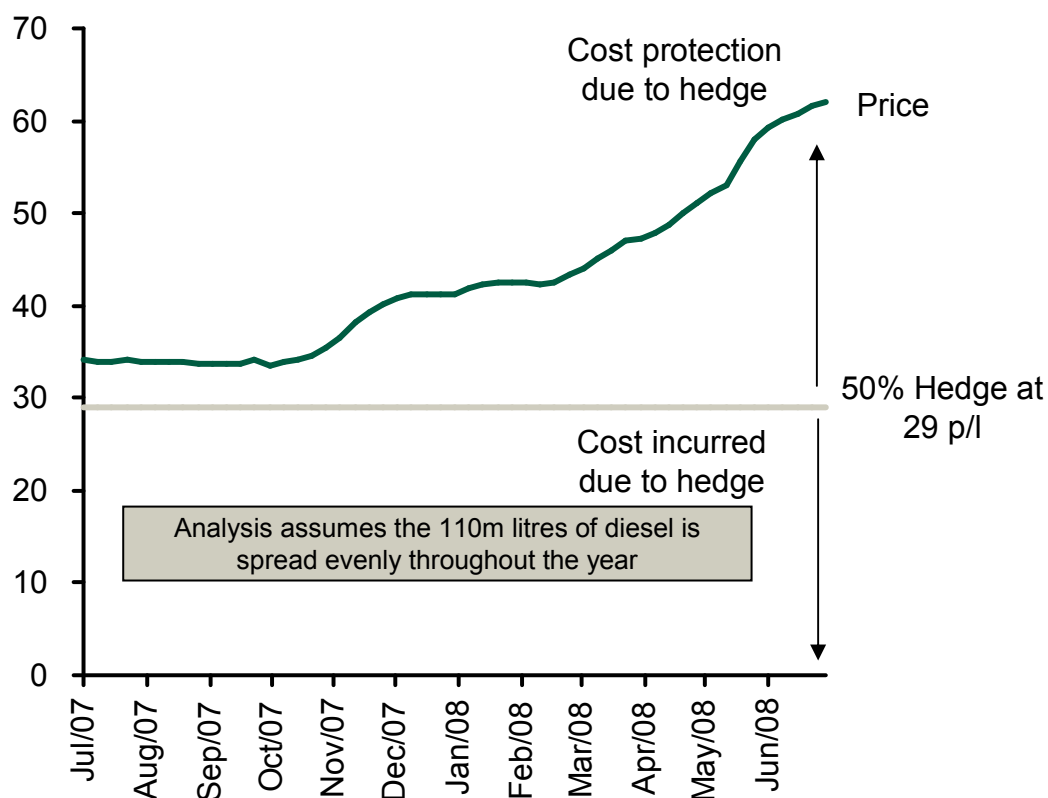
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## Fuel hedges: example calculation of the impact

### Example: Fuel Price hedge: Go Ahead Diesel price excluding VAT, Duty and BSOG

Pence / litre



- In 2008/09 Go Ahead reported a £(6.9)m cost due to fuel hedging for buses in the UK
- L.E.K. has calculated the impact of the fuel hedge by summing the different between the hedge and the price of diesel when it is below the hedge cost. This method estimated the impact to be c.£(7)m in 2008/09
- Using the same method for the year prior, L.E.K. has estimated the fuel hedge benefit to be £7.5m

#### Profit (EBIT)

Sum of subsidiaries	54.0
UK bus division of annual account	64.3
Delta	(10.3)
Fuel hedge	7.5
Delta post fuel hedge	(2.8)

The amount of the fuel hedge where it can calculate it is always less than the profit difference between the subsidiary and group accounts



## Pensions: There was an impact from the introduction of FRS 17 in 2006 and 2007 on all the companies analysed

Pension costs £k	2004	2005	2005 restated	2006	2007
<b>First Group</b>					
First Cymru	910	808	6,208	7,355	7,365
First Manchester	1,682	3,469	3,766	4,397	4,383
Size of the pension restatement varies					
<b>Arriva</b>					
Arriva Midlands	600	586	586	559	1,586
Does not typically restate					
<b>GoAhead</b>					
Wilts & Dorset Bus	921	845	565	1,121	1,177
Many do not restate					
<b>Stagecoach</b>					
Stagecoach Northwest	1,123	1,230	1,230	1,050	5,458
Impact does not appear until 2007					
<b>National Express</b>					
West Midlands Travel	1,129	1,289	4,873	4,831	5,531

- FRS17 was introduced in November 2000, but only became mandatory for accounting periods commencing on or after 1 January 2005. The main requirements of FRS17 are:
  - pension scheme assets are measured using market values
  - pension scheme liabilities are measured using a projected unit method and discounted at an AA corporate bond rate
  - the pension scheme surplus (to the extent it can be recovered) or deficit is recognised in full on the balance sheet
  - the movement in the scheme surplus/deficit is analysed into:
    - current service cost and any past service costs: these are recognised in operating profit
    - interest cost and expected return on assets: these are recognised as other finance costs
    - actuarial gains and losses: these are recognised in the statement of total recognised gains and losses (reviewed at least every three years)
- A reporting / disclosure amendment has also been issued in December 2006, and is effective for accounting periods beginning on or after 6 April 2007
- FRS17 replaces SSAP 24 which values both the assets and the liabilities in a defined benefit pension scheme on an actuarial basis (not market value). The objective is to arrive at a regular pension cost each year that is a substantially level percentage of the pensionable payroll. Any variations from the regular cost are spread forward and recognised gradually over the average remaining service lives of the employees
- In the period analysed, the bus groups typically account for pensions under IAS at the Group level, but under UK GAAP at the subsidiary level. This gives rise to some discrepancy between profitability reported at the Group level vs. the sum of subsidiary profitability levels. L.E.K. has adjusted for this impact to the extent possible given data availability in the relevant accounts (see page 18 for details of this adjustment)

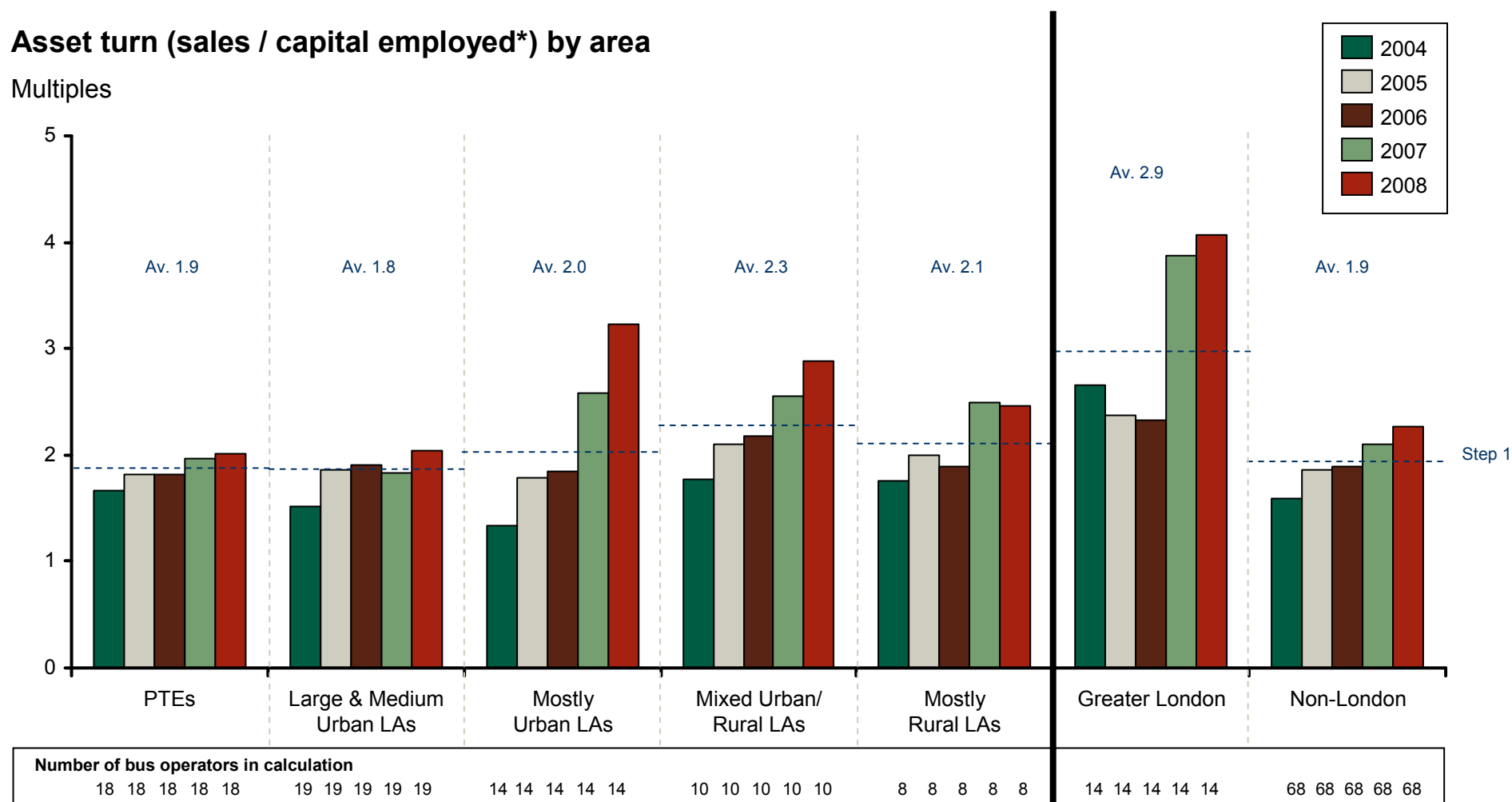
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**London has by far the highest asset turn and this has increased significantly over the last two years**

