

This is a repository copy of Passenger Rail Franchising - British Experience.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/2477/

# **Conference or Workshop Item:**

Nash, C.A. and Smith, A.S.J (2006) Passenger Rail Franchising - British Experience. In: ECMT Workshop on Competitive Tendering for Passenger Rail Services, 12 January 2006, Paris.

#### Reuse

See Attached

#### **Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.





# Universities of Leeds, Sheffield and York <a href="http://eprints.whiterose.ac.uk/">http://eprints.whiterose.ac.uk/</a>



### **Institute of Transport Studies**

# **University of Leeds**

This is an author produced version of a paper originally given at the ECMT Workshop of Competitive Tendering for Passenger Rail Services. It has been uploaded here with the permission of the European Conference of Ministers for Transport.

White Rose Repository URL for this paper: http://eprints.whiterose.ac.uk/2477

### **Published paper**

Nash, C.A., Smith, A.S.J. - 2006- Passenger Rail Franchising - British Experience - ECMT Workshop on Competitive Tendering for Passenger Rail Services, Paris, 12 January 2006

# Passenger Rail Franchising - British Experience

Chris Nash and Andrew Smith (ITS, University of Leeds)\*

Paper to be given at the ECMT Workshop on Competitive Tendering for Passenger Rail Services Paris, 12 January 2006

#### **Abstract**

Given that virtually all British passenger train services were franchised out over the period 1995-7, and many have now been franchised for a second time, Britain should provide an excellent opportunity to study the impact of franchising passenger rail services. Moreover, since several different franchising models have been tried, there should also be some useful evidence on how best to go about franchising. In practice, however, the turbulent history of the British rail industry over this period makes drawing firm conclusions difficult. At the start, it appeared that franchising was very successful with strong competition for franchises, rapidly rising traffic, rising productivity and falling subsidies. Whilst most of the increase in traffic was due to external factors, the growth appears somewhat faster than would be explained by these factors alone. Despite this, a number of train operating companies got into financial difficulties, particularly in the Regional sector, where franchisees were relying on reduced costs rather than increased revenues to achieve subsidy reductions, and in the short term franchises were renegotiated or replaced with cost-plus contracts pending refranchising. After the bankruptcy of Railtrack not only have the costs and performance of the infrastructure manager severely deteriorated, but there has also been a large rise in the costs of train operating companies. Without a better understanding of the causes of this rise it is hard to form firm conclusions on the success of franchising. One argument is that one of the reasons franchisees found it difficult to achieve the anticipated cost reductions was the degree to which costs had already been driven down in the 1980s. However costs did start to rise again in the early 1990s and in the early years of franchising substantial savings in costs per train kilometre were achieved, with cost increases only following later. A second suggested explanation for the cost increase is the temporary placing of many Train Operating Companies on management contracts or renegotiation of franchises around 2001. We have found some support for this hypothesis, with our analysis showing that the affected TOCs experienced higher cost growth than other TOCs. A third argument is that the increase in costs in the last few years may have been driven by factors unrelated to the franchising process, and in particular, other aspects of policy such as health and safety legislation, disability discrimination legislation and a general requirement for higher standards. It is hard to be definitive on which of these three effects dominates, but we do have evidence which suggests that the way in which problem franchises were managed may have contributed substantially to the rise in costs after 1999/00. Our overall conclusion then is that passenger rail franchising in Britain may be regarded as a moderate success on the demand side, but that it has failed to achieve its objectives on the cost side. However, it should be noted that the rise in train operating costs in recent years has occurred at a time of considerable disruption, during which many other factors unrelated to franchising policy were changing at the same time. It remains to be seen what the re-franchising process will achieve in terms of cost reduction in a more stable environment.

\* We have greatly benefited from comments on an earlier draft by a number of people including, Mary Bonar, Richard Davies, Jeremy Drew, Peter Kain, John Glover, Lou Thompson and Steve Perkins. Responsibility for the final version is however solely our own.

#### 1. Introduction

The principle argument for franchising rail passenger services via a competitive tendering is that it permits the preservation of an integrated network of services, subsidised where necessary, whilst introducing competitive pressures, leading to incentives to reduce costs and (depending on who bears the revenue risk and what other incentives are in place) improve quality of service. Compared with the alternative of open access competition as a way of introducing competitive pressures into the rail passenger industry, competitive tendering is especially useful in cases in which competition in the market is not feasible because of the need for subsidies or a lack of capacity.

If it is decided to franchise passenger services, there are many issues about the best way to do it. Key questions are:

- What pattern of franchise length, control of services and fares and responsibility for investment is best?
- How large a network should each franchise cover?
- How may appropriate incentives be built in to the contract?

As will be seen a number of different approaches to these issues have been tried in Great Britain. This, plus the fact that in Great Britain virtually all rail passenger services are subject to franchising makes the British experience very relevant. In the next section we discuss the first round of competitive tendering in Great Britain which took place from 1994-7. We then consider the initial approach to franchising under the Strategic Rail Authority. We discuss the collapse of Railtrack and subsequent approaches to franchising before assessing the success of franchising in Britain and drawing some final conclusions.

### 2. The first round of franchising

The rail industry in Great Britain has by far the most experience of competitive tendering in Europe, having moved to a situation where virtually all rail passenger services are competitively tendered over the period 1994-7. Separation of infrastructure from operations in 1994 was followed by outright privatisation of the infrastructure manager and the freight operators and by franchising of virtually all passenger services, whether short or long distance, profitable or not. Initially franchises were typically let for 7 years, on a net cost basis, with a requirement to provide at least a minimum level of service but opportunities to run more services than that. Some fares (most season tickets, and either the ordinary or for longer distances the off peak saver) were capped. Franchisees lease rolling stock from separate rolling stock leasing companies, so the level of investment required is very low, thus reducing barriers to entry. Nevertheless, a few franchises, notably that for the West Coast Main Line, were let for periods of up to 15 years, on the basis that major investment was involved which would require longer track access agreements and rolling stock leases to achieve value for money.

The initial round of franchises is described in table 1. As will be seen the majority of franchises were won by existing transport companies, particularly from the bus industry but also airlines and a shipping company. This leads to speculation as to what would have happened at this stage had the bus industry not already been privatised.

There were some characteristics of the way franchising was undertaken in Britain which are very different from other countries. For each set of services to be franchised a company was formed. Whoever won the franchise took over that company including its staff and assets for the period of the franchise. This may have made entry easier than in a country where the bidder would have to recruit staff from scratch, although it may also have imposed less pressure on labour costs. Certainly franchising in Britain has attracted a high level of competition, with typically at least 6-8 serious bidders for each franchise. Bids were generally awarded on the basis of minimum subsidy (or exceptionally highest premium for profitable franchises) and the subsidy profile generally declined sharply over the course of the franchise as a result of assumed cost savings and/or revenue growth.

Until the Hatfield accident in October 2000, which set off a chain of events culminating in the bankruptcy of the infrastructure manager, Railtrack, the franchising process had been largely successful. Traffic had grown substantially (Figure 1). There has been much debate in Britain concerning how much of the growth can be attributed to privatisation (through franchising) as opposed to other factors, such as the very strong performance of the economy over the post-privatisation period. In section 6 below we present some evidence to inform this debate.

Whilst initially privatisation raised the level of subsidy, since all the assets were sold and had to be leased back at commercial rates, by 1999-2000 subsidies were falling substantially (Table 2). In that year the overall level of subsidy had been reduced to some 3.4p per passenger km, with a number of inter city and London and South east franchises paying a premium (money paid by the franchisee to the government).

