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Research in Transportation Economics is available online at:

<https://dx.doi.org/10.1016/j.retrec.2014.09.053>

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# An assessment of the Competition Commission Report and subsequent outcomes

[Revised version in response to referees' comments May 2014]

Workshop 4.

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## Keywords (up to 8):

Buses  
Deregulation  
Competition  
Contracting  
Elasticity  
Great Britain  
Profitability

## ABSTRACT

Following the Office of Fair Trading's review of the British deregulated bus market as a whole in 2009, the issues raised were referred to the Competition Commission. Its final report was published in December 2011. Subsequently, the House of Commons Transport Committee carried out an enquiry into the Commission's report, and reactions to it by the operating industry, user groups, and other bodies, which was published in September 2012. A number of major issues have been raised, including the extent to which price competition may be effective, the appropriate rate of return on capital that would be expected within the industry (and appropriate actions where this is excessive in practice), and industry structure. The importance of competition *per se*, as distinct from attributes of direct concern to users (such as reliability, frequency, fares) has also been debated. This paper reviews the issues raised, and outcomes to date, in the light of further evidence on the industry's performance. It is demonstrated similar rates of return could be attained through very different operating strategies, which in turn have very different implications for changes in consumer surplus. The alternative uses made of such profits (for example through reinvestment) may also have markedly different impacts effects on users. Rather than focussing on the dangers of excessive rates of return on capital, the outcomes for service users should be the main issue.

## Developments in Britain prior to the recent competition debate

In previous papers at a number of 'Thredbo' conferences - beginning with the first in 1989 - I have outlined developments in the deregulated coach and bus sectors in Britain. Many other writers on this subject have indicated a range of views on probable outcomes and those observed. This introductory section highlights the main changes.

### 1.1 The express coach case

The deregulation of long-distance coach services under the Transport Act of 1980 took place from October of that year. The quality of statistics is unfortunately very poor, but some broad conclusions can be drawn. Following removal of previous quantity controls (route and timetable licensing, also direct capacity controls), and those on price, which had protected both the railways and incumbent coach operators, rapid growth took place. The major operator, National Express (NE), increased ridership by about 50% between 1980 and 1986, in addition to which growth was attained by new entrant operators, albeit probably relatively small. Fares fell sharply, especially on the major trunk routes. In addition to coach users, rail users may also have benefitted through fare reductions made in response. However, the major competition was between National Express and British Rail, both then in state ownership, rather than within the coach market itself. Difficulties in obtaining access to terminal facilities used by incumbent operators were undoubtedly a factor in the limited impact of new entrants in the early 1980s. Initial impacts are described and analysed by Robbins and White (1986), Kilvington and Cross (1986), and Thompson and Whitfield (1986).

From this initial peak, some reductions took place in NE ridership, as a result of substantial real fares increases, especially following privatisation in the form a management-employee buyout in 1988. The outcome was broadly consistent with a short-run price elasticity of about -1.0, i.e. total revenue remained largely unchanged in real terms. Little new entrant completion was generated in response to this and a reversal of pricing policy appears to have been associated as much with a change in management following incorporation of NE as a plc in the early 1990s. NE absorbed many of the competing independents, and only on one major corridor (Somerset - London) has all-year-round independent competition been sustained.. Increased emphasis was placed by NE on direct services to airports (notably Heathrow) where coach has a competitive advantage over rail, and is not in the 'inferior mode' position found in respect of trunk routes to city centres. Substantial competition re-emerged for NE from Megabus (a subsidiary of Stagecoach) from 2003, adopting a yield management/ internet booking pricing system. These subsequent developments to 2010 are summarised in White and Robbins (2012). NE's long-distance coach traffic has remained broadly stable in recent years, and consistently profitable despite growing competition from Megabus.

In brief, two broader conclusions may be drawn from the express case:

1. Contrary to some economic theory, impacts of small independents were limited. Although direct economies of a scale in service operation may be limited, network and marketing advantages undoubtedly exist. The only substantial competition in recent years has come from another large company.
2. While direct 'on the road' competition may be a factor in pricing, it is not necessarily the *only* one, and awareness by management of the negative impacts of successive real price increases could also explain behaviour.

## **1.2 The first phase of local bus deregulation**

It is convenient to divide the impacts of local bus deregulation into two phases:

- (a) From its inception in October 1986, following the Transport Act of 1985, to the year 1999/2000, encompassing the initial phase of competition, and dramatic reduction in unit cost per bus-km, but with a sharp drop in ridership outside London.
- (b) From 2000/1 inclusive, in which real costs per bus-km have risen (although still below 1985/86 levels), and the aggregate rate of ridership decline has diminished.

Outside London and Northern Ireland, operators were required to register those services they considered 'commercial' (i.e. covering all costs from user revenues, including the then fuel duty rebate and any compensation received for concessionary fares). About 80% of total bus-km run outside London has operated in this form since. The remaining 20% share was taken by services contracted to local authorities, where commercial operation was not registered. In addition to obvious cases such as low-density rural routes, this also covered a substantial part of the day and week on routes otherwise registered as 'commercial' (for example evenings and Sundays). Hence, one might find two separate operators on the same route, both commercial and contracted, dependent on time period.

The perceived threat of competition 'on the road', and direct competition in the case of bids for contracted services, helped to stimulate a very sharp reduction in real total cost per bus-km for the industry as a whole (including London). This had reached about 45% by 1999/2000 (on a base of 1985/86, i.e. the last full year before deregulation), explained by increased labour productivity (notably through reductions in administrative and engineering staff), some reductions in wages and working conditions, higher vehicle utilisation, and use of smaller vehicles (Heseltine and Silcock 1990).

