Evolution not revolution - the future of the railways

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Detailed summary

- The UK has the 4th largest economy in the world, without a world class rail system to match. The fundamental problem with the railway system is not a few years of privatisation but many decades of nationalisation and underfunding.

- The IoD argues that the present structure of the railway industry can be made to work, but the financing can't. The SRA's Strategic Plan involves a catch-22 scenario whereby private investment depends on confidence in future growth in passenger numbers, but the growth in passenger numbers will not be possible without the upfront investment. Attracting private capital to take on this risk has been made much more difficult as a result of the Secretary of State placing Railtrack into administration.

- Table A shows that all public funds in the Strategic Plan can be allocated, with only the CTRL[1] and WCML upgrade adding to network capacity. The financial situation is made worse by the possibility that £7.5 billion of the government's £33.5 billion spending on rail over the next decade, could have been double counted.

Table A

Railway industry resource allocation 2001-2011	
Post-Hatfield additional maintenance costs	£6 billion
Railtrack administration	£2 billion
Additional safety investment	£3.5 billion
Channel Tunnel Rail Link/West Coast Main Line	£8 billion
EU interoperability	£1.5 billion
Disability Discrimination Act	£1 billion
Revenue support for Tocs	£11 billion
Total	£33 billion
(Based on industry sources and IoD estimates)	

[1] Channel Tunnel Rail Link and West Coast Mainline upgrade.

- It is abundantly clear that in order to expand the capacity of the railway network very significant private investment will be required, in the absence of additional public finds. Given the catch-22 problem, together with the impact of Railtrack administration, major policy initiatives will need to be introduced in order to attract private capital.

- The IoD recommends four key policy initiatives to transform the outlook for railway investment:

  - The introduction of widespread road pricing.
  - The closure of heavily subsidised parts of the network.
  - Longer 'carrot & stick' Toc franchises.
  - Measures to 'capture' windfall land price gains.

- The introduction of all these policies has the potential to increase passenger traffic at the rates envisaged in the Strategic Plan. If road revenues were used to finance extra rail investment, over and above that shown in the Strategic Plan, it is even possible that growth in passenger traffic might exceed current targets. However, the flip-side is the likelihood that without such innovations, future growth in passenger and freight traffic is likely to significantly undershoot the Strategic Plan targets.

- The IoD calls for a genuinely integrated transport policy – part of the solution to the rail crisis is road pricing. Without optimal road pricing, the doom and gloom surrounding the Strategic Plan could prove justified.

- Greater use of optimal road pricing could provide a substantial boost to the railways and investor confidence. At present we don't know what the 'true' level of rail demand is, because road users do not pay the 'true' economic cost of road use.

- To a degree, the privatised rail system is a victim of its own success, with strong traffic growth having led to capacity problems – track and train. What would happen on the M25 if there was an unexpected 20% increase in the number of cars, without any additional new lanes? Privatisation has run in parallel with the highest levels of passenger traffic and investment in 50 years.

- There is no room for complacency. The rail industry will have to continue to improve where there is: (1) Poor management of repair and maintenance (2) Poor management of investment (3) Poor management of track capacity (4) Poor quality of service.

- It is far too simplistic too say that the UK has the worst railways in Europe. Since privatisation rail investment has been at a higher level than on the continent. Passenger and freight traffic has increased its market share in the UK whereas on the continent it has often continued to decline. Secondary lines in France and Germany are often very poor.

- The solution to the problems on the railway is one of evolution not revolution. This paper argues that the current structure of the industry can be made to work. We reject the vertical integration of Railtrack and the Train Operating Companies – bringing track and train together - and the horizontal integration of the Office of the Rail Regulator and the Strategic Rail Authority.

- There is no overpowering argument as to why bringing track and train together will transform the rail industry. Across the globe, vertical integration of track and train has not prevented the relative decline of rail in favour of road transport.

- Where there are examples of Railtrack failing to invest in network enhancement, the 2000 Transport Act, together with revisions to Railtrack's network licence - for the second control period 2001-06 - provide the Rail Regulator powers for enforcement of investment. In other words, the 'integrated benefits' from vertical integration are obtainable from recent reforms to the regulatory environment. However, this situation will need to be closely monitored. The first control period saw the Tocs bear none of the costs of increasing traffic, whilst Railtrack received none of the benefits.

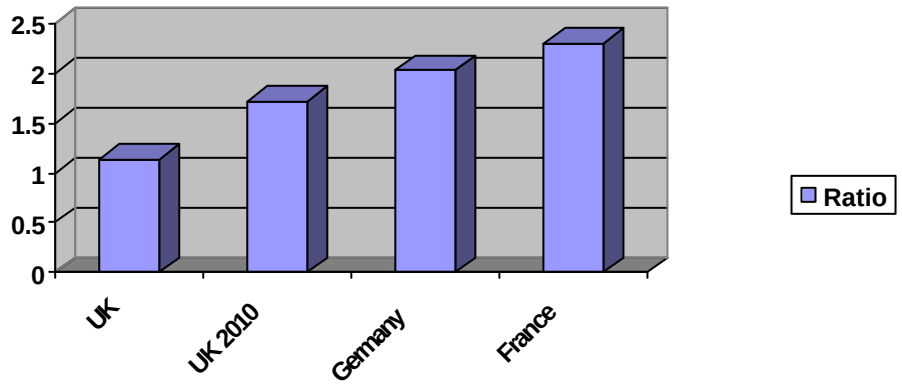
- Even if the targets for passenger growth are met, the UK will still use its railway system less intensively than in France or Germany – unless there is a reduction in total track length. See Figure A.

- The current rail network is too large. As Figure A shows, even if there was to be a 50% growth in passenger traffic over the next decade, the UK railway system would still be used less intensively than on the continent.

Figure A

Passenger-track ratio

(ratio of annual passenger km billion to track, 000 km)



(Source: IoD calculations. UK 2010 figure assumes passenger traffic growth of 50% - SRA Strategic Plan target)

- There are strong reasons why the Train Operating Companies will not want control of track and signalling. First, over the next 1-2 years, because of the lack of a fully populated asset register identifying the precise condition of Railtrack's assets. Second, because vertical integration has implications for track access. Vertical integration might bring benefits in geographically enclosed networks, but on other networks, such as the West Coast Main Line, a very large number of Tocs operate. Control by one company therefore raises access problems – and restricts competition – for others. The Rail Regulator could have a strong role in enforcing a fair regime, but worldwide experience suggests that many 'subtle' obstacles to competition could be introduced.

- In the past, Railtrack has been rightly condemned for a lack of emphasis on safety. However, the tragic accidents at Ladbroke Grove and Hatfield have surely taught the company a lesson. Railtrack must now see that it is in its own financial interest to put safety first. The situation is a complex one across a number of safety indicators. These headline measures suggest that there has been no deterioration in safety, indeed, the situation appears to have improved and is expected to continue to do so. Safety is now a management issue, not a structural one.

- Airlines don't own the skies, and buses don't own the roads, but this doesn't automatically lead to a case for the re-nationalisation of Railtrack. The sky doesn't require investment, but the rail infrastructure does, and the history of state ownership is a legacy of under investment, especially when there are demands for greater resources for health and education. Over the past 5 years rail investment has bucked the trend of low capital investment by the public sector.

- However, the figures for investment growth look less impressive when one allows for:

    - The significance of one-off projects such as the Channel Tunnel Rail Link and the West Coast Main Line upgrade.
    - Part of the reason investment figures have looked so good, is because of the overspend on the West Coast Main Line upgrade.
    - Maintenance expenditure being classified as capital expenditure, post privatisation.
    - Future investment projections tail-off following the completion of the second stage of the Channel Tunnel Rail Link.
    - A big chunk of planned investment growth will be absorbed by the costs of introducing the European safety system across the network, together with the cost of meeting regulatory requirements for disabled rail passengers and EU interoperability.

- The IoD's integrated transport policy means that even if parts of the rural network were to be closed down, road pricing – with compensatory reductions in fuel duty – would make rural car use cheaper. The current level of rail subsidy on certain regional and branch networks is excessive.

- Without optimal pricing on the roads we do not believe the rail targets in the Strategic Plan can be met. Passenger traffic growth of only 10-20% maximum is likely.

- With optimal pricing we believe the Strategic Plan targets can be met. Moreover, if the revenues were then invested in the rail infrastructure to bring forward many of the projects identified in the 2005+ and 2010+ plus periods, then far greater rail traffic growth would be possible – maybe 80-90% a decade or more from now. This would involve the construction of extra capacity all across the network, together with high profile projects such as Cross Rail and a North-South high-speed link.

- In addition to road pricing there needs to be greater use of land pricing to capture windfall land price gains. The Strategic Rail Authority needs to pursue the possible use of windfall land price levies. For example, because of the boost to property values, developers at Canary Wharf paid a substantial sum towards the cost of building the Jubilee Line extension. Press reports suggest this approach is being seriously examined for the Cross Rail project. It needs to be rolled out nationally and become a central plank of policy.

- Part of the problem of privatisation was the excess fragmentation of the industry, particularly with regard to the multitude of sub-contractors involved in track maintenance and renewal. Railtrack had become an outsourcing company with too little control over the management of this process. There is a case for bringing maintenance contractors and sub-contractors together, possibly in geographic zones, to help aid more efficient 'possessions'. Improvements are now being made.

- The SRA needs to implement a policy of franchise extensions. Longer 'carrot and stick' franchises, with stiffer penalties for failure and greater rewards for success, need to be introduced as a way of further boosting investment.

1 Introduction

A central thesis of this report is that the fundamental problem with our railways is many decades of nationalisation, not a few years of privatisation. Such a legacy will take time to overcome.

When thinking about the future of the railways and where we want to go, it is useful to go back to first principles and ask 'what do we want from our railways?' The answer is surely:

- Fast, safe trains.
- Trains on time at regular intervals.
- Trains with a seat to sit on.
- Train tickets at reasonable prices.
- Quality of service – attractive stations and train interiors.

It is abundantly clear that despite becoming the fourth largest economy in the world, the UK is yet to achieve an integrated transport policy with a rail infrastructure to match. The UK economy demands a world class transport infrastructure that provides high quality competition between road, rail and air. The continued modal dominance of roads is shown by the fact that rail accounts for just 6% of total passenger kilometres travelled and 10% of national freight moved.

In this report, the IoD argues for a genuine integrated transport policy, one that recognises the railways cannot be treated in isolation. Part of the solution to the rail crisis is road pricing. The IoD has argued in previous reports (*More roads and road pricing – the way to go?* Graeme Leach, Institute of Directors, 2001) that road users do not pay the true economic cost of car/van/lorry use and so it isn't possible to see what the true level of rail demand actually is.