### Asset turn (sales / capital employed\*) by area

Multiples



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income

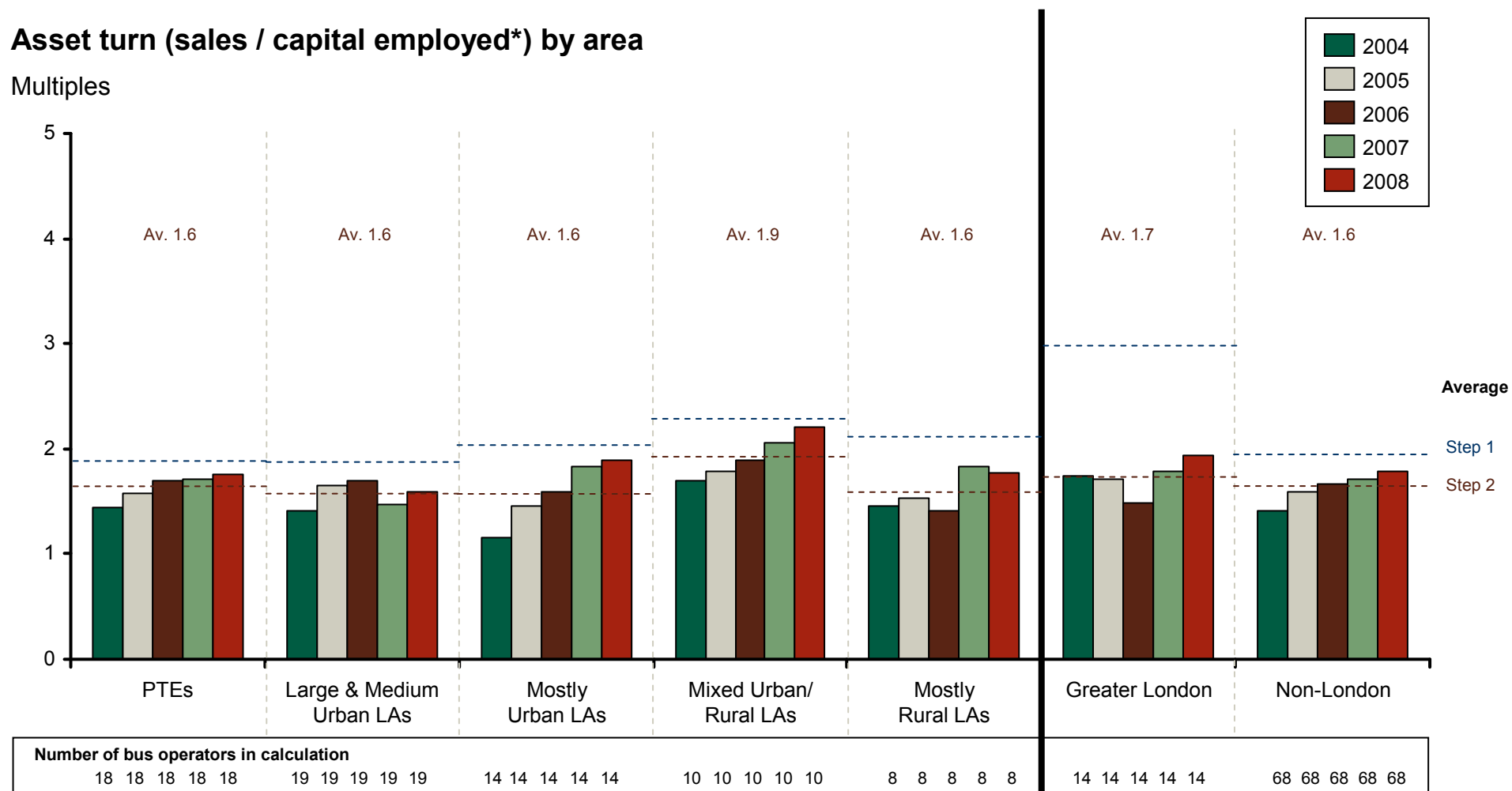
Source: Annual accounts; L.E.K. analysis

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## There is little difference by area for asset turn after capitalising leased assets

### Asset turn (sales / capital employed\*) by area

Multiples



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income

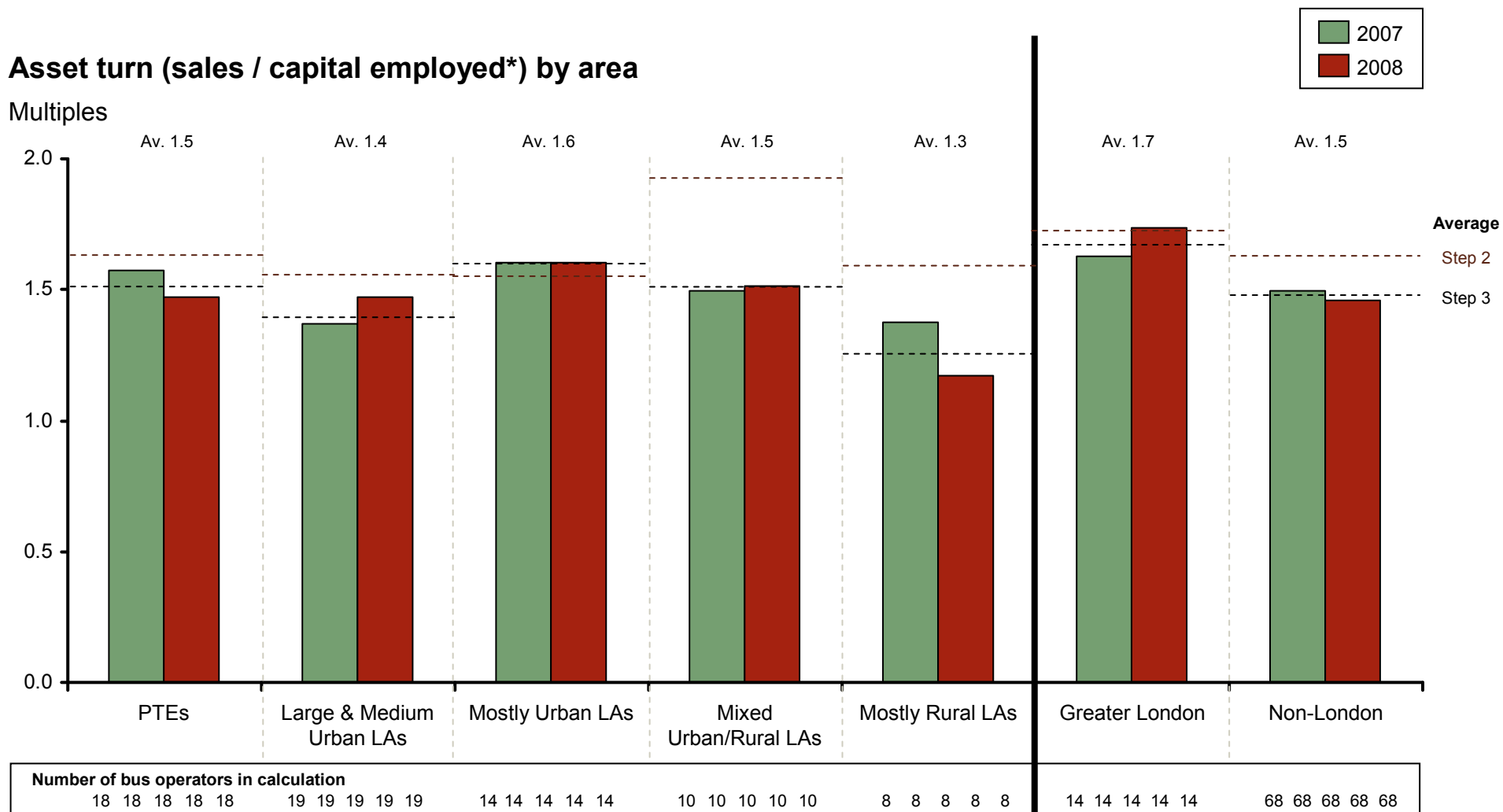
Source: Annual accounts; L.E.K. analysis

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## Asset turn is similar across most geographies