However, this was not translated into a corresponding reduction in costs per passenger trip in the deregulated regions, since average loads fell by a similar percentage to unit cost per bus-km. While ridership might have been expected to grow as a result of higher bus-km operated (and certainly did so in some cases such as high-frequency minibus conversion), the aggregate impact was affected by an unstable network structure, and offset by substantial real fares increases. Some of these were due to removal of high support levels in the former metropolitan counties, but also occurred in other areas - there was no aggregate effect of price competition in reducing price levels. Rising car ownership and other external factors would also have affected ridership in any case. The result was very poor average loads. The National Travel Survey (NTS) can be used to estimate changes in bus trip rates by car availability – in non-car owning households trip rate per person remained about the same (i.e. real fare and service level changes offset one another), but for those with cars available the bus trip rate fell even below that found in 1985/86 (White 1997, table 1).

The outcomes of direct competition on service quality, fares levels and ridership were highly variable and have been debated by many authors: (see, for example: Gomez-Ibanez and Meyer 1997; Preston 2003).

Evans (1990) and Van der Veer (2002) indicates that much competition may have taken the form of increased frequency, rather than lower fares, partly as tactic by incumbent operators to deter entry to newcomers.

Following an intensive phase of 'on the road' competition in the late 1980s, this diminished rapidly, and in many areas is now non-existent (the main exception being Oxford). Periodic competition occurs in some areas, but is not necessarily sustained.

The reductions in unit costs, and increases in fares, enabled substantial reductions to be made in the net level of financial support received by the industry. This was most marked in London, where the drop in costs while retaining ridership enabled net support (after concessionary fare compensation) to be virtually eliminated in 1999/2000.

### **1.3 The second phase of local bus deregulation**

Taking 1999/2000 as the base, a different overall pattern emerges. A lower rate of overall ridership decline in the industry as a whole has been observed. This was assisted by very strong growth in London offsetting decline elsewhere, and also by the extension of concessionary travel for older and disabled users. From 2001 a nationwide minimum standard of a half fare was imposed, in place of a wide range of local authority policies applying previously. Subsequently, a far more generous scheme was introduced, of free travel after the morning peak period, initially by the devolved administrations in Scotland and Wales, and then subsequently in England from 2006. This clearly stimulated ridership growth, especially in areas which had offered less generous concessions previously (notably England outwith London and the Metropolitan areas), although this effect has probably reached its full extent, and decline has resumed in recent years, notably in Wales and Scotland. Within England, London's continued growth has offset aggregate decline elsewhere such that aggregate industry ridership still rose (DfT 2014).

In some areas there has also been substantial growth in non-concessionary (i.e. fare-paying) ridership, notably where operators have pursued more supportive marketing and service quality policies, such as Brighton & Hove, the Nottingham area, and Cambridge. In many cases these are also areas where car use may be constrained by the high-density nature of the area, such constraints being reinforced by local authority policies – for example, in historic university cities there may be strong pressure to limit total traffic growth for environmental reasons.

Industry profitability also improved substantially from the late 1990s, enabling a return to 'normal' levels of fleet replacement (typically a 15 to 16 year life for full-sized vehicles). Profitability is typically measured as 'Earnings before Interest and Taxation' (EBIT), which may be easily expressed as a return of sales (RoS) margin as percentage of turnover. However, normal accounting practice in Britain is to charge only historic depreciation as a cost before calculating EBIT. Hence, while a cash flow is generated from historic depreciation, this will be insufficient to enable like-for-like replacement of vehicles and other assets at current prices. A higher margin (used in part to fund renewal investment, as well as returns to owners) will be necessary, or alternatives such as raising additional capital, or leasing rather than vehicle purchase (but the latter would be incurred as an annual operating cost in subsequent years, reducing future EBIT).

London in particular has displayed exceptionally strong growth, especially in the early 2000s, associated with a large increase in bus-km run. Population growth, and, to a lesser extent, congestion charging, are among the other principal factors. Estimates of the components of

this growth were provided by the author at the 2007 Thredbo conference and subsequently published in revised form (White 2009)<sup>1</sup>. The London growth has also been associated with very high levels of net financial support (i.e. additional to BSOG and concessionary fare compensation), which rose from £1 million in 1999/2000 to £532m in 2002/03, peaking at £792m in 2008/09, then falling to £500m in 2012/13<sup>2</sup>, at 2011/12 prices.

While the ridership trends since 1999/2000 may in general be seen in a more positive light, those for real unit costs per bus-km reversed. Establishing a fully-consistent data series is difficult due to discontinuities in data published by DfT, but it can be shown that the industry-wide average rose in real terms by 28% between 1999/2000 and 2006/07 (including London), and by 22% between 2004/05 and 2012/13<sup>3</sup> (excluding London). In aggregate, unit costs are now about 30-35% higher than in 1999/2000. However, bear in mind that this rise took place from a low base. For example, an operator with cost index of 100 in 1985/86 would have one of 55 in 1999/2000 (on a drop of 45%). Even if this grew by 40% by 2012/13, the resultant index is about 77, i.e. still well below the 1985/86 level.

Increases in costs were probably inevitable, given the need to improve wages and working conditions of staff (especially in London), and external factors (such as fuel and insurance). In some cases, growing congestion (and the need to improve service reliability in the light of stricter monitoring by the Traffic Commissioners) has required more vehicles and drivers to be scheduled to provide a given service frequency (i.e. for the same volume of bus-km). This change also affected cost per passenger trip, reinforcing the importance of average loads.

A continued trend toward consolidation in the industry can be seen. Very few of the management/employee buy-outs from NBC or SBG privatisations survive (the main examples being Wellglade - the holding company for Trentbarton - and East Yorkshire). Further examples have occurred of smaller municipals, and some larger rural independents, being absorbed into major groups.