We argue that privatisation itself has not been at fault, but often the manner in which it was introduced – the nature of fragmentation[2]. We will also argue that there is far too much doom and gloom attached to the railways. Since privatisation there has been strong growth in investment, passenger numbers and freight carried – to a degree, the railways have been a

[2] Part of the motivation behind the privatised railway structure was a desire to prevent re-nationalisation and to weaken trade union power. The benefit of this fragmented structure can be seen in the recent dispute on South West Trains, which has not spread across the entire national rail network.

victim of their own success[3]. Rail privatisation introduced very radical change over a very short period of time. Mistakes were bound to be made, and were. Many wise heads on old railway shoulders were lost in an unrealistic drive to bring in new blood.

There is no denying that people are very frustrated with the railway system, particularly in the South-East of England. Research suggests (*Commuting in Great Britain in the 1990s*, A Benito & AJ Oswald, Department of Economics, University of Warwick, April 2000) that full-time workers in London lost an additional 70 minutes per week of leisure time to commuting during the 1990s.

The research also found that commuting times are especially long among the highly educated. In other words, they are more dependent on the transport system operating efficiently, and more likely to be vocal when it does not. People with university degrees spend 50% more time travelling to work than those with low qualifications.

The Institute of Directors (IoD) would agree with the Strategic Rail Authority (SRA) that there is much to be proud of on the railways since privatisation. But there is also no denying that the perception and reality of safety problems, overcrowded and delayed trains and the collapse in the national network timetable, post-Hatfield, have seriously undermined public confidence.

The new chairman of the SRA, Richard Bowker, has stated that,

"We have 20% more trains since privatisation and a third more passengers. This has been against a backdrop of deteriorating assets and deteriorating quality of management" (Today Programme, BBC Radio 4, 14th January 2002)

A poll by *YouGov.com* in January 2002 found that 65% of the population believe the railways have worsened since 1997.

[3] We show later that the statistics on investment growth and passenger numbers whilst still good, are not as good as at first appears.

Box1 Do we have the worst railways in Europe?

2002 started with the Minister for Europe, Peter Hain, stating in a *Spectator* interview that,

"We have the worst railways in Europe. We started transport investment too late. It's an intractable problem".

Is Mr Hain correct? Rail infrastructure investment averaged 0.25% of GDP in the EU over the 1982-1995 period. This compared with just 0.12% in the UK. However, since privatisation, the headline rate in the UK has been well above that in the EU. As a proportion of GDP, rail investment is set to continue at a higher level than in the EU.

The idea that railways are prospering across the Channel is not shared by the European Commission. In a recent White Paper (*Towards an Integrated European Railway Area*, January 2002) the EC states that,

"despite a number of successes … rail's market share is continuing to decline".

Between 1970 and 1998 its share of passenger traffic in the EU fell from 10% to 6%, while the proportion of freight carried collapsed from 21% to 8%. In the UK, passenger and freight traffic shares are increasing, not decreasing.

The perception of British trains as unreliable, older, slower and dirtier than their European counterparts is a little too simplistic. For example, Germany's Deutsche Bahn is criticised for delays and overcrowding at weekends. Across Europe one can see much old slam door stock amidst the double-deckers.

On average, in 2000-01, 79% of UK trains were on time. The previous year the proportion was around 90%. This compares with 95% in Switzerland, 93% in Denmark, 90% in Germany, 87% in the Netherlands and Sweden and 85% in Italy (Source: BBC News Website – The State of the Railways – UK train time keeping). Even the French TGV network only operates at 87% punctuality – low for trains running on new dedicated track. High-speed glitz can also hide shortcomings on regular trains which are starved of investment. French and German networks can run trains up to 186 mph and 179 mph respectively, compared with 125 mph in the UK. Moreover, the TGV is just one element of the French network. Latest statistics show that over the entire SNCF network 80% of trains ran on time, compared with 79% in the UK (Source: BBC News Website – The State of the Railways, 14th January 2002).

Where the UK rail system does appear antiquated is in the lack of high speed track. Japan's bullet trains lead the world, with 8% of the network providing high speed track. However, what is clear is that the network proportion of high speed track is zero in the UK compared with 4.7% in France and 2.2% in Germany. Sweden also has zero high speed track, whilst the Netherlands has a high speed Amsterdam-Brussels link under construction.

It is wrong to look at comparative systems, such as the TGV in France, and hold them up as the ideal model, without acknowledging that such systems have huge costs attached. The chairman of the SRA has argued that,

"if you take France for example, where railways lose on a commercial basis hundreds of millions and it's transferred in the tax burden".

Latest comparable figures show that UK state aid for the railways amounts to 2.36 bn euros, compared with 9.52 bn in Germany and 6.06 bn in France.

Rail receives more than euro 30 bn (£19 bn) a year in subsidies from EU governments, making it Europe's most subsidised sector outside of agriculture.

The Financial Times has reported (12th January 2002) that:

"For passengers, last year was the worst since records started. Fewer than 80% of trains arrived on time. In the first nine months of 2001, passengers spent the equivalent of 3,500 years waiting for trains".

At times, the media focus on the railways has been little short of hysterical and this has helped boost the sales of two prominent books on the railways: *Off the rails – Britain's great rail crisis – cause, consequence and cure*, by Andrew Murray and *Broken Rails – How privatisation wrecked Britain's railways*, by Christian Wolmar.

It is not surprising, therefore, that for supporters of rail privatisation, recent years have been a public relations disaster:

- The £500 million cost of privatisation, followed by the sale of the rolling stock companies (ROSCOs) for a £900 million profit just months after they were privatised. Heavy public subsidies to a Railtrack private monopoly, whilst it simultaneously pays out £600 million in dividends. An impression that since track access charges are set by the Rail Regulator, the key to Railtrack profitability is to cut costs.

- Tragic train accidents, such as Ladbroke Grove and Hatfield, directly linked to safety issues and significant non-compliance and a culture of non-compliance on the part of Railtrack. A tendency reinforced by Railtrack's policy of 'sweating assets' and limiting 'possessions' for track maintenance.

- The impression of a collective nervous breakdown in Railtrack's management in the wake of the Hatfield crash. Despite the growth in passenger and freight traffic, the appearance of an industry moving from moderately managed decline to spectacularly badly managed expansion.

- The placing, by the Secretary of State for Transport, Local Government and the Regions, of Railtrack into administration in October 2001.

At the present time, despite the recent SRA Strategic Plan, (*Building a better railway*, SRA, published on 14th January 2002) there appears to be little confidence in the future outlook. In the wake of the publication of the plan, newspaper editorials were scathing:

- The Financial Times stated that; *"the strategic rail plan should be read as a work of fiction".*

- The Daily Telegraph stated that; *"having seen the expropriation of Railtrack's owners, investors are understandably reluctant to stump up. They will want a risk premium of the kind that is paid to investors in Zimbabwe".*

- The Independent stated that; "*Everything of real value in the plan is dependent on extra private investment. And of course, the government's handling of Railtrack, when it effectively bankrupted the company and seized its assets, must place that in some doubt*".

- The Times stated that; "*Private sector money was never guaranteed and, after the recent efforts of Mr Byers, it looks far from assured*".

But there is a counter argument as well, from those on the 'inside'. The recent *Rail* magazine, 2002 National Rail Conference (held on 23rd January 2002) took an electronic poll of delegates. These industry insider results – with admittedly simplistic questions – provide cautious grounds for optimism:

- 90% stated that they were prepared to invest money and resources to make the Strategic Plan work.

- 59% stated that they thought passengers and freight users would see a significant improvement within three years.

- 64% stated that they thought the Strategic Plan paved the way for the industry to work together effectively.

This report aims to show how we can create a far better rail network by a process of evolution, not revolution. In so doing, we hope to help rail passengers and all segments of the rail industry to have a positive and practical vision of the future.

2 History and structure

We live in a small country with lots of railway. Britain's rail network is one of the largest, most complex in Europe, with 10,500 route miles. Total track lengths are 34,100 km in the UK compared with 31,800 km in France and 36,500 km in Germany (Source: *Come back Dr Beeching,* The Economist, 19th January 2002)[4]. The rail network comprises some:

- 2,500 stations;
- A rolling stock fleet of roughly 12,000 vehicles;
- Over 35,000 freight wagons.

Over its 176 year history the UK rail industry has been in private hands for three-quarters of the time. However, there has also been heavy governmental interference from the outset. Governmental action began in the 1830s and continued with detailed price control in the late 19th century. The government leaned on companies to build countryside branch lines, such as the so-called 'farmer's lines' in East Anglia. This intervention had the effect of watering down capital investment.

The overwhelming majority of the UK rail network has been built by the private sector. By 1900, the railway network was 18,665 miles. History shows that a fragmented industry was still very capable of providing comprehensive geographic coverage.

[4] Britain's railways are used less intensely than in Germany or France. Annual passenger kilometres total 39 billion in the UK compared with 74 billion in Germany and 73 billion in France. Part of the explanation for this pattern is the perverse effect of government regulation in the 19th century, when railway companies were limited to a set rate of return on assets. As a result, the only way to raise profits was to expand their asset base – railway lines. A century later, two thirds of all government subsidy is spent on these under-used regional networks – only one third is spent on inter-city routes and commuter lines. Press reports (The Economist, 19th January 2002) suggest that Lord Birt, who is undertaking a study of the future of the railways for the prime minister, has concluded that rail investment needs to be concentrated on London and the South-East. The implication of this review is that many under-used regional branch lines will need to close.

Table 2.1

The railways – a corporate history		
1825	Wheel & rail	One company
1867	Wheel & rail	467 private companies
1921	Wheel & rail	100+ private companies
1923	Wheel & rail	Big four private companies
1948	Wheel & rail	One public corporation
1996	Wheel versus rail	125+ private companies

In the late 19th century the government limited railway companies' profits to a set return on assets. As a result, in order to raise their profits, the companies built extra railway lines across the country, in order to enlarge their asset base.

Box 2, on the following page, shows key dates in Britain's railway history and how this country gradually lost its global pre-eminence at the vanguard of rail transport. Way back in 1904, Great Western's City of Truro was the first train to be recorded running at over 100 mph. At its zenith, in 1912, the railway network was over 20,000 miles in length.

During the 19th century the railway industry at one stage comprised some 467 companies – the dot.coms of their day, such as in 1846, when 272 Acts of Parliament were passed authorising new lines. Economics and the 1921 Railways Act resulted in the amalgamation of 123 main line companies into the 'Big Four' (GWR, LMS, LNER and SR) in 1923.

The old private companies did everything. They owned and maintained the tracks, bridges, tunnels, signals and stations. They mostly built their own locomotives and rolling stock and, of course, maintained them. This tradition of doing everything continued with the Big Four.

After World War 2, the Big Four railways were nationalised into British Railways in 1948. The nationalised industry faced a huge backlog of renewals and ageing rolling stock – partly attributable to the war. It took until 1955 to announce the Modernisation Plan, which aimed to replace worn out tracks and signalling, extend electrification and replace steam with diesel traction. However, the Modernisation Plan was flawed in that it wasted much money. Many previous projects that had been rejected were now dusted off and implemented. For example, the Carlisle marshalling yard was built, opened and closed within six months!

