



Issue Analysis

Privatizing Rail, Avoiding the Pitfalls:

Lessons from the British Experience

by Iain Murray
May 19, 2005

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Executive Summary

The U.S. national passenger rail carrier, Amtrak, is in crisis once again. The failure of its much-vaunted Acela high-speed train service between Washington and Boston has demonstrated its ineptness in both asset management and strategic planning. Congress must look closely at ways to return the passenger rail service to the private sector to take advantage of private industry's skills of management, innovation, and foresight.

Britain's experience with privatization provides valuable lessons in this respect. This Issue Analysis examines the history of British government involvement in the management of the rail industry, from earliest times through nationalization to privatization. It finds that the British rail industry was never truly privatized, because the coercive fragmentation of the industry that was chosen as the method of privatization allowed too much room for government interference. Over-mighty regulators chose to exercise their powers just as the industry was starting to find its feet and choked off any hope of the industry operating independent of government control.

A better route is the American model of freight rail deregulation. An industry that is vertically integrated and free to decide its own routes and prices without government interference is more likely to provide a better service at a lower cost than a highly-regulated industry.

Part of Amtrak's problem is also its crumbling infrastructure. The history of underinvestment in Britain's rail network during nationalization is remarkably similar. The UK had an opportunity to allow a privatized infrastructure owner the freedom to solve this problem using private sector funds and resources, but instead made all infrastructure spending dependent on political decisions. As a result, the UK is committed to spend vast sums on rail infrastructure with no genuine prospect of private sector funding approaching those levels. Congress must ensure it does not go down that route.

Congress has much to learn from Britain's tribulations over the future of its rail system, and thus avoid fundamental mistakes in the process of making the America's passenger rail system a net contributor to the nation's prosperity. Calls to reregulate significant parts of the freight rail system would send America down the British road of underinvestment in essential railroad infrastructure. These must be rejected in order to keep America's freight capacity at the levels the nation needs.

Introduction – How not to Deregulate a Railroad

The U.S. national passenger rail carrier, Amtrak, is in crisis once again. The failure of its much-vaunted Acela high-speed train service between Washington and Boston has demonstrated its ineptness in both asset management and strategic planning. Congress must look closely at ways to return the passenger rail service to the private sector to take advantage of private industry's skills of management, innovation, and foresight.

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A better route is the American model of freight rail deregulation. An industry that is vertically integrated and free to decide its own routes and prices without government interference is more likely to provide a better service at a lower cost than a highly-regulated industry. Calls to reregulate significant parts of the freight rail system would send America down the British road of underinvestment in essential railroad infrastructure. These must be rejected in order to keep America's freight capacity at the levels the nation needs.

Background—The Political and Regulatory History of the British Rail System¹

When George and Robert Stephenson opened the world's first operational railway between the northern industrial towns of Stockton and Darlington in 1825, the British rail system exploded into life. By 1852, significant infrastructure had been created, with 6600 miles of route. As Robert C.B. Miller explains in his book, *Railway.com: Parallels between the early British railways and the ICT revolution*,² the railway revolution followed a similar path as the recent Internet boom, as speculators and banks rushed to fund the new technology,

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despite the lack of any proven business model. Speculation also occurred despite a permitting process that required an Act of Parliament to approve each railway project. When the dust settled in mid-century, many of those banks and speculators had gone bust, but Britain had an infrastructure network that would serve its needs well throughout the heyday of rail, before the arrival of the automobile.

It was not long after the opening of the first railway before the government began to interfere in the railway business. Perhaps it had something to do with the fact that the first man ever to die in a public railway accident was a prominent Member of Parliament and cabinet minister, William Huskisson, killed by an engine on the other line while taking a break from a trip on the Duke of Wellington's train in 1830. Yet it still took another 10 years before the Regulation of Railways Act 1840 set about the creation of a safety regulator, followed by eight similar acts over the next 50 years, often following accidents such as the "Armagh Disaster" that killed 88 in 1889.

Alongside safety regulation, the government expanded economic regulation during the Victorian rail heyday. The Duke of Wellington, a shameless reactionary who is said to have feared that the railway merely encouraged the common people to move about the country, had suggested state control of the railways. In 1859, following some bankruptcy scandals and motivated by the opposite desire to guarantee public access, Gladstone's Liberal government drew up plans to impose strict economic control and even to nationalize certain lines, although the plan was watered down before Parliament enacted it (Parliament approved buying certain lines in the case of excess profit, but dropped the plan on the recommendation of a Royal Commission in 1867).

Yet Gladstone did succeed in distorting the market in a manner that set the tone for later government interference. He instituted the Parliamentary Train, a service mandated by Parliament to serve third-class travelers at a fare not to exceed one penny per mile. However, the service was poorly timed, and thus deterred many third-class passengers from rail travel altogether—they would have been more likely to travel at other times but were reluctant to use the more expensive services after the introduction of the mandated train—but the principle of a government-mandated public rail service had been established. It would never cease to be a part of the industry.

Nevertheless, the industry thrived during the Imperial heyday, employing 648,000 people in the late Victorian age. Yet,

as transportation journalist Christian Wolmar—no supporter of privatization—notes:

The beginning of the decline of the railways coincided with much greater government involvement as the state took over the running of the system in 1914 after the outbreak of the Great War, using powers under the Regulation of the Forces Act 1871. The war was to change the management of the railways forever. The railways, which had reached their peak size of 23,000 route miles, were expected to shoulder the overwhelming burden of transporting materials, munitions and people, and this could only happen with government control. While it would be simplistic to argue that it was the government's greater role which damaged the railways [during the war], the state that the network was left in after the war was to cause insuperable problems for the industry in the ensuing decades. The railways were sweated and over-used, with very little compensating investment since resources were concentrated on the war effort. The railways had been run into the ground, with a major backlog of maintenance and equipment, and administrative chaos.³

These problems—overuse of assets owing to government insistence, maintenance backlog, investment shortfall, and administrative chaos—would recur again and again as years went on. And they remain dominant today.

The government's "helping hand" to the industry it had helped grind down was simply to force market consolidation via the Railways Act of 1921, aimed at increasing national efficiency by reducing "wasteful rivalry," as Wolmar puts it. The Act created the "Big Four" companies on a geographic basis: the London & North Eastern Railway (LNER), London Midland & Scottish (LMS), Southern, and the Great Western Railway (GWR). The Act also empowered government to fund major investment schemes. The government both began regulating freight rates in order to return them to the pre-war levels of 1913 and forced the railways to become "common carriers," obliging them to undertake certain services on demand, whether or not they would make a profit.

This new regime proved, Wolmar notes, "a recipe for disaster." Passenger and freight traffic declined; freight traffic in particular suffered as road trucks began to attract business. He summarizes:

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The Big Four's twenty-five year existence can be characterized as an unsuccessful struggle to achieve profitability which, in turn, meant that the system suffered badly from under-investment. The government's promise, when it forced through the grouping of the Big Four, to maintain the companies' net receipts at 1913 levels through the regulation of charging rates proved impossible to fulfil, given the fast-growing competition from other forms of transport which meant that the 1913 targets were hardly ever met...Passengers, too, were no longer prepared to put up with shoddy service away from the main lines with corridorless trains that provided neither toilets nor refreshments.⁴

The Big Four launched a campaign in 1938 aimed at reducing government regulation, which got some support from the government of Neville Chamberlain, but the Second World War intervened before any deal could be reached. The railways' experience during this conflict inevitably mirrored that during the first. Overuse, lack of maintenance and investment, and ramshackle administration wore the industry down further.

So the railways were a natural target for the post-war socialist Labor government led by Clement Atlee, which aimed to improve efficiency by bringing industry under the all-knowing control of Whitehall bureaucrats.⁵ The British people had become used to command-and-control during the extraordinary circumstances of six years of war, so to extend the principle to peacetime seemed natural. Along with many other industries, from coal mining to healthcare, Britain's railways were formally nationalized in 1948.

The resulting nationalized industry, British Railways (BR), was controlled formally by the British Transport Commission (BTC), appointed by the Secretary of State for Transport. Funding was determined ultimately by Her Majesty's Treasury, whose annual public expenditure budget generally passed through Parliament as a formality.

The industry's revenues were never enough to cover both its operational costs and the cost of infrastructure upgrading and improvement. The government could supplement BR's service revenues, and income from other interests such as property, by an External Financing Limit, an appropriation which had to compete against all other public expenditure commitments. When pitted against the need for new hospitals or increased welfare payments, the rail industry normally lost in the battle for additional expenditure. This inevitably led to a series of financial crises.

With the rise of alternative means of transport, the industry was increasingly saddled with a bloated infrastructure, yet obliged to run large numbers of loss-making services. The result was the “Beeching cuts,” named after Dr. Richard Beeching, appointed BTC Chairman in 1962⁶ by Transport Minister Ernest Marples with the explicit task of solving BR’s financial problems. Beeching drastically streamlined the network, proposing to close down 2,363 stations and thousands of miles of track.⁷ In the end only 10,500 miles of track survived (Beeching had wanted to reduce the amount to 7,500, with only 3,000 of that in intensive use).

