

Pricing approaches and changes

Introduction

1. In this appendix we begin by examining the ROSCOs' pricing approaches, setting out their stated views as to how lease capital rentals are agreed.
2. We then consider the influences on capital rentals by examining:
 - (a) capital rentals at first lease; and
 - (b) capital rentals at subsequent leases. This analysis includes:
 - the level of capital rentals for MOLA rolling stock over time and their relationship with capital rentals for post-MOLA rolling stock;
 - a quantitative assessment of changes in capital rentals;
 - the parties' quantitative evidence on changes in capital rentals; and
 - a qualitative assessment of the reasons for changes in capital rentals.

Pricing approaches

3. In this section we examine the stated approaches of the ROSCOs to determining lease rentals. We begin by explaining how lease rentals were first set at privatization before examining how new rolling stock capital rentals are set at first lease. We then consider the process by which capital rentals for subsequent leases on MOLA and post-MOLA rolling stock are set.

First leases for MOLA rolling stock at privatization

4. Prior to privatization of the ROSCOs and in the absence of an active market for leasing passenger rolling stock, the Government set the initial capital rentals for MOLA rolling stock. The DfT told us that the initial rentals for MOLA rolling stock '... were intended to represent a reasonable approximation to the prices which would pertain in the longer term in a competitive market ...', and 'achieve comparability between the overall net costs of operating older and newer [rolling] stock of similar type, avoid discouraging investment in new rolling stock or premature scrapping of older [rolling] stock'. The DfT added that this method was designed to set a price for the MOLA rolling stock at a level just below that at which a TOC would choose to lease new rolling stock.
5. This approach, known as the indifference pricing method, calculated rentals based on the cost of a notional replacement fleet of new rolling stock. This calculation consisted of four broad steps:¹
 - (a) Identification of a notional replacement fleet for each existing fleet in order to calculate an annual lease charge for the replacement fleet. This annual lease

¹The description of the calculation is as set out in the Hambros Bank Information Memorandum for the sale of the three ROSCOs (May 1995).

charge was based on a notional annual finance lease charge calculated using an assumed economic life of 30 or 35 years,² and an annuitized heavy maintenance charge. The purchase price of the replacement fleet on which the finance lease charge was calculated had a discount of 10 to 20 per cent applied 'in order to anticipate possible future reductions in the [purchase] price of rolling stock'.³

- (b) Calculation of the 'indifference rental'⁴ for the existing fleet by adjusting for differences in running costs to be incurred by the TOC on the existing fleet compared with the replacement fleet, and adjusting for differences in potential revenue earnings based on a sliding scale adjustment of no reduction for vehicles up to three years old to a reduction of 8 per cent of revenue for 30-year-old vehicles.
 - (c) Allocation of the indifference rental into capital and non-capital components, with the capital element being the difference between the indifference rental and the heavy maintenance rental on the existing fleet.⁵
 - (d) Calculation of the actual rentals. As the capital rental was based on a notional finance lease, an operating lease premium was added to the capital rental to reflect the residual value risk that rolling stock may not be re-leased on the same terms at the end of the initial lease period. The operating lease premiums were set to give an incentive to the TOC to choose longer leases. The premiums consisted of a sliding scale with newer rolling stock having a higher premium than older rolling stock and therefore a higher capital rental.
6. The DfT told us that indifference pricing 'was used to set a "day one price" [ie for privatization] and had no ongoing function or relevance after day one'. The DfT also said that the setting of prices in the initial lease period through the indifference price method was not intended as a substitute for the market setting competitive prices in the long term. It said that it had been fully expected, that in subsequent lease periods, competition would emerge from new rolling stock, and the consequent displacement of used rolling stock would create an excess of supply over demand.

First lease for new rolling stock

7. All three ROSCOs use a proprietary leasing software package, named 'Classic', to calculate the per month capital rental for the initial lease of new rolling stock.⁶ The critical components in the calculation are purchase costs, the funding cost (normally based on 100 per cent debt finance), tax rates and capital allowances, payment profiles, the assumed useful economic life of the asset, and the profit margin percentage ('the margin').⁷ When the first lease is agreed, the funding cost is usually fixed for the duration of that initial lease term.
8. In most cases, initial capital rentals are calculated using an assumption that capital rentals remain constant in nominal terms over the assumed useful economic life of

²The assumed economic life was 35 years for EMUs and electric locomotives and 30 years for other rolling stock.

³In practice, the purchase price of new rolling stock has increased in nominal terms since privatization (see paragraphs 22 to 24).

⁴The Hambros Information Memorandum described the 'indifference rental' as an amount at which an operator would, in theory, be indifferent as between leasing the existing fleet and leasing the replacement fleet.

⁵The non-capital rental comprises the heavy maintenance rental and pro rata allocations for overheads, design and endemic faults and movements.

⁶Non-capital rentals are discussed in Section 7 of the main report.

⁷The margin or the capital rental can be the output from the software model. The margin on a lease is the difference between the overall rate of return on the lessor's investment (in practice, the maximum rate of interest on a loan that would be repaid by the lease cash flows) and the actual loan rate. So if the lease cash flows would repay a loan at 9 per cent and the lessor can borrow at 6 per cent, the margin is 3 per cent.

the asset.⁸ One ROSCO [X] said that having constant nominal capital rentals 'ensures that TOCs subject to the primary lease period are not penalized in terms of funding a larger proportion of the capital cost, than those in subsequent lease periods where the residual value is lower'.

9. In calculating capital rentals for new rolling stock, none of the ROSCOs explicitly assumes any subsequent investment (for example, a mid-life refurbishment) or any period when the rolling stock assets could be off-lease. However, we were told by the ROSCOs that in setting the margin they take account of asset re-lease risk for the rolling stock.

Subsequent leases

10. The ROSCOs generally use the same 'Classic' software package or an alternative spreadsheet model to assess the capital rental and margin to be used as a starting point in negotiations over subsequent leases of both MOLA and post-MOLA rolling stock.⁹ All three ROSCOs emphasized that rather than simply continue with the previous capital rental, there are a variety of factors (such as negotiations with TOCs and competitive pressures from alternative used or new rolling stock) that determine the capital rental that can be achieved on subsequent leases.¹⁰
11. Each ROSCO adopts a slightly different approach to arriving at capital rental offers for subsequent leases, with one ROSCO (HSBC) still explicitly using a version of the indifference pricing model initially adopted at privatization. In the remainder of this section, we examine each of the respective ROSCOs' descriptions of their approaches, considering the role of the previous capital rental and the indifference pricing model in the determination of capital rentals.

Angel

12. Angel stated that for MOLA fleets it generally sets itself the target of achieving the same capital rental that it previously had for that fleet. It noted that the DfT's call option¹¹ effectively prevented a ROSCO from increasing capital rentals at re-lease other than where there was a clear and reasonable justification for doing so (such as a change in the length of lease or rentalization of additional investment). Angel added that in establishing a capital rental for MOLA fleets it analysed the perceived competitive threats and risks to the fleet and that, in almost all negotiations for subsequent leases, there had been significant pressure to reduce capital rentals.
13. Angel told us that on post-MOLA fleets, it also started from the position that the capital rentals at subsequent leases should be the same as in the previous lease. However, it recalculated capital rentals by adjusting the 'Classic' model for any changes in assumptions (eg interest rates) from the first lease.
14. In Angel's internal papers, it evaluates capital rentals against a 'new train equivalent mark to market'. This concept is similar in principle to the indifference pricing model used at privatization. However, Angel told us that the 'new train equivalent mark to market' figure was primarily used as part of its impairment analysis on its fleets. It is a floor rental and represents a minimum acceptable return to Angel. When we

⁸This means that capital rentals are assumed to decline in real terms.

⁹In evaluating whole-life margins for both MOLA and post-MOLA rolling stock, the ROSCOs assume a constant stream of the existing rental over the remaining useful economic life.

¹⁰We test the factors affecting changes in capital rentals in our qualitative assessment below and in our econometric analysis in Appendix 6.2.

¹¹We discuss the DfT's call option in Appendix 2.1.

compared the capital rental offered¹² with the ‘new train equivalent mark to market’ capital rental, we found that in the vast majority of cases the offered capital rental was higher. This supported Angel’s statement about the purpose of this evaluation tool. Angel added that its pricing models also provided some guidance on what capital rentals might be prior to negotiations and were used to monitor and evaluate what returns were being made once rentals had been agreed.

HSBC

15. HSBC stated that, when assessing the potential profitability of a new fleet, it has historically considered the ‘base case assumption’ to be that the rentals earned over an asset’s lifetime will be flat in nominal terms. In setting capital rentals on subsequent leases, HSBC told us that it used the principle of indifference pricing by setting capital rentals to reflect the value and performance of the fleet, taking into account the competitive options available to the TOCs (this includes both alternative used and new rolling stock). Therefore the actual rental may differ from the previous rental for a variety of reasons (eg the relative price of new rolling stock, maintenance costs, TOC negotiations and additional capital investment). HSBC noted that an indifference pricing approach was also used for the assessment of first leases, in particular in cases where a view was taken at first lease that a flat rental assumption was not sustainable on an indifference pricing basis. HSBC’s indifference pricing approach to each lease is explicitly set out in its internal papers.

Porterbrook

16. Porterbrook told us that the existing capital rental formed only the starting point for its assessment of capital rental charges for re-leased rolling stock. It added that the assumption of constant nominal capital rentals was a forecasting assumption rather than a pricing rule.
17. In negotiating capital rentals, Porterbrook stated that it reviewed the existing capital rental and made an adjustment for commercial factors, including other rolling stock that might be available, opportunities to lease the rolling stock elsewhere, capital rentals for similar vehicles, additional capital expenditure and specific risks.
18. Porterbrook said that it did not formally use any indifference pricing model but it did compare used rolling stock against new rolling stock to assess the differences in capital rentals. Although Porterbrook made little reference to any new rolling stock benchmarks in its internal papers, it told us that such an assessment was carried out as part of a separate pricing and risk exercise.