Just as the flawed Modernisation Plan got under way, the British people 'never had it so good' and economic growth brought about strong growth in private car ownership – the first section of motorway was opened in 1960.

Box 2 The Railways – a concise history

1801	First public railway sanctioned by Act of Parliament
1825	Stockton & Darlington Railway opens – first public railway to use steam locomotives
1830	Canterbury & Whitstable Railway opens – first public passenger railway to use steam locomotives
1838	First portion of Great Western Railway opens
1846	Railway mania – 272 Acts of Parliament passed authorising new lines
1863	World's first underground railway opens from Paddington to Farringdon Street
1886	First electric railway opens in Brighton
1892	Conversion of Great Western broad gauge to standard gauge
1895	Railway race to the north. East and West coast companies compete on speed between London and Aberdeen
1904	City of Truro sets new speed record of 102.3 mph
1921	Railways Act amalgamates railway companies into Big Four (GWR, LMS, LNER & SR)
1938	LNER locomotive Mallard breaks world speed record for steam locomotives at 126 mph
1948	Railways nationalised and British Railways formed
1955	BR Modernisation Plan approved
1963	Beeching Report published
1966	West Coast Main Line electrified between London, Birmingham, Manchester and Liverpool
1973	Prototype HST breaks world diesel record at 141 mph
1974	Electrification of WCML to Glasgow
1976	Introduction of 125 mph high speed train service – fastest diesel service in the world
1981	Serpell Report proposes further extensive rail closures
1991	Electrification of ECML to Edinburgh
1993	Railways Act to privatise BR
1994	Channel Tunnel opens
1996	Railtrack sold
1997	Passenger franchise sales completed
1998	Heathrow Express opens

Table 2.2

100 Years of improvement – fastest journey times from London

City	1900	1949	1999
Aberdeen	11h 5m	11h 50m	7h 1m
Cardiff	3h 19m	3h	1h 50m
Edinburgh	7h 45m	8h	3h 59m
Inverness	12h 50m	14h 14m	8h 10m
Leeds	3h 49m	3h 54m	2h 2m
Leicester	1h 55m	2h 1m	1h 8m
Newcastle	5h 17m	5h	2h 36m
Plymouth	5h 7m	4h 30m	2h 58m

(Source: www.railwayforum.com/educational)

Competition from the road led in 1963 to the famous Beeching report on the Reshaping of British Railways, as the Modernisation Plan was replaced by the Beeching axe. A second report in 1964 proposed further rationalisation of the network. Many would argue that Beeching was in fact the saviour of the railways because without action, the railways would have sunk without trace in a sea of debt and deficit.

The 1970s saw continued losses by British Rail and the 1982 Serpell Report considered reducing the network to a profitable core of about 3,000 route miles.

During the 1980s, under Sir Robert Reid, British Rail began a 10-year programme of restructuring into business sectors. The key businesses were:

- InterCity
- Network SouthEast
- Regional Railways
- Trainload Freight
- Railfreight Distribution
- Red Star Parcels

As a result, freight ceased to be subsidised in 1987 and InterCity ceased to receive subsidy in 1988.

The overwhelming characteristic of the 1970s and 1980s railway industry was managed decline. This mindset continued into the early 1990s, with the privatisation process initiated against a backdrop of poor growth expectations for passenger and freight traffic.

In November 1990 the Secretary of State for Transport, Cecil Parkinson, announced that the Government was determined to privatise British Rail. This was followed by a White Paper in July 1992, *New Opportunities for the Railways*. The Railways Act, introducing privatisation, received the Royal Assent in November 1993. The big change from privatisation was the separation of wheel and track. For those seeing vertical integration as a solution to current problems, it is worth reminding that this structure didn't prevent decline over the past century.

In April 1994, Railtrack was separated from BR and BR was re-organised into operating units for subsequent sale or franchising. The first franchises were awarded in December 1995 and two of the rolling stock leasing companies (ROSCOS) were sold in January 1996. In February 1996 the third ROSCO was sold and the first track renewal and infrastructure maintenance companies were sold.

The 1999 Railways Bill established the Strategic Rail Authority, by transfering to it the functions of the Franchising Director and some powers of the Rail Regulator. The Bill also provided for the Rail Regulator to take account of guidance from the Secretary of State. However, Labour had not sought to fundamentally change the industry structure. Their 1997 General Election manifesto recognised that change would have to be made,

"as we find it, not as we would wish it to be".

The privatisation process and reforms under New Labour have led to the creation of:

- 25 train operating companies (Tocs) with franchises of varying lengths.
- Three rolling stock leasing companies (ROSCOS)
- Railtrack
- Four major freight companies
- Office of the Rail Regulator (ORR)
- The Strategic Rail Authority (SRA)

Other non-franchise passenger operators include Eurostar and the Heathrow Express.

In February 1996, British Rail's bulk freight operations were sold to North & South Railways – now called English, Welsh & Scottish Railways (EWS). The other major companies in the rail freight sector are Freightliner (formerly BR container business), Direct Rail Services (DRS) and GB Railfreight.

Box 3 The regulated railway

The Office of the Rail Regulator (ORR) regulates Railtrack's stewardship of the national rail network. The ORR provides the economic regulation of the monopoly and dominant elements of the rail industry. The Regulator is independent of government. Railtrack operates as the monopoly owner and operator of the rail infrastructure under a network licence issued by the government but enforced by the regulator.

The regulator has a range of statutory powers under the Railways Act 1993, as amended by the Transport Act 2000 and the Competition Act 1998. These powers are used by the regulator to set the contractual and financial framework within which Railtrack works. In other words, the powers are meant to ensure that Railtrack's income – both private finance and public subsidy – is used effectively to maintain, renew and expand the network.

The Strategic Rail Authority (SRA) was formally established on 1st February 2001, as the successor to the Office of Passenger Rail Franchise (OPRAF). It operates under directions and guidance issued by the government. It has a key role in promoting and developing the network. The SRA is the central body engaged in the negotiation of rail franchises. It is currently engaged in the process of trying to replace the existing passenger rail franchises with longer terms. Thus far, however, the process has only resulted in small extensions to franchises in return for improvements in services by the Tocs.

When Railtrack was established as a public corporation, it was subject to light regulation. When it was then privatised, there was no attempt to strengthen the regulatory environment. This was clearly a mistake that had to be rectified.

Too many railways?

In a recent article (*Come back, Dr Beeching,* 19th January 2002) The Economist argued that Britain still has far too much railway. The idea that the UK is a small country with lots of railway is supported in the table below. Britain has the second largest rail network in Europe, but as the table shows, its railways are used less intensively than those on the continent. Moreover, even with a 50% increase in passenger traffic – as targeted in the SRA Strategic Plan – over the next decade, they would still be used less intensively, if the rail network was to be maintained at the current size.

Table 2.3

Small country, lots of railway

	Britain	France	Germany	Japan
Land mass, thousand sq km	244.9	551.5	356.9	378
Track, thousand km	34.1	31.8	36.5	27.5
Annual passenger traffic, km billion	39	73	74	384

(Source: The Economist)

The Economist argues that, broadly speaking, the route network divides into three categories:

- Inter-city routes
- Commuter lines
- Branch lines

The branch line network is the least efficient area of the railway. The Economist points out that two-thirds of all government subsidy is spent on under-used regional networks. This is significant, given that 70% of all rail journeys begin or end in London. Despite this South-East weighting to passenger traffic, South-East train operating companies receive less than a fifth of total train subsidies. Moreover, it is in the South-East where the capacity constraints on the rail network are most obvious and where road congestion and air pollution provide the strongest argument for government subsidy for rail travel.

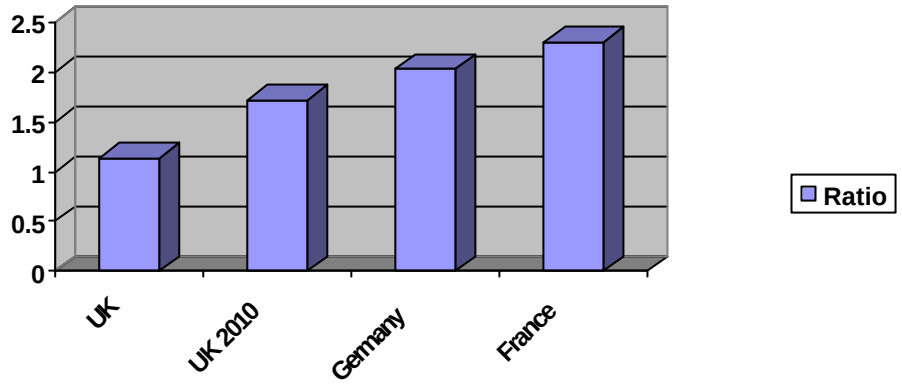
SRA data (published in *Come back, Dr Beeching,* The Economist, 19th January 2002) shows that in the most subsidised TOC franchises, the subsidy can range between 20 and 45 pence per passenger mile.

Press reports suggest that Lord Birt's study for the prime minister, on future transport options has concluded that rail subsidy needs to be concentrated in the South-East.

Figure 2.1

Passenger-track ratio

(ratio of annual passenger km billion to track, 000 km)



(Source: IoD calculations. UK 2010 figure assumes passenger traffic growth of 50% – SRA Strategic Plan target)

In order to match the present German intensity ratio of two, by 2010, total track kilometres would need to fall to 29,250 km – a reduction of almost 5,000 km or roughly 15%. This calculation assumes that the SRA Strategic Plan target of a 50% growth in passenger traffic is attained. If it is not, the implication for total network lengths is obviously more severe.

We recognise that these track estimates can only be seen as broad indicators of excess capacity, given that network capacity involves both track and trains. However, the magnitude of the differential between the UK and France and Germany does suggest that Dr Beeching's knife is ready for sharpening.

This year, for example, every passenger on every train gets 38 pence for every mile travelled through suburban Wirral to Liverpool.

3 The impact of privatisation

Two sets of expectations in the mid-1990s need to be borne in mind, when assessing rail privatisation:

- First, at the time of privatisation, and subsequently, many commentators adopted a neutral 'jury is still out' position towards railway privatisation. In 1997, a Leeds University study (*Rail Privatisation – How is it going?* CA Nash, Institute of Transport Studies, ITS Working Paper 497) retained an air of qualified optimism, stating:

  "There remain uncertainties ahead and it is by no means clear that the outcome will necessarily be more favourable than it would have been under the old regime. However, few observers would have imagined at the start of the process that it would be possible virtually to complete such a complicated privatisation process within the space of three years. If franchisees are indeed able to fulfil the terms of their franchise agreement whilst at the same time operating at a profit, prospects for the railway industry look good. Only time will tell if this is indeed the case".

  Very radical change was implemented over a very short period of time. It was always going to take time for the new structures to bed down.

