

Accounting ratios and whole company profitability

Introduction

1. In this appendix we set out our analysis of accounting ratios. In general we are using our analysis as a high level cross-check to our main assessment of whole-life margins on capital leases and a comparator, as appropriate, to profitability submissions by the ROSCOs. In addition we are using this analysis to assess the significance of maintenance returns.
2. We were unable to analyse maintenance profitability because the ROSCOs do not allocate capital to maintenance activities.
3. In this appendix we set out the limitations of ROCE and accounting ratio analysis in this inquiry. We then summarize the adjustments made to the data, and then present our ROCE analysis for each ROSCO. Finally we look at the relative importance of maintenance profitability.

Limitations of accounting ratio analysis

4. ROCE is usually expressed as the ratio of earnings before interest and tax (EBIT) to interest-bearing debt and equity shareholders' funds. In our analysis we have substituted debt and equity with the NBV of each ROSCO's rolling stock assets. Therefore the definition of ROCE used in our profitability assessment will be EBIT divided by the NBV of rolling stock assets.
5. An accounting-based ROCE, however, has some limitations with regard to profitability assessment. Accounting measures of income and expenses can change over time with revisions to accounting standards (for example, International Financial Report Standards (IFRS)) and the use of NBV as a capital base will lead to higher ROCE figures for older assets because the NBV declines over time as a result of depreciation.
6. Accordingly we might expect to see that the ROCE increases over time and that the ROCE for MOLA assets is higher than for post-MOLA because the MOLA assets are older.
7. Furthermore, in industries with long-life assets of high opening value, the NBV of those assets will depend on the depreciation policies used, and may not reflect the economic value of the assets. For this reason, we consider that ROCE based on NBV may not provide an accurate indication of levels of profitability and we are placing limited weight on the results.

Source of information and principal adjustments

8. The main source of our information has been submissions of financial data made by the ROSCOs. We asked each of the ROSCOs to remove or separately identify any

activity not related to their Great Britain passenger leasing business¹ and associated maintenance services—for example, freight leasing.

9. Angel has combined the results of more than one leasing company, and Porterbrook's are the consolidated results of its activities, whereas HSBC included adjustments to the valuation of their rolling stock assets, which were recorded in the consolidated accounts of their parent company. We also considered the differences between the information provided by the ROSCOs and the information in the respective statutory accounts.
10. We made certain adjustments to the information provided by the ROSCOs. These adjustments related to four issues:
 - (a) assets in the course of construction;
 - (b) changes in the way revenue and expenses were reported by the ROSCOs resulting from the implementation of IFRS in 2005;
 - (c) company-specific items which we believed should be adjusted to ensure that a consistent analysis was made between the three entities; and
 - (d) allocation of overheads between capital leasing and maintenance services.²

Taxation

11. In this analysis we compare pre-tax ROCE with a pre-tax WACC. While we recognize that different capital allowances may apply to post-MOLA and MOLA assets, we do not consider that these differences will have a material effect on our interpretation of these ROCE results.

Asset values

12. For post-MOLA assets, the relevant book value is the purchase cost of the asset. For MOLA, however, there is an issue determining the appropriate book value. The ROSCOs accounting data is based on asset values determined when the ROSCO was last acquired. In each case this has caused an upward revaluation in asset values and capital employed. In our work on asset values set out in Appendix 6.5, we came up with two possible valuations: the purchase price on first resale of the ROSCOS, and that figure minus 15 per cent, which was used as a sensitivity. To be consistent with these values, the capital employed figures used in this appendix would need to be adjusted to reflect this 15 per cent difference, and this would be likely to increase ROCE. However, since we consider that comparing ROCE with WACC is not appropriate in this instance and will not provide reliable evidence on profitability levels, we have not made any such adjustment.

HSBC

13. In Table 1 we set out the ROCE percentages for HSBC we have estimated based on the methodology described above.

¹We note that the ROSCOs passenger leasing business may include a small quantity of stock which is leased to open access operators.

²There was a wide difference between the split of allocation of overheads between capital leasing and maintenance activities. The differences do not significantly affect our results, although they limited our ability to compare results between ROSCOs.

TABLE 1 **HSBC ROCE percentages, calculated by the CC**

	2002	2003	2004	2005	2006	2007
Combined business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Capital leasing business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Post-MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
WACC (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CC analysis.

14. HSBC also submitted a ROCE analysis performed by Frontier Economics. The results are summarized in Table 2.

TABLE 2 **HSBC accounting ROCE percentages, calculated by Frontier**

	2002	2003	2004	2005	2006
Capital leasing business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Post MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: HSBC Rail profitability: 2002–2006, Frontier Economics, November 2007 Annex 5.