**Table 1. Rail Franchises – first round** 

Franchise	Owner	Length of Franchise	Subsidy prices)	(£m Feb 1997
		(yrs)	1996/7	2002/3
			(actual)	(projected)
Great Western	MBO/Firstbus	10	61.9	36.9
South West Trains	Stagecoach	7	63.3	35.7
Great North Eastern	Sea Containers	7	67.3	.1
Midland Main Line	National Express Group	10	17.6	-4.4
Gatwick Express	National Express Group	15	-4.1	-12.0
LTS Rail	Prism	15	31.1	19.3
Connex South Central	Connex	7	92.8	35.9
Chiltern Railways	MBO/Laing	7	17.4	3.3
Connex South Eastern	Connex	15	136.1	32.6
South Wales & West	Prism	$7\frac{1}{2}$	84.6	44.0
Cardiff Railways	Prism	71/2	22.5	14.3
Thames Trains	MBO/Go Ahead	$7\frac{1}{2}$	43.7	3.8
Island Line	Stagecoach	5	2.3	1.0*
North Western	Great Western Holdings	10	192.9	129.7

Franchise	Owner	Length of Franchise	Subsidy prices)	(£m Feb 1997
		(yrs)	1996/7	2002/3
			(actual)	(projected)
Regional Railways North East	MTL Trust	7	231.1	150.6
North London Railways	National Express	71/2	55.0	20.0
	Group			
Thameslink	Goahead/Via	7 yrs 1 mth	18.5	-27.0
West Coast Trains	Virgin	15	94.4	-3.9
Scotrail	National Express	7	297.1	209.3
	Group			
Central Trains	National Express	7	204.4	136.6
	Group			
Cross Country	Virgin	15	130.0	50.5
Anglia	GB Railways	7 yrs 3 mths	41.0	6.3
Great Eastern	First Bus	7 yrs 3 mths	29.0	-9.5
West Anglia Great Northern	Prism	7 yrs 3 mths	72.6	-14.6
Merseyrail Electrics	MTL Trust	7	87.6	61.8
Total subsidy			2090.1	919.3

Negative Subsidies indicate payment of a premium; MBO stands for Management Buy Out; \* assumes constant subsidy after year 5.

Source: OPRAF Annual Report 1996-7

Table 2. Government support to the rail industry (million pounds, 2003/04 prices)

Year	Central	PTE	Direct rail	Other	Freight	Total Govt.
	Government	grants	support (grants to	elements of Govt.	grants	support
	grants		the infrastructure	e support		
			manager)			
1985–86	1607	148	0	115	13	1883
1986–87	1375	127	0	40	11	1553
1987–88	1402	120	0	-442	4	1083
1988–89	901	114	0	-286	3	733
1989–90	727	127	0	352	2	1208
1990–91	889	161	0	614	6	1670
1991–92	1210	161	0	754	1	2126
1992–93	1573	141	0	1146	3	2863
1993–94	1191	214	0	688	5	2099
1994–95	2259	431	0	-577	4	2115
1995–96	2073	438	0	-1989	5	527
1996–97	2133	343	0	-1231	18	1263
1997–98	1629	428	0	29	33	2119
1998–99	1334	376	0	59	32	1802
1999-00	1124	340	0	82	25	1572
2000-01	901	301	0	89	38	1329
2001–02	768	321	719	110	60	1978
2002-03	958	312	1195	188	50	2703
2003-04	1359	414	1670	179	32	3654

Source: National Rail Trends Yearbook 2004-2005, SRA, p. 47.

Note The negative entries in the figure for other elements of government support are receipts from sale of assets. Positive elements are loans for investment. Whether either of these really constitute elements of government support may be open to doubt.

# 3. Refranchising – the first approach

When the Labour party took office in 1997, it wished to see a major expansion in the rail market. Its 10 year plan for transport showed investment in the rail industry of £49bn, with £11bn of public money leveraging in £34bn of private. Of course, any private money injected ultimately has to be paid for, plus a private sector rate of return, either through the farebox, or through increased government subsidies in the future.

Its strategy for achieving this was as follows (SRA, 2001). Firstly, a new strategic body was to be established, the Strategic Rail Authority (SRA), which took over the role of franchising but also had responsibility for strategic planning and for the planning of major investment projects requiring coordination between different parts of the industry. The SRA was initially established in shadow form by bringing together the Office of Passenger Rail Franchising, the remaining functions of the British Railways Board and some Department of Transport Environment and the

Regions staff. But it had to wait for the passage of the 1999 Transport Act to be fully constituted as the SRA in February 2001.

The second part of the strategy concerned refranchising. The majority of the first round of franchises were for around 7 years and would soon start to fall due for refranchising. The SRA saw refranchising as an opportunity to agree a smaller number of longer (20 year) franchises, conditional on performance and on implementation of much more ambitious investment plans. It saw longer franchises as encouraging greater investment, although some commentators observed that short franchises might lead to companies eager to retain the franchises investing even towards the end of the franchises (Steer, 2001).

It might be questioned why longer franchises were necessary given that, as stated above, train operating companies were themselves responsible for little investment. One issue was the question of who would bear the risk of the unexpired value of rolling stock at the end of the franchises. Initially the rolling stock leasing companies were unwilling to bear this, so longer franchises paving the way to longer leases were seen as necessary to achieve significant rolling stock investment. As time passed so they become more willing to invest without a long term, or even any, lease, although arguably the risks involved still led to high leasing charges. SRA had the powers to underwrite longer leases to remove this risk but at this stage was reluctant to use them, except in exceptional circumstances, such as the requirement to build new suburban stock in advance of refranchising to meet requirements imposed by the Health and Safety Executive for the phasing out of Mark 1 stock.

But the main reason for longer franchises was to involve train operating companies in infrastructure investment. In the original structure of the industry, this investment would be financed by Railtrack, remunerated by the train operating company and where necessary subsidies under the franchise agreement would reflect the non commercial element of the costs. SRA from its formation as a 'shadow' authority doubted the ability of Railtrack to finance and manage investment on the scale necessary, and sought another way forward – the so-called 'Special Purpose Vehicle'. Rail infrastructure has the problem that, even where commercially justified, time horizons are long and risks high, and that makes it relatively unattractive to the private sector. By selectively intervening to provide longer term funding SRA believed it could lever in substantial private funding.

The idea was that major infrastructure improvements would be financed from a variety of sources, including train operating companies, private financiers, and the SRA in the form of grants or loans, but the latter being 'patient capital'. At completion, Railtrack would buy the assets and recover the costs through its normal process of access charges, thus releasing capital for further projects. The first example of funding of this sort was indeed the Channel Tunnel high speed rail link. Initially, Railtrack opposed this approach, claiming that it could finance and manage all the investment itself provided that the Regulator permitted it to make appropriate profits to keep its share price reasonably high. However, following the financial crisis resulting from the Hatfield accident referred to above, Railtrack's share price fell precipitously and it accepted that it could no longer fund or manage all these projects itself.

SRA opened negotiations on a number of franchises earlier than was necessary, on the basis that the incumbent might be persuaded to relinquish the franchise early in return for the opportunity to bid for a long term more attractive franchise. It sought a wide range of proposals rather than

being prescriptive on what new investment and improvements in service the offer should contain. The result was a difficult process in which SRA had to weigh up such issues as realism and past delivery of performance against ambitious plans for the future; a much more difficult task than simply comparing the subsidy bids for a stipulated set of services. The process therefore took a lot more time than was originally expected; only a small number of franchises were surrendered early, and only one of the new long term franchises (for Chiltern Railways) was actually signed before the policy changed again.

In the meantime, it was already clear that whilst those franchisees that relied on growth in revenue to meet their financial targets were achieving profits, those where farebox revenue was small relative to costs, and where therefore cost reduction was the key to success, were in difficulties (Table 3). This problem particularly impacted on regional TOCs and, even though regional passenger growth has been comparable with that achieved by long-distance and London and South East TOCs, the fact that passenger revenue makes up a smaller proportion of total revenue means that these TOCs are more reliant on cost savings in order to maintain profitability in the face of falling subsidies.

In particular two operators – MTL and PRISM – were by 2000 believed to be close to bankruptcy. The SRA was faced with a choice of either taking over operation itself pending refranchising or renegotiating the franchises. In both cases, a deal was negotiated whereby the operator was taken over by another operator (MTL by Arriva, PRISM by National Express), and a 'cost plus' contract negotiated for the loss making services until refranchising took place (strictly this was a contract under which the level of payment was negotiated annually on the basis of projected costs; the TOC therefore retained some cost risks). Renegotiation followed on other regional TOCs, without a change of control, either to renegotiate the terms of the original franchise to provide more subsidy (Central Trains and Scotrail) or to move other regional TOCs (First North Western) on to cost plus contracts pending refranchising in due course. All these renegotiations were associated with redrawing of the boundaries of adjacent companies to achieve what was seen as more appropriate groupings of services, and this also delayed refranchising until the boundary changes could be completed.