- Second, the significant growth in passenger and freight traffic was not anticipated. Post-privatisation, there has been a 28% increase in passenger train miles and a 39% increase in freight tonne miles. The rail network became a victim of its own success, as the number of trains on the system increased, obstructing one another and reducing service reliability.

We will now examine the impact of rail privatisation in the following areas:

- Safety
- Passenger numbers
- Investment
- Pricing and public subsidy
- Punctuality
- Freight traffic

Safety

At face value, statistics do not support the view that there was a dramatic deterioration in safety on the railways post privatisation[5]. Safety can be looked at in several ways:

- The number of significant train incidents
- Signals passed at danger (SPADs)
- The number of broken rails

Significant incidents

The Cullen Report (*The Ladbroke Grove Rail Inquiry,* The Rt Hon Lord Cullen, Health and Safety Executive, 2001) has acknowledged that overall standards of railway safety – as measured by the number of serious incidents threatening life and property – have continued their long-term trend improvement[6].

The number of significant train incidents[7] per million train miles run has improved significantly over recent decades. During the second half of the 1990s, there was a resumption of trend decline. HSE statistics show a rate of 1.01 in 1975, falling to just under 0.5 by 1990 and, after a small pre-privatisation rise, to 0.26 in 1999-2000 (see Table 3.1).

Table 3.1

Railway accidents
(absolute number and rate per million train miles travelled)

	1990	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000
Rate per million train miles	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3

(Source: Transport Statistics Great Britain 2000)

Signals passed at danger

The number of signals passed at danger (SPADs), fell to the lowest number ever in 2000-01 (Source: The Railway Forum, September 2001). Between 1995 and 1998 there was a steady reduction in SPADs. In the first half of 1998, the number of SPADs began to grow and

[5] Some commentators argue that the measured safety improvements are a mirage, owing to a fall in the reporting of incidents post privatisation.

[6] One should add the caveat here that focusing on these statistics risks examining the symptoms rather than the cause.

[7] This includes an array of incidents from broken locomotive windscreens to major train collisions.

remained largely stable until the middle of 1999, when it started to fall as a result of greater driver awareness after the Ladbroke Grove accident. Implementation of the train protection warning system (TPWS) by December 2002 should significantly reduce the number of future SPADs. Advanced Train Protection (ATP) systems, which work at much higher speeds than the TPWS, have been fitted on First Great Western trains from Paddington.

Recent press reports (*Rail* magazine, No. 428, February 2002) state that HSE railway inspectors are satisfied with Railtrack's actions to reduce the risk of SPADs at 21 of the 'top 22' signals identified across the network after the Ladbroke Grove collision in October 1999. HSE reports that the railway industry has made a lot of progress since Ladbroke Grove, but also criticises the wide variations in the way different Railtrack zones deal with SPADs.

Broken rails

The Rail Regulator has acknowledged that track quality worsened in the years before privatisation. The number of reported broken rails rose from 656 in 1994-95 to 973 in 1998-99 followed by 945 in 1999-2000. HSE reported that the figure was "*unacceptably high"* and *"a significant cause for concern"*. This was not surprising, given the increase in passenger and freight traffic.

Research published in a letter to the Financial Times showed that over the 1961-1990 period British Rail achieved an annual track renewal rate of 2.2% per annum – on a par with the 2-2.5% per annum rates achieved by the larger European railways. However, over the five years to March 2000 Railtrack only achieved a cumulative renewal rate of 3.3%.

There is no denying that the tragic rail crashes at Southall (1997), Ladbroke Grove (1999) and Hatfield (2000) shattered public confidence in Railtrack and the privatised rail industry structure. Ladbroke Grove highlighted the problem of SPADs. Hatfield highlighted the problems of broken rails. Lord Cullen's public inquiry into the 31 deaths at Ladbroke Grove described Railtrack as "*incompetent and inadequate"*. His second report said fragmentation of the industry after privatisation had hampered efforts to improve safety on the network.

Even supporters of rail privatisation raised doubts in the wake of Ladbroke Grove. Professor John Hibbs[8], in reference to the failure of communication that was part and parcel of the crash, refers to the so-called 'cloud on the mountain' problem. Information between Railtrack and Tocs needs to be passed up and across and back down again, whereas prior to privatisation, the information would merely have been transferred horizontally. In the up and across and down model, the information may get stuck or lost or altered in the process.

Railtrack had become a contracting company with around a dozen or so first-line maintenance contractors who in turn passed on much of the work to 2,000 independent sub-

[8] In conversations with author.

contractors. This resulted in Railtrack having no clear understanding of the state of the rail network.

The management failings surrounding these incidents are well documented and clearly show that Railtrack did not have the safety culture passengers demand. However, despite the tragic loss of life and injury, these management failings, of themselves, do not justify wholesale industry restructuring. Hatfield clearly sent a shockwave through Railtrack and should ensure a far greater priority for track renewal in the future.

Serious management failings have been evident over the post-privatisation period. Railtrack's lack of a comprehensive asset register, that was not just fully populated, but also provided accurate information on the condition of assets, always risked problems. This was because of Railtrack's policy of 'sweating assets' – the policy of not replacing track etc at regular intervals, regardless of condition. The Hatfield tragedy exploded a time-bomb within Railtrack's management culture and led to the replacement of hundreds of miles of suspect track.

One could reasonably argue that Railtrack has reaped massive financial failure from not putting safety first and will surely have learned the lesson, in whatever form it eventually emerges from administration. Safety is more difficult to manage in a fragmented railway, than under BR, but this does not mean that the current railway structure cannot be operated safely. Pretending otherwise, is playing politics.

Railtrack has announced (*Railtrack opts for ultrasonic fleet*, Rail magazine, 428, February 2002) that a new fleet of ultrasonic rail inspection vehicles will be running by the spring of 2003. It is also leasing a range of rail grinders as part of a five-year programme, beginning with the main-lines, to restore the correct profile on rails by gradual grinding[9].

The Rail Regulator has acknowledged that Railtrack is making real progress with the establishment of a register of its assets and their condition. There is also progress towards establishing a Rail Industry Safety Board, as recommended by Lord Cullen. Another indicator of change is the appointment of an engineer, John Armitt, as Railtrack's chief executive.

There remain key issues, with implications for safety, that do need to be addressed, but they do not justify radical changes in industry structure and/or ownership:

- 'Possession rights' for track maintenance and the limited time available owing to adversarial contractual relationships between the Tocs and Railtrack.

- The fragmentation of Railtrack from maintenance contractors and sub-contractors from the maintenance contractors.

[9] Grinding is important in controlling head checking and gauge corner cracking and broken rails – the cause of the October 2000 Hatfield accident.

Safety must always be paramount and it is clear that over the early years of privatisation, there were serious management failings on the part of Railtrack. There are now grounds for optimism for the future, in the wake of changes introduced in the post-Hatfield environment. Most significantly, Railtrack must now surely understand that it is in its' own financial interest to put safety first.

Passenger numbers

Stephen Glaister, professor of transport & infrastructure at Imperial College, University of London, has stated that: (UK Transport Policy 1997-2001, paper delivered to British Association for the Advancement of Science, 4th September, 2001),

"the [passenger] growth in the period after privatisation was far more than can be explained by the conventional response to increasing economic activity or reduction in fares … [the growth] was at a level without historical precedent, something must have been going right".

The SRA produces National Rail Trends statistics covering:

- Passenger journeys
- Passenger kilometres
- Timetabled train kilometres

Table 3.2

Passenger kilometres – highest on record GB (billions – all operators)	
1986-87	30.8
1987-88	32.4
1988-89	34.3
1989-90	33.3
1990-91	33.2
1991-92	32.5
1992-93	31.7
1993-94	30.4
1994-95	28.7
1995-96	30.0
1996-97	32.1
1997-98	34.7
1998-99	36.3
1999-00	38.5
2000-01	39.2
(Source: SRA)	

Between 1996-97 and 2000-01, the total number of passenger journeys rose from 801 million to 957 million – an increase of 20%. By the end of 2001, the total was at almost one billion – back to the levels experienced in the 1950s. Between 1995-96 and 2000-01, the total number of passenger kilometres travelled rose from 30.0 billion to 39.2 billion – a 28% increase, with total passenger kilometres higher than at any time since 1947. These figures appear even more impressive when one considers the loss of passengers in the wake of the Hatfield accident.

However, there is uncertainty as to just how to interpret these figures:

- First, because passenger journey figures include an element of double counting, as a journey involving more than one operator is scored against each operator. This contrasts with results previously published for British Rail, for which a through-ticketed journey was counted only once, irrespective of any changes made.

- Second, because of the difficulty in differentiating between cyclical and secular forces. An optimistic interpretation might be that the government's macroeconomic policy framework has reduced the boom and bust cycle and so there is less need to differentiate between cyclical and non-cyclical influences. However, if we take an alternative view, that the business cycle is not dead, and we will continue to see upswings and downswings in economic activity, the question to be asked is how much of the recent growth could be lost in any future downturn? Historical experience shows that the number of passenger journeys rose by around 200 million in the late 1980s boom – very similar to the growth over the 1995-96 to 2000-01 period. The early 1990s recession saw total passenger journeys fall 77 million from peak to trough. Added confusion arises from the contrasts between the late 1980s and late 1990s. In the late 1980s, season tickets grew very strongly at the same time that ordinary fares were flat or falling. However, in the late 1990s, both types of passenger journey grew strongly, around 19-20%.

- Third, there are other factors, hard to quantify, such as road congestion and ticket pricing, which will undoubtedly have influenced passenger demand.

The government has acknowledged that the railways are carrying more passengers than at any time since World War II, but that the drivers of this increase were largely external to the industry, including economic growth with more trade and travel, rising road traffic congestion and rail fare regulation.

Table 3.3

Timetabled train kilometres GB (millions)	
1997-98	376.3
1998-99	405.1
1999-00	418.4
2000-01	427.2
(Source: SRA)	

In the late 1980s, the number of rail journeys was soaring upwards and was forecast to rise 35% over the following 10 years. Instead, demand actually fell, although it subsequently resumed an upward path from the mid 1990s onwards. The Rail Passenger Demand Forecasting Council (RPDFC) – consisting of the Tocs, the SRA, the Rail Regulator, London Underground and Eurostar – has commissioned research predicting passenger growth of between 35-60% over the coming decade, with an understanding that the industry should plan on the basis of a 50% increase. Transport economists at Sheffield University separately forecast growth of a similar order of magnitude (*Future demand for rail travel*, ATOC Briefing Sheet, September 2000)

Our interpretation of passenger traffic numbers is that there has been a significant improvement, one that is set to continue as the combined effects of Hatfield being forgotten and new rolling stock coming on stream, takes effect. Table 3.3 shows that the volume of train service provision has increased by 14% over the past four years.