15. There is a difference between the two sets of results. However, both show [REDACTED] in ROCE over the period. We considered the differences between our data and Frontier’s data. Both calculations include an adjustment for assets in the course of construction. The differences in the two sets of results arise from a different basis of calculation. We note that the Frontier calculations include the deduction of deferred taxation and actuarial rather than straight-line depreciation. The deferred taxation adjustment includes an element that relates to the revaluation in the asset base. The actuarial basis of depreciation is adopted by HSBC in its management accounts and is similar to the depreciation profile that is an output from the lease pricing model.
16. The increase in the CC’s calculated ROCE from post-MOLA stock over time may in part be caused by timing differences as the fleet is commissioned. For instance, the NBV will include the full cost of each asset but the rental income will only include the full rental from the date the asset is brought into service.
17. Table 2 also shows that MOLA returns are [REDACTED] than those for post-MOLA. [REDACTED] we have already noted the expected ROCE increases with the age of the asset as the NBV declines. The same pattern is observed in the accounting ROCE results provided by Frontier.

Angel

18. In Table 3 we set out the ROCE percentages we have estimated for Angel. The table shows that the capital leasing ROCEs have increased over the six years, with the exception of 2006.

TABLE 3 **Angel ROCE percentages, calculated by the CC (original)**

	2002	2003	2004	2005	2006	2007
Combined business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Capital leasing business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Post-MOLA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
WACC (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Combined business	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CC analysis.

19. Angel submitted some adjustments to our figures provided by Oxera. These are set out in Table 4.³ Angel also supplied an updated analysis after making a number of adjustments—principally changing the revenue allocation between MOLA and post-MOLA, increasing the allocation to post-MOLA in the early years, and eliminating impairment provisions in 2006 and 2007. We considered these adjustments to be reasonable.

TABLE 4 Angel ROCE percentages, calculated by the CC (updated)

	2002	2003	2004	2005	2006	2007
<i>Before Angel adjustments</i>						
MOLA	[X]	[X]	[X]	[X]	[X]	[X]
Post-MOLA	[X]	[X]	[X]	[X]	[X]	[X]
<i>After Angel adjustments</i>						
MOLA	[X]	[X]	[X]	[X]	[X]	[X]
Post-MOLA	[X]	[X]	[X]	[X]	[X]	[X]

Source: CC analysis.

20. On both sets of data MOLA profitability has fallen and post-MOLA profitability has risen over the period. The returns on MOLA are significantly higher than for those on post-MOLA, but that is not unexpected given the different NBVs of the assets. Over time, accounting ROCE would be expected to increase for non-MOLA the same way as for MOLA.

Porterbrook

21. In Table 5 we set out the ROCE percentages we have estimated for Porterbrook.⁴

TABLE 5 Porterbrook ROCE percentages, calculated by the CC

	2002	2003	2004	2005	2006	2007
Combined business	[X]	[X]	[X]	[X]	[X]	[X]
Capital leasing business	[X]	[X]	[X]	[X]	[X]	[X]
MOLA	[X]	[X]	[X]	[X]	[X]	[X]
Post-MOLA	[X]	[X]	[X]	[X]	[X]	[X]
WACC (%)	[X]	[X]	[X]	[X]	[X]	[X]

Source: CC analysis.

22. There is no clear trend for either the combined business or capital leasing ROCEs. There is a general pattern of increases in the MOLA ROCE between 2002 and 2007. The decrease in 2004 which affects both post-MOLA and MOLA is largely due to a significantly higher depreciation charge adjustment compared with the two prior years.
23. The increase in the ROCE from post-MOLA may be caused in part from timing differences as the fleet is commissioned. For instance, the NBV will include the full cost of the asset but the rental income will only include the full rental from the date the asset is brought into service.

³Angel expressed concern with the methodology used by the CC in calculating the ROCEs.

⁴Porterbrook has expressed concern with the methodology used by the CC in calculating the ROCEs.

Overall results

24. Our analysis of ROSCO ROCE showed, as we expected, that ROCE was higher for MOLA than for post-MOLA stock. This is consistent with the findings from our margin analysis.

Maintenance

25. The ROSCOs procure maintenance services from third parties, and as a result there is no capital base for these activities on which we could calculate a stand-alone ROCE and so we have not done so.
26. We compared the ROCE results for capital leasing (ie excluding maintenance) and for combined activities (ie including maintenance). In our analysis of accounting ratios we set out for each ROSCO a comparison of the ROCE for the combined business and the capital rentals activities. The differences between the two activities are set out in Table 6.

TABLE 6 Contribution of maintenance services to ROCE

	<i>per cent</i>					
	2002	2003	2004	2005	2006	2007
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CC analysis.

27. Table 6 shows that for two of the ROSCOs ([REDACTED]), maintenance returns have been falling as a proportion of capital employed. The table also shows that maintenance activities made a positive contribution to ROSCO profits over the period. However, this contribution was small in comparison with overall profits.