However, the post-Beeching railway still operated on a socialist model. Government analyzed each passenger service to determine if there was a “social case” to subsidize a loss-making service. For example, if a line served a community whose labor force was predominantly employed in a nearby town served by the rail connection, then BR would undertake a Public Service Obligation (PSO) to maintain the rail connection with losses subsidized by central government. As a result, even the drastically reduced network continued to face financing problems. BR official historian T.R. Gourvish summarized the problem thus:

The BTC had wanted to modernize the railways after years of neglect. The public wanted a modern railway network of roughly the same size of 1955. The government wanted the BTC to fulfill its obligation to break even. Much of the review activity was... about the attempt, made under government pressure, to reconcile these objectives. Not surprisingly, it proved impossible to do so.⁸

As Wolmar notes, Gourvish “was writing about...Beeching but this analysis could apply equally to any part of the past 50 years of railway history.”⁹

The industry continued to stagger on though the 1960s, 70s and 80s, becoming, in the process, a national joke. The low quality of service—from delayed trains to the infamous “British Rail sandwich,” a meager slice of ham between two curling pieces of cardboard that might once have been bread—became the staple of complaints among commuters, in newspaper columns, and on TV comedy shows.

This steady diet of problems led to another restructuring in 1982, when the old geographic structure was replaced by a series of stand-alone, but still government-owned, businesses—InterCity, Network SouthEast, Regional Railways, and separate freight and delivery businesses. The managers of these new organizations were,

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at last, “expected to run them like commercial concerns by taking responsibility for marketing, investment and cost allocation.”¹⁰

This new discipline, coupled with a friendly relationship between BR Chairman Sir Bob Reid and Prime Minister Margaret Thatcher’s Transport Secretary Nicholas Ridley, led to a turnaround in the railways’ fortunes. InterCity, which posted a £100 million loss in 1984, turned significant profits by the late 1980s. Network SouthEast invested large sums but still broke even after initial losses. Fares were allowed to increase at rates higher than inflation to levels the market would bear. As Wolmar summarizes:

The industry’s improving condition emboldened advocates of full privatization—although critics to this day, strangely, insist that the industry’s improvement was a reason why it should not have been privatized.

Through a combination of tight management under a good run of chairmen and some, though insufficient, investment, BR had largely got it right. The management had finally got rid of the regional baronies, they had developed a competitive—or market-orientated—fares policy, strikes were reducing, the passenger’s charter had been developed as a means of measuring performance—which was improving—and they had even convinced the government to allow rolling stock to be leased...efficiency was the best in Europe and productivity still rising. British Rail bore comparison with any major railway operation in the world. (p 55)

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Privatization – The Restructured Rail Industry

A simple set of assumptions provided the rationale for the British privatization wave of the 80s and 90s. The Conservative government recognized that public control of industry was wasteful and inefficient because it suppressed the pressure for innovative approaches that private enterprises face in a competitive environment. Privatizing industries would boost Britain’s economy by reducing the public expenditure burden, freeing up money for tax cuts, and making British industries more competitive in the world markets.

The question that had delayed privatization was, which model would best create an appropriate industry structure? Many British privatizations, such as those of British Telecom, British Airways, or British Steel, had merely taken a monopoly or near-monopoly service

provider, removed its monopoly powers, and sold the company via stock market flotation virtually intact. New markets were created—or reestablished—by the removal of monopoly powers, while regulators were put in the position to help “make the markets” where necessary and ensure that the privatized firms did not abuse their market dominance to reassert a monopoly position. By and large, this model worked.

However, in the case of utility privatizations, the experience with British Gas, privatized as one monolithic supplier, suggested that monopolistic tendencies created severe challenges for regulators attempting to guarantee a competitive market (Eventually, British Gas split itself into two companies in response to regulatory measures).

The government therefore attempted to “jump start” the competitive process by breaking up nationalized utilities either by creating regional companies—as in privatization of the water supply industry—or restructuring the utility into competing companies with a substantial element of vertical separation—a “julienne or snap” approach to market restructuring. A prime example of the latter is the electricity generation and supply industry, where the Central Electricity Generating Board and its regional supply boards were restructured into four companies. The transmission system was transferred to The National Grid Company. Two generating companies were created in direct competition with each other. The 12 area supply boards were superseded by 12 Regional Electricity Companies, which were given a license to distribute and supply electricity within their own areas. The utility privatizations, however, proved problematic, illustrating that regulators are not in a position to decide on an appropriate structure for an industry.

Therefore, there was considerable debate within Government (mostly between Her Majesty’s treasury and the Department of Transport) on how BR privatization should proceed. There was fairly swift agreement that it should not be privatized as a monopoly, given the significant entry barriers entailed in provision of vertically integrated rail services (it was and remains extremely difficult to gain approval to build an independent railway. See Appendix 1). Splitting the companies into the various BR operating areas would also prove problematic, as Regional Railways, which required by far the most subsidy, would be very much a poor relation to the profitable InterCity and solvent NetworkSE divisions. Later events, however, showed that these options were probably abandoned too quickly.

Initially, thinking ran along the lines of water privatization with the creation, or rather re-creation, of the old regional companies,

Despite the elaborate structure, there was little in the way of real competition in the restructured industry, the only competition being between contractual parties in securing the best deal.

which would compete against each other in a limited fashion. The industry would remain vertically integrated under this option.¹¹ However, some worried that the level of competition presented would not be enough to allow competitive pressures to deliver the necessary service improvements. There was also an important European dimension to the issue (see Appendix 2).

Therefore, the government devised a scheme, based on a 1987 proposal from the Adam Smith Institute,¹² that would introduce competition into the industry by means of “competitive tensions” created by contracts between operating units and their need for regular renegotiation at the optimum level of benefit for all parties. This would be done primarily by means of vertical separation. So rail service companies (passenger rail franchises, freight operations) would negotiate access contracts with an infrastructure service provider (the track owner, initially envisaged as remaining in public ownership). Other industry services, such as the provision of rolling stock (engines, carriages and wagons) or infrastructure maintenance, would be provided by other companies. However, despite the elaborate structure, there was little in the way of real competition in the restructured industry, the only competition being between contractual parties in securing the best deal.

The resulting fragmented industry was so complex that it required two regulators to oversee (see diagram of industry structure). The Office of Passenger Rail Franchising (OPRAF) would award franchises to companies competing to provide passenger rail services¹³ on the basis of least contribution from government. This was a way of continuing to recognize BR’s old PSOs while introducing competitive bidding as a means of reducing the size of the subsidy. The Office of the Rail Regulator (ORR), the more powerful of the two, would grant a license to a new company that would own the network’s physical infrastructure (track, stations, signal boxes, and so on) and oversee other facets of the new industry’s operations.

Perhaps the most crucial decision taken in creating this new industry was in privatizing the infrastructure company. While the economic rationale was clear—a major new company with a substantial asset portfolio could raise funds for infrastructure improvements against its own balance sheet—there was nevertheless a suspicion of political opportunism due to the need for a substantial injection into public finances to pay for the then-unfolding “mad cow disease” fiasco of the mid-1990s which required government to compensate farmers for a massive cull of livestock.

The new company would be called Railtrack, to be sold by IPO. The main question over its valuation related to the political risk to potential stock purchasers. The opposition Labor party, which was looking more and more as if it would form the next government, had announced its intention to take the railways back into public ownership. This uncertainty helped depress financial institutions' initial valuation of the company in 1996. Government, heeding this valuation, sold the company at an initial offer price of £3.90 in May of that year; but the market soon discounted the political risk, theorizing that such a complex privatization would be too expensive for an incoming government with many other expenditure priorities to undo. Railtrack's stock price soared to £17.68 by the end of 1998, leading to charges that the privatization had significantly undervalued the company and to accusations of "windfall gains" to politically connected investors.

The new industry consisted of over 30 separate companies, taking over an industry that had seen several years of continuous improvement. Improvement accelerated, and the public reacted by significantly increasing its use of the product. Peter Osborne summed up the industry's success in a piece for British weekly magazine *The Spectator*:¹⁴

The records show that the 1993 Railways Act was followed by a brief flowering of the railway industry. Passenger numbers—in decline since the Second World War—rose by about one third. There were more trains. Despite this added traffic there were fewer delays and the safety record—measured, for instance, by the number of drivers going through red lights—sharply improved. In 1998, for the first time since 1902, there were no passenger deaths in a rail crash.

