

FULL CIRCLE:

RAIL INDUSTRY PRIVATISATION IN NEW ZEALAND, AND A NEW THEORY OF ITS FUNDAMENTAL CONCEPTUAL WEAKNESSES ¹

Ross Clark ²

Rail Performance Manager
Transport Scotland

ross.clark@transportscotland.gsi.gov.uk

1. INTRODUCTION

The privatisation of state-owned assets, a defining characteristic of the 1980s, was not restricted to the United Kingdom. In New Zealand, the Labour Government which took office in 1984, was committed to a policy of what was known at the time as ‘corporatisation’ – converting government departments and other agencies which had commercial functions, into proper commercial entities, and then privatising many of them. The railway operation had already been converted to a commercial structure, in 1982, and it was eventually privatised in 1993. However, it was how the markets in which the railway operation worked would develop, that would prove to be ‘a bridge too far’ for the railway’s privatisation. Although the network had not been split out in the sale process as it was in Great Britain, the whole company eventually had to be saved from bankruptcy. It has now been repurchased completely.

The purpose of this paper is to examine the situation in New Zealand, and then to compare it with other industry privatisations which have worked. This paper will argue that the critical difference between rail and other formerly nationalised industries lies in its subsidy requirement – what people are prepared to pay for railway services, only rarely bears any relation to what those railway services cost to provide – and *further*, that those services are provided by an effective monopoly. It is the *combination* of these two aspects which proved fatal for the New Zealand rail privatisation (that is, once the rail freight market went into failure), given the clear Government desire to retain the railway network at its current extent.

The paper’s structure is as follows. First, it looks at the way that the railway in New Zealand was privatised. Second, it introduces a model of industry structure as an explanatory variable for understanding why many privatisations within the transport sector and elsewhere have worked and some railway ones have not. Third, it argues from that basis as to why privatisation could not have worked under these circumstances. Fourth, it provides some comment on the implications of this for public policy, including that in a British context.

2. PRIVATISING A RAILWAY – A UNIFIED APPROACH

We begin with the situation of the railway network in New Zealand. In total route length longer than the railway in Scotland, it is principally a freight-based railway carrying 14.4m loaded tonnes of freight per year (3.96 bn tonne-kilometres) over 4,100km of network ³. When it was privatised, it was as one single operation, thus avoiding many of the problems inherent in the way it was done in Great Britain. The freight market faced by Tranz Rail (the company's name after June 1993) was extremely competitive, and as a result there was no provision of, or indeed need for, an independent commercial regulator. Yet, this privatisation failed as well, with the operator (from 2004, the Australian logistics firm Toll Holdings) bought out by the New Zealand Government in May of 2008.

However, when one considers that the genesis of the New Zealand privatisation goes back to the early 1980s, it is clear that its present situation has been a very long time in the making ⁴. Before 1982 the railways in New Zealand were organised as a Government department, directly responsible to a minister. In that year it was converted into a proper commercial structure, answering to a commercial Board. For example, instead of the total annual losses being paid for via a grant from the Treasury, which was the practice before 1982, the passenger services were supported via a 'transparent' above-line payment, which was then treated as revenue. A great deal of debt was also written off at this time. Over the next few years, there was substantial investment in the freight network, including the electrification of a large part of the main freight line, and the beginnings of a large truck (lorry) operation. The idea was that this investment would pay for itself, which – given the road charging (tax) structure facing the truck sector (refer fn. 7) and higher oil prices (in real terms close to even today's levels) – it should have done. It did not, and by 1990 the government was facing a situation whereby the rail company was left with another huge debt – the situation that the 1982 reforms had been intended to avoid. At the time, it is not surprising that the New Zealand Treasury was looking quite seriously at a complete abandonment of the system, or at the very least a substantial winding-back. Hence the interest in privatisation: it was seen as the only way of avoiding a situation where in future, railways turned once again into a 'money pit', although this was never explicitly admitted to. The option of splitting the operation and the track was considered at this time, but not proceeded with because it was thought that selling a combined operation would maximise the sale price over selling it in pieces, and because of the perception that significant operational difficulties would arise from separating wheel and rail. At that stage, there were no precedents for how this would work in practice.