Some significant changes were introduced by the Local Transport Act 2008. This made it easier to introduce 'Quality Contract Schemes' (QCSs), which had first been specified in the Transport Act 2000. In essence, they would operate in a similar manner to the London contracting system, in other parts of mainland Britain. However, none has been introduced to date, although substantial interest has been shown by a number of Integrated Transport Authorities, notably Tyne and Wear. The Act also enabled local, voluntary agreements to be created, in which a limited degree of timetable and pricing co-ordination is permitted, in marked contrast to the emphasis on competition in the 1985 Act. A number of examples have been introduced, the most noteworthy of which is in Oxford<sup>4</sup>. The earlier aspects of this are summarised in White (2011).

## **2 Competition policy issues**

### **2.1 The Office of Fair Trading (OFT) study**

Until their merger as the 'Competition and Markets Authority' (C&MA) in 2014, there were two main bodies involved in competition policy in Britain, the Office of Fair Trading (hereinafter, OFT), and the Competition Commission (hereinafter CC), the latter having

succeeded the Monopolies Commission. The OFT undertook the first stage in any inquiries, and then had scope to refer the matter to the full Competition Commission for further investigation and action. In the bus and coach sector, a number of inquiries took place in the earlier years of deregulation, primarily associated with allegations of unfair competition, and whether certain proposed mergers should be approved. The latter category became less numerous in the early 2000s, although a number have taken place in more recent years, notably in relation to the Stagecoach acquisitions of the Preston and Eastbourne municipal undertakings (approving the latter, but requiring divestment in the first): for a summary see White (2011). The OFT also examined a number of recent mergers, some of relatively small scale, but generally permitted these to go ahead.

Competition bodies also have powers to investigate entire market sectors, rather than specific firms, through 'Market investigations'. One such was announced by the OFT in 2009 (OFT 2009), looking at the entire local bus industry outside London. The OFT considered there were grounds for further investigation and possible action, referring the matter to the CC in January 2010 (OFT 2010).

The CC subsequently carried out a very extensive inquiry, the final report of which was published in December 2011 (CC 2011a). This in turn was reviewed by many industry commentators, and by the House of Commons Transport Committee, which reported in September 2012 (House of Commons Transport Committee 2012a).

The OFT's report raised a number of concerns, including:

- The marked concentration of ownership in the industry, with about 70% of turnover controlled by the five largest groups (First, Stagecoach, Arriva, Go Ahead and National Express)
- The limited degree 'on the road' competition, following the higher level immediately after deregulation in 1986
- The associated limited extent of price competition (work for the OFT suggested that fares were on average 9% higher in areas where competition was not found)
- Whether the market for tendered services (based on competitive bidding) was working effectively.

The OFT took a fairly narrow remit, focussing wholly on competition within the local bus industry, i.e. excluding competition between buses and other modes (such as taxis), and also excluding the situations in London and Northern Ireland, as did the subsequent CC study, since there were 'no issues of concern' (one might observe that if matters were as good as thereby assumed, it would be worth examining their experiences in more detail to see how relevant they might be to the deregulated regions). In respect of pricing competition the OFT did note that its scope was limited in the local bus market by the (logical) tendency of bus users to board the first bus to arrive rather than wait for a cheaper service.

## **2.2 The Competition Commission study**

The CC undertook a very extensive study (the final report comprising over 500 pages, excluding appendices). A provisional findings report was published in May 2011 (CC 2011a) and a final report in December (CC 2011b). This involved commissioned research, for example, a fresh analysis of values for price elasticity (Molnar and Nesheim 2010), which

derived an aggregate price elasticity of -0.36, very close to the average value of about -0.4 found in earlier research (Balcombe et al 2004). It concurred with the OFT's findings in respect of market concentration, and concern re lack of competition, but did not endorse the specific findings in respect of price levels and competition.

It focussed in particular on the high rates of return on capital enjoyed by the five biggest groups, resulting in 'Adverse Effects on Competition' (AECs). After assessing the value of assets owned (a complex question in its own right), it concluded that, over the period 2005-06 to 2009-10, the average return was 13.5%, compared with a reference cost of capital of 9.7%, suggesting an excess return of 3.8 percentage points. A number of actions were then proposed to reduce this excess return, and return benefits to users. However, the report does not appear to investigate how these excessive profits were generated, or used. Were they the outcome of exploiting a market with a low short-run price elasticity, or innovations in service quality and marketing which stimulated greater ridership? Were they paid out as higher dividends, or reinvested, for example? These questions might point to looking at variations between the performance of the different groups, rather than considering them as a whole.

It is also of interest to note that the CC seriously considered competitive contracting as a policy option in its earlier reports, but had dropped this by the time of its provisional decision on remedies in October 2011.

The CC's final report identified a number of 'remedies' including:

- Greater use of multi-operator ticketing, with additional powers for Local Transport Authorities to determine characteristics of such schemes
- Greater transparency in the bidding process for tendered services (an oddity of the current process for net cost tenders is that an incumbent who deregisters a commercial service is not obliged to disclose the revenue received, and thus has an advantage in being a bidder for a subsequent net cost contract)
- Requirements for operators to provide fair access to bus stations for rival operators
- Measures to stimulate greater competition, including restrictions on changes in service frequency through increases in registration notice periods, and changes to 'frequent' service registrations (limiting scope for incumbents to react to competition)
- The OFT to take a tougher approach to bus company mergers

The only legislative aspect to have been implemented to date is that related to bus station access, under the Local Bus Services Market Investigation (Access to Bus Stations) Order 2012, which took effect in January 2013. A number of operators had already set out by December 2012 standard access charges to meet these requirements (however, station access is probably less of an issue in local bus service competition than the express coach case, given the use of on-street stops). A review of tendering procedures was commissioned by DfT in August 2013 and published in October (Department for Transport 2013).