If public purchase of a product is any measure of the product's success, then Railtrack's privatization must be regarded as an initial success on that ground alone. But that wasn't its only success. A study by Cambridge University scholars Michael Pollitt and Andrew Smith in November 2001¹⁵ found that:

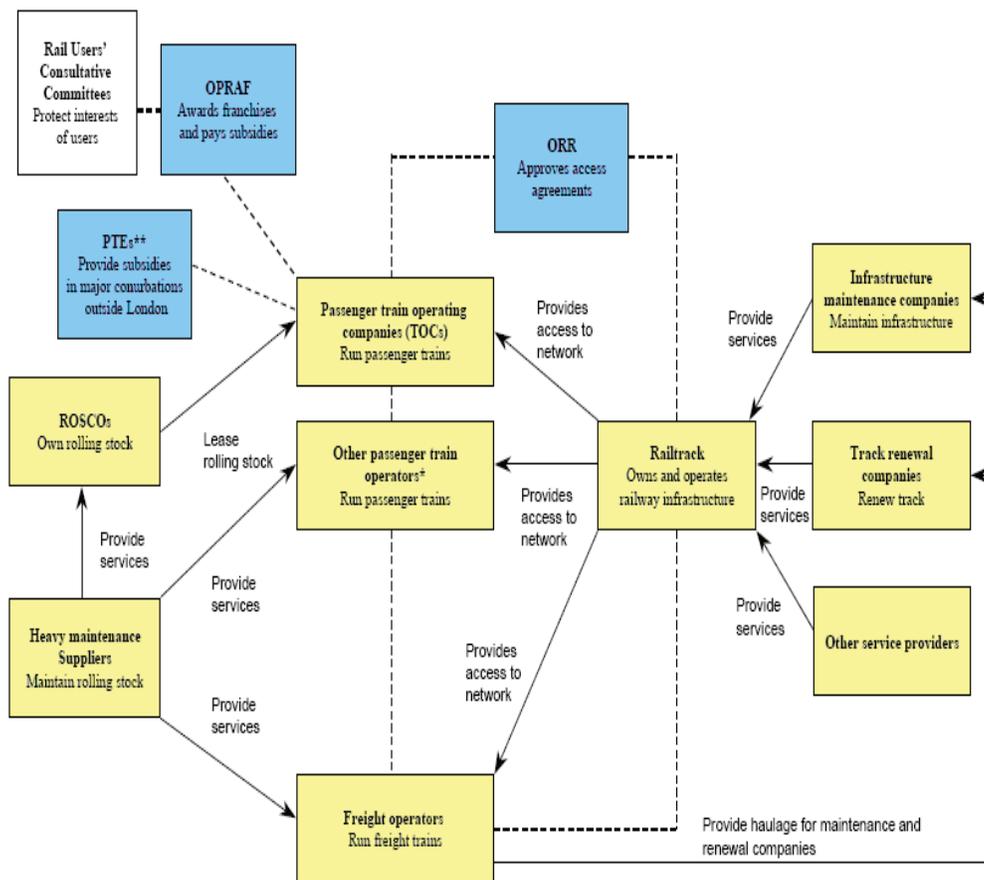
[M]ajor efficiencies have been achieved, consumers have benefited through lower prices, whilst the increased government subsidy has been largely recouped through privatisation proceeds. We find that output quality has also improved [prior to the speed restrictions imposed after the Hatfield crash]. The achievement of further savings will be key to delivering improved rail services in the future...[A] privatised structure, where shareholders demand a return

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on their investment, has led to significant improvements in operating efficiency.

Yet these improvements were not enough to stave off a crisis in the industry that made it the only British privatization to ultimately fail. The circumstances surrounding this crisis need to be explored in detail.

The New Rail Industry in 1996/97



Source: Railtrack Pathfinder Prospectus, page 21.

* Initial structure made some provision for open-access to develop in future. Heathrow Express and Eurostar currently operate on an open-access basis.
** PTE = Passenger Transport Executive

Post-Privatization – Accidents, Political Interference and the Collapse of Railtrack

Peter Osborne’s analysis of the privatized industry’s startling success shows that it was nonetheless “damned on every possible occasion by New Labor.” He notes:

In 1998, even though on practically every measurement for safety and performance the industry was improving at a prodigious rate, John Prescott [Deputy Prime Minister to Tony Blair] labeled Railtrack a “national disgrace.” He personally appointed a new regulator, a sharp, ambitious lawyer named Tom Winsor. Winsor issued a demand for 12.5 per cent better performance, on pain of the biggest ever fine in corporate history. He boasted: “I’m not knocking Railtrack. I’m knocking it into shape.” In 1999 performance improved by 10 per cent, but Railtrack still copped a £10 million fine¹⁶.

This is indicative of the political problems the privatized industry faced. The market rightly assumed that renationalization was unlikely. The Chancellor of the Exchequer for the Labor Government elected in 1997, Gordon Brown, refused to commit the enormous sums necessary to buy back the network. However, that was not the end of political risk. Regulation imposed new costs by adding new layers of political control on the industry. Badmouthing of the industry by politicians only made things worse.

The Labor Government added yet another layer of regulation by creating a Strategic Rail Authority (SRA), which was intended to reintroduce a degree of central planning and coordination to the newly fragmented industry—even though privatization had vested this responsibility in Railtrack as the company responsible for the infrastructure. In fact, the SRA’s role and powers, especially in reference to ORR, have never been especially clear. The SRA’s most significant responsibility was its incorporation of the franchising powers and duties of OPRAF.

Despite the campaigns of regulation and vilification, British passenger rail was significantly safer than before. The rail system had seen an average level of 25-30 passenger deaths per billion kilometers traveled during the 70s and 80s, reaching a high of almost 40 in 1988. This record had improved immensely pre- and post-privatization, stabilizing at around 10 following the

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passage of the Railways Act 1993. But this improved safety record notwithstanding, a succession of fatal accidents led to the collapse of the privatized system.

The Hatfield crash revealed something many had suspected, but which the privatization had not addressed: The infrastructure network suffered from decades of underinvestment from years of government ownership.

In 1999, a crash at Ladbroke Grove killed 31 people. The next year, a crash at Hatfield (see Appendix 3) killed four, and led to the imposition of extensive speed restrictions as Railtrack checked the network for further track problems of the type that caused the crash. In both cases, the fragmented nature of the rail industry, caused by the convoluted method of privatization,¹⁷ was blamed for contributing to the accidents. A judicial inquiry headed by Lord Justice Cullen into the Ladbroke Grove crash suggested that drivers, employed by the Train Operating Company, were not warned about problems with the faulty signal, maintained by Railtrack, that led to the crash. At another crash, at Potters Bar, the Health and Safety Executive (HSE) suggested that the problems with the loose bolts that caused the accident may have stemmed from communication problems both within Railtrack and between Railtrack and the infrastructure maintenance company.

The Hatfield crash revealed something many had suspected, but which the privatization had not addressed: The infrastructure network suffered from decades of underinvestment from years of government ownership. But whether the state of the assets was actually dangerous—as public discussion implied—is debatable. Osborne comments:

Four people were killed at Hatfield, where [Railtrack] really was culpable. It has been pointed out since that traffic accidents claim that many people most days of the year. The reaction was disproportionate: Trains were slowed close to walking pace as a hunt was made for rails in the same condition as the one that caused the Hatfield crash. None was ever found. Since Hatfield, running the company has been close to impossible, and the management has become paralyzed by fear of being jailed on manslaughter charges as much as by lack of investment.

Accidents led to another change in railway regulation. The HSE, which had assumed responsibility at the time of privatization for Her Majesty's Railway Inspectorate, began demanding more in the way of tests, rules, and paperwork from the rail companies, especially Railtrack, in the name of safety. But, as Osborne rightly notes, this was a disproportionate reaction, akin to inspecting all family cars following every fatal road accident. As we shall see,

even the Labor-dominated House of Commons Transport Select Committee is critical of the HSE's misplaced zeal.

Increased regulation and the collapse of Railtrack's public image as a competent organization following the years of backbiting and the massive negative publicity surrounding the Hatfield crash led to a steady decline in Railtrack's share price. From its high of over £17 in late 1998, the price had dropped to below the privatization value by late 2001. This significantly affected the company's ability to raise funds.

This was especially significant as Railtrack had responded to its difficulties by looking to expand investment in the network. According to its 10 Year Plan published in 2001, it would invest over £40 billion during the period 2001-10, but £24 billion of that would come from private sources. Without the ability to raise the money from the private sector, Railtrack turned to the government via the Office of the Rail Regulator. Initially in April 2000, ORR agreed to guarantee extra funding of £1.5 billion, but then in October 2001, as the *Financial Times* termed it, it decided to "renege on the pledge."

This pushed Railtrack over the edge. It was forced to go into liquidation and Secretary of State for Transport Stephen Byers, using a Railways Administration Order (envisaged in the Railways Act 1993 as enabling the state to ensure that the railways kept running in the event of a national emergency), took over Railtrack's assets and created a new company to run them in its stead, refusing to pay the company's shareholders a penny in compensation—something that would be illegal in the U.S.¹⁸

The murky process by which this happened has become clearer with the release of new ORR documents under the UK's Freedom of Information Act.¹⁹ It is now apparent that Secretary Byers and the Labor government were unprepared to listen to the Regulator Tom Winsor's attempts to broker any deal to keep Railtrack in business:

Mr. Byers told the Regulator Railtrack was in financial crisis and the only options were "three Rs"—renationalisation, restructuring, or receivership...

