Dear Adrian

Thank you for the prompt response to my letter dated 28 July 2015.

It has since come to my attention that the TAS report that I originally wrote in response to was commissioned by Stagecoach, a business which owns some of the most profitable bus operations in the deregulated bus market. I note that the information about the identity of the client is not disclosed in the report, which is somewhat unusual for consultancy work.

Nonetheless, you do raise some issues of substance in your response on which I think it is important to set the record straight.

Confusing and inconsistent presentation

I previously pointed out that the report is difficult to follow due to a general lack of clarity and consistency. I take your point that labour costs for Scotland and Wales are added into chapter six as background information, so thank you for clarifying that issue. I have also taken on board your point that I may have missed some of the nuances in the report and have therefore reviewed it further. However, rather than assuring me as to the validity of your findings and the quality of the analysis this has strengthened my view that the report needs further work.

In response to the comments in your letter, I fully appreciate that a degree of uncertainty is inherent in this type of project. Alternative scenarios and assumptions need to be considered and results can often be best presented as ranges. But my difficulty in following your analysis is less to do with the presence of uncertainty, and arguably more due to an excess of confidence in some results, accompanied by a lack of clarity, consistency and, in some cases, basic computation errors.
For example, you open the report by stating that the ‘full annual cost of a delivering a bus service equivalent to that in London to the whole of England is estimated at £3.2 billion per annum’; no ranges, no caveats and no nuances are given. This figure appears nowhere else in the report outside the key findings section and, as I mentioned in my previous letter, I take it that it actually relates to the whole of England outside London. As I stated in my first letter, the confusion is compounded by the fact that costs of £3.8 billion are then given in the Executive Summary and a range of other different figures in table 32, at the end of the report.

Having reviewed the report further, I now realise that the regional figures presented in table 28 do not add up to the ‘England O/S London total’ and also fail to match some of the figures in table 30. Nuanced analysis is one thing, basic computation errors something very different. I expect you will agree that the latter is not a sign of a carefully reviewed report. In case you are minded to review this part of the work, then you might also wish to look at the labour costs for Yorkshire and the Humber which seem out of kilter with the other regions. I’ve not had the time to check every computation and assumption in the report but I still think you might want to consider giving it a thorough proof read for the benefit of other potential readers.

**Contradiction between 2003/4 and 2014 analysis**

I pointed out in my previous letter that you have estimated the cost of a London-style bus system elsewhere in England at up to three times the figure in the 2003 TAS report for the Department for Transport (depending on the figures you choose to go with). Your letter does not explain why this is the case, instead alluding to section 3.7 of the report, which is meant to refer to a ‘full service package’. I have to confess that I have not found any reference to ‘full service package’ in section 3.7 and I can’t quite understand why this would fully explain the large discrepancy between your 2003/4 and 2015 work. Whether or not it is valid to compare your 2003/4 and 2015 results, I think it is perfectly reasonable for any intelligent reader to want to understand how and why your conclusions have changed so radically in the intervening period.

**The economics and finance of bus company profitability**

In your letter, you summarise your rebuttal of my arguments on bus industry profitability by saying that “we do not believe it is either prudent or economically sustainable to adopt any modelling assumption which suggests that operators would bid for public sector contracts at profit levels below their cost of capital”. Assuming you meant to use return on capital employed (ROCE) rather than profit levels in the sentence above, then finally there seems to be something we can agree upon.

Where I believe your report is potentially misleading is, first, by mixing up the notion of target profit margins with that of returns on capital employed (as you again seem to do in your letter), and second, by stating that profit margins (and implicitly returns on capital employed) are at an appropriate, or competitive, level. You direct the reader to other TAS publications but provide no actual figures in this report to support that claim. As I stated in my letter, I believe instead that at least some bus companies operating in the deregulated bus market are making excess profits. You pointed out that I gave no evidence of this in my letter, so this is something I now intend to remedy.

As I expect you will be aware, L.E.K. Consulting published a review of bus profitability in England for the Department for Transport in 2010, which concluded that the benchmark cost of capital for the bus industry should be in the range of 8.2-10.9% (nominal, pre-tax), which was consistent with parallel work by the Competition Commission. This figure will
naturally vary in line with inflation, real interest rates and market risk. Changes in inflation and real interest rates since 2010 will have probably pushed these figures slightly downwards. A shift to bus franchising, with no on-street competition and a shift in revenue risk away from operators, would probably push them down further, though I take the point that you do not necessarily agree with this view.

L.E.K. then computed the actual returns on capital employed earned by the bus subsidiaries of the big-5 groups in England, after taking into account group overheads, bringing any operating leases back onto the balance sheet, and making a number of other adjustments. Based on 2007/8 public accounts, L.E.K. estimated that the average return on capital employed amongst big-5 companies operating in PTE areas was 19.8%, or in other words, roughly twice the cost of capital. In 2011, the Competition Commission also concluded that “overall Large Operators have earned profits persistently in excess of the cost of capital” and found that “some depots show high levels of profitability”, though they did not disclose their analysis for individual operating companies/depots or for PTE areas as a whole.