The main issue outstanding is therefore the extent to which greater competition might be stimulated, and if so, whether it might result in effective price competition, as distinct from that based on frequency. The CC examined in great detail the issue of economies of scale, suggesting little evidence for this. Questions of depot provision to support operation outside the current operating area of a firm also emerge, as does the general unwillingness of



operators to engage in competition outside their established territories (one can permit competition to occur, but is there any means of compelling it?).

### **2.3 The Transport Committee report**

Following widespread industry reaction to the CC's report, an inquiry was announced by the House of Commons Transport Committee, the report of which was published in September 2012 (House of Commons Transport Committee, 2012a)<sup>5</sup>.

The committee took evidence from a number of witnesses, representing the main user groups, local authority and operating groups, trade unions, the Acting Senior Traffic Commissioner, consultants, and others. Its concluding session examined the Commissioner of Transport for TfL (in respect of the London experience), senior staff of the Competition Commission, and the Parliamentary Under-Secretary of State in the DfT responsible for bus policy matters. Memoranda of evidence were also received from many other parties. The committee also visited Oxford to observe the voluntary partnership scheme there.

It found that witnesses representing local authorities, user groups and the industry were broadly supportive of the CC's recommendations (notably greater use of multi-operator ticketing), but were sceptical of the benefits of competition *per se*, notably the outcomes of previous short-run competition which had produced unstable results with little benefit to users. On the whole, users appear more concerned with aspects such as reliability, frequency and value for money rather than competition as such.

The Committee's report made a number of recommendations, including that the Passenger Focus surveys (see section 4 below) should make more explicit comparisons between results for the major groups, and carry out surveys that allowed analysis of passenger satisfaction and competition at a local level (in issue arising from the CC's report is that it might be reasonable to infer that satisfaction would be higher in corridors where competition occurs, for example on price. This would however require a much larger sample size and/or a sample focussed very clearly on a catchment area of such corridors).

Other recommendations and conclusions in the Committee's report addressed the issue of what can be done where a dominant operator provides unsatisfactory service, and the degree to which 'head to head' competition was realistic or desirable. It suggested that local authorities should be free to decide what was best for their areas on a basis of local evidence, including franchising/quality contracts. The DfT should monitor such moves, with their costs and outcomes. It supported partnership working, and wider introduction of multi-operator tickets. It supported wider disclosure of information on deregistered services. The Committee also noted that the CC's studies had not included any comparative analysis of the bus industry in other countries.

The government's response was published in November 2012 (House of Commons Transport Committee, 2012b). This broadly accepted some of the Committee's findings, but indicated, for example, resource constraints on the scale of surveys that Passenger Focus could carry out.

A further discussion of issues raised in the Committee's report took place on 10 January 2013, between members of the Committee and the then Transport Minister Norman Baker (who had earlier given evidence to the Committee). This examined in particular the possible case for quality contracts, and issues arising where a dominant operator provided unsatisfactory services (Cream 2013).

### **3 How appropriate is the focus on an overall rate of return on capital as a guide to setting policy?**

A central aspect of the Competition Commission's case and ensuing 'remedies' is the losses to consumers resulting from 'excessive' returns on capital. However, this raises the question of how such returns were attained, and whether different implications for consumers thereby result. As indicated in the previous section, a high profit margin could simply be a result of exploiting a market with low short-run price elasticity despite the loss of ridership resulting (for example, using a simple linear -0.4 elasticity, a 10% price increase reduces demand by 4%, but revenue rises by 5.6%). Hence, a low profit margin could be improved by raising fares. This would also raise returns on capital. However, consumer surplus would be transferred to producer surplus in the process. A more positive approach would be that of an operator who improves service quality to increase ridership at the same revenue per trip, thus increasing total revenue and also profitability. In this section, a notional case study of two theoretical examples is considered, and then the extent to which observed outcomes illustrate such differences in practice.

#### **3.1 An illustrative case – Operator 'P' and Operator 'Q'**

Illustrative examples of two operators are considered here. Both commence from the same starting point of 1995, in which they carry 100 million passengers at an average revenue of £1 each. Total operating costs are £97.2m (of which £4.2m is historic depreciation), and hence an operating surplus is made of £2.8m, giving a 2.8% return on sales (corresponding to Earnings before Interest and Taxation, EBIT, a measure of performance commonly used in the industry). However, as indicated in section 1.3, this generates inadequate funds to replace assets on a like-for-like basis. However, the fleet is ageing, and each vehicle is valued at only £30,000. To get back to a 15 year replacement life, fleet renewal needs to be accelerated, and a better profit margin is needed to make up for inadequacies of historic depreciation of £4,000 per vehicle per annum (at a cost for new vehicles of £90,000 at that time, and a life of 15 years, £6,000 is required). Both operators have exhausted the obvious efficiency gains typical of the first phase of deregulation, hence a need to raise revenue to improve profit margins.

Assets are valued at the written down value of the fleet (comprising 1050 vehicles), plus the depots which are worth £10m. If 55 million bus-km were run per annum, these data would correspond to 1.82<sup>6</sup> passengers boarding per bus-km, and a unit operating cost per bus-km of £1.76. Each vehicle would run 52,300 km per annum and carry 95,240 passenger trips. These data are broadly typical of the industry outside London at that time.

### 3.2 Operator strategies

Operator P simply raises prices by 1.5% p.a. in real terms. The cumulative effect over the period to 2008 is that demand falls from 100m to 91.79m trips, but revenue rises from £100m to £111.39m. Operating margins (even after allowing for higher depreciation charges on the newer vehicles) rise from 8.0% in 1995 to 11.10% in 2008. The value of the assets (allowing for straight-line depreciation on vehicles) rises from £41.50m in 1995 to £90.65m in 2008. The return on assets rises from 6.75% in 1995 to 13.65% in 2005, the latter broadly in line with the “excess returns” for large groups shown in the CC report.