Eventually, and after writing off some \$NZ1.2 bn in debt (about £500m) and with a cash injection of a further \$NZ360m (about £140m), the company was put on the market. In the end it was sold in 1993 for about \$NZ330m, on the clear understanding that there would be no more public money put into it, except for specifics like the day-to-day subsidy requirements of the two suburban passenger operations (managed and paid for via the local equivalent of a PTE). The aim of the privatisation process was to leave the company in the situation in which it could at least cover its operating costs and earn a genuine financial

return on its investment. This also meant that the government wrote off most of the sunk or replacement costs of the operation. At an estimated \$4 bn, excluding land, the replacement value of the business was far more than the business's sale price⁵.

The new owners, who christened the business 'Tranzrail', did invest in the freight operation – some \$NZ900m of capital expenditure in the next seven or eight years, or nearly three times the initial purchase price. Again, the original expectation was that this investment would be paid for in higher volumes and rates. By 2000, however, if not before, it had become clear that this strategy was failing as well; the volumes had materialised, and this had led to increasing operating costs, but the higher rates had not, leaving the company with an on- and off-balance sheet debt it was increasingly unable to service. Not surprisingly, the-then institutional investors decided to sell up while they could. The problem, it is now clear, was that even within a unified system, the company's freight operations were simply not commercially viable, certainly at that extent of the network. What was also increasingly apparent was that the rail freight market within New Zealand was showing significant signs of market failure; that is, demand for rail services was simply not nearly strong enough to meet the operational costs of the railway system and also generate a return on the capital invested in the business.

To understand why, we need to look at the structure of the freight market in New Zealand. It is roughly split by tonne-kilometres as follows: over two-thirds by truck, seventeen percent rail and fifteen percent coastal shipping⁶. In recent years, significant structural change within the economy has weakened rail's competitive position. For example, bulk loads like forestry have had their ability-to-pay for rail services limited by lower prices for timber on world markets; meaning that if rail is going to capture the traffic at all, it will generally have to do so at an economic loss. Other bulk traffics, such as heavy manufacturing, have dried up as New Zealand has morphed into a services-based economy. The freight markets which are growing tend to be in areas such as FMCGs, (fast-moving-consumer-goods) where rail cannot supply the standard of service the market wants, and will pay for, at a price anywhere within range of what the trucking industry can do it for. This loss of the market also means that rail's very high fixed costs have now had to be shared out across lighter traffic loads, which has further worked against the company's financial viability. A further quirk of the New Zealand arrangements is the high volume (by tonne-km) carried by coastal shipping. This, a function of our geography, tends to include bulk traffics such as petroleum products and cement; traffics that anywhere else would be carried by rail.

Trucking's cost of supply is such that it could easily secure most of these traffics; covering all its financial costs, including New Zealand's fairly high road user charges⁷. That was why over this period the operation also developed its trucking branch, finding very quickly that it was both cheaper and faster to move a lot of its market that way. As it turned out, Tranz Rail had the second-largest truck fleet in the country, provided via owner-drivers. It was modally agnostic if a truck service was the best answer for the customer, which was frequently the case. The net result of these market factors was that in the business could not

pay its way (at a conference in June 2000, a senior manager admitted in public that since privatisation the company had invested “\$700m in the freight network [up to that point], which was twice its profitability over this period”⁸). That lack of profitability was not the fault of a private ownership structure, but rather a reflection of market realities. Rail was simply unable to charge prices in that market, that were sufficient to cover the business’s costs. Road freight did not have that problem.