### Asset turn (sales / capital employed\*) by area

Multiples



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income

Source: L.E.K. analysis

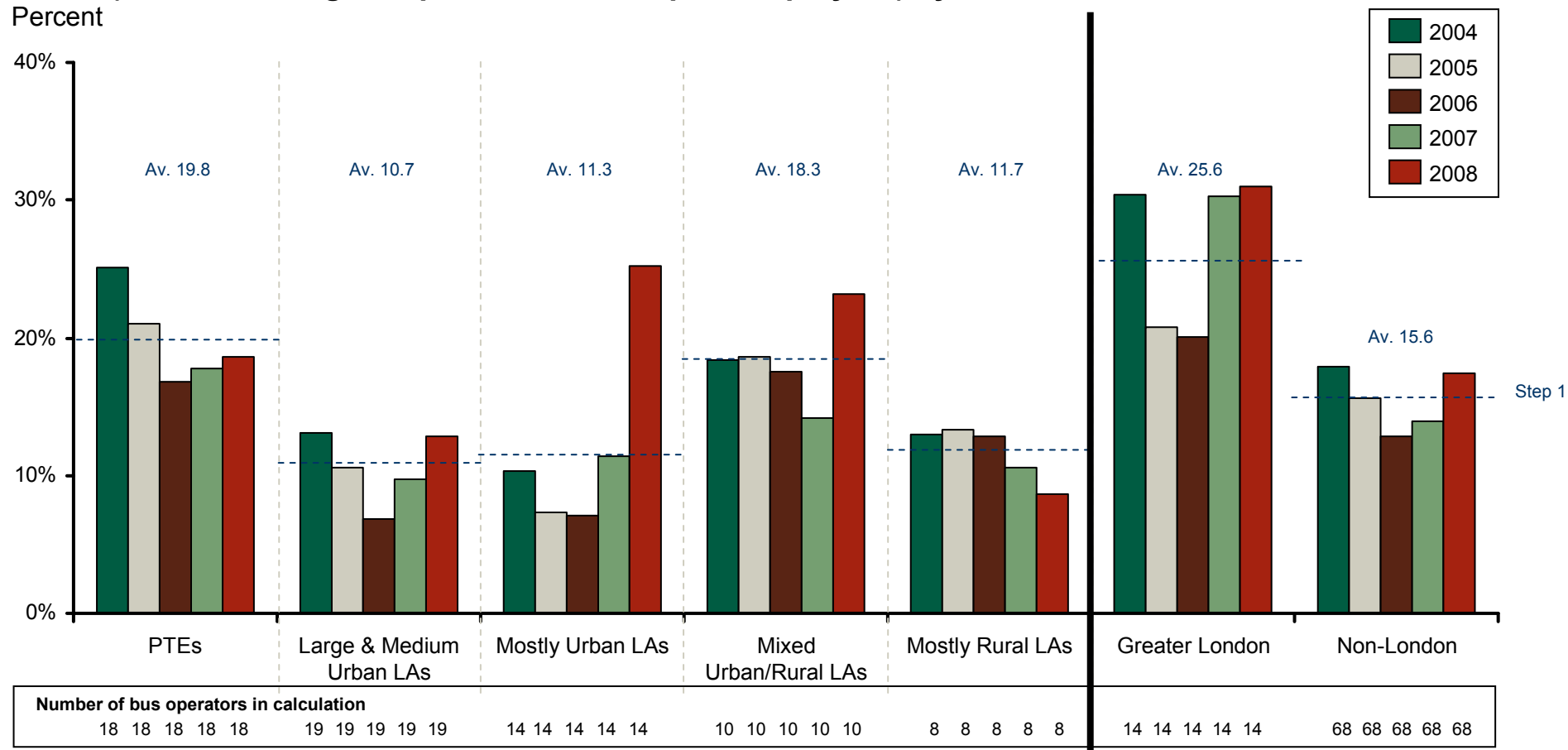
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## PTEs generate the highest return on capital employed outside of London

### ROCE (EBIT excluding exceptional items / capital employed\*) by area

Percent



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income + operating cash

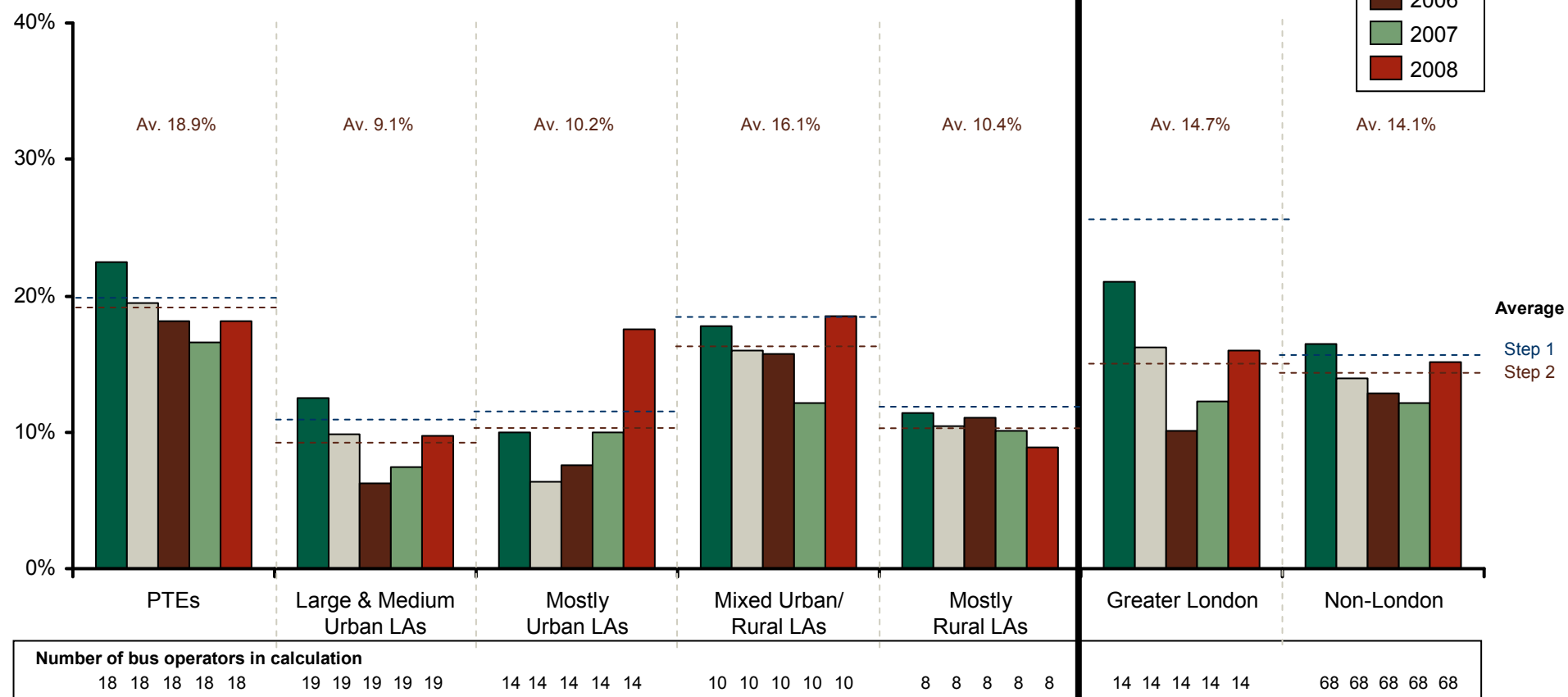
Source: Annual accounts; L.E.K. analysis

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## Return on capital employed (ROCE) remains the highest in PTE areas

### ROCE (EBIT excluding exceptional items / capital employed\*) by area

Percent



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income + operating cash

Source: Annual accounts; L.E.K. analysis

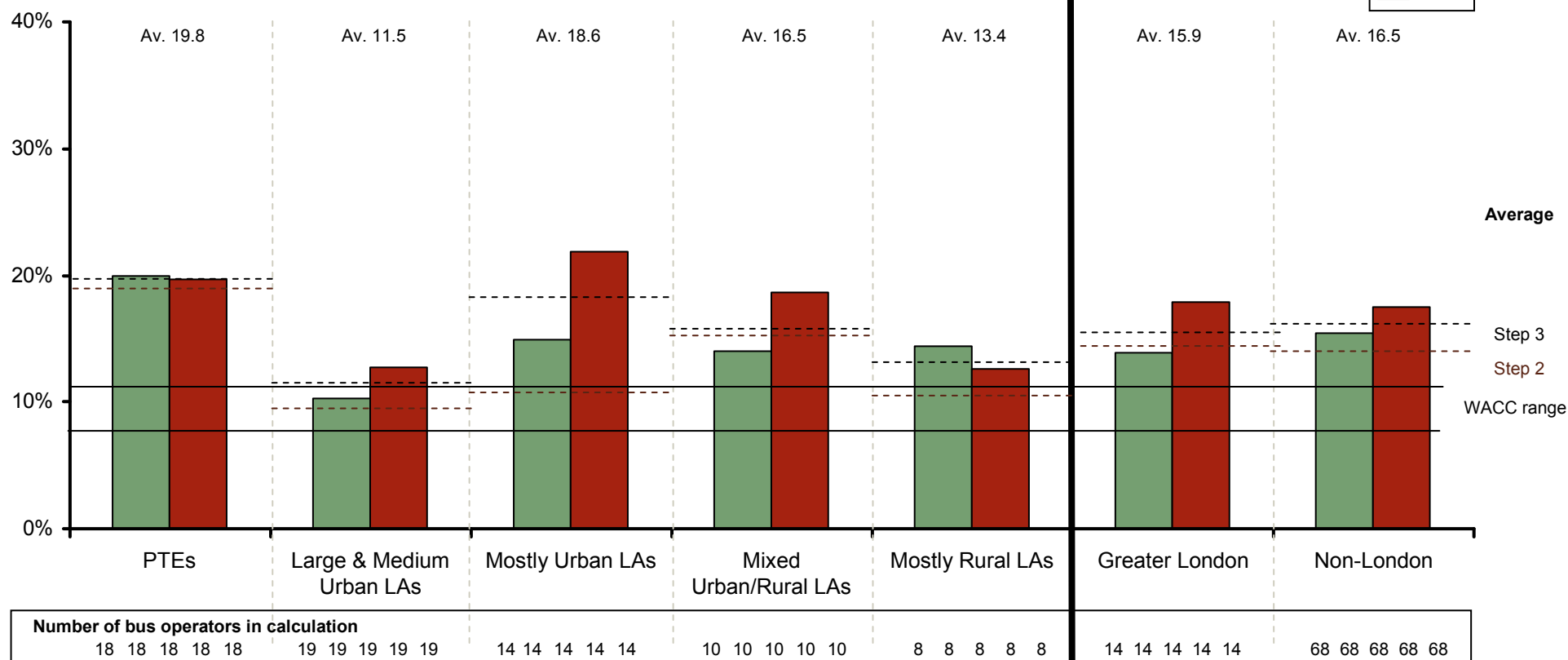
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**On this basis (step 3), PTEs, mostly Urban and Mixed Urban/Rural areas generate the highest ROCEs. All areas generate ROCEs greater than the cost of capital**