Of course, the problem faced by the regional TOCs was not inevitable and could have been averted at the franchise bidding stage by a more successful elimination of unrealistic bids. However, franchises that were let later in the process, which included many of the regional TOCs, tended to see more aggressive subsidy reduction profiles than for those let at the beginning of the process (see Kain, 1998). This observation has led to the conclusion that many of the later bids were over-optimistic; and, to the further concern that the winning bidders may have intentionally bid strategically, with the aim of re-negotiating the agreements at a later date. In section 6 we consider this point in further detail and ask, if this was the case, whether it turned out to be a profitable strategy for the TOCs concerned.

Table 3. Rail Industry Profitability

Operating Profit, 1998/9 (losses in brackets)

(105505 111 010011005)		
	£m	% of turnover
Inter City Operators	90.8	5.5
Network South East Operators	93.7	4.7
Regional Operators	(6.2)	(0.4)
of which		
North West Trains	(5.1)	(2.1)
Wales and West	(12.6)	(9.6)
Cardiff Railways	(4.9)	(18.8)

Source: TAS Rail Monitor, 2000

Two other franchises were the subject of early replacement; the two London commuter area franchises won by Connex. In the case of South Central, it was agreed that Connex would surrender the franchise early in order to get the opportunity of bidding for a longer franchise which was won by Go Via. In practice, before final negotiations were concluded franchising policy had changed again (see below) and only a 7 year contract was agreed. Whilst this process was going on, Go Via ran the services under a cost plus contract. After this, Connex also lost its other franchise, South East Trains. Connex having once negotiated a higher subsidy, and then gone back for more, the Strategic Rail Authority terminated its franchise and took its operation in house pending refranchising on completion of the Channel Tunnel Rail Link, when the two would be franchised together.

## 4. The collapse of Railtrack

In October 2000, a fatal accident at Hatfield was attributed to the state of the track. Following this, severe speed restrictions were put in place across the network, and track renewals greatly accelerated. The effect of this was a major increase in costs, leading to a big increase in the level of government support for the industry. Support more than doubled between 2000/01 and 2002/03 mainly because of the introduction of substantial direct grants from the Strategic Rail Authority to Network Rail, and continued rising (although it should be noted that the decision to introduce direct grants to Railtrack was taken during the 2000 Periodic Review, prior to the Hatfield accident). At the same time, Railtrack was in great trouble with its biggest project the West Coast Main Line upgrading, the cost of which had more than quadrupled whilst it was running many years late. It also had to pay substantial compensation to TOCs for poor performance.

The result of all this was the placing of Railtrack in administration and its replacement by a 'not-for-profit' company, Network Rail. Network Rail is legally a company limited by guarantee. It has no shareholders, but rather 'members', who are said to take the place of shareholders in terms of powers such as removing the Board of Directors but have no financial stake in the company. These members are of three types – representatives of the rail industry (including the government), representatives of other stakeholder organisations (such as the Rail Passenger Council and Transport 2000) and individuals.

Network Rail finances itself by means of loans, and ultimately these loans have been underwritten by the government. The government also provides Network Rail with substantial direct funding for its operations as well as contributing indirectly by subsidies to Train Operating Companies. Thus whilst the government insists that Network Rail is a private company, it seems more appropriate to regard Network Rail as an experiment in a new form of public ownership of the infrastructure.

The big problems that emerged after the Hatfield accident in 2000 mostly concerned the infrastructure manager. To the extent the Train Operating Companies were compensated for delays and unreliability, their finances should not have been affected. However, there was also a problem concerning some of the train operators. This particularly affected the two Virgin franchises, whose revenue projections were always ambitious but in the light of the failure of Railtrack to provide infrastructure for the speed and reliability of services planned became clearly impossible. In the case of Cross Country, an ambitious new timetable had to be cut back to improve reliability, and failed to restore a seriously loss making operation to profitability. West Coast Trains was due to move from receipt of subsidy to payment of a premium, upon completion of the West Coast upgrade, but this was both scaled down and running late. Therefore these two inter city franchises followed the regional ones in being placed on a cost plus contract basis pending either renegotiation or refranchising.

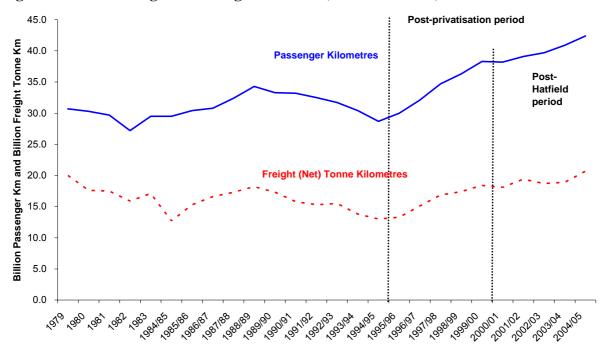
Thus a situation was reached where a substantial proportion of franchises were either renegotiated with higher subsidy, or subject to annual negotiation on a cost plus basis, again with higher subsidy (Table 4). It should be stressed however that this situation came about and persisted for as long as it did in times of exceptional uncertainty, where refranchising had been temporarily halted because post Hatfield the money was simply not available for the sort of long run high investment franchises that had been foreseen in the early days of the SRA, and where there were other delays due to redrawing the franchise map. It was never the intention in the majority of cases to renegotiate long term franchises without refranchising and indeed many of the TOCs that were for a period on cost plus or renegotiated franchises have now been refranchised. Whether or not this is seen as a reasonable short run expedient in the circumstances, there must be concern that this reduced pressure on costs, and we return to this question again in section 6.

Table 4. TOCs subject to re-negotiated franchise agreements or cost-plus contracts

Cardiff Railways	Sept 2000 – Dec 2003 (cost-plus contract)
Central Trains	2001-2004 (re-negotiated)
South Central	2001 – 2003 (cost-plus contract)
South Eastern	2002 – 2003 (re-negotiated)
Virgin Cross country	From 2002 (cost-plus contract)
C2C	2001-2011 (re-negotiated)
Merseyrail	2001 – 2003 (cost-plus contract)
Northern Spirit	2001 – 2004 (cost-plus contract)
North Western	2001 – 2004 (cost-plus contract)
Scotrail	2001 – 2004 (re-negotiated)
WAGN	From 2001 (cost-plus contract)
Wales & West	From 2001 (cost-plus contract)
Virgin West Coast	From 2002 (cost-plus contract)

Source own compilation based on SRA annual reports and TAS rail monitors

Figure 1. Rail Passenger and Freight Volumes (1979 to 2004/05)



# 5. The current position on franchising

After a period following the problems caused by the Hatfield accident, when refranchising was halted and short extensions to existing franchises negotiated, the SRA's policy under new chairman Richard Bowker saw a return to 7 years as the typical franchise period, with extensions of up to 3 years possible if justified by performance. Where new rolling stock was required SRA generally used its powers to underwrite a longer lease. Funding for the major upgrades envisaged in the 10 year plan was no longer available since it was needed for maintaining and renewing the

existing system, and only one SPV – as part of a 20 year franchise for the Chiltern line was ever concluded. One other long run franchise, for 25 years was concluded for Merseyrail, but responsibility for that had been devolved to the Passenger Transport Executive.

The aim of the new policy was to restore confidence in the industry, and in the franchising model, after a period of turmoil. Efforts were therefore made to simplify the model through much more tightly defined franchise agreements, specifying in much more detail the services to be provided (it being considered that under the previous more flexible arrangements additional train kilometres had often been introduced which were damaging overall in terms of their impact on other services and on reliability) and lay down much stricter conditions regarding a whole range of quality of service indicators, and share revenue risk – previously this was borne entirely by the franchisee.

The current situation in terms of franchises is shown in Table 5. After some initial reductions in the early years, subsidies to train operators are again rising and are now considerably higher than envisaged at privatisation; indeed they are almost back to the level at the start of the process. The rise in subsidies is driven predominantly by a sharp rise in train operator costs (including the cost of leasing rolling stock), as will be discussed in the next section. It should be noted that the 2000 Periodic Review of Railtrack's finances led to a fall in rail access charges of about £200m, in 2001/02, which means that subsidy payments to TOCs were reduced by the same amount in that year. The comparison between actual and projected subsidy levels is therefore even less favourable than that shown in Table 5¹. Given the proposed increase in track access charges following the 2003 review of Network Rail's cost levels, further subsidy rises should be foreseen in the future (although the way in which these are being phased over time means that access charges for TOCs, and therefore subsidies to the TOC sector, actually fell substantially in 2004/05 but will rise sharply in future years).