Investment

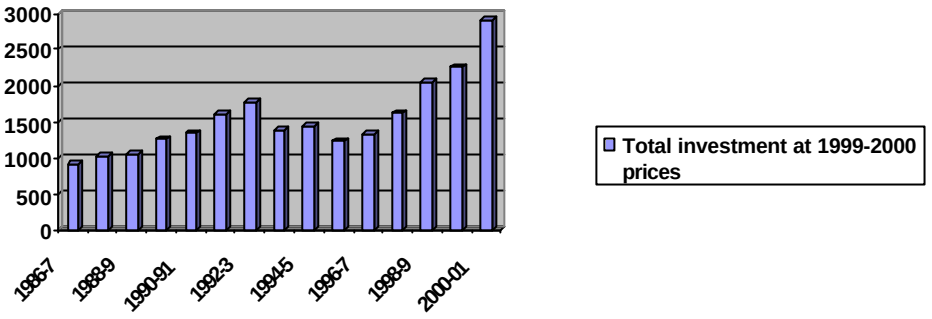
One of the key arguments for rail privatisation was that it would free the rail industry from the constraints imposed by HM Treasury on investment.

Indeed, analysis of public sector investment over the past five years, strongly supports the case for privatisation. Over the past five years, rail investment has taken an upward path whilst overall public sector net investment has declined[10].

[10] The SRA publishes statistics on rail industry investment. They include expenditure on rolling stock, track renewals, new routes and electrification, signalling, buildings, plant and equipment. The results for 1993-4 to 1995-96 include private sector investment on the Heathrow Express, Ashford International Station and new networker trains.

Figure 3.1

Investment in the rail industry (total at 1999-2000 prices - £ million)

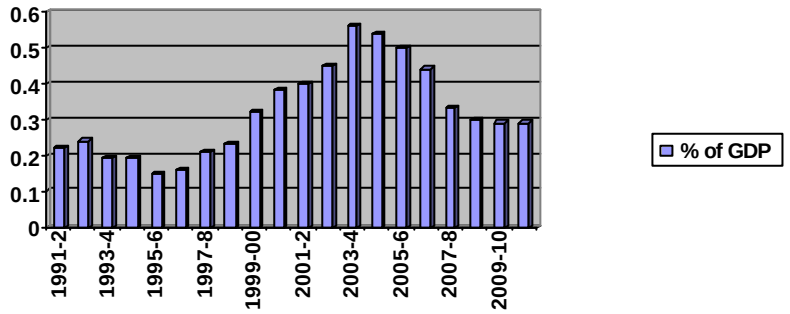


(Source: SRA)

SRA figures show that at constant prices rail investment is now at the highest level for more than 50 years. In real terms, total rail investment has more than doubled since before privatisation in 1993-94.

Figure 3.2

Rail investment – past, present & future
(Total public & private as % of GDP)



(Source: Transport 2010: The Ten Year Plan, DETR, July 2000)

Since privatisation more than 3,600 new vehicles have been ordered, worth in excess of £3.5bn, all of which will be in service by the end of 2004. All Mark 1 slam door rolling stock will be phased out by 2004. Major terminuses, such as London Paddington, have received very considerable new investment, aimed at exploiting new rental opportunities.

Over the first control period, Railtrack spent £2bn more than the amount allowed for by the Rail Regulator when setting the access charges in 1995.

Despite these impressive figures, a number of important caveats need to be applied to the data:

- The data in the SRA investment series are not directly comparable pre- and post- 1994-95 because Railtrack includes expenditure in its capital account that would previously have been recorded as maintenance expenditure.

- Part of the large increase in investment is attributable to the huge cost over-run on the West Coast Main Line upgrade.

- Even where the quantity of investment is not in question, the quality might be. The Rail Regulator has observed that the company's performance in terms of reducing train delays and asset renewal has been below expectations. The magazine *Modern Railway* (as reported in *The Times*, 15th January 2002) has suggested that BR could upgrade a line for £5m per mile at current prices, whereas Railtrack is spending three times as much on the same task. The magazine's industry editor, Roger Ford has stated that:

  "the extra costs largely come from the need to pay compensation for disruption and the increase in the number of companies on the job all seeking a profit".

- There is an element of catch-up in the post-privatisation investment series, owing to the 1994-96 pre-privatisation hiatus and a backlog in rolling stock orders.

- Asset sales may have blurred the investment series.

Table 3.4

Total private investment in rail (£ billion)	
1993-1994	0.0
1994-1995	0.1
1995-1996	0.1
1996-1997	1.2
1997-1998	1.7
1998-1999	2.0
1999-2000	2.8
2000-2001	3.5
(Source: BBC News On-line, 11th January 2002)	

An overall conclusion must be that rail investment in the post-privatisation era has been good, but not that good.

Pricing and public subsidy

Pre-privatisation, rail fares were raised at inflation-plus levels as a means of choking off demand and reducing the BR financial deficit. The creation of effective private monopolies under most franchise agreements means that the SRA has been granted powers to regulate fares. Regulated fares include:

- All standard-class weekly season tickets where such a season ticket existed in 1995.
- All saver tickets for journeys where a saver ticket existed in 1995.
- All standard day singles and standard day returns for journeys within the London zones and from stations in the London suburban area into the Travelcard zones:
- All season tickets, weekly and longer, for journeys within the London Travelcard zones and between stations in the Travelcard zones and stations outside the zones.

Unregulated fares include all first-class fares, most cheap day return fares and all advance purchase tickets. Roughly 40% of fares revenue comes from fares that are regulated. Research carried out for the SRA found that the average fare paid rose by 12% in real terms over the 1990-1995 period, compared with just 0.5% real price growth subsequently, up until 2000.

Table 3.5

Comparative fare rises (June 1995 – January 2002)

(Note: UK inflation rose 17% over this period)

Franchise	1st single	Std single	Super saver	Saver	Away break	Cheap day	First season	Std season
Anglia	20	19		15			19	11
Chiltern	12	35			16	35	15	15
Connex SE	15	15			20	28	14	14
C2c		-10				14		14
First GE	17	16			17	21	14	14
First GW	40a	40	24	13			17a	17
Gatwick Express	34	24				17	13	13
GNER	42a	30	37e	13			23a	16
Midland M	36 b	49b	39b	15b			13b	6b
Silverlink	18	22			20	17	14	14
South Central	20	20			24	24	12	12
South West	35	14		29	29	29	6	6
Thames Trains	15	11			15	23	10	10
Thameslink	10	10			49	45	3	3
Virgin	85c	85	50d	15			15c	15
WAGN	11	10			17	15	12	12

(Source: The Fare Dealer, Barry Doe, Rail Magazine 427, 2002)

(a) Now includes free hot and soft drinks
(b) Now includes free hot drinks
(c) Now includes free hot and soft and alcoholic drinks and food
(d) Virgin and GNER have abolished supersavers so this is 2002 savers against 1995 supersavers

Detailed analysis by one of Britain's leading rail fare experts, *Rail* magazine's Barry Doe, across different Tocs, is shown in the Table 3.4. The table gives the percentage change in fares for different tickets since 1995 – UK inflation was around 17% over this period. The table shows a very large variation in price movements between different Tocs – some of which will claim to have enhanced their service with free food and beverages, airport style lounges etc. The table clearly shows that some fares, such as open returns, have gone up well beyond the rate of inflation.

The Rail Passengers Council (RPC), commenting on the latest round of price changes (RPC News Release, 21st December 2001) stated that:

"By and large, operators have either frozen fares or kept the increases very low. Many London commuter fares have actually come down, reflecting poor performance, which is good news of a sort, even though passengers would rather have good performance ... we are particularly concerned that on some routes walk-on fares have seen massive increases, and some business passengers and season ticket holders will face rises of 10% to 17% in first-class fares".

Public subsidy

Prior to 1994-95, government support to the rail industry comprised of grants to British Rail and passenger transport executives (PTEs) and borrowing by BR from the National Loans Fund. The peak shown in the table below for 1992-93 relates to the high levels of investment in the Channel Tunnel. The data show that government support remains at a relatively high level. On the one hand it could be argued that one of the primary motives of privatisation – removing government support – has been a failure. Alternatively, one could argue that if BR hadn't been privatised, the levels of support currently received would not have been available and the rail industry would have been in a parlous state.

Table 3.6

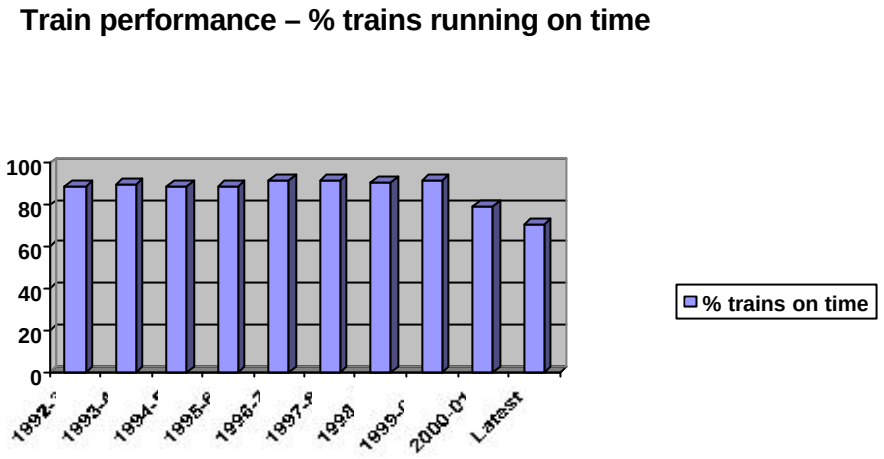
Government support for the rail industry (£ millions)

1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
988	847	613	446	795	1192	1584	2171
1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
1627	1697	431	1056	1829	1586	1418	1214

(Source: DTLR. 1992-93 peak relates to investment in the Channel Tunnel)

Punctuality

Figure 3.3



(Source: SRA)

Latest SRA data shows that only 71% of trains were on time between October and December 2001. However, this situation needs to be seen in the context of Railtrack's administration. In other words it has arisen at least in part, because of government intervention. However, there is clearly a problem. Press reports (*That's enough passengers*, The Economist, 5th January 2002) cite Railtrack managers stating that very considerable amounts of track remain at or beyond their physical life and therefore need replacing.

SRA data show that across all franchises, prior to Hatfield[11], standards of punctuality and reliability were a little better than in the final years of state ownership.

We have already discussed the growth in rail traffic that overcrowded and strained the rail network, but it is also true that research shows that problems were not always associated with those lines experiencing growth in traffic. Railtrack estimated that for every 1% increase in service, delays went up by 2.5%. The rail network is not like the road network. The rail network is a closed system with all the resulting consequences for track capacity.

[11] Post-Hatfield, network speed restrictions resulted in a catastrophic fall in punctuality and reliability that took more than a year to resolve.