### ROCE (EBIT excluding exceptional items / capital employed\*) by area

Percent



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income + operating cash

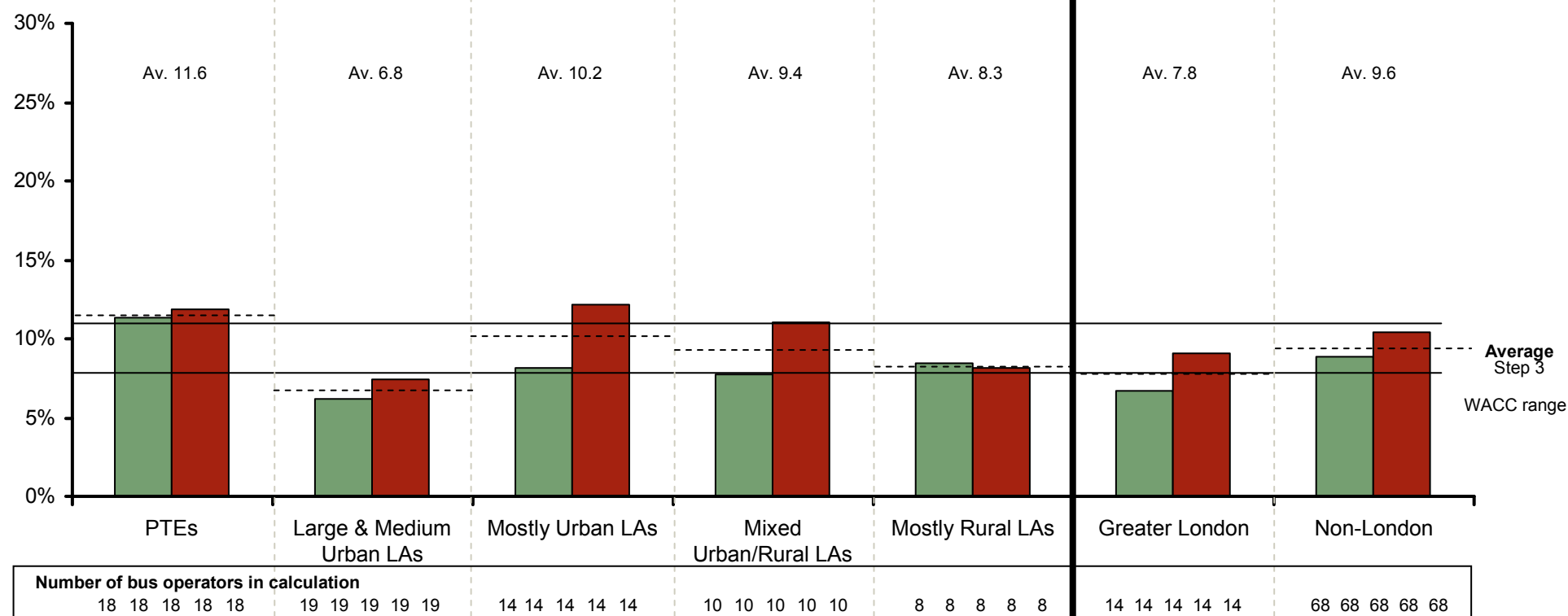
Source: Annual accounts; L.E.K. analysis

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**L.E.K. has also assessed the implied ROCE for a new fleet instead of c. 8–10 year old buses. On this basis, the ROCE is within or below the cost of capital range, except for PTEs which remains above the range**

### ROCE (EBIT excluding exceptional items / capital employed\*) by area

Percent



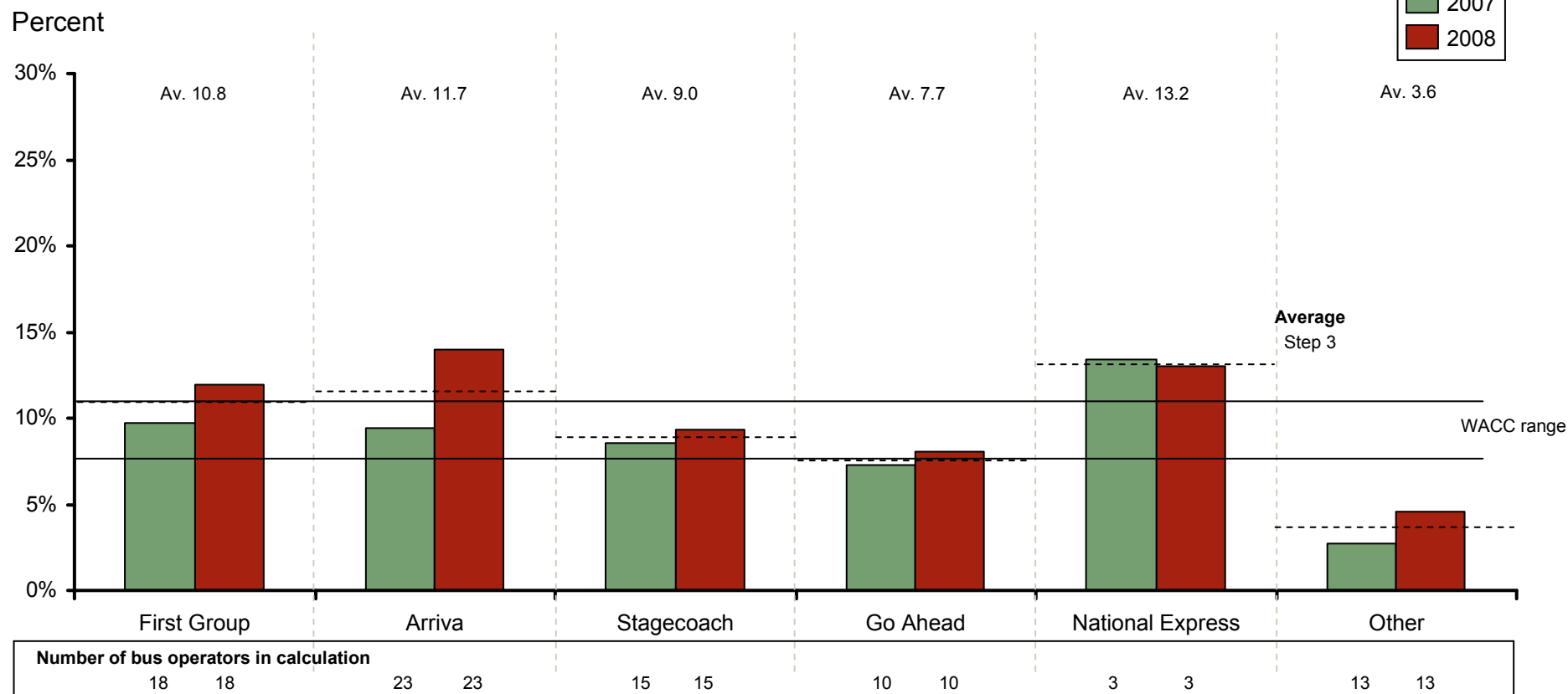
Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income + operating cash

Source: Annual accounts; L.E.K. analysis

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**L.E.K. has also assessed the implied ROCE for a new fleet instead of c. 8–10 year old buses. On this basis, the ROCE is around the cost of capital range for most operators**

### ROCE (EBIT excluding exceptional items / capital employed\*) by group



Note: \* Includes tangible fixed assets + stocks + trade debtors + other debtors + debtor prepayments and accrued income – creditor prepayments – accrued income + operating cash

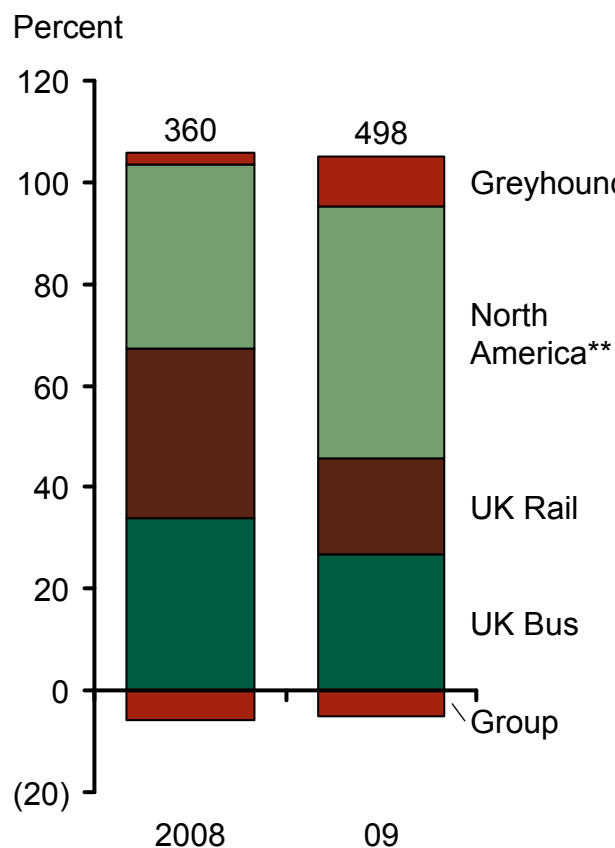
Source: Annual accounts; L.E.K. analysis