Throughout the period since privatisation substantial concentration has taken place in the TOC sector, with National Express holding no fewer than 11 of the franchises. However, almost all franchise invitations have been followed by strong competition between several players and only on one occasion (that of Central Trains, where only two bidders prequalified) has a franchise contest been halted because of lack of adequate competition.

.

<sup>&</sup>lt;sup>1</sup> Although the impact of lower access charges on TOC subsidies reduces in 2002/03 and 2003/04 as access charges increased by 5% in real terms in both of those years compared with their 2001/02 levels.

Table 5: Subsidies to Passenger Train Operators (including performance incentive payments)

(£m, 2003/04 prices)	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Anglia	41	30	26	20	-2	-1	4
Cardiff/Wales and Borders	24	19	20	18	57	92	123
Central trains	198	180	159	140	130	97	140
Chiltern	16	14	11	10	14	19	24
Connex South Central	87	65	55	44	14	-2	78
Connex South Eastern	131	96	70	47	42	38	128
Cross Country	132	113	95	85	125	211	246
Gatwick Express	-7	-9	-11	-12	-7	-5	-13
Great Eastern	33	16	10	-5	-26	-41	-33
GNER	63	42	19	7	-30	-28	-25
Great Western	67	59	53	45	29	9	30
Island Line	2	2	2	2	2	3	3
LTS/C2C	32	29	27	26	15	21	20
Merseyrail	75	67	60	57	82	65	21
Midland Mainline	9	3	1	0	-7	-15	-4
North Western	210	191	176	156	182	180	190
Northern Spirit	250	221	197	180	212	201	240
Scotrail	281	264	246	216	174	189	266
Silverlink	56	40	33	27	45	47	52
South West	71	67	63	51	19	25	106
Thameslink	3	-8	-19	-29	-40	-55	-44
Thames Trains	38	26	17	12	-4	-14	-9
WAGN	62	40	29	9	16	-8	8
Wales and West/Wessex	84	71	68	55	73	52	76
West Coast	87	78	64	62	201	194	332
Transpennine Express	0	0	0	0	0	0	30
Total	2,046	1,717	1,470	1,223	1,315	1,273	1,990
Projected subsidy from initial bids	1,994	1,758	1,499	1,323	1,192	984	

Note: projected subsidy levels exclude performance bonuses and penalties and any changes to track access resulting from the 2000 Periodic Review

Source: SRA Annual Reports and Statistical Yearbooks

The complete history of each franchise is summarised in the Appendix. One curious thing is apparent. It was expected that a typical problem with franchising would occur – that the incumbent would start with a major advantage in terms of knowledge of costs and markets. In fact of the twelve franchises to be refranchised so far, only three have gone to the main incumbent (although the alterations to franchise boundaries mean that in many cases a transfer of some services was inevitable). Yet many of the incumbents then went on to win new franchises in different parts of the country. Moreover, whilst some companies have left the industry, new entrants have arrived, including SERCO and Nedrail, with other new competitors not so far successful including other railways such as DSB and freight operator EWS. It is clear that competition for franchises remains healthy in terms of the number of competitors, although the recent cost and subsidy increases might lead us to conclude that all is not well with the passenger rail franchising model in Britain.

#### 6. An assessment

It will be seen therefore that the process of franchising in Britain has been a mixed experience. Whilst initially it worked as foreseen in reducing costs and increasing in traffic, the latter was at least temporarily slowed down by the aftermath of the Hatfield accident, whilst the reduction in costs has given way to strong growth in costs.

Table 6 shows the extent of the cost shock experienced by Britain's rail industry since the Hatfield accident. Whilst the infrastructure cost explosion is well known, Table 6 shows that the annual cash cost of passenger train operations, including rolling stock capital investment, has risen very sharply as well over the same period. This increase cannot be explained simply by new services, since costs per passenger train km have increased by nearly half in real terms since 1999/00, the last financial year before Hatfield, whilst passenger kilometres grew more slowly than train kilometres over this period.

Table 6: Total Rail Industry Cash Costs: 1999/91 to 2003/04

		Pre-priva	atisation		Post-privatisation period							
						Pre-H	atfield		P	ost-Hatfi	eld perio	od
Costs (2003/04 prices)	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Infrastructure												
Maintenance					864	804	775	723	761	995	1,214	1,245
Renewals and enhancements					1,201	1,430	1,614	1,837		,	3,246	- , -
Other operating costs					779	764	785	788		, -	1,233	
					2,845	2,998	3,174	3,348	4,172	5,121	5,693	6,528
Passenger train operations (including rolling stock costs). Note 1					2,556	2,514	2,840	2,744	3,391	3,925	4,151	4,357
Freight costs					452	552	543	491	510	620	564	579
Total industry cash costs	6,279	5,493	5,473	5,691	5,852	6,064	6,557	6,582	8,073	9,665	10,408	11,464
Unit cost measures												
Total cash cost per train km	16.0	14.1	14.3	14.3	14.5	14.8	14.9	14.5	17.5	20.4	21.7	23.8
Infrastructure cash cost per train km					7.0	7.3	7.2	7.4	9.0	10.8	11.9	13.5
Passenger train operating costs per pass. train km					6.8	6.7	7.0	6.6	7.9	9.0	9.4	9.8

Note 1: includes operating and capital expenditure costs. Sources: see Smith (2006).

Nor can the increase be explained simply in terms of the high levels of investment in rolling stock that we have seen in recent years. Table 7 focuses on operating costs only and, in addition, attempts to identify the element of TOC operating costs that are internal to the operators – that is, TOC costs, excluding payments for access to the infrastructure and train lease payments (paid by TOCs to the rolling stock companies). Table 7 shows that the TOC's own operating costs have also increased by nearly 50% since Hatfield. Furthermore, whilst increased staff numbers and higher wage rates explains part of the growth, the majority of it remains unexplained, within the "other costs" category.

The difference between the experience of franchising in rail and bus de-regulation in Britain, in terms of the impact on staff rates of pay, is striking, with wage rates falling sharply in the bus industry, but rising sharply in the passenger rail sector. This difference may be explained in part by the fact that in Britain when a rail service changes operator, the new operator takes over the

existing company including its staff, whereas in the bus industry, where a new operator would come in with its own staff, the threat to existing staff is much greater. It has also been suggested that pressure on wages is reduced by the stronger commitment by government to the maintenance of rail services compared with bus, and also by the relative ease with which new bus drivers can be trained, relative to train drivers (see Glaister, 2004). Glaister (2004) argues that over-optimism about the ability to cut staff wages and costs amongst bus companies bidding for the passenger rail franchises was one of the reasons for the financial problems experienced by many of the TOCs post-privatisation.

Possible explanations for the rise in other costs might include rising fuel costs over this period (though data is not available for the majority of TOCs, power costs per train km for Virgin Cross Country services increased by 55% between 1999/00 and 2003/04, driven by sharply rising diesel prices) and increased commission on ticket sales paid to other TOCs as passenger kilometres have increased.

It should also be noted that in attempting to isolate TOC own non-staff costs from payments to third parties for rolling stock leasing and maintenance and access to the infrastructure, we have used the corresponding income data from the company accounts of the three ROSCOs as well as Network Rail (and formerly Railtrack)<sup>2</sup>. It is possible that the income reported in those companies' accounts differs in detail from that reported in the TOC accounts (although our discussions with the industry do not indicate any reason to expect major discrepancies), which means that we may have underestimated third party payments, therefore resulting in an overestimate of TOC own non-staff costs (of course, it is also possible that any error might go the other way, therefore implying that we have underestimated TOC own costs). Furthermore, the recent trend towards TOCs taking direct responsibility for rolling stock maintenance, or paying manufacturers direct for heavy maintenance (as in the case of the Virgin TOCs) might distort the comparison for similar reasons.

Of course, whatever the true picture of TOC non-staff costs, the increase in staff costs is very clear, and there remains the question as to whether the staff costs rise is reasonable. There is anecdotal evidence that part of the increase in staff costs represents the impact of neighbouring TOCs seeking to recruit trained staff (especially drivers) from each other, in which case it is possible that the franchising process has actually driven costs up in this respect. It is also argued that new rolling stock (with improvements such as sliding doors, air conditioning, retention toilets and on-board information systems) will have raised maintenance costs, and also led to training costs during the period of introduction; the initial poor reliability of much of the new stock will also have raised costs. In addition, TOCs have invested in revenue protection and improved on board and at station services, in an attempt to improve profitability rather than simply to hold down costs. Tighter specification of quality, in terms of factors such as cleaning and provision of information may also have raised costs. Further research is clearly required in this key area, in order to obtain a totally reliable picture of TOC own costs, separate from payments to third parties, and to provide a clearer explanation of the reasons for the rises in costs We are continuing our research on these issues.

