

ROLLING STOCK LEASING MARKET INVESTIGATION

Pricing appendix for Emerging Thinking

1. This appendix sets out our understanding of the way rolling stock leases are priced, based on information supplied to us by the ROSCOs. It examines the two elements of the lease charges—capital and non-capital rentals—and sets out the differences between initial leases and subsequent leases.
2. Rolling stock is leased in the form of an operating lease (a lease which does not transfer the risks and rewards of ownership to the lessee). The capital rental is associated with the cash flows arising from the purchase and financing of each asset. Where appropriate for soggy and wet leases, there is an additional charge—the non-capital rental—determined from the lifetime anticipated maintenance costs of each asset.

Capital rentals

New build

3. All three ROSCOs use a proprietary leasing software package to calculate the per month capital lease rental for the initial lease of new rolling stock. The critical inputs into the package are purchase costs, funding cost (normally based on 100 per cent debt finance), tax rates and capital allowances, payment profiles and the economic life of the asset. The final input is a profit margin percentage ('the margin') which is described in the following paragraphs. From these variables, a monthly rental over the specified economic life is determined. When the first lease is agreed, the funding cost is fixed for the duration of the lease term. The outputs from the package will include the monthly rental which is specified in the initial lease rental.

4. The margin is the key measure used by the ROSCOs to evaluate capital leases. The margin is a specific percentage input into the model expressed as a constant percentage of the net cash invested over the planned economic life of the rolling stock. The assumed economic life is typically 30 - 35 years with no residual value remaining at the end of this period.
5. The capital rental margin made by the ROSCO covers central overheads,¹ the cost of risks relating to the asset and, since the funding will actually be a mixture of debt and equity, the additional return required by equity investors. The ROSCOs apply management judgement to determine the appropriate overall margin percentage and do not calculate or estimate the component elements of the margin.
6. In most cases, initial capital rental rates are calculated using an assumption that capital rentals remain constant in nominal terms over the economic life of the asset. One ROSCO [X] said that constant nominal rentals 'ensures that TOCs subject to the primary lease period are not penalised in terms of funding a larger proportion of the capital cost, than those in subsequent lease periods where the RV (residual value) is lower'.
7. None of the ROSCOs assume any subsequent investment (for example, a mid-life refurbishment) or any period when assets could be off lease when calculating capital rentals for new rolling stock. These events are taken into account as and when they occur.

Subsequent lease

8. At a subsequent lease the ROSCOs may use the proprietary software or a spreadsheet ('model') to assess the rental and the margin. The difference at a

subsequent lease, compared with a first lease, is that the capital rental is determined from previous rentals, agreed changes and competitive pressures, where relevant, and is then a specific input into the capital rental model. In addition, the funding cost will be based on the rates fixed for the term of the subsequent lease. The margin over either the whole, or remaining economic life, or lease term is then derived from the net of the expected cash inflows and outflows over the specified life or lease term.

9. The concept of indifference pricing is relevant to the capital rentals at a subsequent lease. The DfT outlined its understanding of indifference pricing in its request to the ORR for a CC reference. The DfT said that the desired effect of indifference pricing was to set a price for the MOLA rolling stock at a level just below that at which a TOC would choose to procure new rolling stock. It said that indifference pricing ‘was used only to set lease rentals for MOLA stock for the Initial Lease Period... It was used to set a “Day 1 price” and had no ongoing function or relevance after Day 1. It has been suggested that ROSCOs have used or are using indifference pricing to set lease rentals on MOLA stock renewals...It cannot be assumed, and has not been shown, that the indifference price is the competitive price for MOLA rolling stock (i.e. the price that would be set in a properly functioning competitive market)... At best, any indifference price is a price cap. It is effectively the maximum price that a monopolist lessor of MOLA stock could charge a TOC by way of lease rental. Above that price for MOLA stock, the TOC would choose new build in preference to the MOLA stock in question.’
10. Only one ROSCO [X] said that it explicitly considered an indifference pricing methodology when determining rental rates at a subsequent lease. It considered the rental price of new rolling stock and adjusted this rental downwards to reflect the reduced utility of the older used rolling stock to a point where the TOC is indifferent to

¹To the extent that these overheads are not covered by non-capital rental charges.

leasing either the new rolling stock or the used stock. Another ROSCO [X] said that it considered the competitive threat posed by other fleets (including new fleets) when deciding whether to adjust lease rentals or spend money on improvements for the same rental. A third ROSCO [X] said that it considered all risks (including the cost of new trains) when determining a margin in its pricing calculations, but did not specifically mention indifference pricing.

11. To estimate whole life margin at the point of subsequent lease the pricing models reflect the profitability history of that fleet to the point of subsequent lease. For rolling stock procured since privatization this will be based on the actual cash flows. For MOLA stock, however, there is an incomplete history of cash flows both for the period of BR ownership and also possibly for the initial post-privatization period until the ROSCO's acquisition by its current owner. The ROSCOs generally start their assessment of subsequent lease returns from the price paid for the rolling stock when each ROSCO was acquired by its current owners. This is greater than the value of the assets at privatization and may include the 'fair value' adjustments and goodwill recorded in the accounts of the ROSCOs' owners at the time of acquisition.

Non-capital rentals

12. All three ROSCOs have Whole Life Maintenance Plans (WLMPs) for each class of rolling stock in their portfolios. The WLMP describes the nature, timing and estimated cost of maintenance events for the life of a class of rolling stock asset based on expected annual mileages, and includes estimates of unplanned future maintenance events (for example, additional corrosion repairs). WLMPs were provided to the ROSCOs by rolling stock manufacturers, acquired as part of the acquisition of MOLA stock at privatization or have been developed by the ROSCOs since privatization.

13. The WLMP uses current or expected annual mileages to calculate which maintenance activities are due when, and this—together with fixed period maintenance activities—produces a whole life cost which drives the non-capital rental. The whole life maintenance cash flow costs are then discounted to a single present value amount (each ROSCO sets its own discounting rate and applies this consistently), this amount is then annuitized to produce an annual non-capital rental. The ROSCOs then add a further percentage of the annual cost to cover overheads and/or movement costs and/or margin. The resulting annual non-capital rental is then divided by the number of vehicles in the fleet and then again by 12 to give a monthly non-capital rental figure per vehicle. This rental will be charged to the TOC under a soggy lease. Inflation is taken into account by increasing rentals in line with an index such as the Producer Price Index.
14. Under a dry lease, the TOC is responsible for procuring maintenance. To ensure that the TOC pays a reasonable proportion of lifetime maintenance costs over the duration of a lease, for some dry leases a maintenance reserve system is used by two of the ROSCOs [X]. This involves calculation of a monthly sum, derived from the WLMP and paid over by the TOC to the ROSCO. As each asset's maintenance events become due, the ROSCO releases the relevant sum to the TOC to pay for the maintenance.² This attempts to ensure that current and subsequent TOCs incur the same maintenance costs. The third ROSCO [X] does not utilize a maintenance reserve on dry leases. It said that it saw the deferral of maintenance income as an accounting issue which did not affect pricing and is applied across the whole rolling stock portfolio.

²The sum released by the ROSCO may be different to the actual maintenance cost incurred by the TOC if the actual cost of the maintenance event differs from the anticipated cost or if the amounts contributed to the maintenance reserve prior to the maintenance event are not significant.

15. For new rolling stock, maintenance is usually performed by the rolling stock manufacturer. The ROSCOs may either procure this maintenance from the manufacturer and include the cost in the non-capital rental under a wet lease, or act as intermediary between the TOC and the manufacturer and offer the new rolling stock under a dry lease.