The new Board’s response in 2000 to this situation was to bring in a whole new management team, which mostly included people from a shipping background (why shipping, where the operating environment is the near-complete opposite of that facing rail, has never been explained to anyone’s satisfaction). It is clear that the management had already realised that there was only a little residual value left in the freight group. However, this could not have been admitted to, as the effect on the share price would have been catastrophic. So their response was to sell everything else for which a market price could be achieved, including attempting to sell both suburban rail operations to their respective PTEs (one sale did proceed, and it is now operated in a fashion similar to a British TOC). Over this period, operational problems were becoming more and more obvious as well. For example, there was a mounting number of complaints about badly-maintained equipment as well as badly-maintained track; a clear sign that the operation was not generating the money it needed to. Essentially, the market environment was against it: while the company complained about ‘unfair’ truck competition, the fact was that most of that traffic was not available to rail, there was not that much rail traffic that was equivalently ‘unavailable’ to the truck market and the rail operation had its own trucking operation anyway.

Over the next two years, as the share price continued to collapse, increasingly frantic efforts were made to rescue the situation. Negotiations with the Government had begun in early 2002. However, the Government was most unwilling to provide the company with a blank cheque, making it clear that it was not going to put in money unless it had control of where the money went to. One option would have been to have given the Government several seats on the board and full access to the books for a large annual payment; but the major owners were not prepared to bear the dilution in control that this would have meant. Another part of the problem, also evident by the middle of 2003 if not before, was that the company’s bankers had lost confidence in the company as well and were treating it as a bad business risk. So that had forced the company’s hand as much as the Government’s actions had.

Once the company ceased to be financially viable, the failure of its privatisation was inevitable. In July 2003 – and with receivership (administration) now staring the company in the face – Tranz Rail admitted defeat and accepted a Government deal which saw the Government take the network off the company’s hands in exchange for the Government picking up \$NZ328m of debt. From a commercial point of view, this measure was intended to reduce the company’s debt-equity ratio, by improving the ratio of assets to debt, although the company’s net value remained the same. In other words, the business’s risk profile was reduced, although the fragmentation of the business would have added to costs. Shortly thereafter the network was set up as a separate

company and structure, thus replicating the UK's situation, if on a much smaller scale^{*}. A large number of pressure groups, such as the rail unions, had been wanting this to happen, on the basis that it would give the Government the effective control it needed. This was true, but what the groups did not then appreciate was that the Government buying back the track meant also that it was left 'holding the baby' in terms of fixing all the problems which had now built up. The original estimate when the track was bought back was that \$NZ200m would be needed to fix it; the reality over the next few years proved to be far more than this (refer Heatley (2009), p38ff). The operational side of the business was then purchased by the Australian freight and logistics group Toll Holdings.

This refinancing could have been enough to stabilise the situation; again, it was not. The Government told the network company to levy access charges at a level that would allow the Government to earn a commercial rate of return on the money it had put into saving the system, making the rescue a cash-neutral proposition. It was still not interested, at that stage, in giving the operator yet more subsidy. The result of this approach was a 'Mexican standoff' between the Government and the operator. Toll's response was to argue that if they had to pay those charges and pass them through to their customers, they would lose the business; either to truck or shipping companies, or the traffic would not move at all. If they didn't pass on the charges they would cease to make any meaningful return on their own investment. By the end of 2006, relations had got to the point that Toll was threatening to pull a large number of marginal freight services – a current and very unofficial estimate was that the services run over about half the network were at risk of abandonment at that stage, and on justifiable commercial grounds⁹. The New Zealand Treasury later came to agree with Toll's assessment of the situation¹⁰. That these services were at best marginal, if not clearly unprofitable, had been known for quite some time, but the previous management(s) had not been able to do anything about them.

The Government knew full well that if Toll couldn't make a go of making these services pay their way, no-one else could⁺. This dispute would not normally have registered on their 'radar', as the Government of the time was reasonably non-interventionist. However, there is a great deal of public concern about the number of heavy trucks on the New Zealand roading system, which has far less motorway or even dual-carriageway than its equivalent in Great Britain, and

* One important qualifier here with reference to the UK situation should also be made. New Zealand public finance is *not* affected by a PSBR-type rule which would have forced the railway industry to have been put into a "clg" structure because of the size of its borrowings.