Mr. Winsor's objections were rejected by Mr. Byers, who said he "had the authority of the prime minister and the chancellor immediately to introduce emergency legislation to entitle the secretary of state to give instructions to the regulator."

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Mr. Winsor said such a move would jeopardise the position of regulators in the gas, electricity, water, and telecoms industries. He added it would have a “severe adverse effect” on confidence in the financial markets and could be illegal under the human rights act.

While investors were correct to dismiss the possibility of renationalization by the expected means of buying back the stock, they failed to consider that the government would simply use the threat of legislation to override its own regulatory framework. The effect was a de facto renationalization of infrastructure. Yet the new industry that resulted, a mixture of privatized and government-owned bodies still generally described as a whole as “privatized,” was to be quite unlike any rail industry in world history.

The Post-Railtrack Industry

Network Rail, as the successor body to Railtrack was eventually named, is a highly unusual company. Its public line²⁰ is that:

Network Rail is a company limited by guarantee. This means that, while we are a private organisation and operate as a commercial business, we have no shareholders. Instead we are accountable to members, who do not receive dividends or share capital. They have similar rights to those of shareholders in a public company, except they have no financial or economic interest in Network Rail. This means they have a duty to act in the best interests of the company without personal bias.

In fact, Network Rail’s members are a remarkable collection of 116 “stakeholders” in the industry—some of whose stake is barely discernable—including the SRA, the Crime Concern Trust, the Royal Association for Disability & Rehabilitation, trade unions, and the Cyclists’ Touring Club. The company’s corporate governance in such circumstances met with some skepticism from industry insiders:²¹

Some rail industry chiefs are privately sceptical, pointing out that Network Rail’s members will meet just a handful of times each year. One member said the body was “pointless,” saying it was “more suitable for the management gentlemen’s luncheon club than a railway.”

Yet this body has been charged with running Britain’s rail infrastructure, much to the bemusement of the City of London, other financiers, and the Rail Regulator. Structuring the company this way

may avoid the charges of corporate greed leveled at Railtrack, but in so doing the structure lacks any incentives for good management. As George Trefgarne of *The Daily Telegraph* aptly observed:²²

The members' role has a contradiction at the heart of it. We are told they have "similar rights to those of shareholders in a public company," yet "no financial or economic interest" in whether Network works.

But the whole point of shareholders is they have a financial and economic interest. In return for making their investment and scrutinising the company's affairs, they are entitled to dividends paid out of any profit. This encourages them to exercise their rights and duties diligently.

Network Rail is a sort of Third Way on wheels. Tom Winsor, the rail regulator, believes it is a nonsense. He says a company with no shareholders is hard to incentivise. If he fined Railtrack for poor performance, it came out of shareholders' pockets.

But Network Rail has no shareholders, so just passes a fine on to the taxpayer or passengers in higher costs. "Shareholders with money at stake," said Winsor, "are far more likely to be responsive than public interest members."

Network Rail has proven to be a poor steward of the company's assets. By all accounts, its management consists of little more than asking the Rail Regulator for more and more money while raising money from the private sector on the understanding that the government backs its debts. Network's current plan envisages spending £26 billion over the next five years. Since the government has guaranteed this money, it is essentially a form of state aid to industry that dwarfs all other such subsidies in the UK—and in the rest of Europe for that matter. The guarantee amounts to €37.5 billion, while the rest of Britain's state aid amounts to €3.7 billion in total (Germany spends €13 billion in state aid, the most in Europe).

Network Rail has still failed to match the performance levels set by Railtrack before the Hatfield crash. Currently, only 76 percent of trains run on schedule, a figure far below Railtrack's pre-Hatfield levels of 90 percent (and below even the 85 percent level achieved by Railtrack in early 2001, once the initial post-Hatfield delays had passed).

Moreover, it is not only Network Rail's internal governance that appears confusing. The regulatory framework is now hopelessly

Network Rail has proven to be a poor steward of the company's assets. By all accounts, its management consists of little more than asking the Rail Regulator for more and more money while raising money from the private sector on the understanding that the government backs its debts.

muddled. In oral evidence to the Transport Select Committee, Oxford economist Dr. Dieter Helm explained the confused relationship between government, regulator, Network Rail and SRA as they currently stand:

The Department for Transport's role is subsidiary to that of the Treasury and spending review, leaving the status of the 10 Year Plan ambiguous;

the SRA's role depends on the Department for Transport's priorities, and the guidance provided to it;

the SRA's budget is notionally outside the main government borrowing calculations, but in reality is determined by the Treasury;

the Rail Regulator decides the track access charges which, in practice, are paid by the SRA at the margin;

thus, the Rail Regulator determined how much money the SRA pays Network Rail and the TOCs [train operating companies], and therefore how much money the Treasury pays the SRA via the Department for Transport;

the outputs are, however, determined by the SRA, which effectively carries out the capital planning function (which Railtrack previously did);

Network Rail therefore is largely responsible for the operations of the railways, and the SRA for its capital development, confusing the roles of management and responsibility;

the Rail Regulator and the SRA have a concordat which cements this confusion of roles between them.

As a result, it is not surprising that there are often sharp differences of opinion between all the main parties: the Treasury, the Department for Transport, the SRA, the ORR and Network Rail. Tom Winsor, Rail Regulator, sees himself as the 'referee', but one who has to take into account the aims of the SRA, and whose decisions ultimately determine public expenditure on the railways."

The committee added in its report that, "This picture does not represent the extent of the confusion, and lack of coordination between the main bodies, which we found."²³

For example, the Committee found:

[A]n astonishing and fundamental disagreement between the Government and the Regulator about the extent of the latter's powers. According to the Minister, the Government had a choice about whether to accept the Regulator's access charges settlement; but the Regulator considered that the Government had no option but to accept his decision. This is a prime example of the confusion which lies at the heart of the present structure of the railway and why it is essential that this structure must be streamlined.²⁴

Because of this regulatory confusion, and because of the way in which government funding now swamps private sector involvement, the industry has ceased to be "privatized" in all but name. Private companies assume little funding risk because of the government's guarantee, while their attempts at innovation are lost in the regulatory swamp. As a result, costs are soaring. The Transport Select Committee commented, in a section of its 2004 report entitled "The Government's Failure":

It is vital that the recent surge in costs for the railway is checked. The Government has told us that it is in control of the industry. But the swelling subsidy figures of recent years tell the real story of an industry that is out of effective control...Relying on incremental improvements may take many years to produce results; ill judged restructuring will damage the industry further. However the Government chooses to reverse the present position of the railway, it will be essential that in future it ensures proper control over the money it provides. The Government must ensure that the private sector assumes real risk where it is involved in providing railway services in future.²⁵

Faced with a situation in which private sector disciplines and expertise cannot be brought to bear because of a malfunctioning regulatory system, it is safe to say that, with the industry as currently constituted, rail privatization in the UK has failed.

Analysis – What Went Wrong

Most commentators agree about what went wrong with Britain's rail industry—in the words of transportation journalist Christian Wolmar, privatization, and privatization alone, "wrecked Britain's railways."²⁶ Yet when asked to explain further, many of the same commentators immediately point to the real causes: the

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fragmentation of the industry and the disastrous over-regulation that accompanied it.

Blaming privatization relies primarily on a caricature of private enterprise as rapacious and concerned only with the fast buck, the short-term, and the bottom line. In truth, capitalism encourages long-term thinking because its institutions ascribe value based on future prospects.

Blaming privatization relies primarily on a caricature of private enterprise as rapacious and concerned only with the fast buck, the short-term, and the bottom line. In truth, capitalism encourages long-term thinking because its institutions ascribe value based on future prospects. Stock market valuation, for instance, takes into account actions that will affect future profitability and sustainability. A company focused only on the bottom line to the exclusion of future considerations will find its value discounted heavily. This is in sharp contrast with the short-term time horizon of politicians and the political funding cycle: In the UK, the Public Expenditure Survey looks only three years ahead. Short-termism on the part of politicians, not the private sector, caused BR's successive funding crises and the infrastructure degradation that led ultimately to Railtrack's demise.

Politicians and the media also made much noise about Railtrack's early success, the "windfall" gains made by shareholders, and executives' large bonuses. As explained earlier, the windfall gains were caused by the government's initial failure to value Railtrack properly when it was privatized. A more realistic sales price would have reduced these windfall gains.²⁷ Further, the issue of executive compensation is irrelevant to the rail industry's situation. Executive compensation is currently such that bonuses of this kind are standard among senior management. This may or may not be a problem, but to expect the British rail industry to have come up with the answer to any such problem is unreasonable when it affects large enterprises globally.²⁸

The most potent argument advanced in favor of privatization wrecking the railways in fact points in another direction. Some argue that the new private sector managers did not understand the railways, and the fragmentation of the railways led to the loss of valuable experience that caused the communication problems that led to Railtrack's demise. There is some truth in this, as Railtrack certainly lost necessary experience that could have averted financial and operational problems (see Appendix 3). Old railway hands with years of experience were sacked or replaced with inexperienced staff after retirement. Yet this may well have happened even if Railtrack had remained in the public sector. The problem was not so much the source of funds as the industry's new organizational structure. When an organization is split up as British Rail was, there is a conflict between efficiency and redundancy. While the replication of functions throughout the new industry ensures the advantages of a redundant system²⁹, it may be thought of as inefficient. Is it really

necessary, the argument goes, for every new organization to employ people responsible for the same task?