One key problem over the past five years has been the lack of financial incentives for Railtrack to promote investment. The Rail Regulator reported to the House of Commons Select Committee that the financial framework put place in at the time of privatisation, was deficient and that there was:

"no specification of what Railtrack had to do for the access charges which it receives and very little was done … to encourage the making of investment".

The basic problem was that the regulatory regime established on privatisation did not envisage the growth in railway traffic that occurred[12].

Freight traffic

In 1953, rail freight accounted for 42% of freight moved, a total of 37 billion tonne kilometres, falling to a post-war low of 13 billion tonne kilometres in 1994-95.

There has been considerable growth in freight moved – billion net tonne kilometres – since privatisation. Between 1994-1995 and 2000-01, total freight moved rose from 13 billion net tonne kilometres to 18.1 billion net tonne kilometres – a rise of 39%. This strong growth continued, with latest figures showing 8% year-on-year growth in the first quarter of the 2001-02 year.

Rail now accounts for 10% of freight moved, compared with 6% at privatisation. The SRA wants to see this figure rise by 80% to 18% over the next decade.

Total freight moved is, unsurprisingly, very cyclical. Total freight moved had peaked at 18.1 billion ntk in 1988-89, before falling sharply in the recession to the 1994-95 low point.

Over the past half century total freight moved has followed a long downward trend. This downward path was broken by the late 1980s boom. There is more to the most recent upswing than general economic influences, but this does not mean that the outlook is assured.

Potential problems arise from a number of sources:

- Corporate confidence – in time sensitive sectors – in rail freight may have been permanently damaged by the post-Hatfield network problems.

- The risk that Tocs will squeeze out freight-user capacity from the network

- International freight traffic has been seriously undermined by immigration problems and the Channel Tunnel, which have sharply reduced the number of freight trains operating each day. This is reported to have triggered an extra 30,000 lorries on UK roads.

[12] SRA figures show that the performance of individual Tocs, measured by passenger charter standards of punctuality and reliability, has been highly variable.

4 Market and regulatory structure

Market structure – do we need vertical integration?

Radical views of the future structure of the rail industry have emerged in recent years.

- Bus companies don't own the roads, and airlines don't own the sky, therefore why does the private sector need to own the track?

- Even if there is to be no nationalisation of Railtrack, some argue that there should still be the vertical integration of track and train. In other words, they assert the view that the privatised industry structure remains fundamentally flawed.

In most countries, the provision of train services is a potentially competitive activity[13] while the provision of track, signalling and associated infrastructure is largely non-competitive[14]. Structural separation to promote competition tends to follow two routes:

- Separation into regional integrated networks. This has two theoretical advantages. First, regional networks can compete with each other on routes that can be served by two or more networks. Second, each network has a degree of countervailing power in negotiating track access rights. However, US experience shows that access rights have been ineffective in maintaining competition lost through mergers.

- Separation of train operations from the provision of track infrastructure. This has been undertaken in many countries – though generally only for accounting purposes. Full ownership separation of rail infrastructure from train operations has been carried out in the UK, Australia (at the federal level), Sweden and the Netherlands. This form of separation increases transaction costs but it has the benefit of transparency.

[13] The way to maximise competition would be to allow open access to Tocs, but this was never an option on the railways, since nobody would bid for franchises or commit themselves to future investment.

[14] Of course, privatisation in a railway context was always a grey area, given the fact that the government remained the greatest source of revenue for Railtrack and the Tocs.

In work for the Institute for Public Policy Research (IPPR) commission on public private partnerships, John Hawksworth developed selection criteria aimed at deciding the question of ownership:

- The degree of direct competition in the market, with more competition favouring private ownership.
- The significance of non-commercial objectives such as safety or environmental issues.
- The scale and complexity of future investment programmes.
- The extent of uncertainty attached to future provision.
- The extent to which the business can be broken up without losing significant economies of scale and scope.

These criteria suggest that for train operators any public interest objectives can be met through franchise regulation, since competition for franchises and from other modes of transport suggest public ownership is unnecessary. Railtrack's monopoly status and the importance of non-commercial objectives such as safety might suggest the need for public ownership, but there are still persuasive arguments in favour of the private sector. Private sector management has shown itself to be far more dynamic and safety regulation can be applied through the Health & Safety Executive. Other transport sectors, such as airlines, clearly operate safely without recourse to public ownership.

For the ROSCOs and maintenance and renewal companies there is enough competition to suggest that public ownership is not required. In the case of major procurement projects private competition is critical given Railtrack's failure to control costs on the WCML. Phase Two of the Channel Tunnel Rail Link shows that private construction by Bechtel and London and Continental railways, which is then passed on to Railtrack (or its successor), provides a competitive model – which can hopefully be repeated in future enhancement projects, using so-called special vehicles.

Where we do believe there has been too much fragmentation is in the separation of maintenance and renewal contractors. It would be best to have far fewer contractors, possibly grouped together in geographical zones.

Richard Brown, chair of the Association of Train Operating Companies (ATOC), has argued for vertical integration by giving train operators control of their own track. His reasoning is that by giving Tocs control of the track, maintenance and renewal would be in the hands of those with the strongest incentive for safe operation.

The IoD is less enthusiastic for this proposal because it would create another set of problems. Most tracks are used by more than one Toc and most Tocs use track across more than one region – the WCML has 15 different operators. This would create problems of policing access if control were given over to one Toc. It is known that freight operators, in particular, are concerned at the prospect of losing out access to rival Toc operators.

The IoD concurs with the view of the new chairman of the SRA (comments at National Rail Conference 2002), that,

"[there is not] anything philosophically wrong or difficult with the contractual separation of infrastructure and operations, but what has gone wrong is the management of the interface".

The railway history of the 20th century shows that the bringing together of track and train is by no means an assured route to economic success, though there may be a safety case for vertical integration. The House of Commons Select Committee has acknowledged the difficulties involved with vertical integration. For 'enclosed' networks, vertical integration might offer some benefits but on other routes, which are operated by more than one Toc or freight company, problems of monopoly power might arise – the operator might provide track access rights to its own downstream operator at a lower cost than to third party operators. Clearly, there is the potential for the Rail Regulator to take action to ensure access at reasonable charges, but there might be other more subtle ways one Toc might be able to undermine the competitiveness of another.[15]

Even if an economic case for vertical integration could be made, the lack of a fully populated database of Railtrack assets, together with comprehensive coverage of their condition, strongly suggests that Tocs would be averse to taking on the added financial risk for track and signalling. In his recent book, *Off the Rails*, Andrew Murray quotes one engineer describing the network as being,

"held together with elastic and string … they have not replaced wiring, not replaced grease boxes … we get more faults day by day … more faults, less fixing".

One might also argue that it is better for the Tocs, such as Virgin, to think about trains and customers instead of tracks and signalling – though there clearly is a strong dependence of one on the other.

To a degree, there is already a degree of vertical integration – outside of 13 major stations, the Tocs already operate the stations on their lines. In order to incentivise Tocs to take on responsibility for track and signalling, they would have to see a clear net financial gain from a reduction in the track access charges they now pay.

There is an issue regarding vertical integration, where the Tocs may wish to see an investment in infrastructure improvement, but Railtrack is unwilling to proceed. However, Tocs have the ability to appeal to the Rail Regulator, and Railtrack has a renewal obligation incorporated into its network licence. The Transport Act 2000 contains new powers, to be used by the Regulator on the application of the SRA, to order Railtrack to upgrade parts of its network (including stations).

[15] There is an issue with regard to asymmetries in information between Railtrack and the Rail Regulator, which might tempt Railtrack to exploit its monopoly position at the expense of Tocs and the taxpayer, but this could be reasonably stamped on by the Rail Regulator.

However, this situation will require monitoring and if the Tocs don't feel the stronger network licence is effective, serious consideration of vertical integration will be back on the table. The Rail Regulator has stated (Herbert Smith, 2001, op cit) that:

"In the second periodic review of access charges we have rewritten the financial regime for Railtrack, giving it much stronger incentives and pressure to grow the network and do work well. It provides for the first time a clear specification of what Railtrack has to do for the money it gets from train operators and taxpayers, and how extra spending will be treated".

Unfortunately, this new financial framework had only been in place six months when the Secretary of State decided to place Railtrack into administration.

What has been lacking over the period since privatisation is a strong incentive mechanism to encourage Railtrack to invest in network renewal and enhancement. Access charges are set by the regulator, who has clearly acknowledged that the system was not established to deal with strong growth in rail traffic and resulting infrastructure investment demands. The network licence for Railtrack has been strengthened for the second control period, but the IoD believes greater imagination is still required in working out ways to incentivise Railtrack or its successor.

Radical thoughts

One possible radical model would see Tocs bid for units of time instead of a comprehensive franchise. A Toc might bid for commuter trains from Reading to Paddington between 07-00 and 09-30 hours, for example. This has the immediate attraction of providing so-called open access competition via a contestable market. However, it also risks the creation of even more train operating companies, adversarial contracts and problems of network connections.

In an industry historically starved of investment, heavily regulated, with many non-commercial services, we feel that this model is unlikely to encourage significant investment.

Longer franchises?

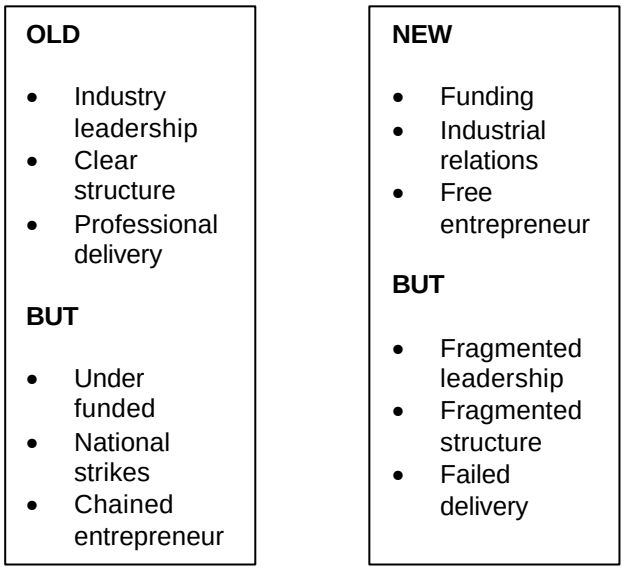
The IoD would agree with the House of Commons Select Committee that for both Railtrack and the Tocs much stronger incentives for success and far stiffer penalties for failure need to be introduced. In July 2001 the government published its draft franchising statement in which the SRA was charged with securing early improvements under existing franchises or by negotiating two year extensions. In the wake of Railtrack's collapse, short extensions are probably the only realistic negotiation on the table for the time being. However, we would wish to see a move towards longer franchise commitments with far greater incentives and penalties, at the earliest opportunity. The rail industry desperately needs new franchises with substantially enhanced performance and investment requirements. Tocs would then have a greater incentive to invest, knowing that they would have longer to reap a return.

Reversed polarity?

Chris Green, chief executive of Virgin Trains, has argued (*Phoenix from the Ashes – Rediscovering the business-led railway*, Sir Robert Reid Lecture, Institute of Logistics and Transport, 13th February 2001) that the railway industry has experienced reversed polarity pre- and post- privatisation.

According to Chris Green, the new world has reaped the benefits of improved funding, better industrial relations and a more entrepreneurial industry. However, he believes that this has been at the price of fragmented leadership, a fragmented structure and failed delivery. However, Chris Green asserts that the structure can be made to work through evolution not revolution.

Reversed polarity?



Regulatory structure – do we need horizontal integration?

The Rail Regulator, Tom Winsor, believes (*Positively regulating the railway industry*, speech to IEA conference, 26th June 2001) that his reform of access contracts, the periodic review and a range of new licence conditions will encourage and promote the enhancement of the network. He argues that there is no longer any regulatory overlap or competition. In other words, whilst the ORR and SRA have the same statutory objectives and purposes, these common objectives are served by separate and complimentary powers. The view of Tom Winsor is that:

"Parliament got it right in the Transport Act 2000, and Parliament need not be troubled again … an ORR/SRA merger would harm investor confidence, reintroduce considerable amounts of additional political risk, put up the cost of funding … the private sector train operators have collectively stated that they have grave concerns about legislation which may affect the independence of the regulatory regime … they said that certain principles were established at privatisation which they believe must be preserved. These principles are fundamental to the commercial stability of the industry and the long-term availability, sustainability and cost of finance … Given the events of 7th October 2001, it is even more important that financial markets remain confident in the future of rail investment. Among the most fundamental of these principles is that the industry is subject to regulation that is independent of government".

The IPPR (*Getting back on track – Reforming the ownership and regulation of Britain's railways*, Tony Grayling, IPPR 2001) favours bringing together the SRA and ORR. However, the main counter argument is that the regulator determines what access charges Railtrack can charge and if this function was merged with the SRA, then the Rail Regulator would have lost his independence. The SRA is subject to instructions by the Secretary of State while the Rail Regulator is subject only to his guidance.

If the roles were to be merged, the SRA, as the dominant purchaser of railway services, would also be able to determine the price and quality of those services. This provides a clear risk to future private investment, especially in the wake of the controversy surrounding Railtrack's administration. Railtrack is a monopoly supplier of rail infrastructure services, and the private sector needs to retain the ability to turn to an independent entity in relation to the quality and price of those infrastructure services.

If the ORR and SRA were to be merged this would be to the disadvantage of the Tocs. For example, the super regulator might wish to see considerable investment expenditure and would therefore raise access charges. However, with regard to fare regulation it could cap fares and squeeze the Tocs. There are clear problems with a super-regulator able to grant franchises and determine access charges.

Winsor has stated (speech on *The future role of the Rail Regulator*, the National Rail Conference, 23rd January, 2002) that merging the ORR with the SRA would damage the railways. Winsor argues for the role of an impartial regulator:

"*the simple point which the private sector makes is that the referee cannot play for one of the teams on the field. The role of an impartial regulator cannot be subsumed with that of the purchaser of infrastructure services, any more than a litigant in a case can expect then to don the robes of the judge and decide the case in his own favour*".

The IoD agrees with this view. Winsor argues that merging the SRA with the ORR would result in the railway being maintained on a patch-and-mend basis instead of by timely and competent renewals.

Winsor has acknowledged that the regulatory regime for control period one was flawed: a lack of accountability on the part of the infrastructure provider, black holes down which endless sums of private and public money was being poured and the users and funders of the railway powerless against what might be incompetent and inefficient spending of resources. Winsor has stated (*Creating an investment friendly environment*, speech delivered at Herbert Smith, 11th July 2001) that:

"In 1996, Railtrack was privatised on the basis of a network licence, a contractual regime and a financial framework which were not fit for the purpose".

Winsor has said that for control period two these problems have been rectified (2002 National Rail Conference speech). There is no doubt that Railtrack's network licence has been strengthened for the second control period, with the need for the creation of a comprehensive asset register and for the appointment of independent experts to assess the sufficiency of maintenance and renewal work. There is also a requirement for an annual return reporting on the performance and condition of the network, based on the output, asset condition and activity measures underpinning the periodic review – such as the condition of key track, signalling, electrification and other assets.

Much progress still needs to be made. In June 2001, Part 1 of Railtrack's 2001 Network Management Statement (NMS) was found to be unsatisfactory by the Rail Regulator – in key areas such as the scale of post-Hatfield delays and track quality.

If the government were to merge the ORR with the SRA it would be akin to a return to British Rail – back to a situation where control rests with a non-commercial board and is dependent on the vagaries of HM Treasury. It would undermine the freedom of Railtrack and the Tocs.

5 The future

SRA Strategic Plan

In January 2002 the SRA published its long awaited Strategic Plan for the railways over the next decade. The £67.5 billion plan relies on £33.5 billion of public expenditure[16] and another £34 billion of private investment[17]. There was very little 'new' information in the report. All the important areas of the plan were known from the government's 10 Year Transport Plan. In the original 10-Year Transport Plan government expenditure was estimated at £29 billion, but that figure has now been raised to £33.5 billion because of cost overruns by Railtrack.

There is much in the new plan to be pleased about:

- 1,700 new coaches - and the phasing out of all slam-door coaches – on South Central, Connex South Eastern and South West Train routes by the end of 2004.
- £400 million Rail Performance Fund to co-invest with rail companies in directing resources towards improved reliability.
- Completion of the West Coast Main Line upgrade by 2005[18].
- Infrastructure upgrades for the Virgin Cross Country franchise.
- Completion of the first phase of the Channel Tunnel Rail Link upgrade by 2003 – the first new mainline for a century.
- Introduction of the Train Protection and Warning System (TPWS) across the whole network by 2003.
- A national rail academy to ensure adequate training in specialised skills.
- Track and signalling improvements at 100 locations across the national network.

But there is also a great deal of much needed important work that is not planned for completion until the 2005-10 period. This includes:

- Longer trains and platforms to relieve overcrowding on South-East commuter routes

[16] Just over £1 billion per annum of this total is revenue support for passenger and freight train operators.

[17] It is important to note that the projected investment is expressed in gross terms at current prices, rather than net investment at constant prices.

[18] Trains will be able to run at 125 mph but the 140 mph may not be reached as the SRA is reviewing the upgrade.

- Upgrading Thameslink 2000 across Central London to relieve congestion on London Underground, by doubling capacity into the capital from Bedford and Brighton.

Even more disturbing, many important projects are placed in the dream category, 'for further development', beyond 2010. These include:

- Crossrail twin bore east & west tunnels in London
- Congestion relief in Birmingham and Manchester, including a new Birmingham New Street tunnel.
- Kings Cross - St Pancras superhub
- North-South High Speed Line
- Great Western Main Line renewal
- Multi-modal schemes

Public & private funding

The proposed public funding is divided into:

- Revenue support
- Channel Tunnel Rail Link (CTRL)
- Renewal schemes – primarily capital grants for the West Coast Main Line (WCML) upgrade
- Rail Modernisation Fund designed to lever in private investment

Of the targeted £33.5 billion of public sector funding over the next 10 years, the SRA estimates that 75% will be required to meet commitments and continue existing programmes.

The new head of the SRA, Richard Bowker, argues that there is too much negative coverage (see national newspaper editorial quotations in Chapter 1 – Introduction) of the potential for private sector capital. He argues that the private sector already has a strong record of investment in the railway, as shown by the £3 billion pumped into rolling stock since privatisation (*Making railways the first choice of the passenger*, The House magazine, 28th January 2002).

The IoD has sympathy with Mr Bowker's comments, but at the same time, we have to acknowledge that serious funding issues need to be addressed.

The catch-22

In order to attract in private capital, investors will need to be assured of the potential growth in passenger and freight traffic[19].

The Strategic Plan plan foresees very strong growth in both passenger and freight traffic over the next 10 years:

- 40-50% increase in passenger-kilometres (a reduction from previous government forecasts of 50% growth in traffic). This is based on passenger km statistics of 24 billion in 2000-01 as a baseline, rising to 34-36.5 billion in 2010-11.

- 80% increase in freight-tonne-kilometres[20].

- The projected passenger growth figures – a compound rate of around 4% per annum – represent a deceleration in growth when compared with actual growth in recent years.

On the congested main commuter lines and inter-city routes it is difficult at present to believe such growth is attainable. The existing network has clearly struggled, to say the least, to absorb the growth in passenger and freight traffic over the past five years and so there is a catch-22 for the future. Put simply, the problem is:

No investment without demand and no demand without investment

The potential problem here is implicit in the new SRA Chairman's call for a capacity utilisation strategy. In his 2002 Sir Robert Reid Railway Lecture, Richard Bowker stated that,

"Our fear must be that unless we create a strategy for the utilisation of this capacity, the timetable on which the network depends will become impossible to manage and the network impossible to grow".

Bowker's main point in this quotation refers to the haphazard network development over the past six years, but it also illustrates the key point that there is little room for capacity growth within the existing network. There must be concern that investment tails-off significantly after 2006, following the completion of the CTRL.

[19] The government seems to be ruling out heavy fare rises as a source of revenue for investment. The Plan states that, *"[the government] is considering changes to the way in which infrastructure will be financed in the future, so that most of it is paid for by funders and passengers only once it is in use, rather than up-front"*. Notice the word 'considering'. It suggests the SRA will continue to regulate fare increases, but it is not an unequivocal commitment.

[20] The plan to raise the freight market share to 18% by 2010, by way of an 80% increase in traffic, needs to be understood as a plan to restore it to where it was in 1980, in the wake of sustained decline.

The catch-22 has been made worse by the manner in which Railtrack was placed into administration. Speaking on the BBC's *On the Record* programme, IoD Director-General, George Cox stated that,

"I think Stephen Byers has got a problem of restoring confidence and credibility. I don't know anyone at present who is saying 'well at least Stephen Byers has got it in hand".

Cox articulates the view of many that the decision to place Railtrack into administration would result in companies needing more incentives before committing their money. As we have seen, there was a clear catch-22 even before the government shot itself in the foot over Railtrack. The timing couldn't have been worse.

In March 2002, 20 of the biggest names in City and US fund management, wrote to the Chancellor of the Exchequer, warning that the way Railtrack was placed into administration by Stephen Byers, had undermined trust. The fund managers argued that new projects will now carry an increased political risk. They also argued that the Secretary of State's threatened use of emergency legislation against the Rail Regulator,

"challenged the independence of the Rail Regulator and therefore challenged the whole concept of economic regulation for monopoly utilities".

Despite the announcement of compensation for Railtrack shareholders, there are still strong doubts about the government's ability to lever in private investment.

Do the numbers add up?

The former head of the SRA, Sir Alastair Morton, has argued that substantially more money may now be needed, than envisaged at the time of the 10-Year Plan – published in July 2000[21]. Shadow DTLR Secretary Theresa May (House of Commons debate, Hansard, 5th March 2002) has commented on the SRA's Strategic Plan that,

"a third of the £65 billion is inflation, a quarter of it is double-counting and a third of the remainder is on-going renewals and maintenance".

[21] The SRA states that the plan does take into account emerging information about EU interoperability and improving accessibility in line with the Disability Discrimination Act – but one has to doubt whether the full funding implications have been absorbed into the numbers, as compared with the 10 Year Plan projections. One needs also to add on costs of administration for Railtrack. There is also concern that the Strategic Plan doesn't take into account the added cost of maintenance over the next 10 years, arising from the Hatfield crash – some estimates put the figure at £7 billion (Daily Telegraph, 15th January 2002). National implementation of the high speed European Train Control System could eventually cost between £3.5 to £5.6 billion over the next 15 years (Financial Times, 5th March 2002). Railtrack administration costs, together with delays in efficiency improvements by Railtrack, are likely to add another £1 billion on top.

The House of Commons Transport Select Committee has highlighted significant changes since the 10 Year Plan was published, which may have substantial implications for the costs of the railways,

"the train protection system recommended by the Cullen inquiry might cost between £3-5 billion, compliance with the European interoperability directives[22] may cost £1.5 billion and the costs of works to provide station access under the Disability Discrimination Act 1995 are as yet unquantified, but are likely to be very large".

In evidence to the House of Commons Transport Select Committee (Wednesday 6th March 2002, obtainable at www.publications.parliament.uk/pa/cm200102/cmselect/cmtlgr) the Secretary of State, Stephen Byers was questioned about the financing of the Strategic Plan. Byers acknowledged that:

- Of the £34 billion planned public expenditure on the railways, £18.6 billion is allocated to investment.
- Of the £18.6 billion, £10.1 billion has already been allocated to the CTRL and network grants to Railtrack.
- Of the approximate £8 billion remaining, £3 billion is netted off to allow for double counting.
- Over the 10 year period, there is between £4-5 billion of public sector investment remaining to spend on infrastructure projects.

The IoD argues that even this bleak assessment may be too optimistic.

Table 5.1 shows estimates of key areas of resource allocation over the next decade. It is clear from the table that the entire allocation of public funding is accounted for, with only the CTRL and WCML adding to network capacity. The Financial Times has reported that additional maintenance of £6 billion – post-Hatfield - and the extra cost of additional train safety systems, will cost a further £3.5 billion. Neither of these costs is incorporated in the Strategic Plan budget.

[22] The interoperability measures to be taken to develop trans-European high speed networks – in the field of technical harmonisation. In the UK, the high speed network is defined as the Channel Tunnel rail Link, the West and East Coast main lines, the Great Western main line between London and Bristol/Cardiff and that part of the Channel Tunnel within UK jurisdiction (Source: www.railways.dltr.gov.uk). It is likely that interoperability will be extended to certain other main lines on the conventional rail system as well (Source: CEN, European Committee for Standardisation).

Table 5.1

Railway industry resource allocation 2001-2011	
Post-Hatfield additional maintenance costs	£6 billion
Railtrack administration	£2 billion
Additional safety investment	£3.5 billion
Channel Tunnel Rail Link/West Coast Main Line	£8 billion
EU interoperability	£1.5 billion
Disability Discrimination Act	£1 billion
Revenue support for Tocs	£11 billion
Total	£33 billion
Based on industry sources and IoD estimates	

Double counting

The Financial Times makes the valid point that the government has not explained why the private sector would be willing to invest £34 billion in projects without a commercial rate of return.

With passenger revenue and revenue support from the government – around £1bn plus per annum - amounting to around £4.5 billion per annum (see Table 5.2), it is going to be very hard to generate £3bn plus per annum in investment from the private sector.

Table 5.2

Passenger Ticket Revenue

(Total of ordinary fares and season tickets at 1999-2000 prices - £ billion)

1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92	1992 -93	1993 -94	1994 -95	1995 -96	1996 -97	1997 -98	1998 -99	1999 -00	2000 -01
2.46	2.6	2.7	2.7	2.7	2.62	2.58	2.56	2.5	2.66	2.8	2.97	3.16	3.37	3.35

(Source: SRA. Revenue support to Tocs projected to be over £1 billion per annum)

The bleak financial assessment is compounded by the problem of double-counting. The need for government subsidy alerts one to the possibility of double-counting. An investigation by The Financial Times (published on 5th and 6th March) has revealed that the Strategic Plan is already very much out of date and plagued by double-counting. As we have seen, The Secretary of State has acknowledged £3 billion of double-counting which has to be netted out of the expenditure total.

The Financial Times has reported that this adjustment is insufficient and that maybe £7.5 billion of the government's £33.5 billion spending on rail over the next decade could have been double counted.

The Financial Times state that,

"Much public subsidy is destined simply to buy improvements through the private sector. It is therefore counted twice".

Consequently, in order to enhance the rail network's capacity over the coming decade, a massive inflow of private sector capital will be required.

All in all, the Railway Forum's comment of "*two cheers for the Strategic Plan"* seems fair.

Box 4

Railtrack – ORR Second Control Period Review

The second periodic review – covering the period 2001-2006 - by the Rail Regulator provided for a very substantial increase in resources. It provided for Railtrack to receive a 50% increase in its income (compared to control period one) over the second period to April 2006. Of that £15 billion, the government has indicated that it would prefer access charges were lower, and £4 billion of the total would be paid as direct grants by the SRA to Railtrack, instead of going through the train operators.

The impact of Railtrack administration and additional maintenance costs could result in an interim review by the Rail Regulator, before the company is taken out of administration.

Attracting private investment

It is abundantly clear that in order to expand the capacity of the railway network very significant private investment will be required, in the absence of additional public finds. Given the catch-22 problem, described above, together with the impact of Railtrack administration, major policy initiatives will need to be introduced in order to attract private capital.

The IoD recommends four key policy initiatives to transform the outlook for railway investment:

- The introduction of widespread road pricing
- The closure of heavily subsidised parts of the network (see Chapter 2)
- Longer 'carrot & stick' Toc franchises (see Chapter 4)
- Measures to 'capture' windfall land price gains

The introduction of these policies has the potential to increase passenger traffic at the rates envisaged in the Strategic Plan. It is also possible that these policy initiatives might raise passenger traffic growth at a faster rate than envisaged in the Strategic Plan. However, the flip-side is the likelihood that without such innovations, future growth in passenger and freight traffic is likely to significantly undershoot the Strategic Plan targets (see Figure 5.1).

The IoD argues that part of the solution to the rail crisis lies in road pricing. Under such a system each car user would pay the full marginal social cost imposed by that use, stemming from pollution, congestion etc. This would work to improve the relative price of rail use and help switch traffic from road to rail. The IoD has recently published a paper on the economic case for road pricing (*More roads and road pricing – the way to go?*, Graeme Leach, IOD, 2001) Revenues from congestion charging could also be used to improve the rail infrastructure, thereby helping sustain any pick-up in rail demand. Road pricing and the use of revenues for rail investment opens up more optimistic scenarios.

In a recent paper (*A plan for Growth? An analysis of the 10 Year Plan's perspective for rail*, Railway Forum, March 2001) for the Railway Forum, Dr Rana Roy argues that,

"the key constraint limiting the planned growth of rail traffic is the government's apparent acceptance of a continuing pattern of highly sub-optimal prices across all modes of transport. On the basis of a more optimal pattern of prices, a far more ambitious perspective comes into view".

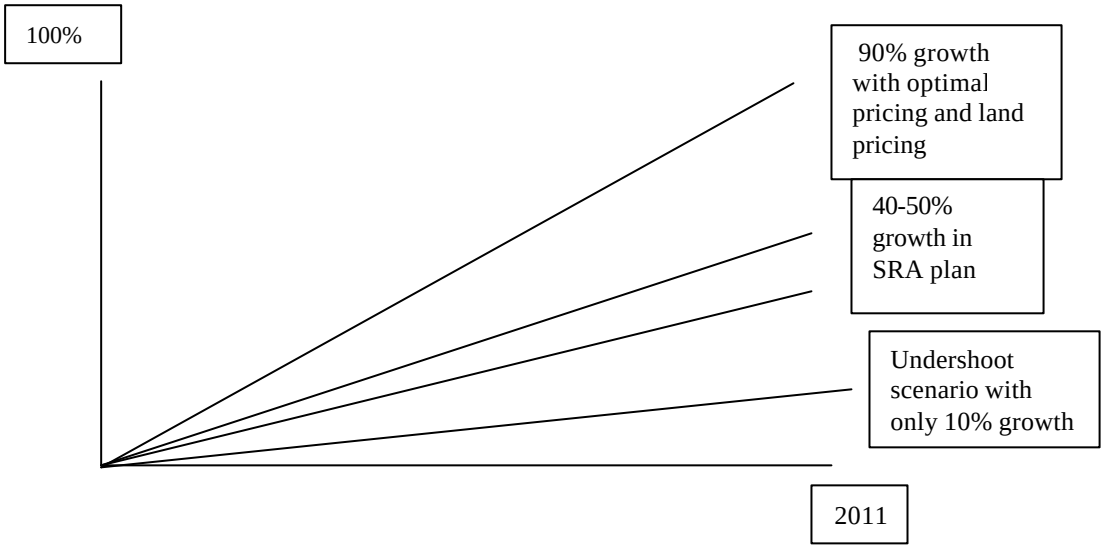
Roy goes on to argue that,

"for the country as a whole, optimising road prices, whilst maintaining the 10 Year Plan's assumptions on rail pricing and investment, should deliver a 91% increase, a near doubling in rail traffic over the ten year period and more than a doubling if one assumes further accommodative investment".

This seems overly optimistic, but at the very least suggests a 40-50% growth in passenger traffic could be attained.

Figure 5.1

Future rail passenger traffic projections 2001-2011



Because of the overwhelming dominance of car use, a small modal shift off the road translates into a large acceleration in the rate of growth in rail passengers traffic.

In the future, the government hopes to use Special Purpose Vehicles to develop major infrastructure enhancement projects - involving companies such as Bechtel. These consortia would have the financial muscle to raise debt finance at low rates and at the same time would assume the risk for cost overruns and finishing projects on-time and on-budget. We believe this policy needs to be taken much further.

Our final recommendation is that the government not only encourages the use of special vehicles for investment, but also tries to capture the windfall gains to land and property owners. This needs to become a central plank of policy.

Press reports suggest *(£10 bn rail link may be financed by property tax*, Financial Times 15th February 2002) that strong consideration is being given to this method as one source of financing the Cross London Rail Link. In the case of Canary Wharf, the construction of the Jubilee Line extension contributed to a four fold increase in property values. Canary Wharf developers contributed £300 million towards the Jubilee Line extension. This type of approach needs to be exploited much more in the future.