Capital rentals at first lease

19. Angel, HSBC and Porterbrook all said that there had been an upward trend in purchase prices of new rolling stock, though it was also pointed out that prices have varied widely by fleet. Porterbrook submitted that there had been an upward trend in nominal purchase prices of DMU and EMU rolling stock of [%] and [%] per cent a year respectively.
20. We found that it was important to distinguish between purchase prices and capital rentals for new rolling stock. We considered that the capital rental at first lease reflects the price faced by the TOC but that we should examine both prices together

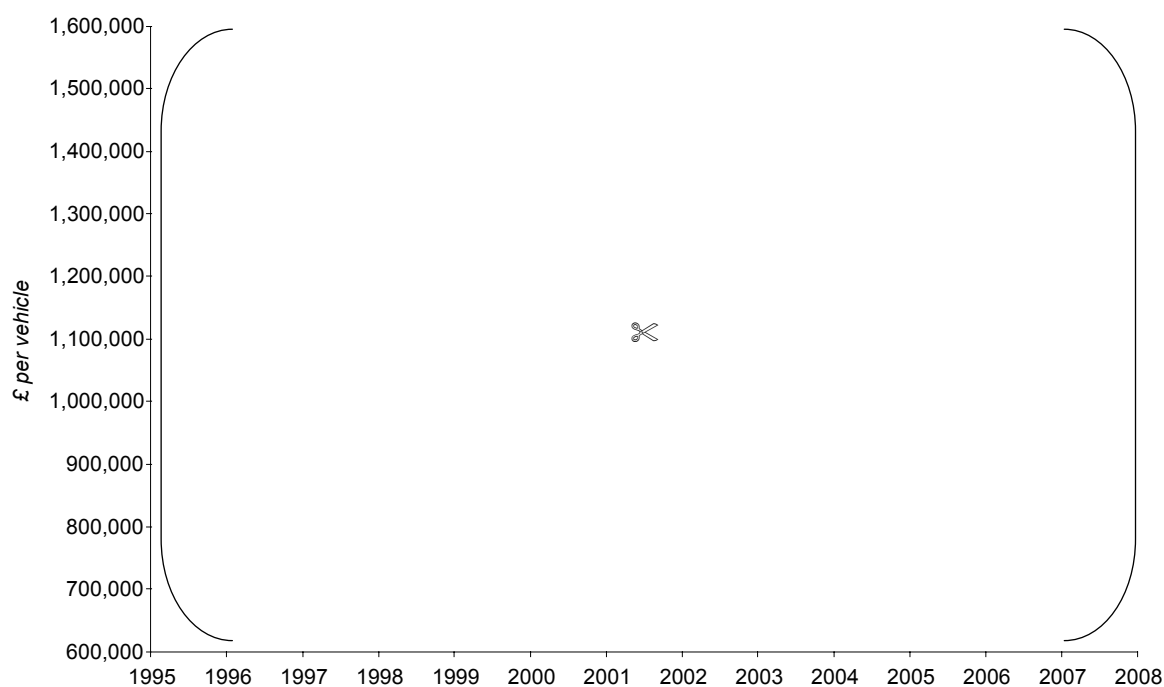
¹²This is capital rental figure quoted in Angel’s internal documents as having been offered to franchise bidders.

in order to understand the way the leasing market operates (and in particular how the purchase price is converted into a capital rental).

21. We therefore examined the trend since privatization in purchase prices and capital rentals of new rolling stock. We noted that the lack of homogeneity in rolling stock makes comparison over time difficult—no one DMU or EMU order could be said to be exactly the same as another DMU or EMU order (for instance, due to differences in individual TOC requirements and fleet sizes¹³). Partly to account for this and to provide a more meaningful comparison, we grouped certain types of rolling stock together into DMUs and EMUs with maximum speeds of less than 100mph.¹⁴ However, we noted that as a result our analysis and assessment of trends was based on a limited number of data points (29 leases for DMUs and 26 leases for EMUs).
22. Figures 1 and 2 show that nominal purchase prices paid by ROSCOs¹⁵ for new rolling stock (in pounds per vehicle) increased in nominal terms between privatization and the end of 2007 for both DMUs and EMUs with maximum speeds of up to 100mph. The size of the ‘bubble’ for each observation represents the number of vehicles involved.

FIGURE 1

Nominal purchase prices (paid by ROSCOs) for DMUs up to 100mph



Source: CC analysis.

Note: The size of the ‘bubble’ for each observation represents the number of vehicles involved.

23. In Figure 1, DMU nominal purchase prices have risen from £[✂] in 1996 to £[✂] in 2007 (an increase of approximately 36 per cent). The RPI has increased by nearly 36 per cent between 1996 and 2007, which means there is almost a flat trend in real

¹³Due to the high set-up cost of production lines, the size of orders may be a significant factor in the cost per vehicle of new rolling stock.

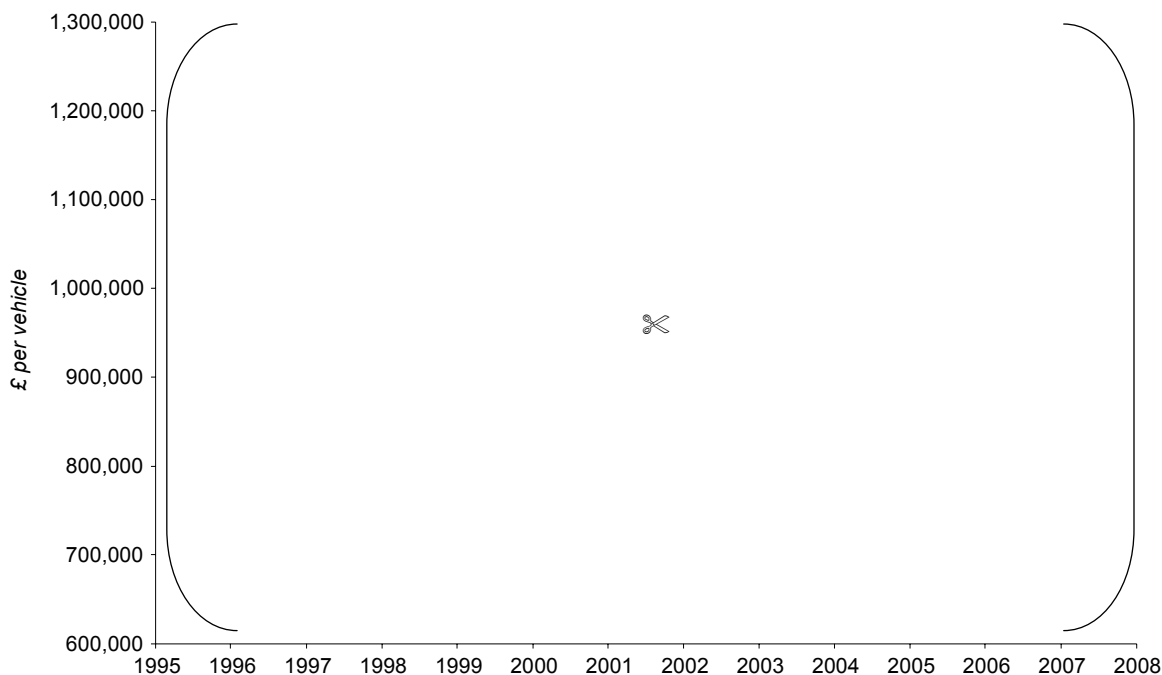
¹⁴In practice, this meant excluding the Class 180s, 390s and 395s which would not be particularly comparable to slower DMUs and EMUs. There were insufficient data points to conduct a separate analysis for these high speed DMUs, DEMUs and EMUs.

¹⁵The purchase price is essentially the construction costs for the rolling stock.

terms. This percentage increase is based on a simple point to point estimate for 1996 to 2007 and we have not used a line of best fit.

FIGURE 2

Nominal purchase prices (paid by ROSCOs) for EMUs up to 100mph



Source: CC analysis.

Note: The size of the 'bubble' for each observation represents the number of vehicles involved.

- 24. In Figure 2, EMU nominal purchase prices have risen from a vehicle-weighted average of £[x] in 1997 to a vehicle-weighted average of £[x] in 2007 (an increase of nearly 40 per cent). In real terms, this is an increase of around 7 per cent. Again, this percentage increase is based on a simple point-to-point estimate for 1997 to 2007 and we have not used a line of best fit.
- 25. In setting capital rentals for first lease we noted in paragraph 7 that this takes into account a number of factors that include the cost of funding. We found that the cost of funding¹⁶ has fallen from 8.3 per cent at privatization to 6.3 per cent in 2007, as shown in Figure 3.

¹⁶The cost of funding is the cost of debt, which is taken to be the average of AA- and A-rated corporate debt yields with maturities of five to seven and seven to ten years. Annual figures presented are based on the monthly average for that year.

FIGURE 3

Cost of debt from privatization to end of 2007



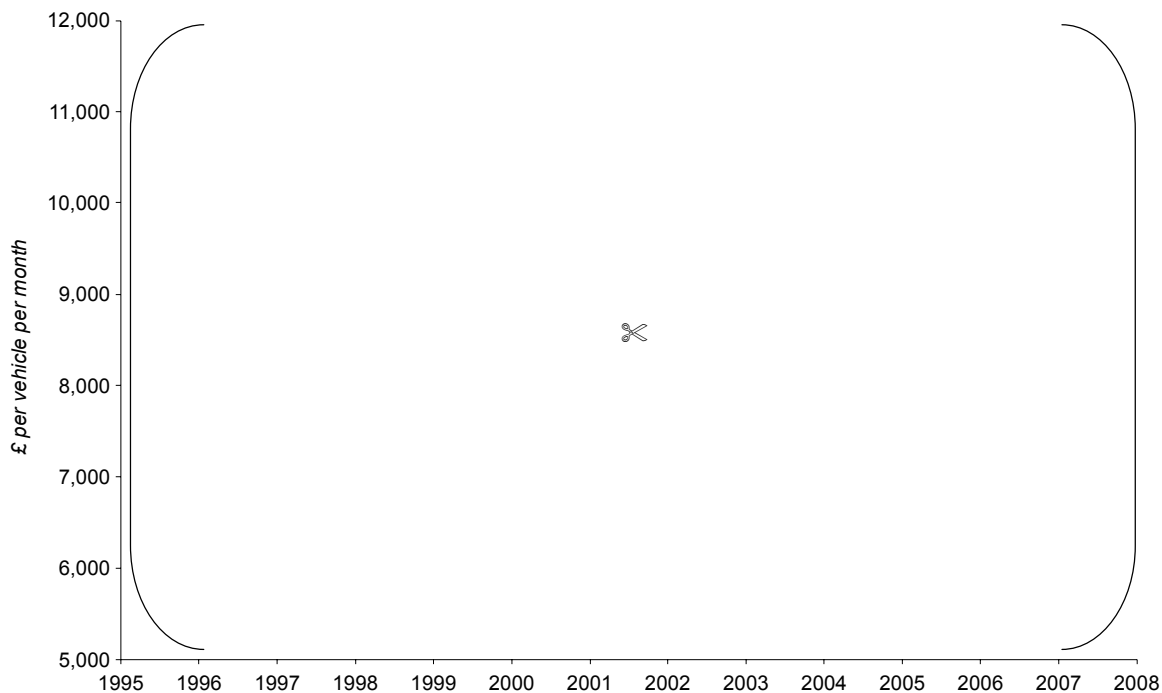
Source: CC analysis of AA- and A-rated corporate debt yields with maturities of five to seven and seven to ten years.