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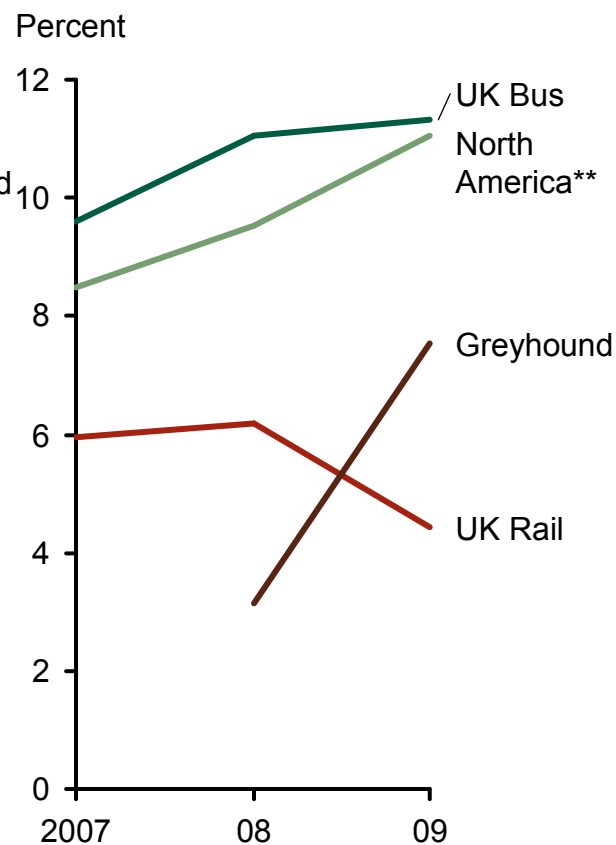
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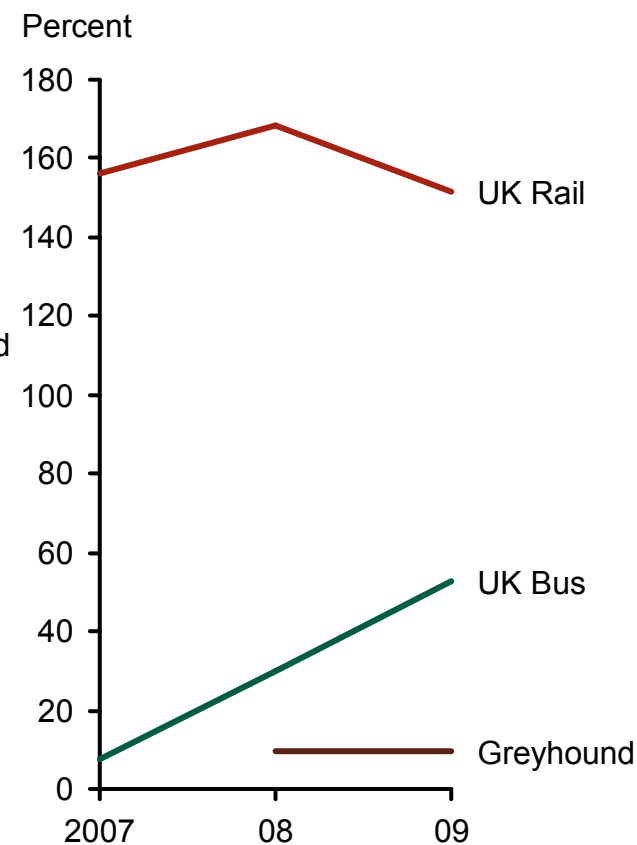
**First Group's UK bus operations generate the highest returns (ROS) compared to its other divisions. The rail operations generate the highest return on net assets**

First Group – operating profit<sup>^</sup>

First Group - return on sales



First Group - return on net assets\*



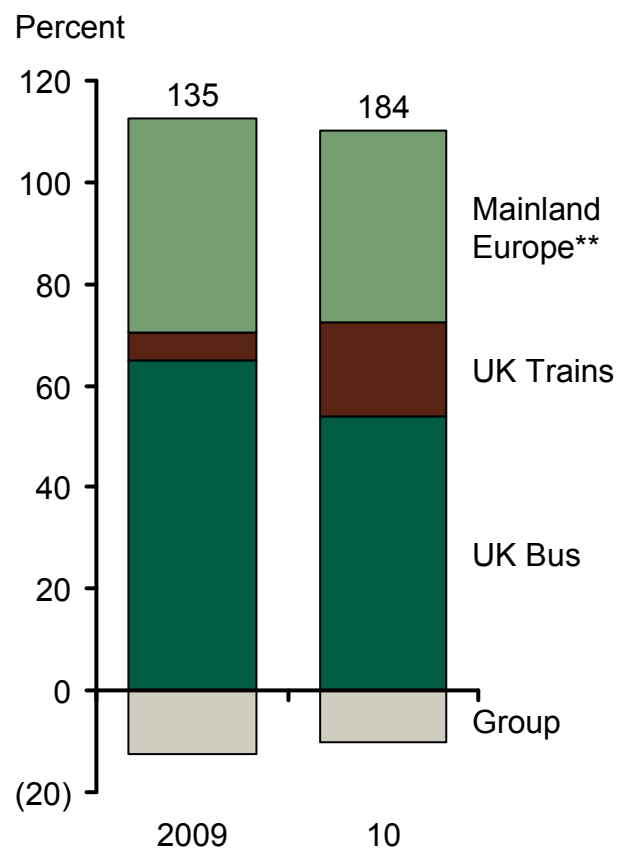
Note: \*Negative North American assets; \*\* Predominantly bus; ^ Pre exceptionals, goodwill impairment and intangible amortisation

Source: Statutory Accounts; L.E.K. analysis

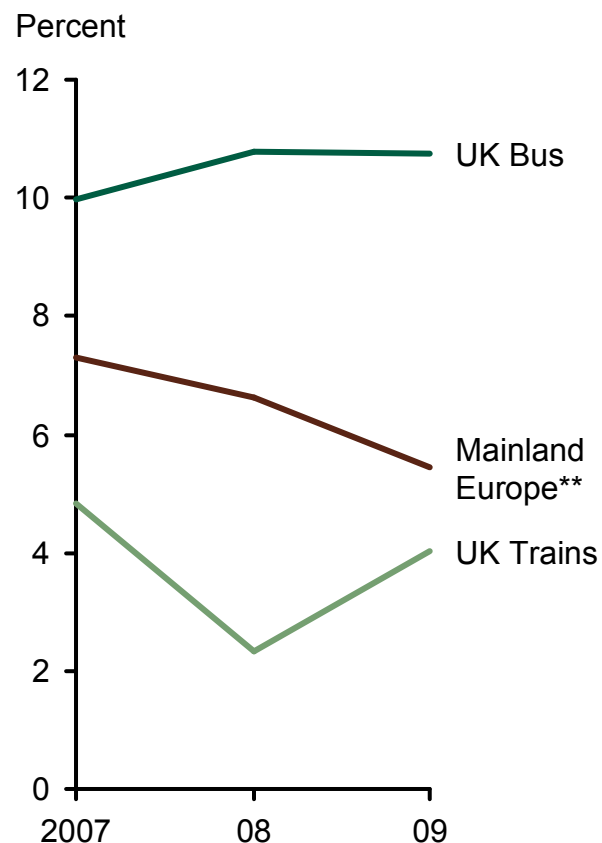
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## Arriva's UK bus operations generate the highest returns (ROS) compared to its other divisions and also the highest return on net assets

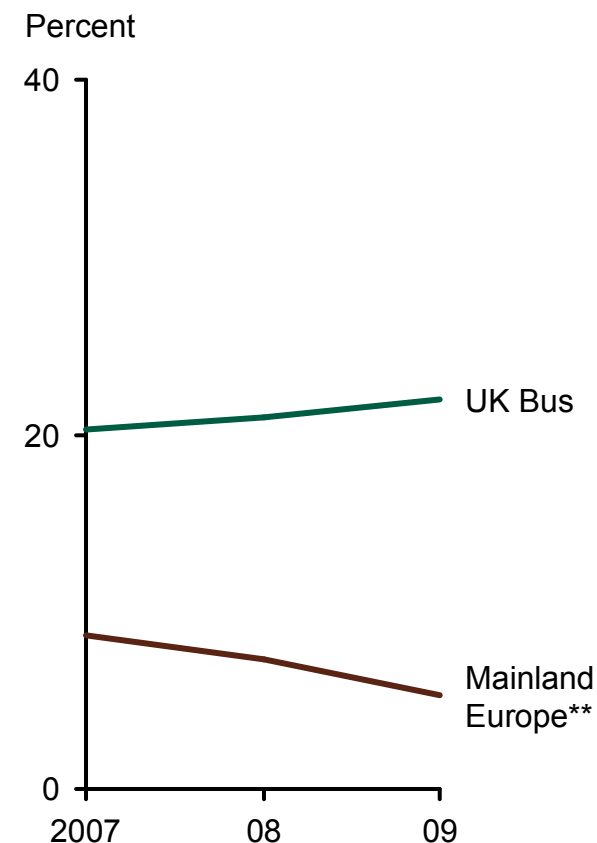
Arriva – operating profit<sup>^</sup>



Arriva - return on sales



Arriva - return on net assets\*



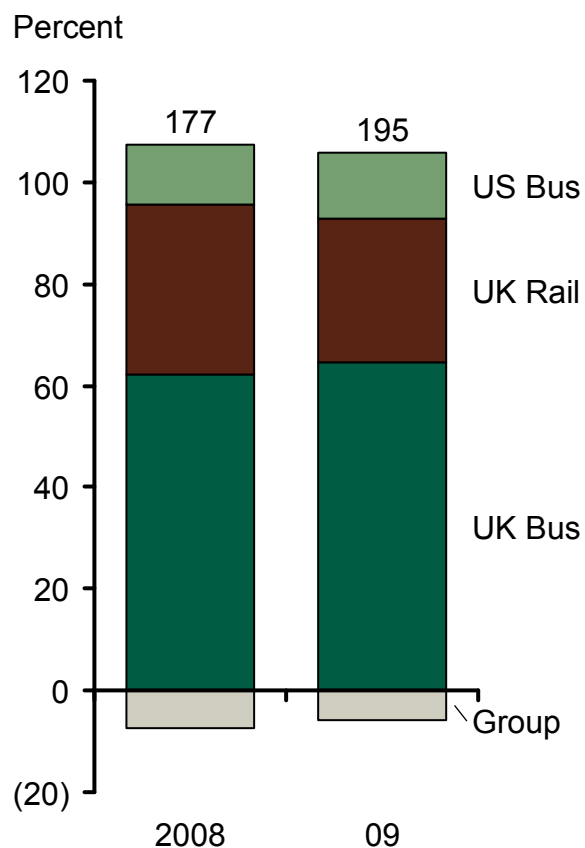
Note: \*Negative rail assets \*\* Bus and rail operations; ^ Pre exceptionals, goodwill impairment and intangible amortisation