<sup>&</sup>lt;sup>2</sup> Since TOCs do not always report access charge and rolling stock payments in their company accounts.

Table 7: Drivers of TOC cost rises

Drivers of TOC cost rises (£m, 2003/04 prices)	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	<b>2003/04</b> F	Post-HF 6 growth
TOC own costs - Of which, staff costs - Of which, other costs	2,149	2,076	2,090	2,099	2,473	2,681	2,981	3,097	47.5%
	1,063	1,021	1,030	1,037	1,086	1,180	1,297	1,376	32.7%
	1,086	1,055	1,060	1,062	1,387	1,501	1,684	1,720	62.0%
Average salary	24,352	25,333	26,254	26,556	27,008	27,793	28,837	30,426	14.6%
Headcount	43,638	40,290	39,231	39,049	40,196	42,470	44,968	45,236	15.8%
Passenger train km - million	374	376	405	418	427	436	443	446	6.6%
Passenger km - billion	32.1	34.7	36.3	38.5	38.2	39.1	39.7	40.9	6.2%

As noted earlier, the SRA's decision to re-negotiate contracts, and put TOCs onto temporary costplus contracts might have been expected to weaken incentives for cost control amongst the affected TOCs. Indeed, one of the classic problems of franchising is that the initial bids may tend to be too optimistic, leading to a subsequent re-negotiation with the franchising authority. Overoptimistic bids might be the result of poor information, leading to the "winner's curse", or of strategic bidding, where operators bid strategically with a view to re-negotiating the contract at a later date.

Table 8 shows the profitability (measured as a percentage of total revenue) of the TOC sector, and each individual TOC, over the period since privatisation. A number of points are worth noting. First of all, the profitability of the TOC sector as a whole improved in the first few years after privatisation, took a fall in 2000/01, the year of the Hatfield accident, and has since rebounded sharply, far exceeding the levels seen before the Hatfield accident. So whilst passenger have endured poor punctuality performance during the post-Hatfield period, costs have risen, and the government has increased subsidy levels substantially, the train operators have enjoyed rising profitability. There is a question as to what the appropriate rate of profit should be for a franchised passenger rail operating company given the unusual nature of the business, with little investment directly undertaken by the TOC itself. But it appears that the increase in TOC profits in total comes mainly as a result of eliminating losses in loss making TOCs and bringing them up to something closer to the industry norm, rather than increasing profits in profitable ones. In other words, the process did succeed in overcoming the financial problems of certain TOCs referred to earlier.

Table 8: TOC profitability as a percentage of turnover

TOCs on re-negotiated or cost-plus contracts (excluding Virgin TOCs)	AFI*	97/98	98/99	99/00	00/01	01/02	02/03	03/0
Cardiff/Wales and Borders	20.0%	-6.9%	-18.8%	-21.9%	-12.6%	4.3%	7.3%	7.3
Central trains	13.0%	0.7%	0.6%	-2.3%	-8.4%		-3.1%	-3.1
Connex South Central	5.0%	-1.3%	0.6%	2.9%	2.5%	-3.0%	2.7%	6.6
Connex South Eastern	7.0%	1.5%	0.6%	1.4%	1.1%	-0.2%	-2.0%	-4.1
C2C	4.0%	7.4%	8.6%	18.5%	-5.8%	-1.3%	-2.9%	0.6
Merseyrail	17.0%	5.7%	3.2%	-0.7%	-4.1%	2.3%	8.8%	9.3
North Western	19.0%	-0.3%	-4.1%	-6.0%		4.1%	1.4%	1.4
Northern Spirit	16.0%	2.3%	0.5%	-6.4%	-8.5%	3.3%	5.9%	6.9
Scotrail	10.0%	-0.7%	0.4%	0.4%	-3.2%	-12.8%	-2.5%	-3.2
WAGN	7.0%	5.7%	4.9%	3.9%	0.1%	4.4%	7.3%	6.8
Wales and West/Wessex	14.0%	-3.2%	-9.9%	-9.7%	-10.1%	2.1%	6.9%	6.2
Average	12.0%	1.0%	-1.2%	-1.8%	-6.9%	-1.0%	2.7%	3.1
<u>Virgin TOCs</u>	AFI*	97/98	98/99	99/00	00/01	01/02	02/03	03/
Cross Country	11.0%	0.7%	-3.3%	-8.0%	-16.1%	-11.2%	-9.9%	8.4
West Coast	7.0%	2.8%	9.3%	11.8%	9.2%	12.2%	10.2%	3.8
Average	9.0%	1.7%	3.0%	1.9%	-3.4%	0.5%	0.2%	6.1
Other TOCs	AFI*	97/98	98/99	99/00	00/01	01/02	02/03	03/
Anglia	13.0%	3.3%	2.2%	-1.8%	-0.9%	-1.7%	-0.2%	1.9
Great Western	2.0%	8.6%	7.6%	11.5%	11.6%	8.5%	7.4%	7.2
GNER	4.0%	3.4%	3.0%	3.2%	6.9%	10.2%	14.1%	11.1
Midland Mainline	4.0%	4.2%	3.7%	2.4%	7.7%	6.8%	8.0%	7.6
Chiltern	8.0%	4.0%	2.5%	2.6%	0.7%	5.6%	7.9%	8.1
Great Eastern	5.0%	4.3%	6.6%	7.1%	19.3%	14.9%	12.9%	8.3
Silverlink	9.0%	0.8%	2.8%	2.9%	2.8%	1.8%	0.4%	2.5
Thameslink	8.0%	6.2%	7.6%	9.2%	11.5%	11.1%	9.1%	8.9
Thames Trains	10.0%	5.3%	4.6%	3.4%	3.5%	1.3%	-1.2%	-1.2
Island Line	7.0%	-21.1%	6.4%	5.1%	1.4%	8.0%	9.6%	9.6
Gatwick Express	4.0%	10.0%	10.6%	10.6%	13.7%	14.3%	5.4%	
Average excluding Gatwick Express**	7.0%	1.9%	4.7%	4.6%	6.4%	6.6%	6.8%	6.4
All TOC profitability (weighted average)		2.5%	2.8%	2.9%	1.1%	2.8%	4.4%	4.6

<sup>\*</sup> Average annual improvement required to match subsidy reductions over the period to 2002/03. Source, Kain (1998).

Since the circumstances surrounding the Virgin TOCs being placed onto cost-plus contracts are somewhat different from those of the other TOCs, the former have been separately identified in the table. It can be clearly seen that the TOCs which have run into trouble are those that were based on the most aggressive subsidy profiles, as measured by the implied annual financial improvement (AFI) required to match the proposed subsidy reductions.

However, if strategic bidding is the explanation for poor performance and re-negotiation in respect of the "problem" TOCs, it does not appear that this was a particularly profitable strategy. The problem TOCs made substantial losses for four of the years after privatisation and, even after re-negotiation, profitability levels remain below those of the rest of the TOC sector (though the averages do hide substantial variations by TOC). The Virgin story is very complex, although we note that by the end of the period Virgin does appear to have done well relative to the sector as a whole, and its profitability is broadly in line with other long distance operators.

<sup>\*\*</sup> The losses in 2003/04 distort the comparison so are excluded

Turning to the question of whether the SRA's decision to re-negotiate contracts weakened incentives for cost control, Table 9 below compares the unit cost (per train kilometre) growth between those TOCs on cost-plus or renegotiated contracts and the remaining TOCs. The analysis is based on TOC costs including rolling stock costs, since it was not possible satisfactorily to separately identify payments for rolling stock in the TOC accounts. Likewise, not all TOCs report payments for track access in their accounts fully (or at all in some cases). This problem was addressed by using a detailed dataset provided by Network Rail which shows Railtrack / Network Rail passenger access charge revenue by TOC for the period 1998/99 to 2003/04. Owing to the particular circumstances surrounding the re-negotiation of the Virgin TOC franchises, these are shown separately.