+ A similar 'Mexican standoff' had also developed between the company and the two regional councils (equivalent to British PTEs) which funded urban passenger rail services. The councils were resentful at having to spend a lot of their own money to support the operations, and, citing 'monopoly issues', made it clear that they wanted more control as to where the money went. As time went by the Government's attitude was similar. At the root of the councils' frustration, however, was the unwillingness on the part of central Government to provide a decent level of financial support at that time for passenger transport, especially for new investment. This was another reason, from the company's point of view, behind wanting to sell the urban passenger operations, although in the end only one was sold. A separate exercise to sell the long-distance (tourist) rail business also failed, after the business was part-sold and then had to be bought back.

almost no inter-urban motorway. Keeping freight on rail is perceived to have significant road safety as well as environmental benefits, and as a result there was and is keen political pressure to see rail freight services maintained. So the Government decided that it was far better to own rail, regardless of its loss-making status and demands for more expenditure, as this was seen as the most practical way of securing the variety of wider benefits that the railway is perceived to provide. Hence the operation's repurchase in May of 2008. The network operation was formally combined back into the main company in October of the same year.

The option of abandoning much or all of the network, as had been considered in 1990, was simply not acceptable to the Government, given their desire to use the railway system to meet a number of environmental and other public policy goals, for which the railway is effectively a monopoly provider. This is distinct from provision of service in a market, where Tranz Rail's situation is *extremely* competitive. The desire to reduce the Government's financial exposure from the rail operation was placed to one side, because of the desire to see the railway used to promote a number of other non-market goals, including regional development, environmental sustainability (rail's fuel use is measurably lower than that of trucks) and road safety ¹¹. It also says a lot about the way that the freight market runs in New Zealand, when compared with the way one might like it to run, that Toll has retained the trucking part of the operation – clearly, they saw it as commercially viable. Indeed, in the week the sale of the rail operation was announced, they went off and bought a truck company in a part of New Zealand where they did not have much market presence ¹².

2.1 Common lessons with Great Britain

Although the New Zealand and British systems are very different, there are a number of common lessons which can be drawn from what happened. In both privatisations, the common reason underlying them both was to save money. Specifically: in New Zealand, the concern was to remove the risk of having to bail out the system again, although this was never really admitted to. The sale price of the business certainly reflected the clear assumption that no further subsidy would be paid for freight services. In Great Britain, it is clear that a lot of the process was motivated by the desire to maximise returns to the Treasury ¹³, and it also seems to have been the view that restructuring would lead to a situation where subsidy would no longer be required. The mistake was possibly in thinking that lessons applicable in the bus industry could also be applied in rail.

That said, the following conceptual weaknesses about the privatisation process, in New Zealand anyway, are certainly apparent. In both privatisations, there was very little acknowledgement of the wider benefits of having freight shifted by rail instead of on the roading network. At the time, this was mostly seen in terms of road safety benefits (fewer trucks on the main highways), but we would now add a number of environmental benefits (peak oil, climate change issues) as well. Second, the process did not pay sufficient attention to the risks of failure – and what you would then have to do if the company did fail. Certainly, absolutely no-one had allowed for the underlying secular change in the economy which was moving away from producing the sorts of items that a railway can carry most efficiently.