Source: Statutory Accounts; L.E.K. analysis

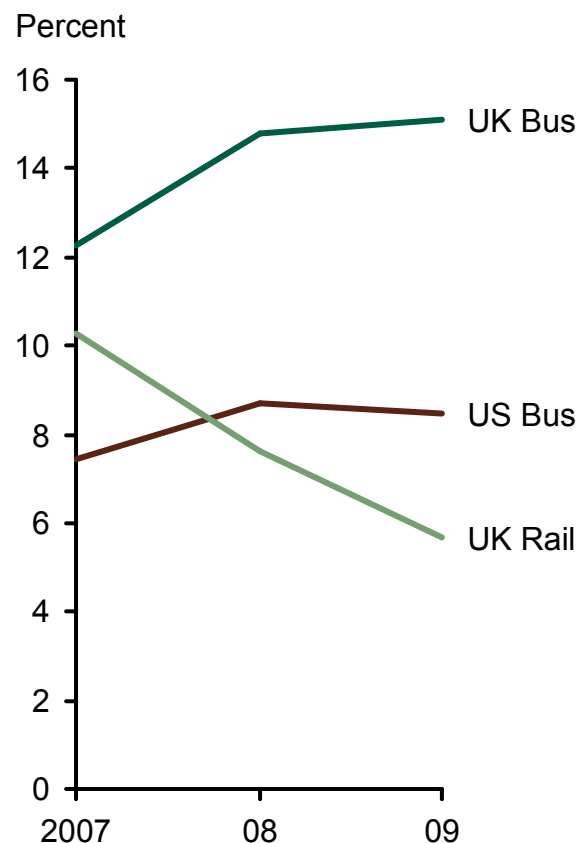
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## Stagecoach's UK bus operations generate the highest returns (ROS) compared to its other divisions and also the highest return on net assets

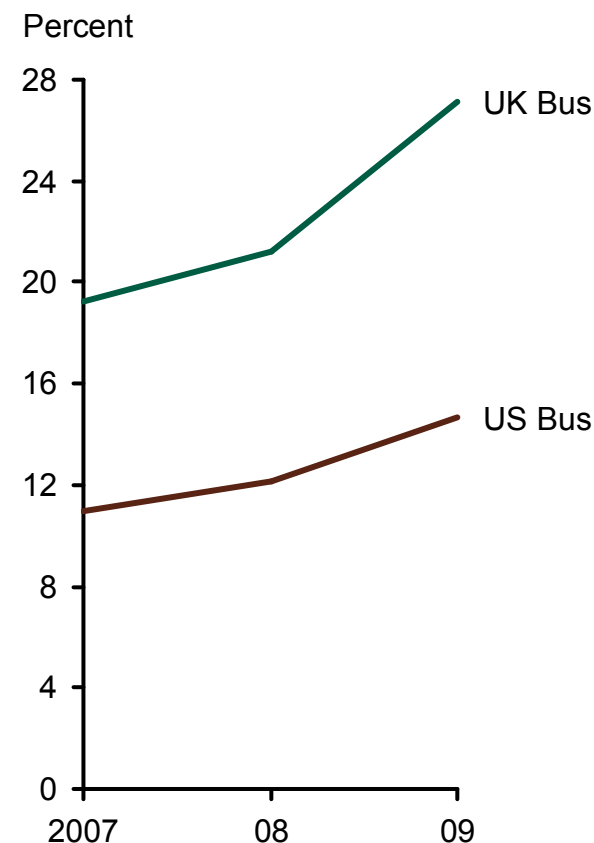
Stagecoach– operating profit<sup>^</sup>



Stagecoach– return on sales



Stagecoach– return on net assets\*

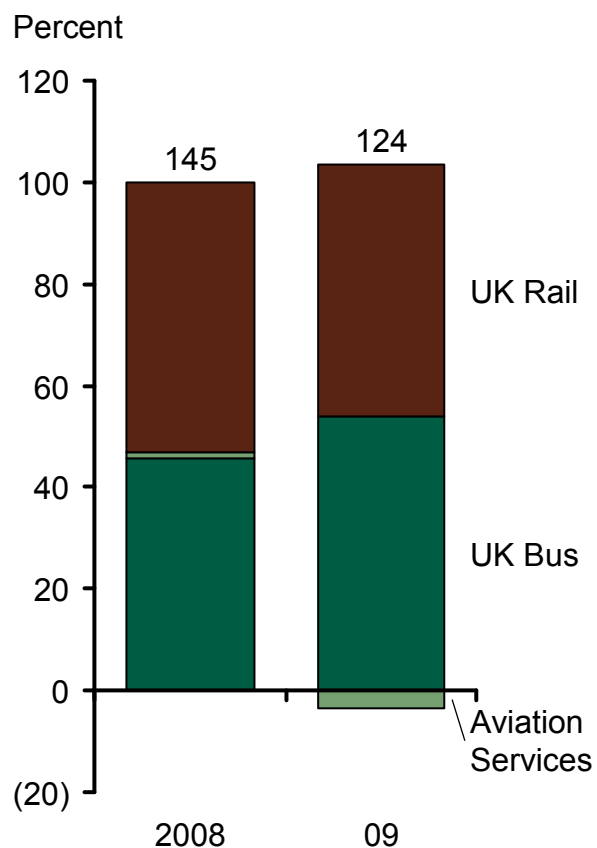


Note: \*Negative rail assets; ^ Continuing operations - pre exceptionals, goodwill impairment and intangible amortisation

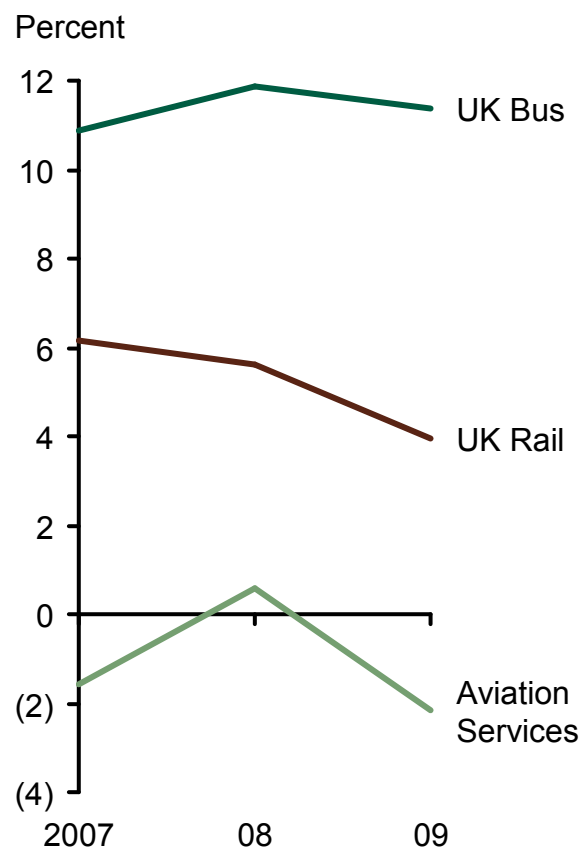
Source: Statutory Accounts; L.E.K. analysis

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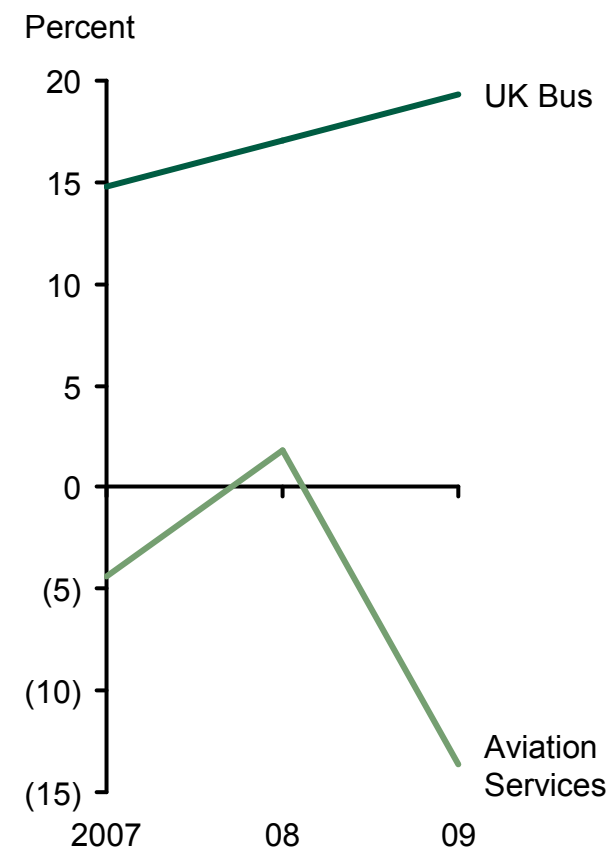
## Go Ahead's UK bus operations also generate the highest returns (ROS) compared to its other divisions and also the highest return on net assets