To answer this question, it is worth considering the issue of information costs. Information costs are those costs an organization must pay in order to get the information necessary to run its business effectively. Examples include such obvious expenditures as market research, but also less obvious expenses like the costs necessary to review the state of assets. In the current example, efficiency argues that direct costs are increased unnecessarily by the replication of functions, which is countered by the argument that replication reduces information costs. In the end, *unpaid* information costs in the form of lack of experience and communication in the reformed industry helped derail Railtrack.

In a fragmented rail industry, there is no reason why the private sector should address costs any differently than the public sector. The public sector, being exercised by value for money for the taxpayer, may be more concerned with reducing direct costs, such as staff wages, than with paying information costs. The private sector, on the other hand, may recognize the risk associated with unpaid information costs and opt to pay them rather than reduce direct costs. The fact that a private sector Railtrack made the wrong decision about the value of paying these information costs does not imply that a public sector body would not make the same mistake.³⁰

What this suggests, therefore, is that the fragmented nature of the supposedly privatized industry—rather than privatization itself—imposed extra information costs that the industry was unwilling to pay, to its own detriment. In fact, these costs were significantly increased by an overbearing and unresponsive regulatory system.

As explained earlier, the rail industry went from having one major and one minor regulator at the time of privatization to in effect having three separate, powerful regulators and one publicly-owned company under the current government. The Transport Select Committee heard evidence confirming that the responsibilities of these bodies conflicted and in some case contradicted each other, confusing the industry and thereby raising information costs still further. The committee found that:

We have seen no evidence, since our predecessors reported two years ago, that fragmentation in the rail industry has reduced. Indeed, our evidence has suggested that it is getting worse. In addition, industry costs are increasing; performance remains in the doldrums; and the SRA appears utterly incapable of managing significant improvements.

What this suggests, therefore, is that the fragmented nature of the supposedly privatized industry—rather than privatization itself—imposed extra information costs that the industry was unwilling to pay, to its own detriment.

The evidence of the Rail Regulator’s Interim Review of track access charges is that the Regulator and the SRA are not co-operating well.³¹

It became clear that, as the railway system is currently governed, there is no one organisation capable of properly addressing the [industry’s problems]. In our view, until there is a single body with the authority to deal with these questions, government and the rail industry are condemned to spending energy debating structural issues rather than getting on and running the railway for the benefit of the travelling public and the country.³²

While the Committee’s suggestion of a single regulatory body as the solution is debatable, its analysis that the various parties are condemned to endless quibbling under the current situation is sound.

Moreover, the committee—in unusually strong language—pointed out that two of the public bodies responsible for the railway had failed to live up to their mission:

[The Government had created] another fudge by creating Network Rail, a private company without any private sector disciplines, seemingly set up simply to keep the enormous costs of the railway infrastructure away from the Government’s balance sheet. In addition, we have found that the Health and Safety Executive is regulating railway safety without full regard for the improving safety record of the industry or its ability to fund improvements. The result is that spending in this area is a major contribution to soaring costs but with progressively less safety gain.³³

The other two public bodies, ORR and the SRA, had also failed in their mission:

Economic regulation of the railway, as presently organised, has largely failed. However, if the private sector continues to be involved, there will be a role in future for a measure of independent economic regulation to “hold the ring” between the infrastructure provider and the private sector companies.³⁴

The committee, while endorsing government control, recognizes that the funding issue is a political decision and that regulation has not succeeded in controlling the industry’s costs. When political considerations override business considerations and regulation reinforces that trend, there is no real regulation of a market to speak of. The Regulator becomes a permanent funding

mechanism, rather than someone whose role is a temporary one, to help the market find its feet, as privatization first envisaged.

Public dominance over the privatized railway is a clear case of government and regulatory failure, not market failure. The Government has proven unable to regulate its way out of this problem. The inability of government or Regulator to achieve their goals by interventionist means provides a clear case to give private enterprise the chance to achieve those goals—the delivery of an efficient railway service—which it has been barred from pursuing since the creation of the SRA.

However, in its 2004 report of the future of the rail industry the Transport Select Committee proposed the introduction of a Railway Agency to replace the various regulators and Network Rail. Its suggested powers and function are described as follows:

This new executive body would combine the strategy and output delivery functions of the SRA with control of the infrastructure, and must be given all the powers required to manage the entire rail system and to deliver excellent services for the travelling public. Combining these functions will permit the body responsible for growth and targets also to manage the means of achieving improvements, and to receive funding at the cheapest level. However, this body must demonstrate a much greater creativity and vigour than its predecessors if these new arrangements are to have a chance of working. The travelling public do not care who runs railway services; their concern, quite properly, is with efficiency and value for money. While the private sector may therefore continue to provide some train and infrastructure services, where that clearly provides the best option, the Government needs to keep an open mind on the provision of these services directly by the public sector.³⁵

This goes well beyond the previous solutions of regulation or even of nationalized industries in imposing direct government control over the railways. When the National Health Service (NHS) took over Britain's health care in 1948, its creator, Minister of Health and Housing Aneurin Bevan, said that he wanted the crash of every dropped bedpan to reverberate around Whitehall and Westminster. Those crashes have reverberated, but not as he envisioned. The NHS has been a disaster in terms of lack of investment and inefficiency, two entirely predictable outcomes of centralized planning. To turn the railways into an "NHS on wheels"—a frequent accusation by opponents of greater political control of the railway system—betrays

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a failure to learn the lessons of history.

Her Majesty's Government apparently has recognized that too many regulators spoil the broth. On April 7, 2005, the Railways Act 2005 received Royal Assent. This abolishes the SRA and transfers its responsibilities to the Secretary of State for Transport (in some cases to devolved regional administrations). It also establishes the Office of Rail Regulation—a revamped version of the ORR—to function as a combined economic and safety regulator (the duties of HSE will transfer to ORR).³⁶ While certainly a better solution than that proposed by the Transport Select Committee, the new Railways Act does not address the fundamental problems that arise from political control. Therefore, the problem of government failure with respect to the railways will continue just as it has since the First World War. A new government solution is no solution at all.

A degree of fragmentation may indeed be necessary in the rail market to ensure some form of competition. However, vertical separation has increased information costs to a harmfully high level.

Instead, a sensible approach would look at what have proven to be the rail industry's major problems and attempt to solve those. As noted, the major problems have been the government's coercive fragmentation and overzealous regulation of the industry.

A degree of fragmentation may indeed be necessary in the rail market to ensure some form of competition.³⁷ However, vertical separation has increased information costs to a harmfully high level. An efficient rail industry needs to be vertically integrated, and so needs to be restructured once more.

There are two possible approaches. One is to return to the regional companies model originally considered for the privatized industry. This would, however, require something approaching renationalization of the entire industry. Instead, we might profitably consider a suggestion made by the former Conservative Environment Secretary John Redwood MP in a March 2004 article in *The Times* of London.³⁸ Redwood advocates abolition of the SRA, and notes that:

[Transport Secretary Alistair] Darling is tiptoeing towards the train company solution—reunite trains and track. He is trying out joint offices, where problems can be resolved more quickly, blame apportioned and remedies applied all in one go through joint working. This is a sensible measure. He is looking at whether new ways of collaborative working can be tried on the least used path.

Redwood proposes that allowing train operating companies to purchase Network Rail assets would reduce the inefficiencies caused by separation, allow operations to drive investment, and make private enterprise more likely to fund more services.

The ultimate aim of such a program should be the elimination of government funding. As experience shows, demand for government funding grows where it exists because it constitutes a steady income stream—this is the economic phenomenon of “rent-seeking.” Yet with government funding comes naturally the desire for more government control and regulation, with all its attendant problems.

Redwood’s solution would reduce information costs, while allowing the private sector to apply its disciplines to solve the problems of investment and funding. While many of the newly reintegrated lines might prove to be too small to operate independently, a period of consolidation—as existing train companies merged—would produce economically efficient companies that might then be able to cross-subsidize and become less dependent on government funding. As Redwood notes:

The railway is very old technology, struggling to adapt to the weight, speed, and volume demands of the modern world. While China puts in a Maglev system capable of running at more than twice the speed of anything we have, and as Japan’s privatized railway shows what can be achieved with more modern, dedicated track for true express trains, the UK patches and muddles on a Victorian railway, improving the way they tip sand on the track in their desperate search for grip when braking.