Operator Q pursues a more positive approach, stimulating demand through improved service quality at the same aggregate vehicle-km: for example, through better marketing, improved reliability of service, customer-focussed driver training, pricing flexibility around the £1 average figure, redeploying total bus-km to match demand more effectively, etc. Total passenger trips rise by 11.39%, and revenue by the same amount. Hence in 2005, both operators display the same total revenue and profitability.

However, implications for passengers are very different. In the case of operator P, trips have fallen by 8.21%, and each remaining trip pays a fare about 21% higher than in 1995. There is a shift *along* the demand curve, as would be shown in a standard consumer surplus diagram. Hence, there is a direct transfer of consumer surplus from these passengers to the operator of £20.54m in 1995. In addition, applying the ‘rule of half’ (i.e. assuming that the average loss to someone no longer travelling is half that to someone still traveling) results in a further loss of £0.86m, giving a total consumer surplus loss of £21.40m.

For operator Q, the effects may be represented by shift *to* the right (i.e. higher quality produces more trips at the same unit revenue). There is no loss of consumer surplus. If the demand curve is extrapolated upward and assumed to be linear, the ‘price’ at which the former demand level of 100m passenger trips would be found is £1.29. On a more tentative basis than the consumer surplus loss calculations, we can assume the existing users would also benefit from improved service quality (an inferred consumer surplus gain of £29m), plus ‘rule of half’ gains to new users (a further £1.65m), giving a total gain of £30.65m. This calculation is dependent on the extent to which measures designed to attract additional ridership would also benefit existing users. This is clearly the case, for example, with improvements in service reliability, vehicle accessibility, passenger information, and staff training. However, measures taken purely to stimulate ridership through better marketing (such as the ‘telemarketing’ of Stagecoach) would not necessarily provide benefits to existing users. The consumer surplus gain would therefore represent an upper estimate of potential effects, but nonetheless contrasts sharply with the consumer surplus loss from fare increases by operator P.

This is, of course, a simplified example. Both operators would experience some external negative factors (such as rising car ownership) and positive ones (notably introduction of free concessionary travel, subject to the effect of compensation in lieu of direct passenger revenue on profit margins). In some respects, Operator P’s case could prove to be even worse, since medium-run elasticities are of greater magnitude than -0.4 (Balcombe et al 2004), and hence the cumulative impact of the fare increase in the early years on final year ridership could be greater than assumed here. It is also reasonable to assume some increase in the absolute value of the short-run elasticity as absolute level of real fares rises. Given the poor loadings, the operator might well cut out some mileage, but this in turn would

have a 'knock on' effect on ridership also. In the case of operator Q, some increases in mileage might be needed to cope with demand growth which would then stimulate further growth and passenger benefits (such as reduced waiting time). Hence the compound differences between the two cases could diverge further than shown in the initial calculations.

### **3.3 Implications arising**

The implications in terms of the Commission's policies are very different for each operator. Clearly, in the case of P, there has been a direct transfer of consumer surplus from users, and urgent action could be needed to offset this. However, simply reducing P's own surplus would not be an objective in its own right. For example, short-run competition from another operator paralleling existing journeys might divert some ridership, but unless increasing ridership by reducing fares or waiting times would not be necessarily transfer benefits to users.

For operator Q, one might see higher margins as a 'reward' for good service quality, especially if these were reflected in higher investment level rather than higher dividends. In the long run, one might have some concerns re sustained higher-than-average returns, but again the issue would be that of transferring the surplus to users, not reducing it for its own sake.

Another interesting outcome is the extent to which the performance of each operator might attract competition. Clearly, if competition is to act as a 'remedy' where excessive profits at the users' expense are generated, one might hope that competition would be more likely to arise in the case of operator 'P'. However, as well as the high profit margin being attained by the incumbent, a newcomer would also be concerned about the absolute volume of ridership it could attract. For example, where a newcomer introduces a service parallel to a service currently operated by the incumbent operator, 'Q' might attract stronger competition than operator 'P', since it would have built up substantially higher ridership. If network size had remained unchanged, Q would be carrying about 21.4% more passengers per route than P. It is noteworthy, for example, that trentbarton, generally judged one of the more successful post-deregulation operators, with high ratings on Passenger Focus surveys, has attracted substantial direct competition, notably on the Nottingham - Derby corridor, whereas First Group (see further comments below) has not necessarily attracted much competition, even in areas where high fares are charged.

## **4. How far does this match observed patterns?**

Within the Competition Commission's report, the problems arising from the profit margins of the large groups are largely seen as an issue common to all the groups, but one could argue that major variations can be seen in their performance, not only in financial data which are already in the public domain, but also differences in ridership trends, and degree of user satisfaction. There is also evidence of differing investment levels. Unfortunately, one cannot obtain a consistent series of published data on ridership, since the data published by DfT are aggregated at regional level, and do not refer to specific operators (although the local authority-based 'trips per head per annum' indicator does show ridership at a more local level and where one company is known to be dominant, serves as an indicator of their performance – for example, the very high ridership in Brighton and Hove, at c190 per head of population, the highest outside London within England, even in comparison with the large metropolitan areas). Unfortunately, this indicator is produced only for unitary and higher-tier

authorities, hence it is not possible to obtain it for second-tier authorities within larger areas (such as Oxford city within Oxfordshire). Technical press reports also indicate ridership trends for whole groups, and/or in different areas they serve, although these are dependent on willingness of operators to quote such data.

An indication of user satisfaction is given in the regular bus user surveys undertaken by Passenger Focus, a state-supported nationwide body which represents the interests of rail and bus users<sup>4</sup>. In addition to an on-going basic user satisfaction study (originally managed directly by DfT), which asks for ratings on a 0-10 scale for a range of indicators (and is published only in regional, aggregated form), Passenger Focus carry out specific local studies, examining users' perceptions in named areas (and distinguishing between operators). A five-point scale is used, ranging from 'very satisfied' to 'very dissatisfied' and 'satisfaction' is expressed as the sum of the respondents reporting 'very satisfied' or 'satisfied'. A number of major attributes are assessed separately, a particularly useful indicator being the 'Value for Money' (VfM) which effectively enables respondents to trade-off fares and service quality, rather than simply assess fare levels in isolation.