The data in Table 9 shows that those TOCs on cost-plus or re-negotiated contracts (with the exception of the Virgin TOCs) had a much higher growth in costs than the other operators over this period. This finding provides support for the hypothesis that the SRA's decision to renegotiate contracts, and put TOCs onto cost-plus contracts, weakened incentives for cost control amongst the affected TOCs as compared with the rest of the sector. An alternative hypothesis is that it is those TOCs with the largest cost increases which ran into trouble, although the cost increases reported here occurred mainly after the companies had got into trouble and entered negotiations regarding their franchise agreements.

It should be noted that in the previous version of this paper - presented at the January 2006 workshop - we found no evidence to support the claim that TOCs on cost-plus or re-negotiated contracts had seen higher cost growth. The difference is that the previous analysis was based on more limited data and a smaller sample size of "problem" companies. Further analysis is required to understand the differences between the two analyses more fully, particularly as it may be sensitive to whether one or two TOCs are included in the "problem" TOC companies. However, we are more confident in the most recent findings as they are based on a larger sample of problem TOCs.

Table 9: TOC cost growth by TOC-type

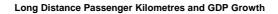
TOC type	Growth in TOC costs per train km (excluding access charge payments, but including payments to ROSCOs): 1999/00 to 2003/04
TOCs on cost-plus or re-negotiated contracts	33%
Virgin TOCs	5%
Balance of TOC sector	17%

On the demand side it is clear that passenger demand has risen very sharply after privatisation. What is less clear is whether this is due to the introduction of private sector skills, combined with the strong incentives provided by the franchise contracts, or due to external factors. Figures 2 to 4 show the growth in demand in its historical context. The aim is to compare the upturn in demand in 1990s with the boom in the 1980s. If we take the trough of demand in 1994/95 as the starting point for privatisation, the post-privatisation growth does look unusually strong, indicating a major privatisation effect on demand.

However, if we use the economic cycle to define our start and end points, the upturn in the economy began two years earlier in 1992/93, and the growth in demand from that point looks less impressive and more closely in line with the 1980s boom, except perhaps for London and the South East. This result comes, of course, because demand continued to fall in the early 1990s even after the economy had started to recover, which itself could be attributed to privatisation (in the sense that managers were focused on restructuring, rather than on running the business).

Nevertheless, as already noted, there are a number of factors, other than GDP, that need to be taken into account in analysing passenger rail demand, and we can therefore not rely on the simple analysis shown in Figures 2 to 4. Table 10 shows the results of some recent work carried out by Professor Mark Wardman at ITS aimed at disentangling these effects. For a large sample of flows (but excluding season tickets), the table shows the level of traffic growth that would have been predicted had rail fares and services remained unchanged for the period, and the degree to which this may be explained by population, GDP, car ownership and car journey time and costs. A distinct change in trend post privatisation (post-1995) is found, accounting for some 20% of the growth for London and South East, although somewhat lower for non-London flows, but other factors dominate, and in particular GDP effects. It is this 20% which may be due to improved marketing or other unmeasured factors following privatisation. It should be noted that the study only goes up to 1998, so it represents very much the first period of the new structure, with the last of the franchises only being let in 1997. Unpublished work on the post Hatfield period, 2002-4, identifies no ongoing impact on demand, with the trend being fully explained by other explanatory variables.

Figure 2: Long distance passenger demand and GDP growth 1978 to 2004/05



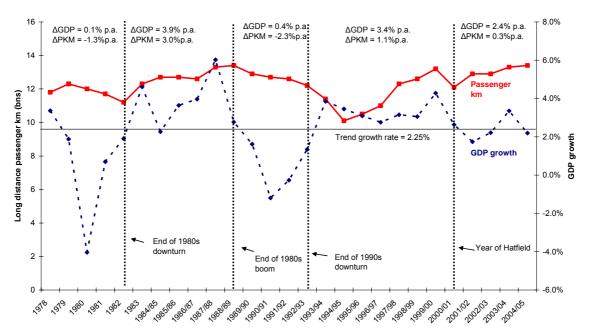


Figure 3: Regional passenger demand and GDP growth 1978 to 2004/05

#### Regional Passenger Kilometres and GDP Growth

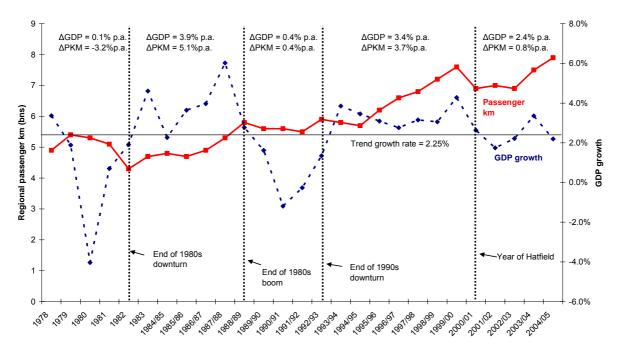
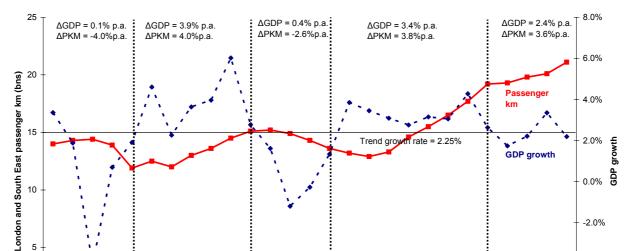


Figure 4: London and South East passenger demand and GDP growth 1978 to 2004/05

London and South East Passenger Kilometres and GDP Growth



End of 1990s

,<sub>99619</sub>1

,99<sup>7198</sup> 1998/99 1999100 200001

downturn

199A195 1995/96

,993<sup>194</sup>

Year of Hatfield

202103

-4.0%

-6.0%

Table 10: Rail Demand Growth 1990-1998: Separating the Impact of External Variables from the Post-Privatisation Trend

End of 1980s

1991/92 'allay

boom

1.606	1.307	1.440
1.119 (2)	1.033 (5)	1.092 (2)
1.435	1.266	1.319
0.975 (6)	0.951 (3)	0.972 (6)
1.038 (5)	1.022 (6)	1.055 (4)
1.045 (3)	1.056 (2)	1.049 (5)
1.043 (4)	1.031 (4)	1.067 (3)
1.301 (1)	1.196 (1)	1.149 (1)
London	Non London	South East
	1.301 (1) 1.043 (4) 1.045 (3) 1.038 (5) 0.975 (6) 1.435 1.119 (2)	1.301 (1) 1.196 (1) 1.043 (4) 1.031 (4) 1.045 (3) 1.056 (2) 1.038 (5) 1.022 (6) 0.975 (6) 0.951 (3) 1.435 1.266 1.119 (2) 1.033 (5)

5

1919, 1980, 1981

End of 1980s

downturn

,085186

1986187

198A185

′‰, ′‰,

,08<sup>7</sup>18<sup>8</sup> 1988/BB 1989/90 1990191

Note: Figures denote the proportionate change in demand in the period attributable to this variable. Rankings of the magnitudes of each effect are given in parentheses. The overall growth is what it is estimated would have happened for the group of services concerned in the absence of specific rail management decisions, in terms of changes in services and fares. Source: Wardman (2005)

Finally, having considered trends in costs and demand, we might also ask what has happened to quality over this period. The big picture is that prior to Hatfield punctuality was improving,

though largely due to the efforts of Railtrack, rather than the operators (see Figure 5), but that post-Hatfield punctuality deteriorated very sharply. The latter deterioration was mainly due to problems on the infrastructure side, but delays attributed to TOCs also increased substantially after Hatfield, and are recovering only slowly.

However, there are other measures of quality that are important. Passengers presumably benefit from newer rolling stock for a variety of reasons (for example, improved ambience and the introduction of air conditioning on new trains). The average age of rolling stock has fallen sharply from 20.7 years in 2000 to 14.7 in 2005, even though the benefits of this change in terms of punctuality are not yet apparent. At the same time, rail complaints are falling, and customer satisfaction levels are rising (in terms of the overall opinion of journey); although customer satisfaction in terms of the key measure of value for money is falling. Meanwhile, safety has continued to improve and, according to Evans (2004) at a faster rate than before privatisation. On the negative side, overcrowding on services continues to get worse. Overall then, there are signs of improved quality in a number of areas in recent years; there is a question as to whether the benefits of these quality improvements are as high as the cost increases with which they are associated, but many of the forces driving them were independent of the franchising process.