26. Assuming that the fall in funding costs between 1996 and 2007 is fully reflected in the capital rentals on first leases, this should have offset to some extent the increase in nominal purchase prices.
27. Figures 4 and 5 show the changes since privatization in nominal capital rentals at first lease for DMUs and EMUs with maximum speeds of up to 100mph.¹⁷

¹⁷The data is based on the capital rental quoted in the winning franchise bid which is not necessarily the same as the final agreed rental price but we do not consider that there is likely to be any material difference.

FIGURE 4

Nominal capital rentals for first leases for DMUs up to 100mph

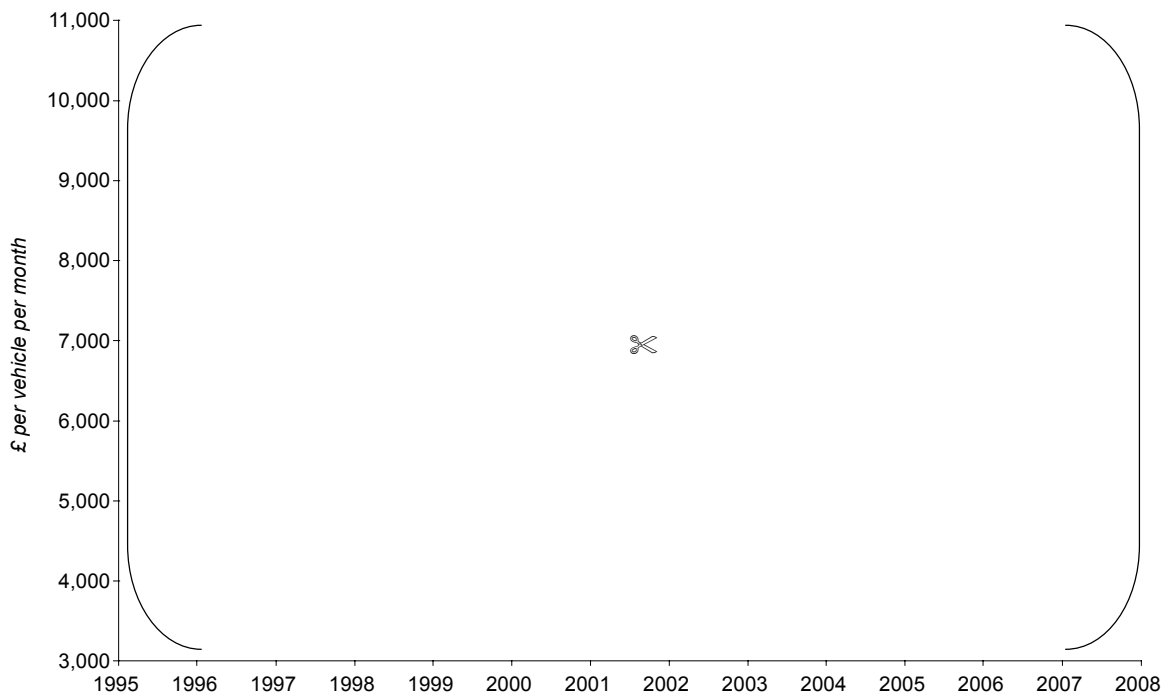


Source: CC analysis.

Note: The size of the 'bubble' for each observation indicates the number of vehicles involved.

FIGURE 5

Nominal capital rentals for first leases for EMUs up to 100mph



Source: CC analysis.

Note: The size of the 'bubble' for each observation indicates the number of vehicles involved.

28. Our analysis of capital rentals in Figures 4 and 5 shows that nominal capital rentals for both DMUs and EMUs up to 100mph have tended to fall between privatization and 2002/03.¹⁸ It appeared to us that the trends for nominal purchase prices and capital rentals have been different because the higher nominal purchase price of new rolling stock has been at least in part offset by reductions in financing costs, which appear to have been reflected in lower capital rentals partly as a result of a competitive process for leasing new rolling stock.

Capital rentals for subsequent leases

29. Having examined the changes in first lease capital rentals over time, we considered how subsequent lease capital rentals have also changed. We examined the relationship between MOLA and post-MOLA rolling stock capital rentals and the changes in capital rentals from one lease to the next.¹⁹

The relationship between MOLA and post-MOLA rolling stock capital rentals

30. Given the ROSCOs' views²⁰ on the role of new rolling stock in influencing capital rentals of used rolling stock, we examined the relationship between MOLA and post-MOLA²¹ capital rentals that have been agreed at franchise re-lets.
31. We took the vehicle-weighted average capital rental across all leased fleets within a class of rolling stock. We then examined the difference between the weighted average MOLA and post-MOLA rolling stock capital rentals for DMUs and EMUs. In Figures 6 and 7, MOLA rolling stock is shown in blue, substantially refurbished MOLA rolling stock in yellow, and post-MOLA rolling stock in red.²²

¹⁸We noted that since 2002/03 there is only one DMU data point and three EMU data points which are higher than the capital rentals in 2002/03. Although there are too few data points to draw any conclusions, we noted that this was in line with the trend in Figure 3 for the cost of funding, which began to increase at this time.

¹⁹We did not compare leases over time given the difficulties in making such comparisons due to the heterogeneity in fleets and the different terms in each lease agreement.

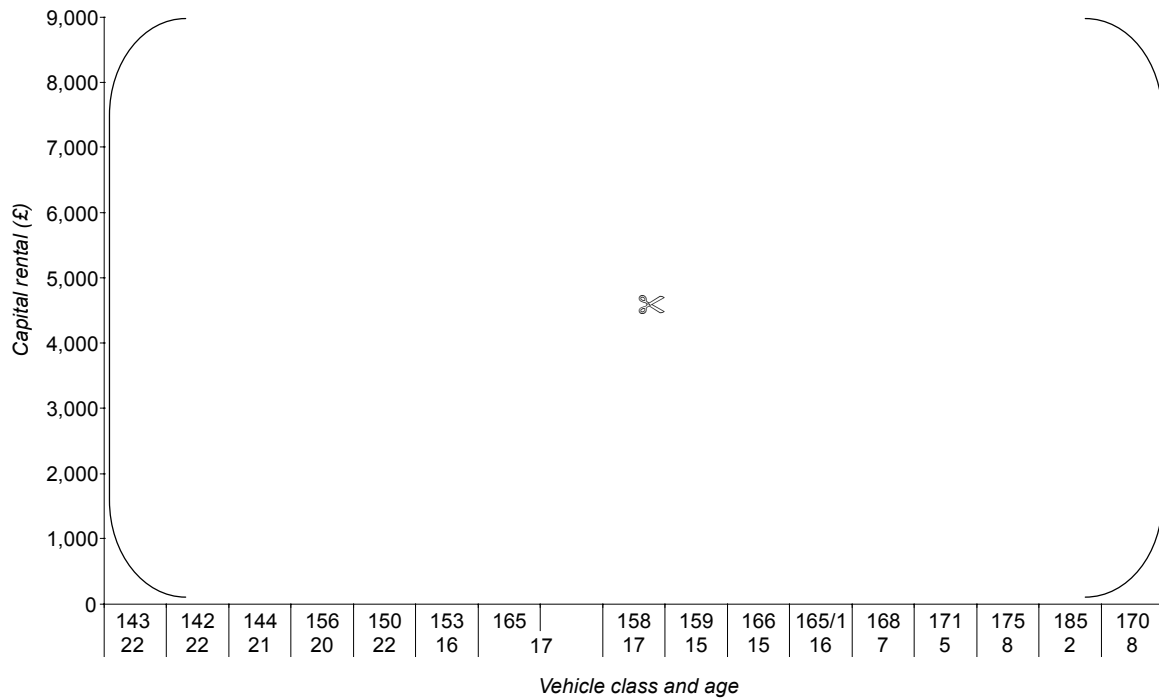
²⁰See discussion in paragraphs 10 to 18.

²¹Post-MOLA rolling stock represents new rolling stock that has been introduced since privatization.

²²Substantially refurbished or modified rolling stock may act in a similar way to new rolling stock.

FIGURE 6

Weighted average capital rentals for DMUs by vehicle class

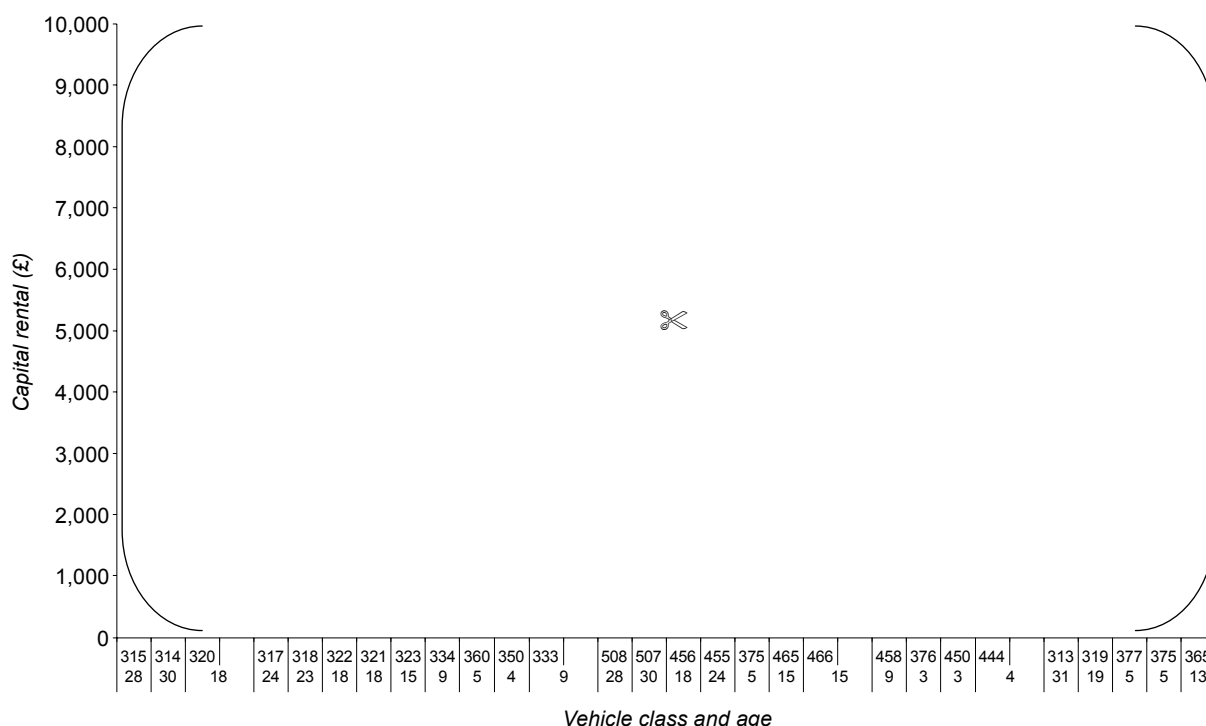


Source: CC analysis.