While less complex than some more sophisticated indicators developed by other researchers - for example - the Passenger Focus scale has the merit of being easy to understand, for respondents, operators and policy-makers.

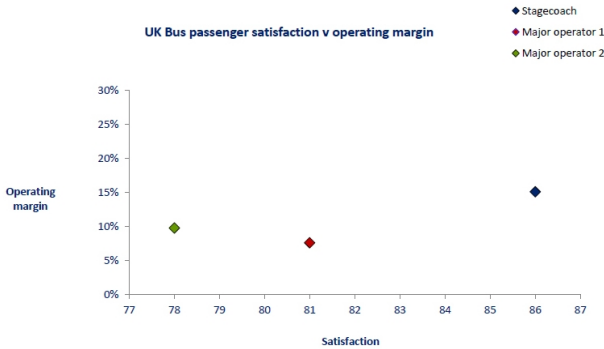
These surveys generally indicate a high level of satisfaction from bus users (albeit the views of non-users are excluded). In more recent surveys, data have been distinguished separately for different operators. In most cases this has only been for a limited period, so that only one (or sometimes two) observations are available for a specific operator in a specific area, and a series of data over a longer period is not available. However, marked variations can be seen, with high scores in particular for the Stagecoach and Go Ahead groups. Lower levels of satisfaction have been recorded for First and National Express. In some areas, such as South Yorkshire, where two major operators run – First and Stagecoach - direct differences can be observed especially in the 'VfM' indicator. In some cases these have as far apart as 25 percentage points (South Yorkshire) or 13 points (Greater Manchester) (Jack, 2013).

A substantial report was published in March 2013 (Passenger Focus 2013), covering 20 regions in England (and two BRT schemes, assessed separately). It also contains explicit comparisons for four of the five largest groups on four key indicators, drawn from the sample in those same regions. At this aggregate level, differences are less extreme than in some specific cases cited above, but nonetheless a similar general pattern can be observed. On 'overall satisfaction' Stagecoach scored highest at 86%, National Express lowest at 78%. On 'Value for Money', scores were generally lower, but again Stagecoach scored highest, at 59%, with First and Arriva both at 48%. On punctuality, Stagecoach attained 74% versus 63% for First and 62% for National Express. Only two Go Ahead Group companies were in the areas sampled, and Passenger Focus did not quote overall figures for this group. However, a separate study carried out by Passenger Focus purely on Go Ahead Group companies in 2012 (Passenger Focus 2012) indicated high performance, with its subsidiaries averaging 89% for 'overall satisfaction' (higher than Stagecoach in 2013), although VfM (for fare-paying passengers) was lower than Stagecoach in 2013, at 52%

There is also evidence from some areas of a growing divergence in price levels between major groups. For example, in Greater Manchester the previous PTE-owned fleet was split into northern and southern divisions, the north part eventually forming part of First Group and the southern part of Stagecoach. From a situation in which a common price had been charged for a weekly bus card, by January 2013, the price in the southern (Stagecoach) area was £12, and in the northern (First) £18, a 50% difference<sup>5</sup>, although should borne in mind that local economic conditions may be less favourable in north Manchester than the south (for example, higher unemployment could cause a loss of ridership, perhaps making it necessary for an operator to raise fares by a higher percentage to attain an adequate operating margin). This would be consistent with some element of the operator ‘P’ case in First’s behaviour, with successive year-on-year fare increases eventually producing a very large difference with an operator following a different policy.

Higher fare levels for First have also been reported in other areas it serves. It should be emphasised at this point, that a major change has taken place in the last two-three years in senior management at First, with a very different policy now being adopted, the north Manchester weekly now being priced at £13 for example. A noteworthy case is the Bristol area, in which an extensive consultation was carried out with local users, followed by a decision by First to substantially reduce fares from 3 November 2013, with 90% of users paying, on average, 27% less for single fares, together with lower-priced day tickets and 30% discount card for those aged between 16 and 21<sup>6</sup>. [and Pax Focus results]

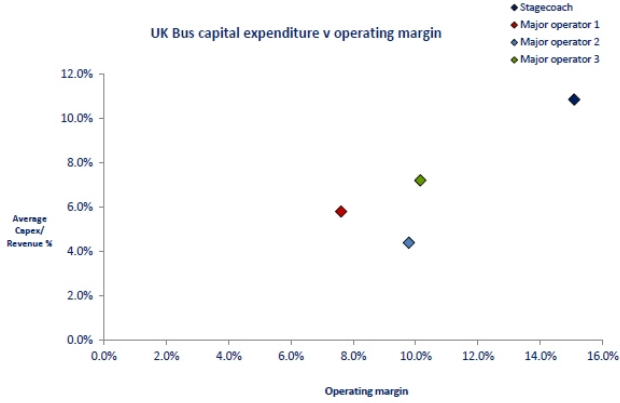
Statements from Stagecoach, issued in June 2013 for the year to 30 April 2013 (Stagecoach 2013), highlight some of these factors. Figure 1 below shows the relationship between overall profitability (ROS) and user satisfaction, indicating that Stagecoach performs better than two other major groups on both indicators. Stagecoach attribute this to ‘low fares, good quality, safe and reliable services’. Satisfaction scores are from the March 2013 Passenger Focus survey. The operating margin is that for its UK Bus (regional and London) services, after applying any unallocated group overheads proportionate to revenue.