The best hope for the railways would be to give or sell control of the track to private companies running the trains, to limit the amount of subsidy they will be granted, and to encourage new technology developments for the new routes public transport ought to have.

Investment has to be made in the private sector—neither main party will be able to spend enough to solve the problem on the public account. Pretending that Network Rail, a state pensioner, is a private sector risk-bearing company is not the answer.

This is the obvious answer to the Transport Select Committee’s call for “much greater creativity and vigor” in the rail industry. Experience both in the UK and the U.S. has shown that using regulation to force vertical separation onto an industry that works best when integrated is extremely counterproductive.

The biggest potential obstacle to the reintegration of the British rail industry is European Directive EC 91/440 (see Appendix 2)

Demand for government funding grows where it exists because it constitutes a steady income stream—this is the economic phenomenon of “rent-seeking.” Yet with government funding comes naturally the desire for more government control and regulation, with all its attendant problems.

Britain's railways must be reintegrated and freed from their regulatory straitjacket if they are to play a useful role in meeting Britain's transportation needs in the foreseeable future. Taking the railways back into public ownership is no solution.

and its successors. The European Union regulations might bar reintegration, which would cause significant reverberations in Britain, given the ongoing debate there over how much power to yield to Brussels.³⁹ Nevertheless, from a transportation standpoint, the answer seems clear. Britain's railways must be reintegrated and freed from their regulatory straitjacket if they are to play a useful role in meeting Britain's transportation needs in the foreseeable future. Taking the railways back into public ownership is no solution. Thankfully, there is a model for successful passenger rail deregulation—the American freight deregulation model.

Lessons from American Rail Deregulation

The American railroad system grew at the same explosive rate as the British, yet evolved differently. While the British railways became predominantly oriented toward passenger travel, freight transportation remained the focus of the American system. This difference led to different focuses of regulation. Safety issues drove government regulation in the UK, while in the U.S., commercial considerations dominated, as government responded to accusations that railroad rates charged that were high and discriminatory.

In response, Congress created the Interstate Commerce Commission (ICC) in 1887, which had the authority to regulate railroad freight rates. The ICC soon found that there was no objective way to determine “fair” rates, and instead consistently caved in to pressure from freight carriers for lower rates, which in turn led to a lack of investment in infrastructure. The ICC also began to regulate in areas beyond rates: routes, equipment acquisition and utilization, labor practices, service offerings, consumer relations, and just about every other aspect of railroad operations. Private sector choice and innovation were suppressed. When, for instance, Southern Railway proposed to introduce 100-ton hopper wagons in the 1960s that would lower rates for its shippers, the ICC decided that this was simply a way to give some of its customers discriminatory rate reductions and prohibited their use until the Supreme Court ruled that railroads were allowed to use “whatever inherent advantages of cost and service they possessed”⁴⁰.

After almost a century of such overweening regulation, the industry was on the point of collapse. As Americans for Tax Reform policy analyst Peter Ferrara summarizes:

By the end of the 1970s, the railroad industry was fading into complete disarray. While railroad rates ended up climbing two percentage points faster than inflation each year over the

previous decade, the industry's annual return on investment had fallen to less than 2 percent. The government had taken over most of the major Northeastern railroads, which had collapsed into bankruptcy. Nationally, railroads accounting for over 20 percent of the nation's track were bankrupt.

Because railroads were no longer able to finance capital investment, their track and equipment deteriorated. By the mid-1970s, deferred maintenance and delayed capital expenditures amounted to billions of dollars. The rate of accidents due to track or structure defects quadrupled from 1966 to 1976. Because of such safety problems, almost 50,000 miles of track, about 15 percent of all track nationally, could be operated only at reduced speeds, as slow as 10 miles per hour. The new phenomenon of "standing derailments" arose, which meant that some tracks were so deteriorated that train cars derailed while standing perfectly still.⁴¹

Whatever the differences between British and American railroads, the effects of regulation on were the same. Excessive regulation of a supposedly private sector industry led to an investment backlog, increased accidents, reduced punctuality and company bankruptcies.

The U.S. Congress,⁴² like the British Parliament, recognized the problem, but proposed a different solution. Congress, rather than seek nationalization, passed the Staggers Rail Act in 1980 (named for West Virginia Congressman Harley O. Staggers), repealing most of the ICC's powers except the authority to regulate in cases of market abuse. Contracts between rail companies and shippers could be drawn exempt from regulation, which allowed the market to set prices. The railroads were also allowed to determine their own routes, which allowed them to abandon routes they considered uneconomic—though, interestingly, many of these routes were bought by new companies that sprang up following deregulation. The ICC was later replaced by the Surface Transportation Board (STB), which now has an annual federal budget allocation of roughly \$10 million and operates on the presumption that rail rates are reasonable.

With their fetters cut, private freight rail companies were able to make much greater returns and in turn invest those returns in maintenance and new infrastructure. Over \$120 billion was invested in the 1990s, with \$15 billion in new track and rolling stock in 1997 alone⁴³—levels of investment that the British rail industry can only dream of. This increased investment has led to greater efficiencies

Excessive regulation of a supposedly private sector industry led to an investment backlog, increased accidents, reduced punctuality and company bankruptcies.

and thus reduced costs; rail rates have fallen by 55 percent on average from their regulated levels. As economists Christopher Barnekov and Andrew Kleit summarized in 1990⁴⁴:

A rough calculation of annual total welfare gains in the United States from rail deregulation resulting from the Staggers Act would include something on the order of \$5.3 billion to \$7.2 billion in lower rates to shippers, \$5 billion to \$10 billion in reduced inventory-related logistics costs, slightly less than \$500 million in higher profits to railroads, and slightly over \$700 million in savings to taxpayers.

These are the benefits that rail privatization was supposed to secure for British taxpayers and was on the road to securing before the forced collapse of Railtrack.⁴⁵

It is worth noting that the 1980 deregulation model was different from other U.S. deregulations. Most U.S. network industry “deregulations” have involved vertical separations, like the British railways, into the “grids” that provide the infrastructure—such as the rail track or the electric supply grid—and the “flows” that travel along the grids—such as train services or electricity. In most cases, the flows have been deregulated while the grids remain highly regulated. Meanwhile, regulators have been willing to take any accident or public concern as an opportunity to extend their powers—much as UK regulators have done and the ICC did before 1980. Thus, when electricity blackouts hit much of the Northeast and Midwest for a day in the summer of 2003, regulators were quick to announce plans to more tightly control the electric supply grid.

Thankfully, U.S. freight rail deregulation avoided such pitfalls, partly because there was no vertical separation of the industry when regulation began in 1887. In a sense, the railways were deregulated right only because they were regulated early. The deregulated rail industry was free to secure service contracts at levels that met the needs of all parties, rather than subordinate the needs of the grid to the demands of the flows, as has been the case with other network industries.

America’s and Britain’s experiences with public sector involvement in the rail industry provide lessons for the other in both rail and in network industries in general. Specifically, it offers some guideposts that policy makers should observe as they consider the fate of Amtrak.

From the American experience, the following lessons apply:

- Light regulation that targets neither grids nor flows allows the private sector the most latitude to bring its skills to bear.
- Freedom to secure contracts at mutually beneficial levels is good for the industry.
- Removing regulation can lower costs and raise capital investment to substantial levels if the industry is free to choose its own routes.

From the British experience, we learn:

- Privatization is meaningless if the industry is not free to use private sector solutions.
- Enforced separation of infrastructure and operations increases information costs to a level that may affect the viability of the industry, and could potentially introduce distorting regulatory costs if one aspect is regulated more than the other
- Political risk can reach crippling levels if the industry is not protected from arbitrary government decisions.

And from both we learn that:

- Excessive regulation degrades the industry as much as public ownership—in general, the less government involvement the better.
- Regulations, laws or ownership structures that lead to underinvestment or disinvestment are bound to be harmful. Investment in rail infrastructure and equipment cannot be shortchanged without eventual significant damage to every party involved.
- Private investors will not put capital in unless they see an opportunity to make money on their investments.
- Regulatory stability is important to maintain investor confidence.
- The complexities of rail operations require smooth information flows. Vertical integration helps to achieve this.

The way privatization was botched in the UK put the British rail industry in a bind similar to that of the pre-Staggers American rail industry. Therefore, it should be obvious that reregulation of the American industry would be harmful—yet that is precisely what some suggest. Some rail shippers, who feel that they have been shortchanged by deregulation because of higher access rates, argue for giving regulators power over rates once more. This would

The way privatization was botched in the UK put the British rail industry in a bind similar to that of the pre-Staggers American rail industry. Therefore, it should be obvious that reregulation of the American industry would be harmful.

reduce the benefits to the industry of the free and fair competition introduced by Staggers, reduce funds available to railroads for capital investment, and reintroduce a system of market-distorting federal subsidies. There is ample evidence, as we have seen, from both sides of the Atlantic that these “solutions” do nothing more than damage the industry at great cost to the taxpayer. As Dr Jerry Hausman of MIT wrote⁴⁶ when reregulation was proposed during the 107th Congress:

Railroads will need significant replacement investment as well as new investment to serve expected growth...But the contemplated new regulations would lower rates and decrease the railroads' return on any new investments.