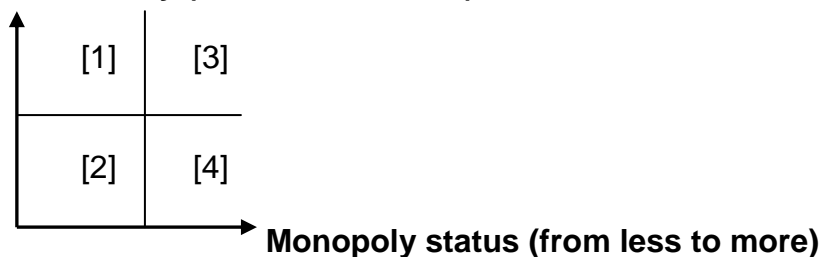
The repurchase of the railways represents a full circle in New Zealand policy, just as much as a return to vertical integration in the British context would represent a full circle. But why have we ended up there, and why have some rail privatisations not worked? To answer this question we must understand the funding of the railway system; and we must also understand the policy challenge of paying public subsidy to a monopoly. When these two questions are answered, we will be able to see why privatisation was always going to be a risky affair. As a comparison, we will also see why the privatisation of the former British Airports Authority was always going to be a much safer, less risky proposition.

3. THE INFLUENCE OF INDUSTRY STRUCTURE

We will start off by examining two fundamental questions: the extent to which a business can cover its costs and then – separately – the extent to which a business can be considered to be monopolistic. We may plot this out on a chart, leaving us with four cells to populate:

Fig 1 Subsidy and competitive provision: theory

Profitability (from less to more)



In the first cell, we see businesses which are profitable and in a competitive environment (sometimes known as ‘competition *in* the market’). Shipping, airlines, and truck companies are in this situation, and it is not a major public policy concern, safety and environmental issues excluded.

In the second cell, we see businesses which cannot cover their costs from the market, but which can be provided competitively via public tendering. Here, we see ‘competition *for* the market’. The provision of subsidised bus, ferry and air services within Scotland is an excellent example of this process at work, and the franchised part of the railway system can be fitted in here as well. So also can the London bus system.

In the third cell we start to see businesses which in their structure provide an excellent ‘compare and contrast’ for any railway system. Here, we are in the situation of electricity and gas transmission, Scottish Water, air traffic control and BAA plc (British Airport Authority, which owns the main UK airports). The businesses are profitable, sometimes strongly so, and because of this – and because the provision of the service is effectively monopolistic – they are regulated as well. Frequently, businesses of this type are also regulated in order to provide socially necessary but financially unviable services, via cross-subsidy and ‘universal service’ requirements. The Royal Mail is an example in point.

In the fourth cell, we have the situation facing most railway networks – effectively, a monopoly supplier, but one which is heavily dependent on subsidy. That said, rail is not the only transport infrastructure in this situation. In Scotland, the Highlands & Islands Airport Company (HIAL) is another excellent example of the situation in which Network Rail finds itself, except that it is clearly and explicitly publicly-owned. Over sixty percent of its annual revenue is either from an operational grant or a capital grant ¹⁴, and this is quite separate from the direct subsidies to users and some subsidised (PSO) airline services as well. So also does Tranz Rail, in the way in which it was and is a monopoly supplier of rail services for meeting public policy as distinct from market goals (such as the goal of fewer trucks on the road network; its *market* situation is extremely competitive). Also in this category, we have the canals network in Great Britain.

Figure 2 below populates Figure 1 above with more examples of various transport businesses and other sectors.

Fig 2 Subsidy and competitive provision: in practice

<p>y-axis: GENERATES PROFIT</p> <p>Any competitive transport business not requiring subsidy – most commercial bus & coach services, for example; many port operations, rail freight in Great Britain, open access rail operators, commercial broadcasting, Tranz Rail (in original market terms)</p>	<p>BAA, British Telecom, the roads network, the Royal Mail (then), water, electricity and gas transmission; some port operations; the road network (in fiscal terms); air traffic control; Scottish Water; other network industries</p>
<p>Tendered bus services, most passenger rail franchises, Calmac (in theory), PSO-supported air services, the London bus system, concession fare systems; any business requiring competition <i>for</i> the market ; primary health care</p> <p>REQUIRES SUBSIDY</p>	<p>The railway network in Great Britain, Highlands & Islands Airports Ltd, the canal system in Great Britain, Calmac (in practice, because of strategic factors), the road network (in governance terms), public broadcasting, Tranz Rail (in terms of external benefits); hospitals</p>
<p>x-axis: Competitively provided</p>	<p>Monopolistically provided</p>

The extent to which the railway industry in Great Britain fits the example of a subsidy-dependent network monopoly can be illustrated from this table, using data for 2008/09 ¹⁵. These data are from the industry’s annual yearbook, with some simplification.