Go Ahead – operating profit<sup>^</sup>

Go Ahead - return on sales



Go Ahead - return on net assets\*



Note: \*Rail assets are too small to be considered; <sup>^</sup> Pre exceptionals, goodwill impairment and intangible amortisation

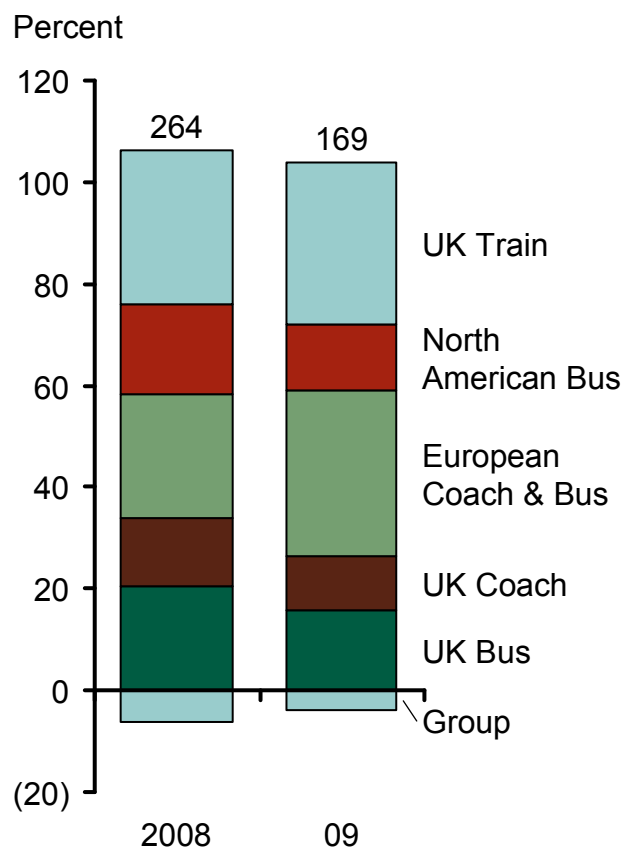
Source: Statutory Accounts; L.E.K. analysis

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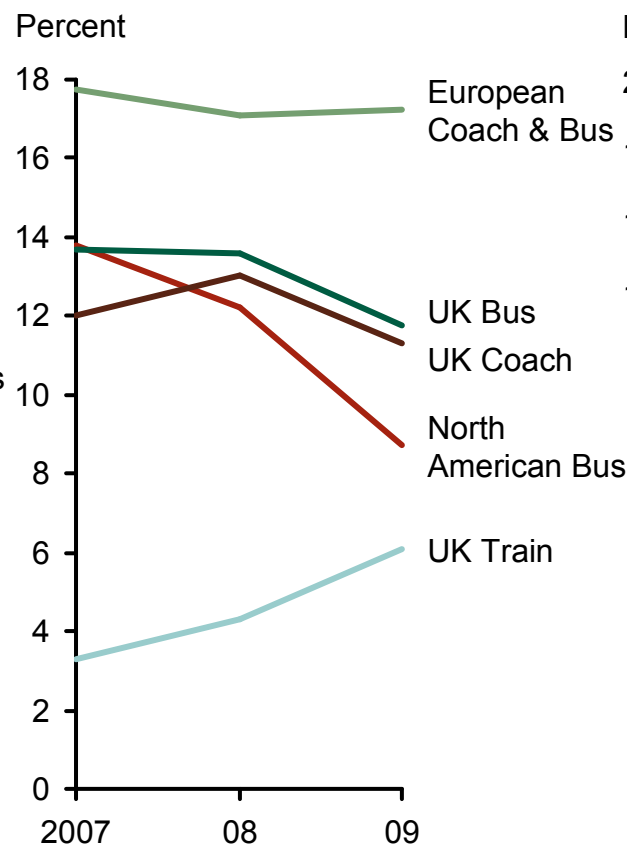


**National Express's European bus and coach operations generate the highest return on sales compared to the other divisions. The UK coach and bus operations generate the highest return on net assets**

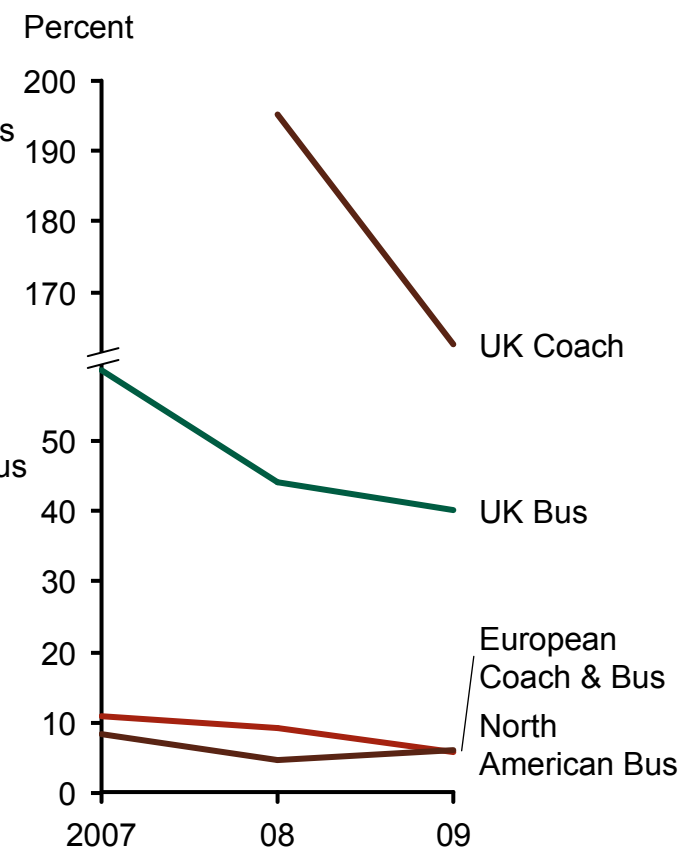
**National Express – operating profit<sup>^</sup>**



**National Express – return on sales**



**National Express – return on net assets\***



Note: \*Negative rail assets; <sup>^</sup> Continuing operations - pre exceptionals, goodwill impairment and intangible amortisation

Source: Statutory Accounts; L.E.K. analysis

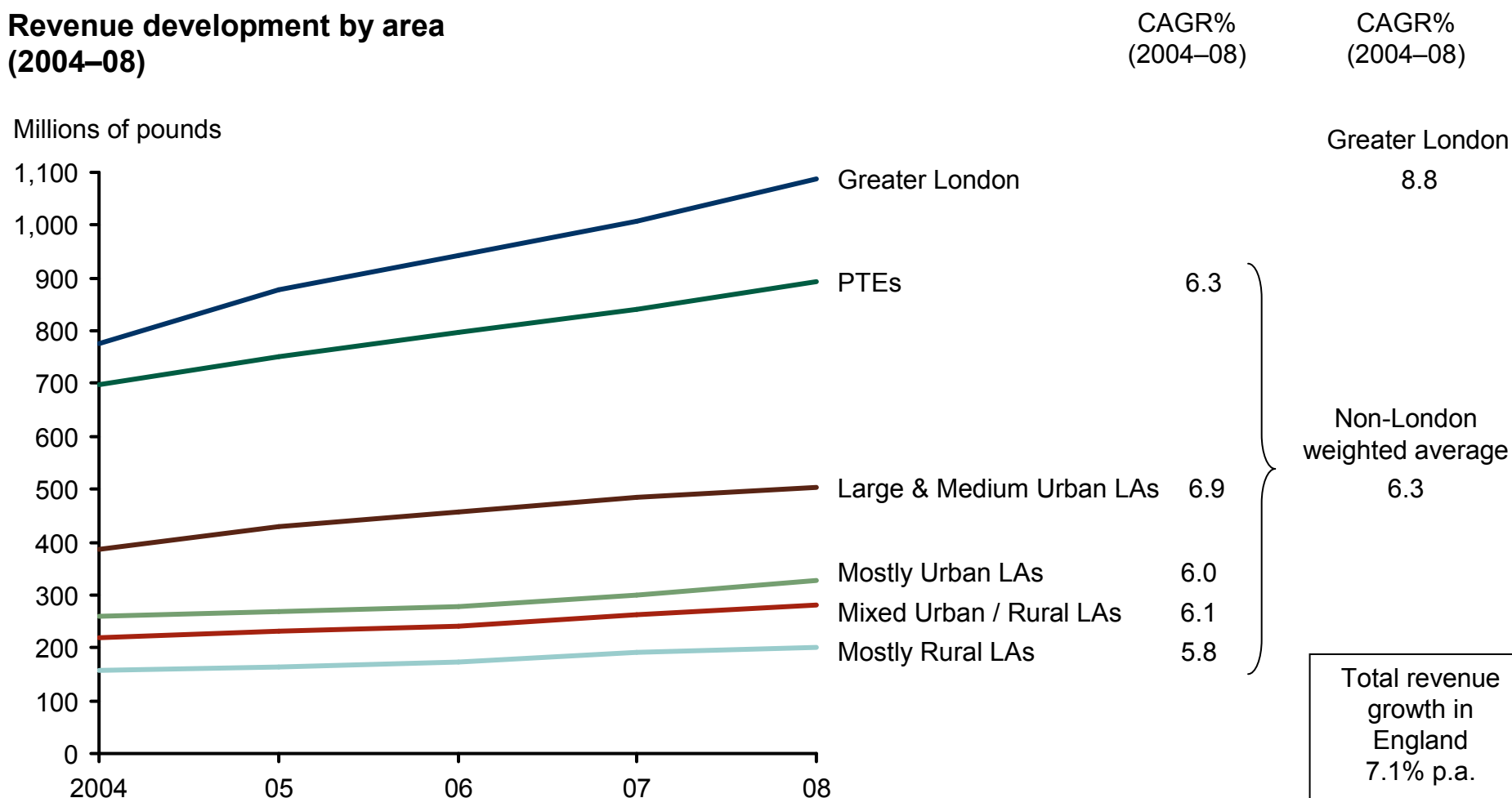
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**Between 2004 and 2008, revenue growth of the bus operators has been over 8% p.a. in Greater London versus c.6% p.a. outside of Greater London**

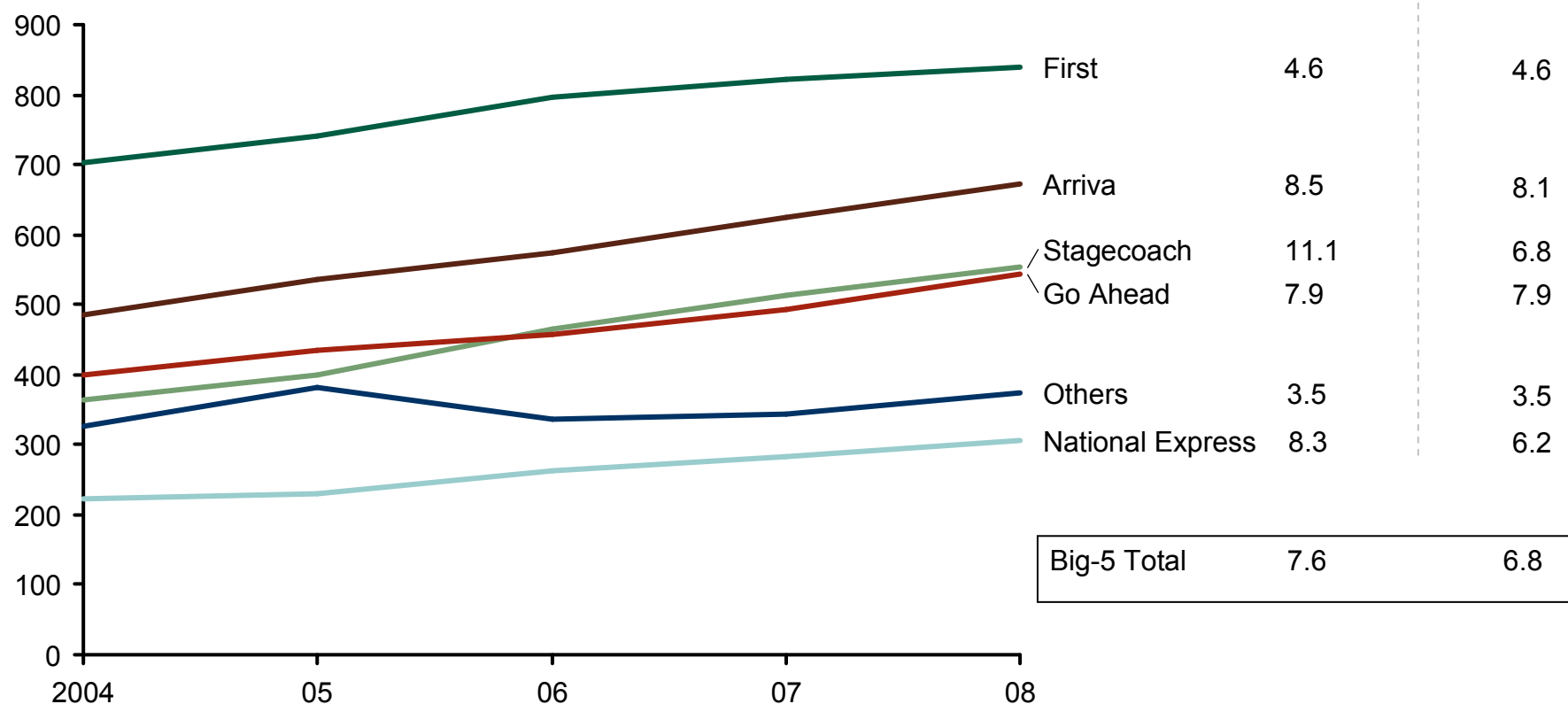
### Revenue development by area (2004–08)



## Between 2004 and 2008, Arriva, Stagecoach and Go Ahead had the highest estimated organic revenue growth of the larger operators

### Revenue development by operator (2004–08)

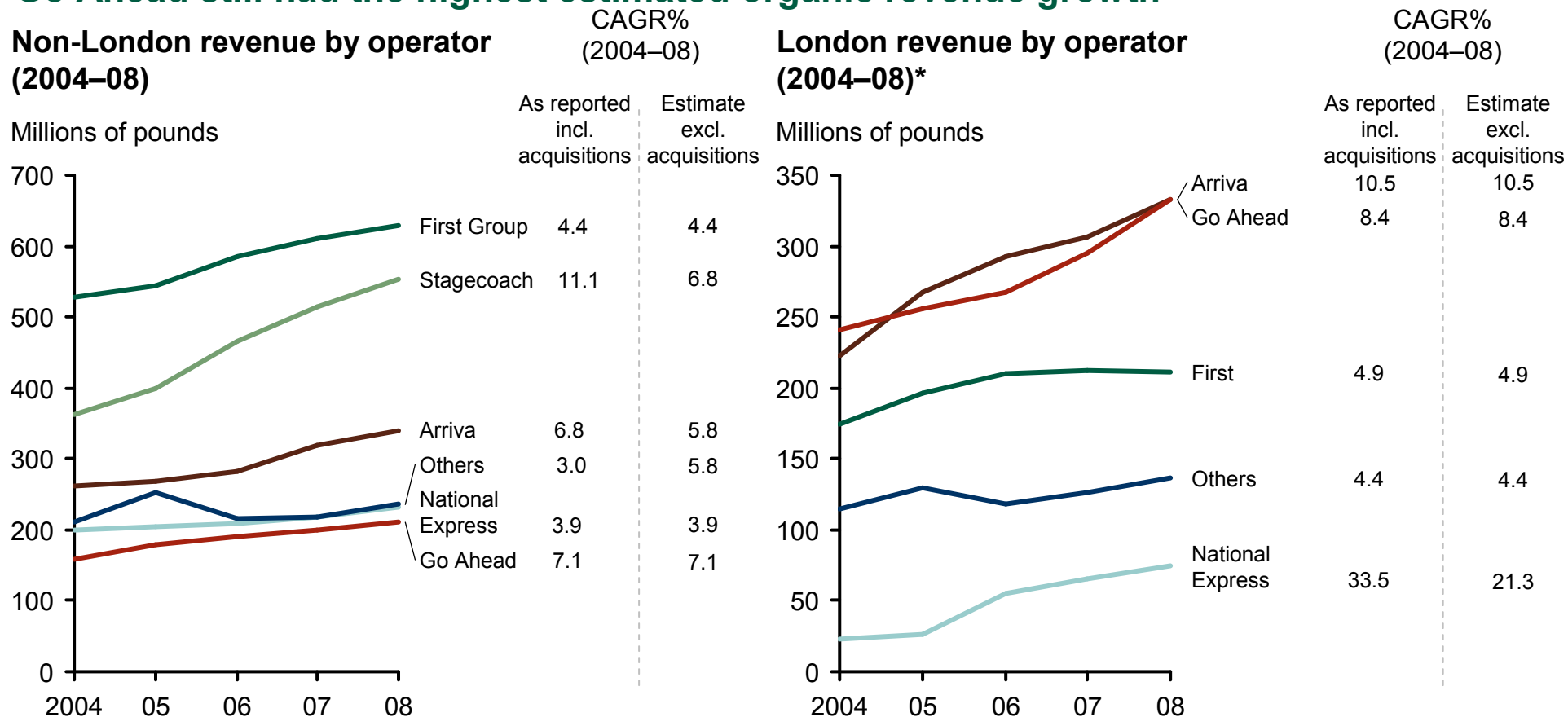
Millions of pounds



Note: Stagecoach made a number of acquisitions in 2006: Andrews (Sheffield) Limited, Glenvale Transport Limited, Lincolnshire Road Car Company Limited, Strathclyde Scottish Omnibuses Limited and Yorkshire Traction Company Limited; Arriva acquired MK Metro Limited in 2007; National Express acquired Travel London (West) Limited in 2006

Source: Annual accounts; L.E.K. Analysis  
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**Revenue growth rates have varied considerably between the London and non-London operations of each of the big-5. Outside London, Arriva, Stagecoach and Go Ahead still had the highest estimated organic revenue growth**



Note: Stagecoach made a number of acquisitions in 2006: Andrews (Sheffield) Limited, Glenvale Transport Limited, Lincolnshire Road Car Company Limited, Strathtay Scottish Omnibuses Limited and Yorkshire Traction Company Limited; Arriva acquired MK Metro Limited in 2007; National Express acquired Travel London (West) Limited in 2006

Source: Annual accounts; L.E.K. Analysis

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