Note: MOLA rolling stock is shown in blue, substantially refurbished MOLA rolling stock in yellow and post-MOLA rolling stock in red. Ages expressed as at 2007. Where the age is less than 11 years old, this represents post-MOLA rolling stock.

FIGURE 7

Weighted average capital rentals for EMUs by vehicle class



Source: CC analysis.

Note: MOLA rolling stock is shown in blue, substantially refurbished MOLA rolling stock in yellow and post-MOLA rolling stock in red. Ages expressed as at 2007. Where the age is less than 11 years old, this represents post-MOLA rolling stock.

32. Figures 6 and 7 show that, for high-speed DMUs and high-speed AC EMUs,²³ capital rentals for post-MOLA rolling stock are higher than for MOLA rolling stock. However, for low-speed DC EMUs and dual-voltage EMU, the picture is more mixed. Excluding one fleet of new AC EMUs ([X]), which due to subsequent modifications has a far higher rental than other fleets, and on the basis of the small number of available observations, the differences between the lease rentals for new and MOLA rolling stock in each of the categories in Figures 6 and 7 were typically around 15 to 20 per cent.
33. The DfT provided a similar analysis which examined the difference in capital rentals between MOLA and post-MOLA rolling stock. The DfT found that for 75 to 100mph DMUs, capital rentals on post-MOLA rolling stock were on average 51 per cent higher than on MOLA rolling stock. This difference was 35 per cent for 75 to 100 mph AC EMUs and 17 per cent for 75 to 100mph DC EMUs.
34. As no two classes of train are perfect substitutes and different classes of rolling stock exhibit considerable differences in quality and characteristics, we would expect to see differences in lease capital rentals between rolling stock classes. We could not tell from capital rentals alone whether any differences between MOLA and post-MOLA rolling stock reflected a difference in quality or whether it also reflected other constraints.

²³For these purposes, high-speed is defined as a maximum speed of greater than 90mph.

35. We considered whether we could adjust the capital rentals of each fleet to reflect the differences in quality between them. To do so would require us to quantify the utility differentials between rolling stock of different ages and classes. Two of the ROSCOs provided us with estimates of some such adjustments.²⁴
- (a) HSBC provided a report produced by consultants which examined the utility differential between rolling stock of different ages by assessing the operating revenues and costs that a TOC would incur on a number of different types of existing fleets.
 - (b) Porterbrook submitted examples of a utility-adjusted value for its Class [X] and Class [Y] fleets.
36. We examined this evidence and considered whether we could accurately assess the utility-adjusted capital rentals of the different fleets of rolling stock. We considered that we could not do so in any reliable way because any measure of utility is highly subjective and unique to each customer:
- (a) As each lease is a unique negotiation and takes into account forward-looking utility at the point of negotiation and varies considerably depending on operational requirements for a franchise, we would need to be able to assess utility on each lease negotiation.
 - (b) The TOC's demand for rolling stock is itself derived from passenger utility and its perception of the DfT's view of the additional utility from new rolling stock.

Changes in capital rentals

37. In this section, we examine the changes in capital rentals from one lease to the next. We first set out the data used in our analysis before presenting the results.

Data used in our analysis

38. We asked the ROSCOs to submit data on each new lease that has been agreed since privatization following a franchise re-let²⁵ or a franchise extension; and, where possible, to submit comparable data for the previous lease for each fleet of rolling stock. There have been 20 franchise re-lets²⁶ and 15 franchise extensions since privatization.²⁷ These franchise agreements have led to a total of 282 new leases being agreed, covering 16,206 vehicles. We were unable to calculate a change in rentals for 40 of these leases, covering 2,279 vehicles, because it was either new rolling stock which had not previously been leased, or used rolling stock for which the previous lease price was not available or was not comparable.²⁸
39. Excluding these data points left a sample of 242 new leases covering 13,927 vehicles. We assessed the changes in capital rental from one lease to the next for each of these leases. Table 1 shows the results.

²⁴We discuss these issues further in Appendix 6.4 and Appendix 6.5.

²⁵By franchise re-let we mean the situation where a new franchise has been let and new leases agreed. In some cases this has involved amalgamations of other franchises or changes in the routes included in the franchise.

²⁶This includes Merseyrail and London Overground, which are both concessions.

²⁷In some cases, fleets have been part of franchise re-lets or extensions on more than one occasion, hence the total number of vehicles that have had a new lease agreed exceeds the total number of vehicles on the network.

²⁸These are cases where there was no previous lease that matched up with a fleet of rolling stock because details were unavailable or because the rolling stock in one lease was split up and leased under different leases.

TABLE 1 **Nominal capital rental changes from one lease to the next**

Rental change	Number of leases		Number of vehicles	
		%		%
No change	57	24	4,364	31
Decrease	98	41	3,653	26
Increase	<u>87</u>	<u>36</u>	<u>5,910</u>	<u>42</u>
Total	<u>242</u>	<u>100</u>	<u>13,927</u>	<u>100</u>

Source: CC analysis.

Note: Data excludes those cases where we were unable to calculate a change in rentals. Figures may not sum due to rounding.

40. Table 1 shows that compared with the previous lease, capital rentals decreased in 41 per cent of subsequent leases, increased in around one-third of leases, and remained unchanged in around one-quarter of leases. The picture is somewhat different in terms of number of vehicles with capital rentals increasing for 42 per cent of vehicles and decreasing for only 26 per cent of vehicles.

41. We distinguished between leases agreed as a result of franchise extensions and leases agreed as a result of franchise re-lets to see whether there were any differences between the two. Table 2 summarizes the results.

TABLE 2 **Nominal capital rental changes from one lease to the next differentiating between franchise extensions and franchise re-lets**

	Number of leases			Number of vehicles		
	Number of leases	% of total	% of subtotal	Number of vehicles	% of total	% of subtotal
<i>Franchise extensions</i>						
No change	30	12	45	1,251	9	38
Decrease	10	4	15	591	4	18
Increase	<u>26</u>	<u>11</u>	<u>39</u>	<u>1,409</u>	<u>10</u>	<u>43</u>
Subtotal	<u>66</u>	<u>27</u>	<u>100</u>	<u>3,251</u>	<u>23</u>	<u>100</u>
<i>Franchise re-lets</i>						
No change	27	11	15	3,113	22	29
Decrease	88	36	50	3,062	22	29
Increase	<u>61</u>	<u>25</u>	<u>35</u>	<u>4,501</u>	<u>32</u>	<u>42</u>
Subtotal	<u>176</u>	<u>73</u>	<u>100</u>	<u>10,676</u>	<u>77</u>	<u>100</u>
Total	242	100		13,927	100	

Source: CC analysis.

Note: Data set excludes those cases where we were unable to calculate a change in rentals. Figures may not sum due to rounding.

42. Based on Table 2, 27 per cent of leases (23 per cent by number of vehicles) in our data set related to franchise extensions. The remaining 73 per cent of leases related to franchise re-lets. Leases agreed as a result of franchise re-lets therefore comprised the majority of our data points.

43. We noted two important differences between franchise re-lets and franchise extensions:

- (a) 45 per cent of leases agreed following franchise extensions were simply rolled over on the same lease terms, with no change in rentals, compared with only 15 per cent of leases agreed as part of franchise re-lets. Indeed, Angel told us that in the vast majority of franchise extensions the existing lease terms were simply extended at the behest of the DFT.

(b) Capital rentals decreased from the previous lease in 50 per cent of leases agreed following franchise re-lets compared with only 15 per cent of leases agreed as part of franchise extensions.

44. Franchise extensions therefore appear to give only limited scope for commercial negotiation between TOCs and ROSCOs. As we wanted to analyse the extent of any competitive pressure in lease negotiations, we excluded the 66 leases that related to franchise extensions. In addition, we also excluded a further 34 leases where competitive pressures were not relevant, for example due to section 54 undertakings and early franchise termination.²⁹
45. This left 142 leases in relation to both MOLA and post-MOLA rolling stock that has been released at franchise re-let. Table 3 summarizes the overall pattern of changes in nominal capital rentals for these 142 leases.

TABLE 3 Changes in nominal capital rentals at franchise re-let for MOLA and post-MOLA rolling stock

	Number of leases		Number of vehicles	
	Number of leases	% of total	Number of vehicles	% of total
No change	11	8	842	12
Decrease	81	57	2,753	38
Increase	50	35	3,576	50
Total	142	100	7,171	100

Source: CC analysis.

Notes:

1. Dataset excludes those cases set out in paragraph 44.
2. Figures may not sum due to rounding.

46. Table 3 shows a mixed pattern in terms of nominal capital rental changes from one lease to the next. Capital rentals decreased in 57 per cent of leases, increased in 35 per cent of leases and remained unchanged in 8 per cent of leases. However, in terms of the number of vehicles, increases occurred more frequently than decreases.
47. In examining the 142 leases, we considered that the capital rental changes for MOLA and post-MOLA rolling stock may not be directly comparable because the reasons for changes in capital rentals from first lease to subsequent lease for post-MOLA rolling stock were likely to be different from that for MOLA rolling stock. In particular, the initial lease for MOLA rolling stock was set using the indifference price methodology whereas the initial lease for post-MOLA rolling stock was subject to a competitive procurement process. With different starting points, we therefore considered it inappropriate to include the post-MOLA rolling stock rental changes as part of the same dataset as MOLA rolling stock.³⁰

²⁹We excluded: (a) Leases entered into for the Intercity East Coast franchise in 2007. These leases were novated to National Express East Coast after the demise of GNER; (b) Leases entered into by Southeastern. All fleets were subject to section 54 undertakings after Connex South Eastern had its franchise terminated in 2003; (c) Other leases which were subject to section 54 undertakings. The capital rentals on these leases are invariably unchanged because the terms are not negotiated; and (d) Leases entered into by First Great Western Link because the franchise was only for two years and was similar to a franchise extension. Angel questioned why we had excluded Southeastern from our analysis. Angel told us that, [§<]. We also excluded a small number of leases for which we did not have substitutability data so could not conduct our econometric analysis or qualitative analysis.