	£m	
Fares income	6,004	
TOC subsidy, net	273	\ Miscellaneous support
PTE subsidy	317	/ excluded
Network Rail grant	<u>4,266</u>	Paid directly by the Government
Gross costs	10,860	

That is, the industry covers 55 percent of its gross costs from fares; but the other critical factor is the volume of these costs which is then absorbed by the network. Of the £10,860m in total system costs, the network absorbed £5,799m in track access and grant income¹⁶, some 53 percent. Also, network costs are by nature mostly fixed in the medium- or even the longer-term, and this flows straight through into the subsidy requirement if revenues cannot cover costs. A network is for life, not just for Christmas.

In terms of financing the railways, we have the interesting counter-example of Sweden, in which the operations and the network (*Banverket*) have been separate since 1998. About forty percent the network's annual operating costs are charged out to the users as track access charges; these are based on the share of the cost base which can be held to be 'marginal'. The balance is paid by the Swedish Government as a direct grant, and assistance for capital expenditure is quite separate again. Any investment in the network is paid for out of a separate government grant, which in 2007 was quite a bit more than the operating grant¹⁷. The core passenger network is operated and funded separately but with a separate subsidy for contracted services¹⁷. Although the financial flows provide an interesting compare-and-contrast with those in Great Britain, the system is far more transparent. In both cases, though, the ratio of infrastructural costs to all costs within the railway sector is far higher than what we would normally see in a comparable industry such as short-haul aviation. There, the costs equivalent to what is provided by Network Rail, comprise only about 20-25 percent of the system's costs overall¹⁸. And as a further contrast: data for New Zealand, where the costs of providing the road network are met directly by road users, show that the equivalent of 'network charges' in a roading environment, are only ten percent or so of the total costs for a road freight operation¹⁹.

With the model above in place, we can now go about answering the fundamental question: why rail privatisation in the New Zealand environment could not have worked, especially once some fundamental public policy goals became compromised. The rail operation is now in the situation of a failed privatisation, because the Government has had to retake ownership; but that is because the New Zealand freight market is not strong enough to meet the costs of railway provision, and in reality that has been the situation for at least the last forty years⁺.

* In 2007, the total grant to Banverket was just short of SEK16.7 bn (£1.5 bn), of which SEK10.6 bn (£942m) was allocated for capital works and SEK 6.1 bn (£546m) for operations. The user fees (track access charges) received from operators comprised a further SEK 3.9 bn (£344m) of revenues; thus, less than 40 percent of annual operating costs, and less than 20 percent of all the cash received by the business in that year. The model the Swedes use is very like that employed for Highlands & Islands Airports Ltd, although HIAL covers 50 percent of its operating costs and 40 percent of all cash disbursements from user revenues.

+ Heatley (2009) is strongly of the view that New Zealand Governments shouldn't be bothering to subsidise its railway system. He is also not sure whether railways in New Zealand have ever been profitable, and blames political interference over the years as contributing to this state of affairs.

4. WHY PRIVATISATION DIDN'T WORK: THE ISSUE OF RISK

There is plenty of profitable (if regulated) private monopoly provision in the transport sector, and there are plenty of subsidised services which are competitively provided as well (mostly, but not restricted to, bus services). That is shown in the table above. That said, the thrust of this paper is that rail privatisation in New Zealand could not have worked, not because rail is a monopoly, or because it needs subsidy, but because of the combination of these two factors. Put another way, the presence in a business of *both* high fixed costs *and* high subsidy demands makes privatisation an extremely problematic policy option. Businesses of this nature are simply not good candidates for privatisation, and the reason, fundamentally, is that of business risk:

First, this sort of business arrangement creates risks for the Government

This problem can be well illustrated from a British perspective. In 2000 and 2001 Railtrack were negotiating with the Government of the time in order to recover their situation, which thanks to the WCML was going very, very badly ²⁰. The situation in which Railtrack had left the Government was quite invidious, because the Government could hardly afford to have the railways stop operating, yet it had had no influence on what Railtrack had done to get itself into this situation. The fate of both the Jubilee Line tube extension (which was meant to cost £1.9 bn but ended up costing £3.5 bn), never mind the WCML project, suggests that past Government efforts to try to pass on business risk have been a false economy. This also sheds light on the situation in New Zealand: simply, the Government was not prepared to spend money on the rail system unless it had a direct control over the business. Generally, governments will generally only support these businesses if they own them as well.

Second, this sort of business arrangement creates risk for the operator

Another British example, but from the other side of the fence. Railtrack discovered too late the risk of being in a business where your prime customer is ultimately the Government, given the degree to which your commercial customers (the TOCs) are reliant on Government subsidy to be in business in the first place. Market risk is one thing that companies can and do manage, but governmental risk, where a government's own preferences can change very suddenly, is another matter. While the risk of having a dominant private sector customer can be managed, public funding can be infamously unstable, regulator or not. In the situations we have been talking about, the option to reduce risk by diversifying your customer base is frequently not there. An airport, if it loses a major customer to bankruptcy – which is fairly frequent – can work round to find another. A rail network simply does not have that option, given that its 'prime customer' is fundamentally the Government. It is noteworthy that after Railtrack's collapse, one firm did look at purchasing the network but withdrew when they realised what risks were involved ²¹. Certainly, when this writer was working for the suburban railway operation in New Zealand – and in an environment, remember, where there was no Regulator to referee things – there were occasions when the monthly urban grant could and would be clawed back, due to something going wrong which was simply not within our control to do anything about.

Third, there is the risk that a regulatory structure itself can create

As Rail Regulator, Tom Winsor illustrated how a regulatory structure can create risks, for both the Government and the business alike. At a seminar in 2006, he discussed how he had determined his settlement for Network Rail for Control Period 2 (April 1999-March 2004). As he put it, “I set a very large number for the size of the Network output, which Treasury did *not* like”²²; presumably the sum was much larger than they had wanted or even expected. (The risk of this happening again was substantially removed by a change to the legislation in 2005, which requires the Regulatory Settlement to have a view to the ‘Statement of Funds Available’ (SOFA)). Again from the other side of the fence, Railtrack discovered the hard way that the Regulator could not be relied on to save them from the consequences of their own very bad decisions^{*}.

The essential lesson is that a subsidy-dependant monopoly has to remain within the public sector, because of the risks for both funder and provider if it remains outside – simply put, the risks are too great. If we look at the bottom right-hand quadrant of Figure 1b above, we see a slew of industries which are not privatised and which cannot be privatised. That said, some of the businesses within the other quadrants of the model have remained in public ownership, because of a variety of other strategic or public policy factors. Scottish Water is a case in point.

4.1 Why you need a fat controller

The comparison with the UK’s other network industries also raises this question. Railway professionals are often heard to say that ‘railways are different’ and that a major cause of the difficulty post-1993 was the fragmentation of the industry. Much is still heard of the problems arising from ‘the separation of wheel and rail’, and that you cannot easily run a railway where these are managed separately. Indeed, it is quite clear that the fragmentation within the industry further drove up the costs in the British situation.

However, there some counter-examples which need consideration within this discussion:

- The example of New Zealand’s railway post-privatisation also makes it clear that keeping wheel and track together is still no guarantee that you will get it right.
- In American freight railroads, which don’t for the most part need (or receive) subsidy, there is no problem with one operator working over another’s network via the use of commercially-negotiated ‘trackage rights’ and specific interchange rules. Here, a contractual regime for railway access – as opposed to a command-and-control one – seems to work.