**Figure 1: Satisfaction and Profitability indicators in 2013 (source: Stagecoach Group)**

Figure 2 below shows the relationship between ROS and investment, again indicating a positive correlation between Stagecoach’s higher profitability, and investment levels. The vertical axis shows capital expenditure as a percentage of revenue, and the horizontal axis the operating margin. Note that some capital expenditure will of course be funded from historic depreciation, but a higher margin covers the difference between historical and current cost depreciation (as discussed earlier in this paper), and also new investment (such

as ticketing systems). UK bus (regional and London) additions to property, plant and equipment over the last reported five years have been measured as a percentage of revenue and then compared to the most recently reported operating margin (after applying any unallocated group overheads proportionate to revenue).



**Figure 2. Profitability and Investment in 2013 (source: Stagecoach Group)**

**5. Implications for policy**

Such differences point to policies that might vary according the performance of the dominant operator in each area, rather than a common approach over the whole country. Where performance is ‘good’ (in terms of operator profitability *and* ridership/user satisfaction) there would be little need for intervention. Conversely, where the operator was clearly charging high fares and offering poor services, much stronger action might be justified. This might point to a selective application of the ‘quality contract’ approach, or other measures designed to improve the performance of an unsatisfactory incumbent. There seems to be little evidence that smaller operators would be willing to take on the challenge on sufficient scale to have much impact.

An associated issue might be whether high profits were being reinvested, or distributed as unduly high returns to shareholders. Again, a stronger case for action would apply in the latter. This would imply some regulatory role in monitoring profitability and its applications (akin to regulated industries in water, and energy) rather than the approach traditionally taken by the Traffic Commissioners (especially since their loss of power over fare levels).

Such a selective approach to application of competition policy could be seen as at odds with the concept of a ‘Market Investigation’. However, if one considers enquiries into mergers by competition authorities and the recommendations subsequently produced, these are clearly seen as unique to particular circumstances.

Two further issues arise:

- (a) The degree to which sustained ‘on the road’ competition may be feasible is probably very limited in most areas, but one can foresee scope for a period of competition in which a successful ‘newcomer’ (perhaps a large group already operating elsewhere) eventually displaces the incumbent, and offers a better service to users than would otherwise be the case.

(b) How far is management behaviour influenced only by competition (or threat thereof), and/or regulatory action? This could, for example, apply to pricing. Is there an effect arising from comparisons of performance, and pressure of public opinion? The Passenger Focus data certainly appears to have concentrated minds and encouraged a changed approach, quite apart from the degree of direct competition.

Some interesting parallels may be drawn with two other papers in the same workshop session. Preston and Almutairi (2014) carried out an aggregate analysis of the London area compared with the entire deregulated sector in mainland Britain. This indicates a positive consumer surplus outcome in the London case, but a negative consumer surplus outcome for the deregulated regions. In contrast, I am suggesting that a crude disaggregation within the deregulated regions by operator groups indicates that two groups – Go Ahead and Stagecoach – generally display a positive outcome for users. They accounted for about 28% of industry turnover outside London in the in 2008/09, part of the 71% represented by the five largest groups in aggregate (Competition Commission 2011b, table 2.14). A more detailed analysis by Cowie (2014) assesses performance for a sample of 49 individual companies, using financial data from TAS, and the Passenger Focus data for passenger satisfaction ratings, from which five clusters of performance can be identified. He indicates that two of these, representing about 29% of the cases considered, can be seen as ‘consumer-centric’. This is broadly equivalent to the percentage share of Go Ahead and Stagecoach within the aggregate total, although it does not of course follow that all the individual subsidiaries of those two groups in the sample examined by Cowie would fall within the two most positive clusters (and likewise, these clusters may include some subsidiaries of the other groups, and/or individual companies outwith the five major groups).

We may thus conclude that, while, in aggregate, the performance outside London has been negative for the consumer, very substantial exceptions do exist, albeit a minority of the overall industry.

## **6. Conclusions**

Trends in Britain indicate that the bus industry recovered from a low level of profitability in the first phase of deregulation, to a much higher level in the second phase, notably among the five largest groups. This has enabled improved rates of fleet replacement, for example. However, both the experience of coach deregulation, and that of local bus, suggests the theoretical scope for extensive competition from numerous small operators may be limited, and that in practice most competition occurs between larger firms. The degree of ‘on the road’ price competition in practice seems very limited.

The review by the Competition Commission identifies concerns regarding possible ‘excessive’ profit levels, and a number of remedies are proposed by the Commission to deal with this. However, it can be shown through the two illustrative case studies in this paper that very different outcomes could arise from the same starting point, both giving the same ‘excessive’ returns on capital, but with radically different outcomes in terms of consumer surplus changes and ridership. This suggests that an approach specific to each large group would be appropriate. There is also evidence that higher profit levels can be associated with higher user satisfaction, and higher investment levels. While direct competition may be a means of reducing excessive price levels, there is also evidence of management behaviour



being influenced by systematic comparisons within the industry, and public opinion. Competition may be a means of changing price behaviour, but not the *only* means.

## Footnotes

<sup>1</sup> Note that these estimates were based on published year-by-year population estimates, The 2011 census indicates a somewhat greater growth than previously estimated, and hence this would form a slightly greater contribution to overall ridership growth, but does not radically affect the conclusions then reached.

<sup>2</sup> All figures at 2012/13 prices. Source: DfT Statistics Table BUS0502.

<sup>3</sup> Source: DfT Statistics Table BUS0408b

<sup>4</sup> As part of Thredbo 13, a presentation was made by the County Council and two main operators involved about the scheme, followed by a technical visit (on website?).

<sup>5</sup> The author of this paper was one of two specialist advisers to the Committee enquiry. It should be stressed, however, that all views expressed in this paper are those of the author alone, and should not be taken as representing those of the Committee.

<sup>6</sup> For convenience, most calculations are shown to two decimal places.