You argue in your letter that bus industry profitability has fallen significantly since 2009/10. Given that the L.E.K. analysis is now a few years old, I went back to bus operating company public accounts for which information is available and computed average nominal returns on capital employed and on shareholders’ funds over the past ten years. Granted that this is a more simplistic analysis than that carried out by L.E.K. but, based on their findings, it is also likely to underestimate returns at group level.

The table below shows ten-year nominal average returns for the top five performing bus companies operating within and into PTE areas. Obviously, any single profitability ratio provides only a partial picture of the financial position of a given company. Yet, these figures show fairly conclusively that all five companies have been making average returns on capital employed vastly in excess of the L.E.K. benchmark cost of capital. And because some of these companies seem to be highly geared (ie, they rely much more on debt than on equity to finance their operation), the returns on shareholders’ funds (ROSF) are unlike anything one would expect from most typical investments.

Let’s turn now to your claim that profitability has declined in recent years. Taking these five top performing companies, the average annual ROCE (taken as a simple average) was 59% in 2009/10 and 90% in 2013/14. A positive trend seems to hold across bus companies held by the big-5 groups operating in PTE areas. Looking at operating profit and pre-tax profit margins, while there has been some fluctuation over time, there has also been a general upward trend over the period for which data is available. Hence, I see little evidence here of a significant decline in returns on capital employed. Please feel free to use these figures in any future publications as they all originate in published accounts.

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1 Competition Commission (2011), Local bus services market investigation – a report on the supply of local bus services in the UK (excluding Northern Ireland and London), paragraph 10.87
2 Ibid., paragraph 10.88
3 Return on capital employed was computed as EBIT divided by (Total Assets minus Current Liabilities).
4 Return on shareholders’ funds was computed as net income divided by shareholders’ equity.
Table 1. Average annual profitability ratios 2004/5 - 2013/14 (nominal)

<table>
<thead>
<tr>
<th>Operating company</th>
<th>Owning group</th>
<th>Area of operation</th>
<th>ROCE (%)</th>
<th>ROSF (%)</th>
<th>Op. profit margin (% of turnover)</th>
<th>Pre-tax profit margin (% of turnover)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midland Red (South) Ltd</td>
<td>Stagecoach</td>
<td>Midlands</td>
<td>88%</td>
<td>374%</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Busways Travel Services Ltd</td>
<td>Stagecoach</td>
<td>North East</td>
<td>60%</td>
<td>187%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Gr Manchester Buses South Ltd</td>
<td>Stagecoach</td>
<td>Greater Manchester</td>
<td>51%</td>
<td>278%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>Go North East Ltd</td>
<td>Go-Ahead</td>
<td>North East</td>
<td>46%</td>
<td>471%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>First West Yorkshire Ltd</td>
<td>First</td>
<td>West Yorkshire</td>
<td>35%</td>
<td>53%</td>
<td>15%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: pteg analysis of operating company accounts data, obtained from the FAME database

In your letter, you also seem to take issue with my point that the accounting treatment of operating leases does not necessarily have any bearing on discussions over profitability (assuming we look at the appropriate measure of profitability). As my intention was to point out that this issue is merely a distraction from more fundamental questions and as we seem to be largely in agreement on matters of definition, I do not feel the need to dwell on this further.

A like for like comparison of deregulation and franchising?

I argued in my letter that your analysis is heavily skewed against franchising due to some odd choice of assumptions and nothing in your letter leads me to change my view. Although I welcome your clarification on service elasticities, I believe there are equally counter-arguments for considering a higher parameter value, not least around network economies and diminishing marginal returns, whereby passengers are likely to be more sensitive to changes in service levels at lower frequencies.

On the issue of fare elasticities, which you do not address in your response, a look through documentation dated 2003 relating to the TAS National Bus Model shows that a fare elasticity higher (in module) than -0.3 was presumably employed from that point onwards, despite the claim otherwise which you seem to make in your response. I’m not sure whether that was an accidental error in your analysis or whether there is some thinking behind that choice. Either way, it’s something else you might wish to clarify in any potential future revision of this work.

Although I’ve not had the time to double-check every computation and assumption in your report, I hope my letters have given you enough food for thought regarding the need for a more thorough review of this work. As it stands, I feel that the low quality of the report reflects poorly on TAS, does little to advance public debate in any meaningful way, and could well end up affecting your reputation and credibility. That being said, given our difference in opinion on some fairly fundamental issues, and recent knowledge of the client for this work, I have no expectation or intention to continue this exchange further.

Yours sincerely,

Pedro Abrantes
Senior Economist