Delay minutes per 100 train km

7

6

5

4

3

2

1

0

1998/99

1999/00

2000/01

2001/02

2002/03

2003/04

■ Operator-on-self
■ Inter-operator delays
■ Network Rail / Railtrack direct

Figure 5: Delay minutes on Britain's rail network

Source: Network Rail 2004 Technical Plan, Section 10.

#### 7. Conclusions

The events befalling the British rail network in recent years make for a confusing picture and therefore it is not easy to draw conclusions from the British experience. However, several points stand out.

Firstly, there has almost invariably been a high level of competition for franchises in Britain, with four or five bidders shortlisted out of a wider field. In many countries we understand that the number of bidders is often only one or two. We can only speculate on the reasons for this more favourable outcome in Britain, but the absence of a dominant incumbent, such as exists in many countries, and the fact that a winner takes over an existing company rather than having to put together staff and assets from scratch, are likely to be factors. The presence of a number of large privately owned bus companies who were interested in entering the rail market is another. It is interesting that, even though National Express has built up a fairly dominant position in the market, and at refranchising obviously there is an incumbent who would be expected to have better knowledge than other competitors, these factors seem to have done nothing to reduce competition, and most TOCs have changed hands at refranchising.

Secondly despite the temporary setback of the collapse of service quality after Hatfield, there has been an extremely healthy growth of traffic and revenue. The evidence that exists suggests that most of this growth has resulted from external factors, particularly the state of the economy but also trends in car journey times and costs. However, on the best evidence we have nearly 20% of the growth in the early years remains unexplained by such factors. Of course this does not prove that the faster growth had anything to do with franchising, but our guess is that a number of factors linked with franchising are at work here, more attention to preventing fares evasion and more sophisticated fares differentiation. It could be argued, however, that none of these factors are more than a continuation of developments under British Rail so it is possible that they would have happened anyway (although the counterfactual is hard to prove), and indeed it may be that the poorer performance in the early 1990s was partly due to the distractions of the privatisation process. Nevertheless, it should be noted that the policy on fare regulation in the post-privatisation environment has also played a role in driving growth and, although this policy cannot be linked directly to franchising per se, real terms reductions in fares does represent a significant break from previous policy under British Rail.

Moreover there would clearly have been more substantial financial problems for the TOCs had there been an economic recession in this period. Thus the agreements in the latest franchise agreements to share revenue risk may be more sensible than the original approach of placing this entirely in the hands of the operator. Were revenue risk to be taken completely from the operator, then the franchising authority would need to completely take charge of pricing, whilst an alternative mechanism would be needed to incentivise TOCs to grow traffic and revenue. Whilst this may make sense for urban or regional services with simple fares structures, we do not think it would be an appropriate way of handling more commercially oriented services where sophisticated pricing structures aimed at yield management are needed.

Thirdly, franchising does not seem to have succeeded in driving down train operating company costs. In the early years of franchising there was a significant reduction in costs per train kilometre as service levels expanded, thus indicating substantial efficiency improvements; but

more recently train operating company costs have grown substantially. This cost increase is after removing any effects of changes in track access charges and rolling stock leasing charges, although we understand that in some cases new leases have left more responsibility for train maintenance with the train operating company, so the comparison may not be totally valid. Other factors may have been extra maintenance costs associated higher specification and with poor reliability of new rolling stock and increased fuel prices, whilst it has been argued that the leasing of rolling stock from private companies has been a very expensive way of providing rolling stock (Shaoul, 2005). However a major increase in staffing levels as well as salaries has occurred. The staffing increase may be associated with more tight quality specifications, whilst there is anecdotal evidence that salaries may actually have been raised by competition between franchisees to recruit trained staff. Nevertheless, given the scale of the cost increases, this is an area which needs further investigation.

Finally there has been a substantial problem in dealing with franchisees who have been unable to achieve their projected financial performance. The franchise agreements permit franchisees to surrender their franchise early, although they will then forfeit some or all of their performance bond, or to call for a viability review, as a result of which they may be granted more subsidy. The franchising body in Britain has been reluctant to see a train operating company become bankrupt or simply surrender the franchise, because of the difficulty and cost of keeping services running in those circumstances (NAO, 2005). They have therefore generally preferred either to renegotiate the terms of the franchise agreement or to enter into a short term cost plus type contract pending refranchising. For a number of reasons, including the change in approach to franchising in the financial crisis post Hatfield and the wish to postpone refranchising until neighbouring franchises expired to permit changes in boundaries or new investments came on line, these cost plus arrangements have lasted longer than would be desirable. This indeed indicates another problem with franchising in that it does cause some difficulties in responding to changed circumstances or changes in government policy.

Furthermore, based on our analysis, the evidence suggests that TOCs which re-negotiated their contracts saw higher cost growth than other TOCs, thus providing support for the hypothesis that the SRA's decision to re-negotiate contracts, and put TOCs onto cost-plus contracts, weakened incentives for cost control amongst the affected TOCs as compared with the rest of the sector. An alternative hypothesis is that it is those TOCs with the largest cost increases which ran into trouble, although the cost increases reported here occurred mainly after the companies had got into trouble and entered negotiations of their franchise agreements. Nevertheless, given the heavy losses incurred by operators prior to re-negotiation, and the relatively modest returns appeared afterwards.

it does not therefore appear that bidders should conclude that they could make money by acting strategically to win franchises by unrealistic bids, although the reduction in downside risk will, other things being equal lead to higher bids presumably from all competitors.

What is clear from the British example is that there are many problems to be faced when franchising rail passenger services, and in Britain the benefits from this process appear to have been rather limited. Costs and subsidies have not fallen as expected and, although demand growth has been very strong, the majority of this growth can be attributed to factors other than the franchising method. However, at present we consider that there is insufficient evidence to draw firm conclusions about why the British example failed to deliver the expected benefits,

particularly on the cost side; and that it is therefore too early to draw wider policy lessons for other contexts. The critical issue here is to be able to explain the V-shaped TOC cost profile over the period since privatisation. This paper has gone part of the way, but our understanding of cost trends remains incomplete.

One possible explanation is that the TOCs inherited an already efficient operation following the substantial productivity gains achieved by British Rail as a result of sectorisation in the 1980s. However the fact that costs started to rise again in the early 1990s, and that significant savings in cost per train kilometre were made in the early post privatisation period suggests at least that this is not a total explanation. A second hypothesis is that the cost increases were caused by the short term placing of many Train Operating Companies on negotiated contracts in the period around 2001, which weakened incentives for efficiency. Whilst we have provided some evidence in support of this, further econometric work is necessary to improve the robustness of this finding. The third hypothesis is that the increase was caused by factors which had nothing to do with the franchising process, truly exogenous factors such as fuel prices, and other aspects of policy such as health and safety legislation, disability discrimination legislation and a general requirement for higher standards. It seems that many of these policy decisions were taken without a clear understanding of the cost implications and the final result may be a smaller network with fewer services.

It is hard to be definitive on which of these three effects dominates, but we do have evidence which suggests that the way in which problem franchises were managed may have contributed substantially to the rise in costs after 1999/00. Our overall conclusion then is that passenger rail franchising in Britain may be regarded as a moderate success on the demand side, but that it has failed to achieve its objectives on the cost side. However, it should be noted that the rise in train operating costs in recent years has occurred at a time of considerable disruption, during which many other factors unrelated to franchising policy were changing at the same time. It remains to be seen what the re-franchising process will achieve in terms of cost reduction in a more stable environment.

#### **Bibliography**

- Kain, P. (1998), 'The Reform of Rail Transport in Great Britain', *Journal of Transport Economics & Policy*, vol. 32 (2), pp. 247-266.
- Evans, A. W. (2004), *Rail Safety and Rail Privatisation in Britain*, Inaugural Lecturer, 16 June 2004.
- Glaister, S. (2004), 'Competition Destroyed by Politics: British Rail Privatisation', *Centre for the Study of Regulated Industries (CRI) Occasional Paper 23*, University of Bath School of Management, 2004.
- National Audit Office (2005) South East Trains, London
- Pollitt, M.G. and Smith, A.S.J (2002), 'The Restructuring and Privatisation of British Rail: Was it Really that Bad?', *Fiscal Studies*, vol. 23 (4), pp. 463-502.