The current proposals for new regulations would inevitably lead to lower prices and lower returns on investment for the railroads, and ultimately poorer service. Since there is widespread agreement that railroads are not currently earning their cost of capital, lower prices and lower returns on investment would decrease the economic incentive for further investment. Thus, the ability of the railroads to attract capital and reinvest in plants and improve levels of service would decrease. Indeed, the ability and incentive to maintain present levels of service to existing shippers may be placed in jeopardy because the economic benefits of replacement investment and investment to accommodate expected growth may not be forthcoming, given the low levels of expected returns.

Railroads will need significant replacement investment as well as new investment to serve expected growth. The railroads entered the period of deregulation with significant excess capacity. Growth over the past 20 years of over 50 percent in volume, as well as the rationalization of the railroad networks, has eliminated much of the excess capacity from the networks. Replacement investment is necessary to satisfy future growth. But the contemplated new regulations would lower rates and decrease the railroads' return on any new investments.

Such arguments apply equally to the British railways. British rail privatization should have provided the nation with benefits similar to those enjoyed by the US following deregulation, by allowing the invisible hand of the market to take charge. Instead, a regulatory framework placed an invisible foot on the industry's throat, choking off the lifeblood of private sector innovation. It should come as no surprise that significant resuscitation efforts are now required.

America must avoid these problems when it considers the future of its own railroads. The freight railroads, if anything,

need further deregulation to allow them to invest more in their infrastructure to help provide the freight capacity the nation needs. Reregulation must be avoided at all costs. As for Amtrak, any privatization measure must avoid the temptation to impose any but the lightest regulatory hand on the new body, should avoid artificially separating operations and infrastructure, and should ensure that any privatized body is able to invest in infrastructure improvements according to its own needs rather than those of politics.

APPENDIX 1 The Political Risk of Project Approval: CrossRail and Central Railways

In London, workers depend on rail transportation to get them to their jobs every day. The city's road system, inherited from previous, smaller populations, is simply inadequate for the purpose of the daily commute. This structural problem has been exacerbated by the environmental pressures that led to the introduction of the congestion charge, which dramatically reduced the number of cars entering central London.

The periods of economic growth in the 80s and 90s have placed increasing strain on London's rail system—both the London Underground system and the more conventional overground network. The Thatcher government, which first recognized the problem, instituted the Central London Rail Study in 1990 to examine potential solutions. One of the study's recommendations was to build a new rail line to serve a function similar to the RER in Paris, a regional rail express route that combines the functions of long-distance train and regional metro. The new line, called CrossRail, would consist of a new tunnel under Central London linking up services that presently feed into terminals and allowing them to serve Central London destinations directly. The service would significantly relieve pressure on the underground, improve journey times, and reduce traffic congestion by attracting passengers off the roads.

Yet the construction of such a line would be both costly and disruptive. That opened the project up to two forms of political risk. Cost estimates rose from an initial \$1.5 billion in 1990 to \$4 billion in 1994. This meant that the Treasury was increasingly unwilling to fund construction as a traditional public sector project. The disruption meant that the project's Parliamentary approval process attracted considerable opposition, which led to the Parliamentary Committee finding the case for the project not proven (London entered an economic downturn in the early 90s, but rebounded quickly).

These forms of political risk fed off each other. Private sector investment was unlikely to be forthcoming until the project approval had been secured, while Parliament was unlikely to approve a project that had not yet secured the funding necessary to build it. Experience had shown that approvals for lines that were not built had created extensive blight on the values of nearby properties.

This is exactly the problem that has beset Central Railways Group, a consortium founded to rebuild an old railway (closed during the Beeching cuts) to act as a freight line linking the midlands to the Channel Tunnel. The consortium has been unable to attract enough investment to satisfy the government that the line has a realistic

chance of being built, but explains that its funding is dependent on it gaining approval for the project. Significant privately-motivated expansion of the rail network is therefore unlikely while the approval process remains politically managed.

A new, politically-sanctioned version of CrossRail is currently beginning its approval process all over again.

APPENDIX 2 The European Dimension: EC 91/440

Article 6 of European Directive EC 91/440, first promulgated in 1991, was adopted following the apparent success of vertical separation of rail infrastructure and operations in Sweden. It states:

Separation between infrastructure management and transport operations

1. Member States shall take the measures necessary to ensure that separate profit and loss accounts and balance sheets are kept and published, on the one hand, for business relating to the provision of transport services by railway undertakings and, on the other, for business relating to the management of railway infrastructure. Public funds paid to one of these two areas of activity may not be transferred to the other. The accounts for the two areas of activity shall be kept in a way that reflects this prohibition.

2. Member States may also provide that this separation shall require the organization of distinct divisions within a single undertaking or that the infrastructure shall be managed by a separate entity.

As community law, this has been adopted by all European Union countries, but with differing methods of application. The UK and the Netherlands, for instance, took advantage of section 2 and created separate entities to manage infrastructure and operations (the Netherlands even separated out timetabling and signaling from infrastructure). In France, on the other hand, the infrastructure operator RFF contracts out all work to operations manager SNCF.

The differing experiences are instructive. Swiss transport analyst Carlo Pfund, in a report published by the Swiss rail think tank LITRA and discovered that, for instance, fragmentation in the Netherlands had been as much a problem as in the UK, without the saving grace of improved customer service and new trains. In fact, the Dutch experience became known as “Crisis and Collapse” and led to the Department of Transport firing the head of NS, the train operating company.

Even in France, communication problems increased with separation. Pfund reports that network planning suffered after the beginning of a “turf war” between RFF and SNCF.

Separation did not inevitably lead to problems, however, with the Swedish system avoiding most of the problems elsewhere. Norway and Finland similarly coped with the change. Pfund concludes that the severest problems were felt on the densest

networks, like the UK and Netherlands. As British transport expert Patrick Crozier sums up, “It seems that dense networks with high-intensity operations magnify the problems of fragmentation.”

EC 91/440 remains in place, however. It continues to be a significant obstacle to any plans to reunite infrastructure and operations under the same ownership.

i“Separation Philosophy of the European Union - Blessing or Curse?” Carlo Pfund, LITRA, 2003

APPENDIX 3: The Hatfield Derailment and its Consequences: When Politics trumps Talent

On October 17, 2000, a rail accident at Hatfield killed four people. It also led directly to the death of Railtrack. Railroad journalist Christian Wolmar summarizes the trivial incidents that led up to the crash:

In March 2000 when wagons carrying new rails to replace a cracked section of track arrived at the site near Hatfield, the workers on the line found they could not unload them because it was the wrong type of train. They would have had to turn off the overhead line electrification, a process that would have taken too long and caused a delay to the reopening of the line. So the new rails went back to the depot and the cracked rail remained in place, with dozens of trains thundering over the faulty section at 115mph every day. Three more attempts to deliver the rails were made and, when they did eventually arrive, it was too late, because the busy summer timetable did not allow for the lengthy line closure such a major job require. So, for a further six months the line was left unrepaired until, on 17 October, it gave up the ghost. As the 12.10 London to Leeds train passed over the damaged section of track, the rail shattered into 300 pieces, causing seven of the nine coaches to jump off the tracks. Most seriously, the buffet car smashed into a stanchion holding the overhead wiring and four of its occupants were killed.

The series of errors was summed up by Chris Garnett, chief executive of train operating company GNER who told Wolmar, “The accident at Hatfield was not caused by a broken rail. It was caused by total mismanagement by Railtrack and its contractors.” The separation of tasks between Railtrack and its contractor meant that no one was actually responsible for ensuring the broken rail’s replacement. Yet, as Wolmar goes on to note, “Hatfield would have remained no more than a footnote in British railway history had it not been for the subsequent imposition of thousands of speed restrictions that caused chaos for rail travelers and hundreds of millions of pounds in compensation claims by the train operators.”

Railtrack simply panicked in its reaction to the crash, and the lack of detailed knowledge of engineering and railway operations in Railtrack’s senior management only made things worse. By the time of Hatfield, Railtrack had only two engineers on its board, and one of those was responsible for liaison with the train operating companies. Railway operations were under the direction of Jonson Cox¹, a man with no railway management experience who had joined the company from the water industry. He had to take the decision about whether to impose speed restrictions. With no experience to guide his decision, he took a precautionary approach that had a fatal impact on Railtrack’s finances.

Cox's lack of experience was crucial in the decision because he relied on conflicting advice from his juniors. Railtrack head of track David Ventry recommended the extreme precautionary approach—placing speed restrictions on all sections of track where there was evidence of “gauge corner cracking,” and setting those restrictions at 20mph, the maximum speed at which a train can remain upright when derailed. Great Western zone head Andrew McNaughton, who was brought in specifically to help deal with the crisis, argued for setting the restriction at two-thirds of the maximum line speed because at that speed the weight of the train is balanced equally on the two rails. Cox's decision to follow Ventry's advice—without knowing how many sites would be affected—brought the railways almost to a halt. Indeed, the West Coast Main Line was initially closed because one zone director concluded that train operations were impossible. Experienced railway hands regarded Railtrack's approach as far too cautious, with SRA chairman Sir Alistair Morton calling it an “overreaction” and evidence of a “nervous breakdown” of the railways.