³⁰The changes in capital rentals are taken from the previous lease. In some cases this means that the new capital rental for the MOLA rolling stock is being compared with a lease that was extended as part of a franchise extension rather than the original privatization capital rental. Given the extent to which leases at franchise extension remained unchanged or increased to reflect additional capital expenditure (see Table 2), this does not undermine our approach of examining changes in capital rentals—in many cases the previous capital rental was very similar to the privatization capital rental or the best comparison is with the capital rental with additional capital expenditure already taken into account.

48. MOLA rolling stock accounted for 121 leases and post-MOLA rolling stock 21 leases. Given the size of these datasets, we focused on the 121 MOLA leases but also considered some high-level analysis for post-MOLA fleets (see paragraphs 71 to 75). We used the 121 MOLA lease data only in our econometric analysis in Appendix 6.2.

Changes in capital rentals for MOLA rolling stock

49. Table 4 shows the directional changes in nominal capital rentals for the 121 MOLA leases.

TABLE 4 **Changes in nominal capital rentals for MOLA rolling stock at franchise re-let**

	<i>Number of leases</i>		<i>Number of vehicles</i>	
	<i>Number of leases</i>	<i>% of total</i>	<i>Number of vehicles</i>	<i>% of total</i>
No change	11	9	842	13
Decrease	70	58	2,560	40
Increase	<u>40</u>	<u>33</u>	<u>2,988</u>	<u>47</u>
Total	121	100	6,390	100

Source: CC analysis.

50. Table 4 shows that capital rentals decreased in 58 per cent of leases, increased in 33 per cent of leases and remained unchanged in 9 per cent of leases. However, again, as in Table 3, increases occurred more frequently than decreases in terms of the number of vehicles.
51. Table 5 presents the average change in capital rentals for the 121 MOLA leases as well as for leases relating to each broad type of rolling stock. We also present the vehicle-weighted average change³¹ and the proportion of changes which have been between -5 per cent and +5 per cent.
52. In addition, we examined the effect of excluding short-term leases, which are not a like-for-like comparison with the previous lease.³² Table 5 therefore also shows the average change in capital rentals for short-term leases, and the average change when short-term leases are excluded.

³¹In other words, the average change by lease, weighted by the number of vehicles on the lease.

³²Ideally when looking at changes we would like to compare leases of the same length. In many cases this is not possible and the lease length varies to some degree. Short-term leases are those that are shorter than the franchise length. As we found that premiums often exist on short-term leases, as discussed in Appendix 4.2, we excluded these leases from our analysis to ensure a like-for-like comparison. Given some uncertainties in our data over the exact end dates of leases, in our analysis we used 60 months as a proxy for identifying short-term leases. We noted one or two instances where the franchise length became considerably longer (for example, on Arriva Trains Wales). However, we have not excluded these instances from the data.

TABLE 5 Changes in nominal capital rentals for MOLA rolling stock differentiating between type of rolling stock

Sample	Number of leases	Average change %	Vehicle-weighted average change %	Proportion of leases where change <±5% %	Number of short-term leases	Average change for short-term leases %	Average change excl short-term leases %
All MOLA	121	-5.77	0.02	39	28	-1.12	-7.85
—EMUs	28	-3.02	-0.66	61	12	-3.24*	-2.86
—DMUs	55	-2.73	-2.00	44	14	4.52	-5.21
—Loco-hauled rolling stock	38	-12.19	1.07†	16	[8]	[8]	-13.07

Source: CC analysis.

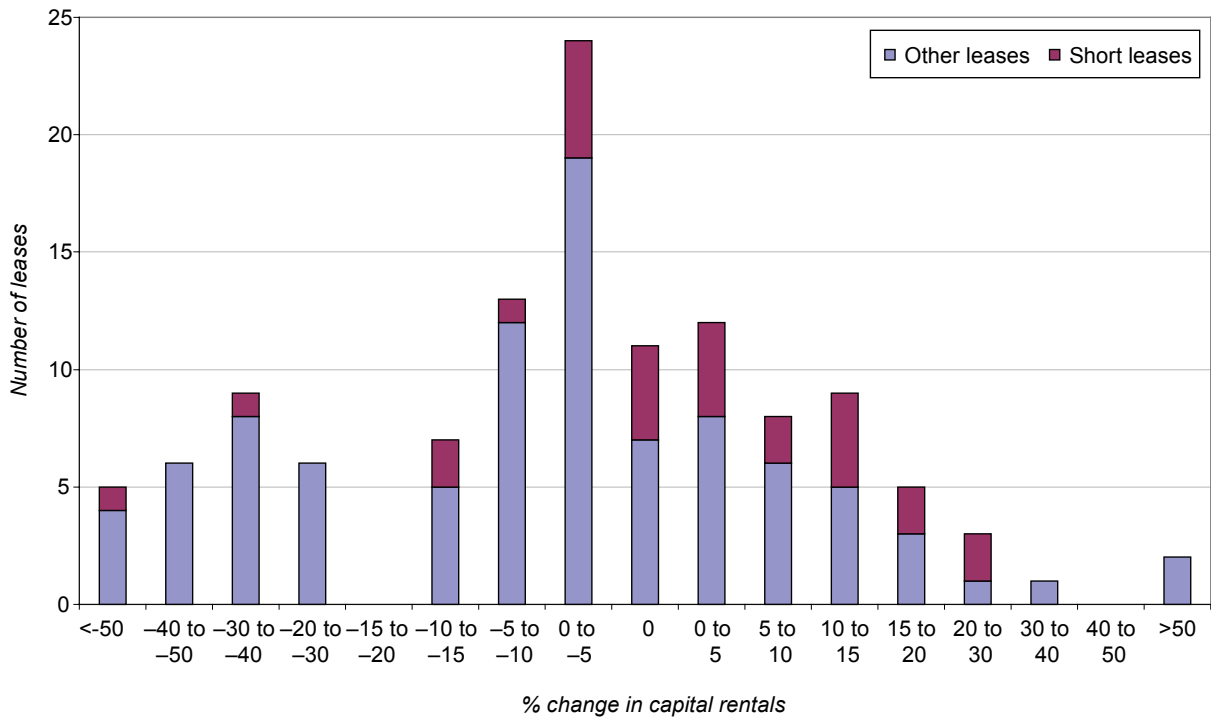
*As is clear from Figure 11, the average percentage change in capital rentals for EMUs is skewed downwards by one lease which saw a decrease of 50.3 per cent. This was a one-year lease of [8], with the decrease being due to the end of previously amortized modifications.

†The vehicle-weighted increase for loco-hauled rolling stock is caused by two large fleets where the rental increased.

53. Table 5 shows that, on average, MOLA lease capital rentals fell by about 6 per cent at franchise re-let, though there is a clear difference between the average changes for EMUs and DMUs and those for loco-hauled rolling stock. We also see that the proportion of leases that changed by less than 5 per cent is much higher for EMUs and DMUs than it is for loco-hauled rolling stock. When these rental changes are weighted by vehicle numbers, the average change is close to zero.
54. Short-term leases, as defined, account for nearly one-quarter of leases in our dataset and are, on average, more likely to lead to a smaller decrease in capital rentals (1.12 per cent) than on longer leases (7.85 per cent).
55. Figure 8 presents the extent of the changes in capital rentals, as well as identifying where short-term leases lie in the distribution of capital rental changes.

FIGURE 8

Change in capital rentals for all rolling stock types at franchise re-let



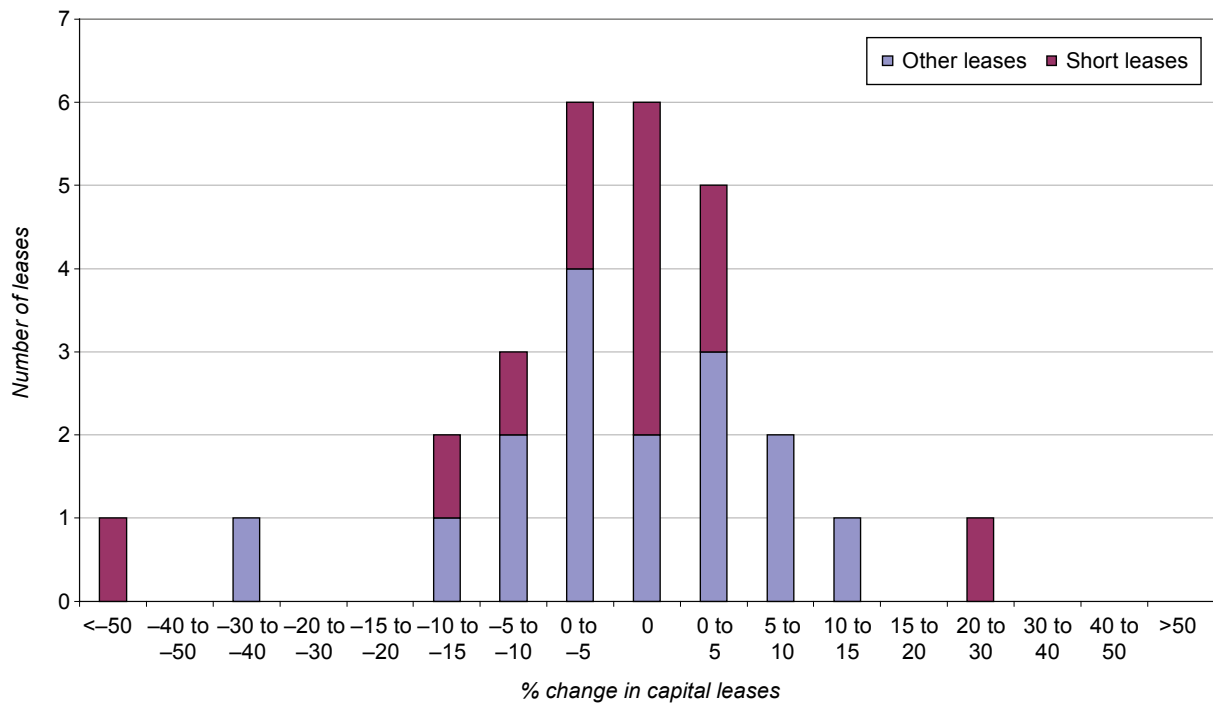
Source: CC analysis.