- Shaoul, J (2005), The Financial Realities of Leasing Trains the British experience. Paper given at the 9<sup>th</sup> international conference on ownership and competition in land passenger transport, Lisbon,
- Smith, A.S.J (2006), 'Are Britain's Railways Costing Too Much? Perspectives Based on TFP Comparisons with British Rail; 1963-2002, *Journal of Transport Economics and Policy*, vol. 40 (01), pp. 1-45.
- Strategic Rail Authority (2001) A Strategic Agenda, London.
- Steer, J (2001) Evolution not Revolution, in Transport 2000 (2001) The Railways: where do we go from here, London.
- Wardman M R (2005), 'Demand for Rail Travel and the Effects of External Factors', Institute for Transport Studies, University of Leeds, mimeo.

# Appendix

Original franchises	What happened and when	New name
1 Anglia	Originally won by GB Railways 31 March 2004: franchise expired Transferred into new Great Anglia Franchise together with Great Eastern and most of WAGN NEG won the franchise for the new Great Anglia Franchise	One
2 Cardiff	Originally won by Prism September 2000: NEG took over from Prism (Interim Franchise agreement reached). Refranchising delayed to incorporate in new Wales and Borders franchise 14th October 2001: franchise expanded to include parts of Wales and West and Central Trains. Name changed to Wales and Borders from that date 2001: Management cost plus contract until franchise agreement completed September 2003: part of North Western transferred in 8 December 2003 became Arriva Trains Wales after they won the franchise bid New franchise for 15 years	Arriva Trains Wales (previously Wales and Borders)
3 Central Trains	14 October 2001: part transferred to Wales and Borders 31 December 2001: during this financial year franchise renegotiated. NEG paid £23m in return for higher subsidies of £44.6m over the rest of the franchise. Attempt at refranchising abandoned because of lack of competition.  1 April 2004: two year franchise extension signed with NEG  Intention now is to split it between neighbouring TOCs	Central Trains
4 Chiltern	Owned by M40 Trains (John Laing) March 2002: won refranchising competition - new 20 year franchise signed with SRA	Chiltern

Original	What happened and when	New name
franchises 5 South Central	Originally Connex 1999 agreement for refranchising to start early for a 20 year contract 26th August 2001: GOVIA took over from Connex having won competition for a 20 year franchise, but then renegotiated to 7 years. Cost plus contract pending completion of negotiations. May 2003: new franchise signed with GOVIA (until 2009). 27th May 2004: name changed to New Southern Railway	New Southern Railway
6 Southern Eastern	Originally Connex 10 December 2002: company signed agreement with SRA which would give an extra £58.9m in the year to December 2003 but shorten the franchise November 2003: SRA terminated contract when Connex asked for another increase in subsidy South Eastern Trains (state owned) took over as a temporary measure until CTRL was open when the two would be franchised together. Refranchising won by Go Via	South Eastern Trains
7 Cross Country	Originally and still is Virgin Cross Country July 2002: franchise renegotiated to provide increased subsidy and to establish the basis for renegotiations regarding uncertainty over the WCRM. Revenue sharing agreements also entered into. Annual negotiation of subsidy Re-franchising currently in progress; will take over many routes from Central	Virgin Cross Country
8 Gatwick Express	Originally and still is owned by NEG Franchise not due to expire until 2011.	Gatwick Express
9 Great Eastern	Originally First Great Eastern. 31 March 2004: transferred to Greater Anglia Franchise along with Anglia and most of WAGN; NE won the franchise competition.	One

Original franchises	What happened and when	New name
10 GNER	Following abandonment of refranchising on a 20 year contract, in 2003 the franchise was extended by two years to 2005  1 May 2005: GNER won refranchising competition. New franchise agreement (seven year deal+3 years subject to performance) signed with incumbent	GNER
11 Great Western	Originally First Great Western Franchise due to expire 2006. Refranchising competition won by First.	Great Western
12 Island Line	Original franchise was 5 years. 2001: extended to by 2 years to 2003 10 December 2003: Stagecoach signed three year deal to February 2007 Extended to be coterminous with South West franchise (also Stagecoach)	Island Line
13 c2c	Originally franchise was to run until 2011 (subject to delivery) One of the Prism TOCs 2001: December 2001 accounts, record a franchise amendment payment of £3.5m paid to SRA in return for a revised franchise agreement involving more subsidy. NEG took over from that point.	c2c
14 Merseyrail	MTL won original franchise but in financial difficulties Arriva took over pending refranchising. Became Arriva Trains Merseyside 2001: put on to cost plus contract 20 July 2003: new franchise agreement signed with Serco NedRailways (expires 2028) following refranchising. No longer under the control of the SRA (looked after by PTE)	Merseyrail
15 Midland Mainline	NE won original franchise Original franchise to run until 2006 (subject to delivery) August 2000: deal agreed to extend franchise by two years to 2008 The franchise premia that would have been paid between 2001 and 2006 now to be invested directly in Midland Mainline And NEG agreed to accelerate investment in the franchise	Midland Mainline

Original	What happened and when	New name
franchises 16 North Western	First won original franchise March 2001: company re-negotiated deal with SRA Paid franchise amendment costs of £38m Put onto cost plus contract September 2003: part transferred to Wales and Borders February 2004: part transferred to Transpennine Express. Balance to Northern Franchise Refranchised TPe won by First; Northern by SERCO/Nedrail	None. Doesn't exist post February 2004
17 Northern Spirit	MTL won original franchise MTL in financial difficulties; deal done for Arriva to take over.2000 In 2001 put onto a cost plus management contract February 2004: part transferred to Transpennine Express October 2004: balance to become Northern Franchise together with North Western New franchise won by Serco Ned Railways (8 years 9 months)	Northern Rail (formerly Arriva Trains Northern)
18 Scotrail	Was National Express Group 2001: deal done to increase subsidies over the remainder of the franchise (due to end in 2003/04). Scotrail paid £36m for this, to get £70m higher subsidies October 2004: new franchise awarded to First (7 years +3) after refranchising competition No longer under the control of SRA (looked after by Scottish Executive)	Scotrail
19 Silverlink	Originally won by NEG September 2004: two year extension agreed to go to 2006 Press release from NEG states that level of subsidy not materially affected (£120m per year over two years: c.f. £50m in year end December 2003)	Silverlink
20 South West	Original franchise to end in 2002/03; Stagecoach owned November 2002: one year extension agreed to 2004 further extension to February 2007 (same end as Island Line)	South West Trains

Original	What happened and when	New name
franchises 21 Thameslink	Original franchise to end in 2003/04 Owned by GOVIA 2004: two year extension agreed (with revenue share mechanism) New franchise from 2006: to merge with Great Northern (part of WAGN) Won by First	Thameslink
22 Thames Trains	Original franchise to run to 2003/04 Was owned by Go Ahead Group Two year franchise (to run to 2006) awarded to First after inviting bids from Go Ahead and First, to bring the end date up to that of GW, in the light of the future: proposal to merge with Great Western and Wessex (post 2006)	Thames Trains
23 WAGN	September 2000: bought by NEG from Prism (along with Cardiff and Wales and West) March 2001: deal done with SRA on subsidy levels for Great Northern part of the franchise: cost plus arrangement March 2004: services split, with West Anglia parts going to the new Greater Anglia Franchise March 2004: two year extension agreed to Great Northern franchise (the balance). Results in subsidy falling by £6m to c. £19m a year. Great Northern to be merged with Thameslink in 2006. New franchise won by First.	One and Great Northern
24 Wales and West	September 2000: acquired by NEG from Prism January 2001: NEG negotiated higher subsidies (cost plus arrangement) 14th October 2001: parts transferred to Wales and Borders. Renamed Wessex Trains from October 2001 2004: franchise extended until 2006 To be merged with Great Western and Thames Trains	Wessex Trains
25 West Coast	Originally and still is Virgin July 2002: franchise renegotiated to provide increased subsidy and to establish the basis for renegotiations regarding uncertainty over the WCRM. Revenue sharing agreements also entered into. Annual negotiation of subsidy	Virgin West Coast

Original	What happened and when	New name
franchises		
26	February 2004: new franchise created from North Western	Transpennine
Transpennine	and Northern	Express
Express	Awarded to First Group and Keolis (8 years + 5 year	
	extension)	

Data sources

TOC accounts SRA Strategic Plan 2002 General web searches ASLEF web site lists current status of all franchises TAS Rail Monitor