Yet the fault was not Railtrack's alone. Regulators exacerbated the problem. Lifting speed restrictions required the consent of Her Majesty's Railway Inspectorate (HMRI), part of the HSE. HMRI ruled that lifting speed restrictions would require a risk assessment of the affected sites—by May 2001, 1,286 sites had been affected. It also instructed Railtrack to prepare of detailed guidance on the criteria used to impose and remove the restrictions, which the company was slow to do.

There was also bad luck. Bad weather caused the worst flooding in years, closing the East Coast Main Line north of York and many other lines in remote areas around the country. This compounded the journey time delays that speed restrictions had caused—in many places journey times doubled and some day trips became impossible. As Wolmar put it, “Public transport was, in effect, suspended, a poor advertisement for the rail industry's wares which was to have a long-term effect” (p.7).

The direct cost of Hatfield and its restrictions turned out to be £733 million, but the cost to Railtrack's value was much greater, with its share price beginning a precipitous decline. Chief Executive Gerald Corbett—who had offered his resignation to the board on the day of the accident, only to have it turned down—and Cox were both fired. Many of Cox's responsibilities were given to Corbett's successor, Steve Marshall, another industry outsider. Richard Middleton, the engineer serving as commercial director mentioned above, was made technical director, but was initially expected to report to Cox before his sacking, which led to Middleton threatening to resign. McNaughton was made chief engineer, although he was not given board status. Even after Hatfield, only two of Railtrack's seven board members possessed substantial railway experience.

i.Mr Cox was titled Chief Operating Officer, which in American railways is often used to mean the man who runs the company, but Mr Cox's responsibility was running the railway.

Notes

¹ Thanks are due to the following for their insights and helpful comments on earlier drafts of this document: Patrick Crozier, Craig Rockey (Association of American Railroads), Michael Schabas (GB Railfreight), Woody Price (formerly of CSX Corp), Fred L. Smith, Jr., Clyde Wayne Crews, Jr., and my former colleagues at the Department of Transport in the UK.

Much of this paper would not have been possible without Christian Wolmar's survey, "Broken Rails: How Privatisation Wrecked Britain's Railways." Although this paper comes to a different conclusion, Christian Wolmar's book is invaluable as a primary source of comments and insights from those most involved in privatization as well as a good general narrative of the process.

² Published by the Institute for Economic Affairs, London, July 2003, <http://www.iea.org.uk/record.jsp?type=publication&ID=210>

³ "Broken Rails: How Privatisation Wrecked Britain's Railways," Plantagenet Press Ltd, London, 2001, p.27

⁴ Wolmar, p.29

⁵ An attitude soon lampooned in popular culture, such as the long-running BBC series *The Men From The Ministry* (1962)

⁶ The BTC was swiftly abolished after Beeching's appointment, and he became Chairman of BR.

⁷ As it happened, Marples was replaced as Transport Minister following his party's defeat in the 1964 election, which slowed down the closure problem, but new Minister Tom Fraser still authorized 1,071 miles of closure in 1965.

⁸ T.R. Gourvish, "British Railways 1948-1973, a Business History," p.304, Cambridge University Press, 1986. Quoted in Wolmar, p.56.

⁹ Wolmar, p.56

¹⁰ Wolmar, p.52

¹¹ It is believed that this was the preferred option of Prime Minister John Major.

¹² "The Right Lines," Kenneth Irvine, Adam Smith Institute, London, 1987

¹³ Selling tickets and operating services using leased rolling stock, running over the infrastructure provider's track.

¹⁴ Oct. 18, 2001

¹⁵ DAE Working Paper 0118, <http://www.econ.cam.ac.uk/dae/repec/cam/pdf/WP0118.pdf>

¹⁶ Op. cit.

¹⁷ This can be seen in other industries. A misplaced fear of private monopoly creates unreliable power grids, as demonstrated by the U.S. blackouts of 2003, which were at least partly attributable to Depression-era laws that keep the industry fragmented.

¹⁸ The legality of the Secretary of State's actions is questionable. As Osborne put it, "First, those who bought shares after last April's announcement of government backing were misled. There is no doubt of that. Second, there is every chance that Stephen Byers has contravened Section 4 of the Railways Act and its demand that the regulator should make sure it is not 'unduly difficult' for Railtrack to finance itself. In other words, it was the government that made the company bankrupt. Thirdly, the shareholders are looking into the likelihood that there was a false market in the shares once the decision to act had been taken." In March 2002, the government finally offered compensation of £2.50 per share, which valued the company at about £500 million. Legal action on behalf of the shareholders is still ongoing, as a large group contends that in October 2001 Mr. Byers publicly rejected renationalization by purchase as an option on the ground that Railtrack's value was £7-£8 million including its debts.

¹⁹ Andrew Clark, "Railtrack's fate sealed with Byers' threat," *The Guardian*, March 31, 2005.

²⁰ <http://www.networkrail.co.uk/companyinformation/index.htm>

²¹ Clark, "Thinktank lays into Network Rail structure," *The Guardian*, September 16, 2002

²² George Trefgarne, "The market knows how to run a railway," *The Daily Telegraph*, June 9

Railways” (p.7), <http://www.parliament.the-stationery-office.co.uk/pa/cm200304/cmselect/cmtran/145/14502.htm>

²⁴ Ibid, p. 19

²⁵ Ibid, p. 11

²⁶ The accusation appears in the very title of his book

²⁷ There is an element of sour grapes in this argument, as many small investors who bought at the IPO sold their shares after the initial price rise and then saw institutional investors make large sums as Railtrack’s share price grew ever higher.

²⁸ There is also a significant element of class warfare in the accusation. As Peter Osborne wrote in his *Spectator* article, “When the original privatization took place, Labor set about making Railtrack the symbol of their brilliantly successful and scurrilous campaign against “fat cats.” Whenever the company dared to announce a dividend, it was condemned for grand larceny. Profit, in a typical piece of financial illiteracy, was denounced as theft. The directors were hounded in a vicious, personalized campaign. “They are a bad bunch, I am afraid,” said transport spokesman Clare Short before the last election. From the very start, Labor treated the directors of Railtrack like criminals. In Labor’s victory conference of autumn 1997, John Prescott read out the names of each director in turn, sneering. At a time when Tony Blair led his party, kicking and screaming, towards capitalism, a concession was made for Railtrack. It was allowed to remain in place in Labor demonology, a symbol of hatred of the bosses and the class war.”

²⁹ In the management literature, a redundant system is a back-up system, e.g. one that ensures that a problem will be caught if the primary system misses it. There are clear advantages to an element of redundancy in any complex system, such as the rail industry.

³⁰ The term “market failure” is sometimes applied to Railtrack, but it should be apparent from the discussion that Railtrack was not really a market entity, being merely a private sector channel for government funding and, often, instructions. There was, essentially, no market to fail.

³¹ Op cit, p. 6.

³² Ibid, p.7.

³³ Ibid, p.8.

³⁴ Ibid, Executive Summary

³⁵ Ibid, Executive Summary.

³⁶ See DfT press release, http://www.dft.gov.uk/pns/displaypn.cgi?pn_id=2005_0046

³⁷ Although there is no reason to assume that this must be guaranteed by government; given freedom, fragmentation may well naturally evolve.

³⁸ March 13, 2004

³⁹ There is considerable public hostility to Brussels’ role in framing much of British legislation, while British attempts to reduce EU powers are met with resistance by both the EU and many other member states. A confrontation over this issue could have much wider political implications, and so British governments are unlikely to force the issue unless the major parties have a change in attitude towards Europe.

⁴⁰ I. C. C. v. New York, N. H. & H. R. CO., 372 U.S. 744 (1963)

⁴¹ “The Folly of Rail Reregulation,” Americans for Tax Reform Policy Brief, 1999, <http://www.atr.org/content/html/1999/090199pb.html>

⁴² While the reforms were passed by Congress, much of the credit must go to work undertaken by the Carter administration, which first proposed deregulation as an option.

⁴³ Ferrara, op. cit.

⁴⁴ Christopher C. Barnekov and A.N. Kleit, “The Efficiency Effects of Railroad Deregulation in the United States”, *International Journal of Transport Economics*, Vol. XVII, No. 1, February 1990, p. 36.

⁴⁵ It should be noted that deregulation of the British bus industry in 1986 led by 1999 to a 40 percent decrease in total costs and a 27 percent increase in service miles.

⁴⁶ “Will new regulation derail the railroads?” *Competitive Enterprise Institute*, 2001, <http://www.cei.org/pdf/2899.pdf>

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