56. Figure 8 shows that while about 40 per cent of capital rentals changed by less than 5 per cent, there is a lot of variation in the size of capital rental changes. Nearly 40 per cent of leases decreased by more than 5 per cent. As expected, the distribution of short-term leases is somewhat skewed towards capital rental increases.

57. Figure 9 replicates Figure 8 for EMUs.

FIGURE 9

Change in capital rentals for EMUs at franchise re-let

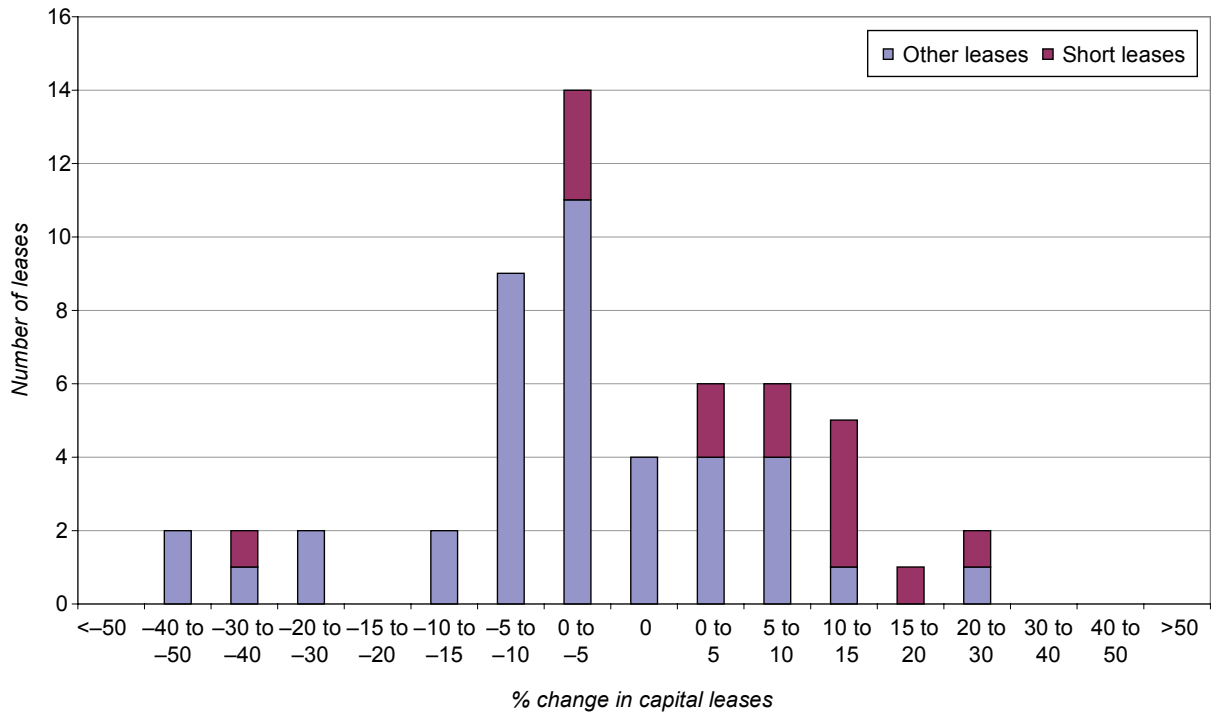


Source: CC analysis.

- 58. Figure 9 suggests that in many cases the change in capital rentals for EMUs is quite small—less than 5 per cent in 60 per cent of cases. One-quarter of leases fell by more than 5 per cent. However, it should be noted that there are a number of short-term leases in this subsample and two large decreases.
- 59. Figure 10 presents the distribution of rental changes for DMUs.

FIGURE 10

Change in capital rentals for DMUs at franchise re-let

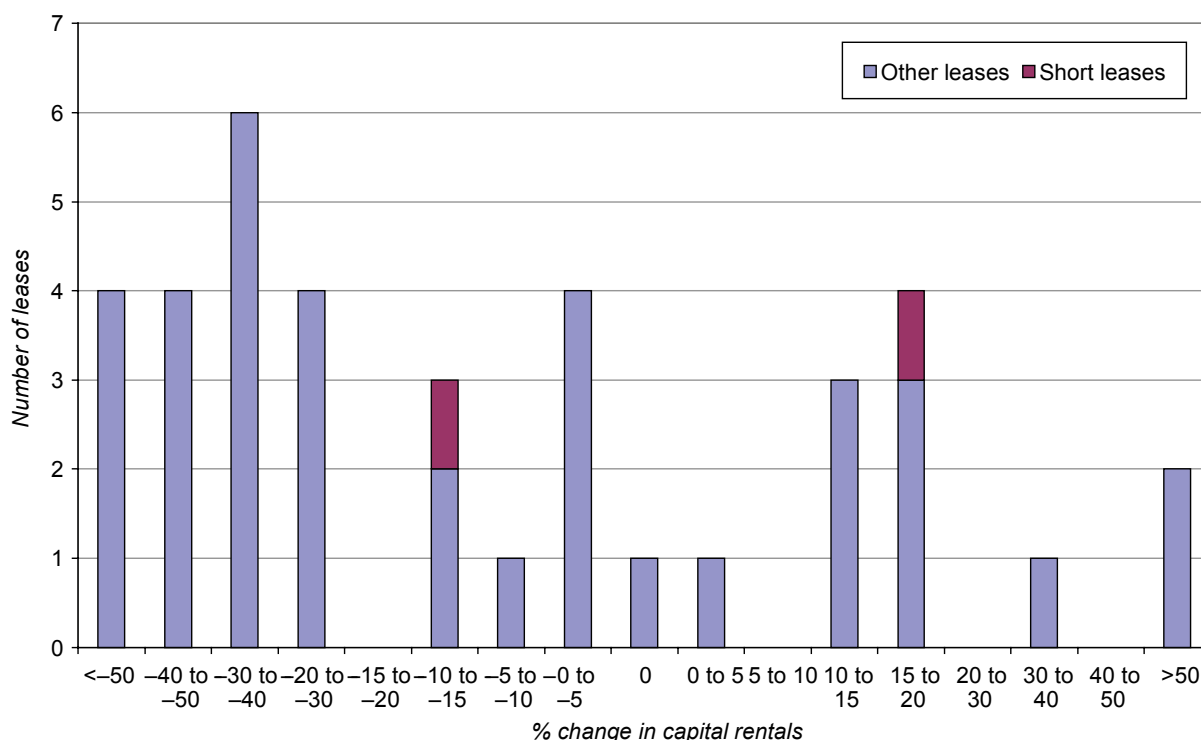


Source: CC analysis.

- 60. While we see that a large proportion of leases changed by less than 5 per cent (44 per cent), there are many cases where the changes are quite large. 31 per cent of leases decreased by more than 5 per cent.
- 61. Figure 11 presents the distribution of capital rental changes for loco-hauled rolling stock.

FIGURE 11

Change in capital rentals for loco-hauled rolling stock at franchise re-let



Source: CC analysis.

62. Figures 9 to 11 illustrate that loco-hauled rolling stock displays a very different pattern to DMUs and EMUs. In only 16 per cent of cases did capital rentals change by less than 5 per cent. We see a large number of significant decreases, with almost 60 per cent of leases decreasing by more than 5 per cent. This may be due to the level of spare capacity and competing alternatives in loco-hauled rolling stock as compared with DMUs and EMUs (see Appendix 6.1).

Adjusting for additional capital expenditure

63. All three ROSCOs told us that where capital rentals had increased from one lease to the next, this was to reflect additional capital expenditure on rolling stock. Additional capital expenditure is expenditure by ROSCOs on refurbishments or modifications to the rolling stock (for example, the fitting of new engines, refitting of interiors, or installation of air conditioning or CCTV). This expenditure may be at the request of the TOC, initiated by the ROSCO or caused by mandatory modification requirements. In some cases, such expenditure will increase the rolling stock's useful economic life and in others it will simply ensure that the expected useful economic life is realized.
64. We adjusted the changes in capital rentals to take account of rentalized additional capital expenditure. The adjustments were based on information provided to us by the ROSCOs on the amount of rentalized additional capital expenditure made on each lease.³³ For example, where a capital rental increase of £120 per vehicle per month (pvpm) included £100 pvpm of rentalized additional capital expenditure, we

³³Angel noted that where additional capital expenditure was not rentalized this was equivalent to a rental reduction. HSBC also stated that price was not the only aspect of competition, and that competition had led to substantial quality improvements to rolling stock.

treated this as a £20 pvpm increase in capital rental for the purposes of calculating percentage changes. This allowed us to reach a change in capital rental that also reflected changes in quality. Adjusting for the effect of rentalized capital expenditure should therefore lead to larger rental decreases and smaller increases.

65. Where additional capital expenditure was not rentalized, we were unable to adjust for the improvement in the quality of the rolling stock.³⁴ There is a potentially blurred boundary between additional capital expenditure which is rentalized and that which is factored into capital rentals. In some cases the adjustments for capital expenditure were unclear as the negotiation for the additional investment was not always explicit about how it related to the capital rental change. The capital expenditure adjustments are therefore relatively simplistic.
66. Table 6 shows the changes in capital rentals having adjusted for rentalized additional capital expenditure.

TABLE 6 Changes in capital rentals for MOLA rolling stock at franchise re-let adjusted for additional capital expenditure

	Number of leases		Number of vehicles	
	Number of leases	% of total	Number of vehicles	% of total
No change	9	7	728	11
Decrease	77	64	3,094	48
Increase	35	29	2,568	40
Total	121	100	6,390	100

Source: CC analysis.

Note: Figures may not sum due to rounding.

67. Comparing Table 6 with Table 4 shows that our adjustments for additional capital expenditure have the effect of switching the change in capital rental on some leases from an increase to no change or a decrease. The number of leases where capital rentals fell is 6 per cent higher than in Table 4. The proportion of leases which experienced rental increases dropped from 33 to 29 per cent and, in terms of numbers of vehicles, the fall was from 47 per cent of vehicles to 40 per cent.
68. Table 7 sets out the average changes, the vehicle-weighted average changes and the proportion of changes which have been between –5 and +5 per cent.