<sup>4</sup> For further details, see their website <[passengerfocus.org.uk](http://passengerfocus.org.uk)>

<sup>5</sup> Coach and Bus Week 2 January 2013, p17

<sup>6</sup> Passenger Transport 11 October 2013, p6

Where specific sources are not shown for statistics quoted, these are taken from those published annually by the Department for Transport (DfT).

## References

Balcombe, R. et al. 2004. The Demand for Public Transport: a Practical Guide. Transport Research Laboratory Report TRL593.

Competition Commission (2011a) Local Bus Services Market Investigation: Provisional Findings Report, May.

Competition Commission (2011b) Local bus services market investigation: A report on the supply of local bus services in the UK (excluding Northern Ireland and London, 20 December, London. [final report]

Cowie, Jonathan (2013) 'Performance, Profit and Consumer Sovereignty in the English deregulated bus market'. Paper at Thredbo 13, September (unpublished)

Cream, Andrew (2013). 'Committee pressure to promote QCs' Coach and Bus Week 16 January, pp16-17.

Cross, A. and Kilvington, R. (1986). Deregulation of Express and Excursions & Tours Coach Services in Britain. Gower.

Department for Transport (2013) Tendering Road Passenger Transport Contracts: Best Practice Guidance. Available at [www.gov.uk/government/publications/tendering-road-passenger-transport-contracts-best-practice-guidance](http://www.gov.uk/government/publications/tendering-road-passenger-transport-contracts-best-practice-guidance)

Department for Transport (2014). Quarterly Bus Statistics: Great Britain Q4 (Oct-Dec) 2013.

Evans, A. (1990) 'Competition and the Structure of Local Bus Markets' Journal of Transport Economics and Policy Sept (Vol XXIV, no 3 (pp 255-281).

Gomez-Ibanez, J.A. and Meyer, J.R. (1997) 'Alternatives for urban bus services: an international perspective on the British reforms' Transport Reviews, Vol 17, no 1 (January-March), pp 17-30

Heseltine, P.M and Silcock, D.T. (1990) 'The effects of bus deregulation on costs' Journal of Transport Economics and Policy' September 1990 (Vol XXIV, no 3), pp 239-254.

House of Commons Transport Committee (2012a) Competition in the local bus market. Third Report of Session 2012-13. HC10. September [available via [www.parliament.uk](http://www.parliament.uk)]

House of Commons Transport Committee (2012b) Competition in the local bus market: Government Response to the Committee's Third Report of Session 2012-13. Seventh Special Report of Session 2012-13. HC 761. November [available via [www.parliament.uk](http://www.parliament.uk)]

Jack, Robert. 2013. 'Gulf in satisfaction with value for money' Passenger Transport 23 March, pp 26-27.

Molnar, J. and Nesheim, L. 2010. A Disaggregate Analysis of Demand for Local Bus Services in Great Britain (excluding London) using the National Travel Survey. December.

Office of Fair Trading. 2009. Local Bus Services: report on the market study and proposed decision to make a market investigation reference. August.

Office of Fair Trading. 2010. The OFT's reasons for making market investigation reference to the Competition Commission. January. OFT1158. Available at [www.of.gov.uk/shared\\_of/reports/transport/OFT1158\\_Local\\_bus\\_services.pdf](http://www.of.gov.uk/shared_of/reports/transport/OFT1158_Local_bus_services.pdf)

Passenger Focus. 2012. Bus Passenger Survey on Go-Ahead's bus passengers outside the London area. September. Available at [www.passengerfocus.org.uk](http://www.passengerfocus.org.uk)

Passenger Focus. 2013. Bus Passenger Survey. March. Available at [www.passengerfocus.org.uk](http://www.passengerfocus.org.uk)

Preston J. (2003) 'A 'thoroughbred in the making? The Bus Industry under Labour' in Docherty, I. and Shaw, J (eds) A New Deal for Transport? The UK's struggle with the sustainable transport agenda. Blackwell, Oxford.

**Preston, John and Almutairi, Talal (2013) 'Evaluating the long term impacts of transport policy; the case of bus deregulation revisited' Paper at Thredbo 13, September (unpublished)**

Robbins, D.K. & White, P.R. 1986. The experience of express coach deregulation in Great Britain. Transportation (13) 359-384

Stagecoach Group. 2013. Annual results for the year ended 30 April 2013 (presentation made on 26 June 2013). Tabulated financial data (but not the comparisons shown in figures

1 and 2) are available at [www.stagecoach.com/~media/Files/S/Stagecoach-Group/Attachments/media/publication-financial-reports/\[relimianry-results-pres-260613.pdf](http://www.stagecoach.com/~media/Files/S/Stagecoach-Group/Attachments/media/publication-financial-reports/[relimianry-results-pres-260613.pdf)

Thompson, D. and Whitfield, A. (1995) 'Express Coaching: privatisation, incumbent advantage and the competitive process' in Bishop, M. et al (eds) *The regulatory challenge*. Oxford University Press.

Van der Veer, J.P. (2002) 'Entry deterrence and quality provision in the local bus market' *Transport Reviews*, Vol 22, no 3 (July - September), pp 247-265.

White, Peter. 1997. What conclusions can be drawn about bus deregulation in Britain? *Transport Reviews* (17) 1-16

White, Peter. 2009a. Factors behind recent bus patronage trends in Britain and their implications for future policy. *International Journal of Transport Economics* (XXXVI) 13-31

White, P. R. 2011. The conflict between competition policy and the wider role of the local bus industry in Britain. *Research in Transportation Economics* (29), 152-158

White, Peter and Robbins, Derek. 2012. Long-term development of express coach services in Britain. 2012. *Research in Transportation Economics* (36) 30-38

'PW Thredbo 13 paper rev Nov 2013.docx'/mydocs/c: