31 101 Economics I - General Essay

The Rail Industry

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1 The State of the Railways

1.1 The History of the railways in the UK

The 1921 Railway Act enabled 123 private railways to be merged into just four geographic groups The London, Midland and Scottish Railway, The London and North Eastern Railway, The Great Western Railway and The Southern Railway.

During the Second World War the British government took control of the nation's railways in order to ensure the transport of men and materials to aid the war effort.

The transport act of 1947 nationalised the railways and set up The Railway Executive.

The white paper published in 1960 entitled 'The Re-organisation of the Nationalised Transport Undertakings' said the British Transport Commission's (the body controlling The Railway Executive) responsibilities were "so large the that it was impossible to run them effectively under a single undertaking". By 1962 the British Railways Board (BRB) was set up to replace the function of the Railways Executive. In 1963 Dr Richard Beeching was appointed chairman of the new BRB. Dr. Beeching presented a plan for a more efficient railway that included recommendations to concentrate on freight and inter-city passenger routes. This focus resulted in the closure of many minor routes and reduced the size of the railways by about 2,000 miles and the closure of more than 2,000 small stations.

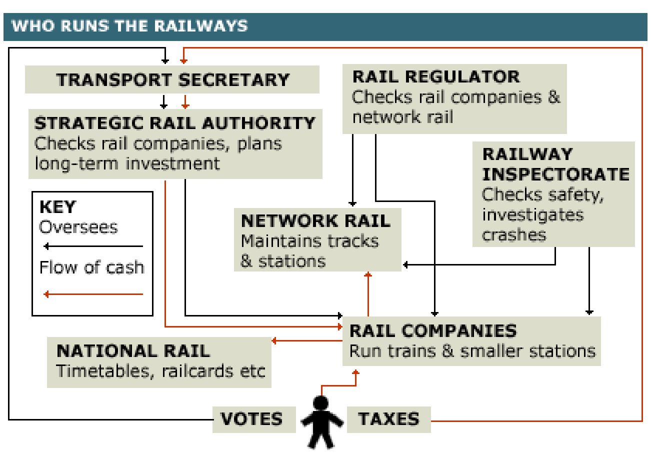
1.2 The UK Railways Since Privatisation

The main premise of the 1993 Railways Act was to privatise the BRB. This was achieve d by breaking the functions of the board down into over 100 elements. Each of these parts could be sold or franchised through the Office of Passenger Rail Franchising (OPRAF) by a process of competitive tendering.

In 1994 Railtrack took control of the infrastructure such as track signalling and stations and was privatised in 1996. In July 1999 The Shadow Strategic Rail Authority (SSRA) took over many of the roles of OPRAF and the BRB. In the year 2000 the Strategic Rail Authority (SRA) comes into being, terminating its shadow status.

By 2001 Railtrack was placed in administration by the government and in October of 2002 the not for profit organisation Network Rail took control of Railtrack's responsibilities.

1.3 The Current Status Of Regulation Of UK Railways



The diagram opposite demonstrates the interactions between the various stakeholders in the railways of the UK at present.

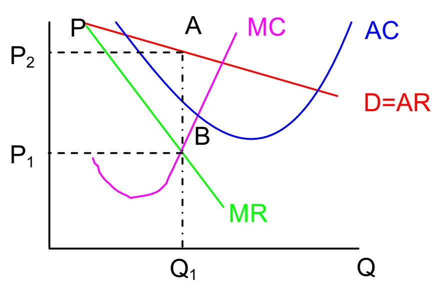
Name	Status	Role
Transport Secretary	Public	The Transport Secretary as head of the Department for Transport and the Regions controls the levels of subsidies paid to the operating

		companies and appoints the head of the SRA and the Rail Regulator.
Rail Regulator	Public	The Office of Rail Regulator (ORR) is responsible for setting out and ensuring operating companies meet minimum standards. The rail regulator is able to issue fines upon failure.
Strategic Rail Authority	Public	The SRA has responsibility for consumer protection, investment projects, and managing rail franchises.
Railway Inspectorate	Public	Part of the health and safety executive, HM Railway inspectorate is responsible for ensuring the safety of new trains and track and investigates crashes.
Network Rail	Not for profit	Network Rail was founded to maintain infrastructure including track and stations following the collapse of Railtrack
Rail Companies	Private	The Train Operating Companies (TOCs) are 26 individual companies that took over the running of lines from British Rail. Examples include Virgin, GNER and ScotRail.
National Rail	Private	The Association of Train Operating Companies (ATOC) is responsible for ticketing (buying a single ticket that operates for several lines), issuing railcards and running the national rail inquiries phone line.

To summarise the key responsibilities of the industry: overall dir ection is managed by the government through the SRA. The track, signalling and stations are run by the not for profit Network Rail whilst the day-to-day running of trains is operated by private companies.

2 The Economic Case for Regulation of a Monopoly

An unregulated monopoly will seek to earn super-normal profits (area enclosed by P_1, P_2, A, B), unlike the competitive firm, a monopoly's demand (D) and marginal revenue (MR) curve have different gradients. As with any firm, a monopoly will produce at the profit maximising output, the point at which marginal revenue (MR) equals marginal cost (MC), a monopoly will produce at this quantity but charge a price of where Q_1 meets the demand curve (D) at a price P_2, regulation could demand the monopoly charge a lower price of P_1.



As well as there being no impetus for a monopoly to earn a normal level of profit it may have no incentive to produce a product or service of high quality, since it has no competitors.

In certain situations, there is an economic case for monopolies. These natural monopolies are due to impediments termed natural barriers to entry. Natural barriers include the control of supply of natural resources, legislation, economies of scale and capital expense.

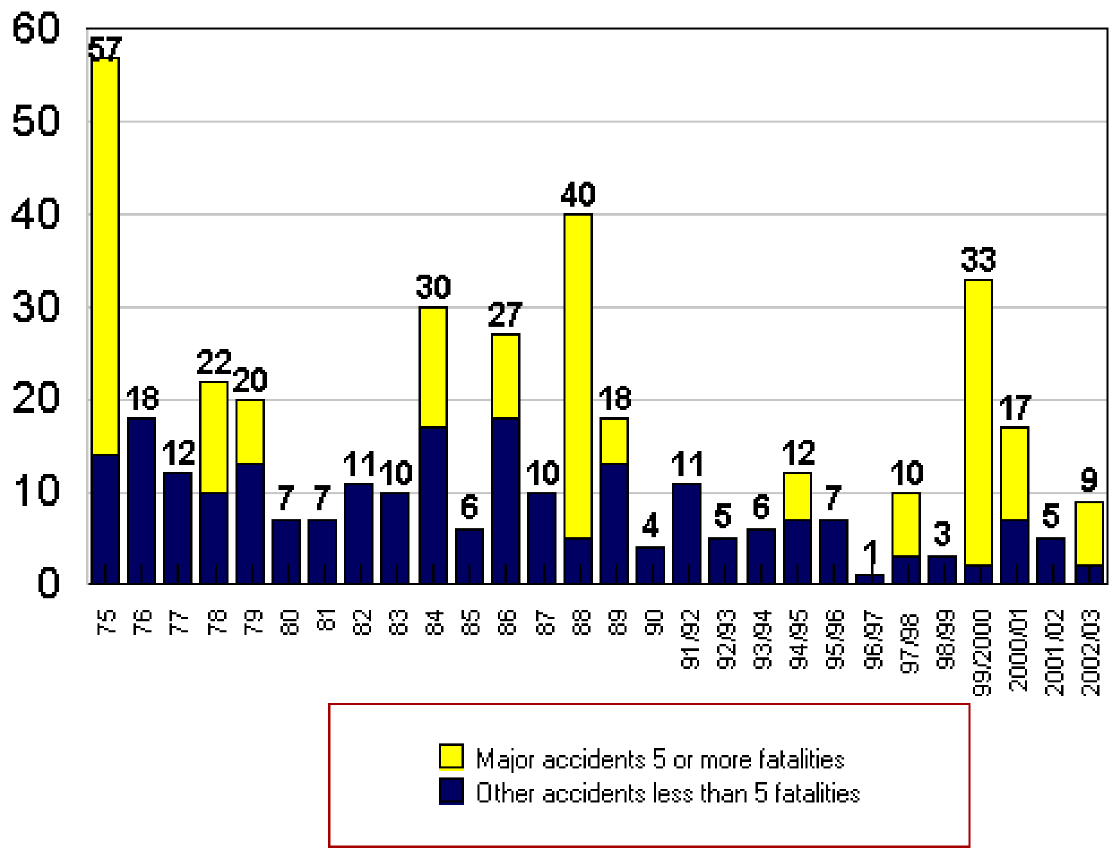
3 Assesment of Regulatory Requirements

3.1 Areas Requiring Direct regulation

3.1.1 The Case For State Regulation

Given the arguments made in section 2, an unregulated monopoly will have no incentive to provide a high level of service at a fair price. Therfore there is a requirement some form of regulation to control the price and level of service in the railways, especially considering the levels of subsidy paid to the railways under the current situation.

It would not be prudent to re-privatize the functions of Network Rail and the status quo should remain. Railtrack is widely accepted as being a failure, primarily in terms of its finances. In one week Railtrack announced losses of £300 million and proposed to pay out a dividend to shareholders of £100 million. Under the current set-up (Network Rail) this dividend could have been re-invested into the rail infrastructure. Railtrack attempted to introduce competitive tendering in the maintenance of the railway infrastructure with little success. Poor communication between contractors was cited as a con tributory factor in the delays in maintenance that led to the Hatfield derailment of October 2000.



The diagram above depicts the number of fatalities on the railways in a given year / period. Looking at the brief period the privatized Railtrack was in ch arge of rail maintenance (between 97/98 – 2001/2002) there are an alarming number of fatalities around this time. This is an indication that profit may not be the best driver for the organization in charge of track maintenance.

3.1.2 The Case for a Regulated Monopoly

Due to the vast capital outlay required to set up the infrastructure of a railway network excludes a competitor to the current set-up entering the market. It is prohibitively expensive for a firm to compete directly with Network Rail in the supply of utilizable track. It would be unrealistic and misuse of resources to build a further comprehensive network of track across the UK.

Looking at the natural barriers that exist in the railways in the U.K. one mentioned in section 2 not applicable is that the railways do not control the supply of a natural resource like De Beers in the case of diamonds and the Organisation of Petroleum Exporting Countries (commonly known as OPEC) in the supply of crude oil.

It can be said however, the railways are capable of exploiting other natural barriers such as economies of scale. The railways may take advantage of marketing economies due to it's large output, a 30 second TV advert costs the same no matter what the level of production or in this case level of passenger capacity.

In addition to marketing economies the railways may be able to benefit from financial economies, a large company has a lower perceived level of risk and so is charged a lower interest rate.

A sizeable industry like the railways may be able to gain from technical economies of scale, it is able to use more capital more of the time, reduce wasted excess capacity.

A more obvious example of an economy of scale would be purchasing economies such as bulk buying. Given the size of the railways they would also be able to benefit from managerial economies, in other word specialisation of labour.

The railways under the current set up and recent past have not been able to take advantage of research and development since the wagons and locomotives have not been designed in house and are manufactured by specialist coachbuilders.

Another economy of scale not readily applicable to the railways is that of risk bearing economies (in layman's terms not putting all your eggs in one basket). This is due to the nature of the industry as it only provides one service, unlike other large companies that offer a range of goods and services. However, it could be argued that the variety of passengers found on the railways leads to a degree of diversification (commuters, holiday makers etc.). Unfortunatly, in a general economic decline, this diversification would do little to reduce the burden of risk.

Legislation to protect a railway company's monopoly would be unnecessary given the above arguments.

3.2 Areas Governed by Competition

3.2.1 The Case for Privatization / Competition

It is widely accepted that a private firm operates with lower costs, due to the incentive of maximizing profits (crudely put, Profit = Revenue – Cost). A private firm will therefore have greater productive efficiency. It has been argued that privatized companies have enjoyed reduced costs (for example BT, BP and British Airways) the reduction in costs have not reduced price to consumer as much as possible, much of these cost savings have been passed onto shareholders in the form of dividends.

The public sector has little motivation to produce an innovative service that consumers may wish to use. The private sector, however, has the motivation to offer a choice of high quality services, the expansion in services available to business class travelers on GNER, Virgin and other TOCs is testimony to this. Although the TOCs are not in direct competition with each other they may be considered to be in competition with other forms of transport.

3.2.2 Competition Applied to the Rail Industry

It may be possible to introduce more competition on specific routes by putting individual services out to competitive tendering (for instance the 1930 to Glasgow Central may be operated by ScotRail, the 1937 may be operated by Virgin). This would introduce almost direct competition between the TOCs and encourage them to make strides in terms of quality and speed of service as well as competing directly on price.

The major shortfalls of this proposal that a train, once it has reached it's destination it may remain idle on the platform or make a journey with no passengers if the TOC did not win a return service on that route. This would eliminate many of the benefits of economies of scale mentioned above. Another problem arises with the consideration of ticketing. The above suggestion would almost certainly be unworkable due to the complexity of finding connecting services with the same operator or buying several tickets with several TOCs for one journey. At the moment tickets are sold from A to B and are valid on any TOC. The current situation eliminates competition on price.

It may be possible for the private sector to invest in expansion of the rail infrastructure in certain highly congested areas, this has been achieved already on the road network with the introduction of the M6 Toll near Birmingham.

The competitive tendering of ancillary services, such as cleaning and food and beverage provision (of both rolling stock and in stations) would be a feasible one. The only objection may be the provider of food may well operate it's own monopoly on a train forcing up prices. This, however, is a minor objection.

The SRA is currently involved in the process of replacing all the passenger rail franchises that are due to expire by 2004. The SRA has created new long-term franchise contracts of up to 20 years. This introduces the incentive for the TOCs to invest in the railways for the long term, although this may reduce the authority of the SRA to regulate the operators.