TABLE 7 Changes in nominal capital rentals adjusted for additional capital expenditure for MOLA rolling stock

	Number of leases	Average change %	Vehicle-weighted average change %	Proportion of leases where change <±5% %	Number of short-term leases	Average change for short-term leases %	Average change excl short-term leases %
All MOLA	121	-7.96	-2.18	36	28	-1.47	-9.92
—EMUs	28	-7.32	-1.93	54	12	-7.65	-7.07
—DMUs	55	-4.06	-3.95	42	14	3.36	-6.59
—Loco-hauled rolling stock	38	-14.09	-0.59	16	[X]	[X]	-14.97

Source: CC analysis.

³⁴We examine unrentalized additional capital expenditure in more detail in Appendix 6.7.

69. Comparing Table 7 with Table 5 shows that the average change on all rolling stock has changed from a 5.8 per cent decrease to an 8 per cent decrease. The proportion of capital rental changes that are less than 5 per cent is similar to that in Table 5.
70. We repeated our analysis in Figures 8 to 11 using the data adjusted for capital expenditure. The patterns were very similar, with the only difference being a shift towards larger decreases/smaller increases.

Post-MOLA rolling stock

71. In this section we examine the 21 post-MOLA leases.³⁵
72. The changes in capital rentals for the post-MOLA leases are presented in Table 8.

TABLE 8 Changes in capital rentals for post-MOLA rolling stock at franchise re-let

	Number of leases		Number of vehicles	
	Number of leases	% of total	Number of vehicles	% of total
No change	0	0	0	0
Decrease	13	62	269	34
Increase	8	38	512	66
Total	21	100	781	100

Source: CC analysis.

73. In terms of the number of leases, the number of instances where capital rentals decreased accounted for the majority of cases (62 per cent). However, in terms of vehicle numbers, the pattern is reversed and capital rental increases occurred in the majority of cases (66 per cent of vehicles).
74. Table 9 shows the average changes and vehicle-weighted average changes for the 21 post-MOLA leases.

TABLE 9 Changes in nominal capital rentals for post-MOLA rolling stock

	Number of leases	Average change per lease %	Vehicle-weighted average change per lease* %	Number of short-term leases	Average change for short-term leases %	Average change excl short-term leases %
Without adjustment for capital expenditure	21	-8.13	-0.40	[∞]	[∞]	-11.35
Adjusted for capital expenditure	21	-9.20	-7.85	[∞]	[∞]	-12.47

Source: CC analysis.

*Average change per vehicle, calculated as the average change per lease where the importance of each is weighted by the number of vehicles covered by that lease.

75. Given the competitive conditions in which the post-MOLA first leases were set compared with the MOLA leases, we might expect there to be more stability in capital rentals on subsequent leases unless competitive conditions had changed significantly, for example if there were more competition for post-MOLA vehicles and costs were falling. Although the post-MOLA data set was small, we found that comparing Table 9 with Tables 5 and 7 shows that the average reduction in leases is higher for

³⁵The 21 post-MOLA re-leases related to only 12 different fleets because the Chiltern 168s have been priced across a number of different leases depending upon when they were introduced.

post-MOLA rolling stock (an 8 per cent reduction compared with a 5.8 per cent reduction on unadjusted changes in capital rentals). However, the vehicle-weighted average change for unadjusted changes in capital rentals is similar for the two groups, with both showing a negligible change in capital rentals.

Evidence on changes in capital rentals submitted by the parties

76. In this section we present the evidence submitted by the parties on changes in capital rentals.
77. Angel, Porterbrook and the DfT each submitted high-level quantitative analysis of capital rental changes from one lease to the next.³⁶

Angel

78. To assess price changes, Angel conducted an assessment of 52 leases agreed for used rolling stock between 31 March 2002 and 30 June 2006. Table 10 shows Angel's analysis.

TABLE 10 Angel's analysis of changes in capital rentals from one lease to the next, March 2002 to June 2006

<i>Change in capital rental</i>	<i>Number of cases</i>	<i>Angel's comments</i>
Reduction	38	Angel 'reacted to competitive pressure by reducing its price, making investment for no additional rental or forgoing rental increases on short-term leased stock'.
No change	2	Price and rolling stock quality were unchanged (one due to a section 54 undertaking).
Increase without investment	2	Prices increased without offsetting investment or a change in service offering—'in both cases this was to reflect better the true market value for fleets of these types'.
Increase with investment	10	In eight of these cases the price increase was due to additional investment and in two it was due to an additional payment to the fleet manufacturer.
Total	52	

Source: Angel submission to the CC.

79. Angel concluded that, based on this analysis and its case studies of eight franchise re-lets,³⁷ there was 'significant competitive pressure' constraining pricing decisions.
80. Angel also submitted an econometric analysis which we discuss in Appendix 6.2.

Porterbrook

81. To take into account changes in the quality of rolling stock from one lease to the next, Porterbrook considered 'effective rentals', which are 'rentals after deducting that element of the current capital lease rental that has been added to recover post-privatization expenditure on modifications, design or endemic fault cover, refurbishment, etc'. In aggregate, Porterbrook found that effective rentals from one lease to the next had on average fallen by [X] per cent in nominal terms since privatization.

³⁶HSBC did not submit this type of analysis.

³⁷These case studies were ICEC 2005, Greater Anglia, Northern, Thameslink/Greater Northern, Greater Western, ScotRail, Integrated Kent and South Western 2007.

For leases associated with franchise re-lets only,³⁸ effective rentals had fallen in aggregate by [X] per cent in nominal terms.

The DfT

82. The DfT told us that lease rentals had generally either remained the same or increased from one lease to the next. Using data for 13 franchises that had been let since 2004,³⁹ the DfT told us that, on average, the MOLA capital rentals increased by around 2.7 per cent in nominal terms. By ROSCO, these figures were increases of [X] per cent for Angel, [X] per cent for Porterbrook and [X] per cent for HSBC. The DfT noted that, even if prices were found to have fallen, this did not mean that they were now at a competitive level.
83. The DfT noted the ‘marked contrast in ROSCO pricing in the very few cases where there is real competition in respect of a fleet—for example, the marked lease cost reduction of [X] per cent by Porterbrook in respect of the [X] fleet and [X] per cent by HSBC in respect of the [X] fleet’. The DfT’s more detailed competitive analysis is presented in Appendix 6.2.

Qualitative assessment of the reasons for changes in capital rentals

84. In this section, we set out our qualitative assessment of changes in capital rental. We begin by setting out a lease-by-lease assessment, before focusing on the factors affecting the 20 largest increases and decreases in capital rentals and those fleets that have been placed under particular competitive pressure.
85. Our qualitative assessment involved a review of the factors affecting 121 MOLA leases.⁴⁰ In making our assessment, we examined: (a) the ROSCOs internal papers,⁴¹ (b) the case studies submitted by the DfT and Angel and commented on by HSBC and Porterbrook, and (c) the DfT’s details of bid submissions. We examined the changes in capital rentals and looked for which factors appeared to be influencing the ROSCOs’ behaviour in making capital rental offers. In each case, we identified factors that were a clear influence on the negotiations and on the offer made by the ROSCO. We identified a number of key factors that appeared to provide an explanation for capital rental increases and decreases for each franchise. These results are set out in Table 11.

³⁸This excludes leases associated with franchise extensions or with movement of rolling stock during a franchise.

³⁹ScotRail, Thameslink/Great Northern, Great Western Link, South West, Northern, Greater Western, First Capital Connect, Integrated Kent, Greater Anglia, Intercity East Coast, Central, Wales and Borders, TransPennine.

⁴⁰In undertaking a lease by lease qualitative assessment, we noted that any qualitative review is to some extent subjective. In addition, although we draw some general themes, as each lease is a unique and a negotiation it is impossible to isolate *precise* components of price changes into factors (eg customer pressure, alternatives, additional expenditure, etc).

⁴¹The respective ROSCOs’ internal papers reflect a different approach to assessing the constraints they face:

- Angel produces board papers on commercial issues relating to leasing of rolling stock. These papers are compiled during the negotiation process, seemingly towards the end of negotiations. They therefore do not necessarily reflect *all* the threats facing Angel when first putting forward a base case proposal.
- HSBC produces business cases which evaluate the rentals it considers should be proposed to prospective bidders. In contrast to Angel and Porterbrook, these papers are compiled prior to putting forward the base case and alternative bids so are more likely to reflect the threats faced when making a pricing proposal.
- Porterbrook produces two types of documents: (a) Credit Application Summaries and Train Expenditure Application Forms (TEAFs), which are produced for the parent company in evaluating credit risks and assess capital expenditure taking place on (used and new) rolling stock on each franchise. These are written once the additional capital expenditure has practically been agreed with the TOC; (b) Monthly Commercial Update Papers, which are produced by the Commercial Director for discussion at board meetings. These reflect ongoing concerns of the board in relation to franchises and rolling stock so are a reflection of the constraints faced at the time (although they do not necessarily reflect all the concerns).

TABLE 11 Assessment of changes in unadjusted nominal capital lease rentals for MOLA rolling stock by franchise

Franchise	Franchise start date	Number of leases on franchise	% of leases		Key factors documented for some of leases that decreased	% of leases		Key factors documented for some of leases that increased	% of leases
			Down	Up		Up	No change		
[X]	[X]	[X]	57		New rolling stock threat	43		Additional capital expenditure	0
[X]	[X]	[X]	33		New rolling stock threat and SRA constraint	0		N/A	67
[X]	[X]	[X]	25		New rolling stock threat	75		Additional capital expenditure	0
[X]	[X]	[X]	0		N/A	0		N/A	100
[X]	[X]	[X]	86		Longer leases, asset to be life expired during lease, some used rolling stock threat	14		Short-term lease	0
[X]	[X]	[X]	0		N/A	100		Short-term lease	0
[X]	[X]	[X]	61		Mainly new rolling stock threat, some threat from used rolling stock	33		Additional capital expenditure and short-term leases	6
[X]	[X]	[X]	56		New rolling stock threat, alternative used rolling stock	11		Additional capital expenditure	33
[X]	[X]	[X]	64		Future excess DMU rolling stock (need to keep rolling stock on long-term lease), new rolling stock threat	36		[X] dry lease, short-term lease	0
[X]	[X]	[X]	80		Previously off-lease stock, alternative used rolling stock	20		Additional capital expenditure	0
[X]	[X]	[X]	50		New rolling stock threat, used rolling stock alternatives, longer lease	50		Short-term lease	0
[X]	[X]	[X]	60		Alternative used rolling stock, longer lease	40		[X] dry lease, short-term lease, additional capital expenditure	0
[X]	[X]	[X]	50		Alternative used rolling stock	50		Unexplained	0
[X]	[X]	[X]	75		Alternative used rolling stock and new rolling stock threat	12.5		Additional capital expenditure and [X] dry lease	12.5
[X]	[X]	[X]	33		End of asset life	67		Short-term lease	0
[X]	[X]	[X]	100		Alternative off-lease used rolling stock	0		N/A	0
[X]	[X]	[X]	0		N/A	100		Short-term lease, additional capital expenditure	0
Total		121	58			33			9

Source: CC analysis.

Note: N/A = not applicable.

86. The key factors that appeared to be influencing lease negotiations were:

- (a) a threat from alternative used rolling stock—documented in 43 per cent of the 121 lease rental negotiations;⁴²
 - (b) a threat from new rolling stock—documented in 45 per cent of the 121 lease rental negotiations;
 - (c) recognition of the DfT/Codes of Practice—documented in 7 per cent of the 121 lease rental negotiations;
 - (d) additional capital expenditure—documented in 45 per cent of the 121 lease rental negotiations; and
 - (e) a short-term lease—documented in 21 per cent of the 121 lease rental negotiations.
87. We examined separately the reasons for decreases and increases.
88. In 56 of the 70 lease rental decreases (80 per cent) reference was made in the associated internal papers to factors (a) to (c) above.⁴³ With the remaining 14 leases, there were other factors⁴⁴ which explained the rental decrease or no explanation was provided.
89. Our assessment identified two factors that accounted for the increases in capital rentals:
- (a) additional capital expenditure—documented in 25 of the 40 leases with capital rental increases; and
 - (b) shorter lease lengths—documented in 14 of the 40 leases with capital rental increases.
90. Only three of the 40 increases⁴⁵ did not include a short-term lease or additional capital expenditure that might explain some or all of the capital rental change.
91. We found that 8 of the 40 increases faced no constraint from any of the three factors (a) to (c) in paragraph 86 that might put some pressure on capital rentals, and 18 of the 40 appeared to have no constraint imposed by a used rolling stock alternative.

Relationship between capital rental changes and factors

92. We wanted to understand which factors appeared to have the biggest effect on changes in capital rentals and whether it mattered if alternatives were new rolling stock, on-lease used rolling stock or off-lease used rolling stock. Supplementing franchise bid submission data (discussed in Appendix 4.1) with evidence on factors affecting negotiations from the internal papers, we analysed the extent of capital rental changes in four different types of scenario:

⁴²The figures quoted serve as a guide for the number of times certain factors have been documented as determining the lease rental outcome.

⁴³We note that the threat of the DfT and the Codes of Practice are more likely to have prevented increases in capital rentals than to have caused decreases in capital rentals.

⁴⁴These included factors such as the vehicles being life-expired, the ending of a period over which modifications had been amortized, adjusting capital rentals to bring them into line with comparator fleets and the inclusion of slightly fewer vehicles in the lease.

⁴⁵There is an additional fourth lease for which the lease rental increases but only by £1 pvpm. This appears to be due to rounding so we have not included it in the count.

- (a) there were no alternative fleets proposed;
- (b) new rolling stock was the only alternative proposed in bids;
- (c) there were on-lease used rolling stock alternatives proposed in addition to, or instead of, new rolling stock alternatives but no off-lease alternative was proposed; and
- (d) there were off-lease used rolling stock alternatives proposed in addition to, or instead of, on-lease used rolling stock alternatives or new rolling stock alternatives.

93. Table 12 presents the pattern of changes in capital rentals for each of the four scenarios listed above.

TABLE 12 Changes in capital rentals for MOLA rolling stock at franchise re-let by type of alternatives proposed

<i>Alternatives proposed</i>	<i>Number of leases</i>				<i>Average change in capital rental</i>	<i>Vehicle-weighted average change</i>
	<i>Increase</i>	<i>No change</i>	<i>Decrease</i>	<i>Total</i>		
No alternatives	2	1	23	26	-15%	-6%
	8%	4%	88%	100%		
New rolling stock alternatives	10	0	20	30	-4%	-2%
	33%	0%	67%	100%		
On-lease used alternatives	9	6	21	36	-10%	-6%
	25%	17%	58%	100%		
Off-lease used alternatives	12	0	20	32	-10%	-4%
	38%	0%	63%	100%		

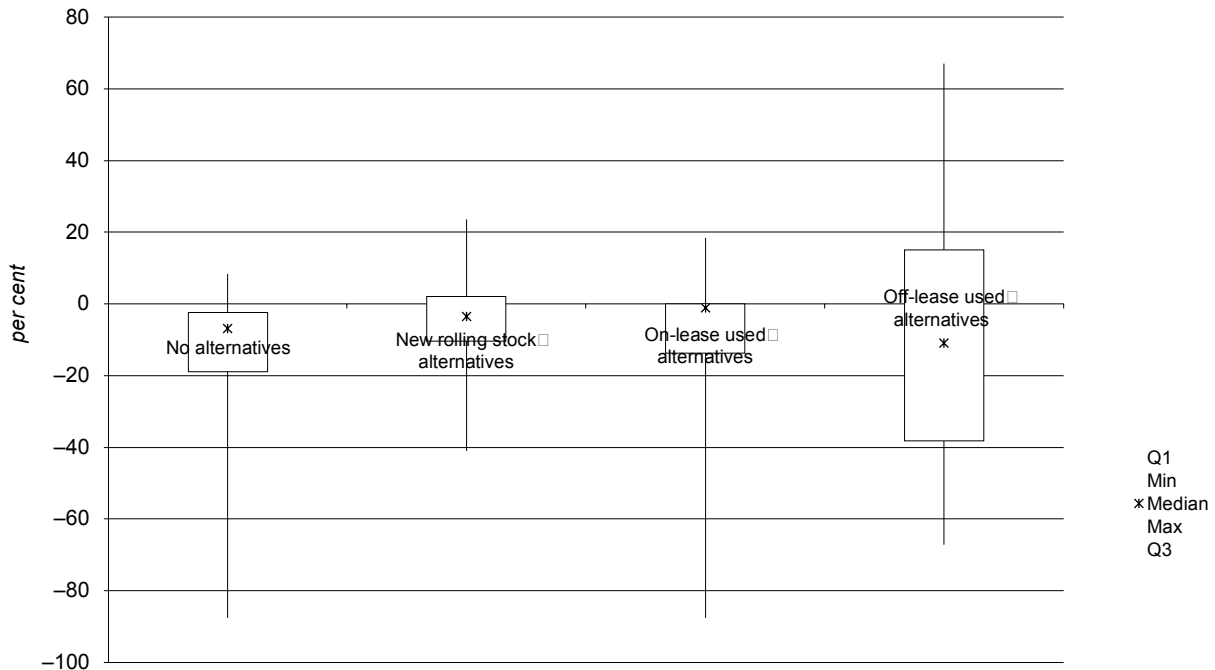
Source: CC analysis.

94. Table 12 suggests that there is no clear relationship between the nature of alternatives and the direction or extent of changes in capital rentals.

95. Figure 12 presents a box and whisker plot analysis of capital rental changes for each of our four scenarios. The cross in the chart represents the median, the box shows the first and third quartiles and the ends of the 'whiskers' are the minimum and maximum values.

FIGURE 12

Box and whisker plot of changes in capital rentals adjusted for capital expenditure for MOLA rolling stock



Source: CC analysis.

96. Figure 12 shows that the only pattern to emerge is that the median rental reduction was greater where an off-lease alternative existed than in the cases where there were no off-lease alternatives (indicating that off-lease alternatives may present a greater competitive threat than displaced and new rolling stock alternatives). However, the spread of the capital rental changes was greatest for those leases where off-lease alternatives were a threat.

Twenty largest capital rental increases and decreases

97. We wanted to understand whether certain factors were more important than others in causing larger capital rental decreases or increases from one lease to the next. We therefore examined in more detail the 20 largest increases and decreases in capital rental percentage changes in our lease data set.

Top 20 decreases

98. Table 13 shows the 20 largest decreases in capital rentals and the factors we identified that caused them.

TABLE 13 Twenty largest decreases in capital rentals for MOLA rolling stock

ROSCO	Franchise	Vehicle class	No of vehicles	CR % change	Factors documented which might have affected lease negotiations
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CC analysis.

99. Table 13 shows that:
- (a) Fifteen of the top 20 reductions related to HSTs and loco-hauled rolling stock. This category of rolling stock is known to have had until recently spare capacity (for example, relatively large amounts of [REDACTED] HSTs and [REDACTED] rolling stock have been off-lease, as set out in Appendix 6.1).
 - (b) Three of the 20 reductions related to Class [REDACTED] and [REDACTED] (see Figure 6).
 - (c) The remaining two reductions (Class [REDACTED]) have quite specific reasons (equalization of rents across the Class [REDACTED] and the end of previously amortized modifications on the Class [REDACTED]).

Twenty largest increases

100. Similar to the 20 largest decreases, Table 14 shows the 20 largest increases in capital rentals and the factors we identified that caused them.

Very low capital rental offers

104. We also heard of two instances where very low capital rentals were offered in order to keep rolling stock leased:

(a) [REDACTED]

(b) Angel offered a [REDACTED] to [REDACTED] to avoid its [REDACTED] going off-lease.

Displaced vehicles

105. We also examined the effect on capital rentals where rolling stock was displaced to another franchise. We compared the capital rental for the fleet on the new franchise with the capital rental for the same fleet which applied on the previous franchise. Using the 121 MOLA leases, Table 15 presents a summary of the different patterns of capital rental changes between switched MOLA rolling stock and those MOLA fleets that were not switched.

TABLE 15 Changes in capital rentals for switched MOLA rolling stock compared with MOLA fleets that were not switched

	Number of leases		Number of vehicles	
	No	%	No	%
<i>Switched rolling stock</i>				
No change	2	7	44	6
Decrease	23	77	535	69
Increase	5	17	139	19
Total	30	100	718	100
<i>Rolling stock not switched</i>				
No change	9	10	798	14
Decrease	47	52	2,025	36
Increase	35	38	2,849	50
Total	91	100	5,672	100

Source: CC analysis.

106. Table 15 shows that where MOLA rolling stock has been switched from another franchise, we observed more decreases and fewer increases in capital rentals than for those fleets that were not displaced elsewhere.