^{*} A further part of the problem, which affected all sides of the newly privatised railway industry, is that the industry was bequeathed a regulatory approach based on that used for the former nationalised industries. The critical difference is that these industries are not nearly as reliant on the taxpayer as what the railway industry is, as a whole, but that distinction, and its effects, were not understood for some time.

- As the cases of the Heathrow Express, the freight companies, and the open access operations all demonstrate – the ‘fragmentation’ of the system is not a problem for them. In these specific cases, it is surely of relevance that they are paying only the marginal costs of their operation on Network Rail’s system, and the Heathrow Express carries the costs of its own infrastructure and rolling stock without further subsidy.
- In a European context, separation of network and operation has worked reasonably well, although as the example of Sweden shows, the government’s control over the industry’s finances is much plainer, and the governance arrangements are much more transparent. Certainly, the governance of Network Rail is often mentioned as a key issue in the British situation, and something which the current government appears to be looking at much more closely. A review of current European practice shows that a variety of ways of organising the railway network are now in place – some systems have the network as a standalone business within the main railway company, other systems have the network organised quite separately, as a separate company, and Sweden and Finland have recently merged their railway network and highways agencies. In each case, though, the governance is transparent and straightforward.

Essentially, a command-and-control structure is really only needed in a network industry when that industry is as subsidy-driven as railways are. In this instance, vertical integration does reduce costs, especially what economists call ‘transaction costs’. But the physical separation of wheel and rail may not in itself be the issue.

Dr Johnson once observed that ‘comparisons are odious’. Comparisons can be fascinating as well. This can be seen when we compare railways with another capital-intensive network industry – aviation. Now, the aviation sector is *far* more fragmented than rail – there are a multiplicity of operating companies, never mind general (private) aviation; the foreign aircraft in one’s airspace are not necessarily working to your safety regime; and air traffic control (the equivalent of signalling) is quite separate from the infrastructure providers (ie. the airports). But, of course, the difference is that aviation does not need financial subsidy to keep going, except for some specific exceptions such as the Highlands, where the weight of demand is insufficient to meet the system’s fixed costs. In that instance, the Scottish Government owns the airport system, and subsidises it directly. Normally, in a commercial situation, the transmission mechanisms for what the customers want do work – because money on the table has that effect.

On any realistic measure, the privatisation of BAA, and most of the other formerly-nationalised industries, has worked – so why did it work for BAA, and BT (British Telecoms) for that matter, and not for British Rail? The essential answer, given that both BAA and BT are monopolistic, lies in the way that public funds will always be in short supply. This means that monopoly supply of a service when the government has to pay for it, creates pressures that genuinely

market situations and funding do not face. Most Governments eventually realise that the risk is not worth it, even allowing for the private sector's carrying the debt. If Network Rail's status is changed in the next little while, the taking-back on board the public sector's books of its debts will also allow a significant change in its governance.

Thus, the environment for companies such as BAA and NATS (National Air Traffic Services, the air traffic control company) rests in striking contrast to the railway industry. Indeed, the rail sector also stands apart from nearly all other transport modes, in that what people are prepared to pay for railway services is nowhere near what it costs to provide those services – rail's fundamental financial weakness, perhaps. Most other parts of the transport system meet the financial costs of their provision from users (including roads, when one considers the size of road taxation in relation to the money spent on the network). Rail is still the main exception (the other is the canal network, and its business is much more about providing a public amenity than about providing transport services). The frequent complaints that 'profit maximisation is not the public interest!' also reminds us that the public interest, however one defines it, costs public money. And public money will always be in short supply; money put into a railway is money that is not available for any number of other 'good causes'²³. There are simply too many other demands, and this was well apparent before the credit crunch.

So, from a policy point of view, the example of New Zealand makes clear that where an industry is both monopolistic and subsidy-driven, as Tranz Rail finally became, direct Government ownership and control will be essential. This applies both if the railway's 'monopoly nature' arises from its provision of transport services, or of the positive externalities which arise from its operation. This structural reality will need to flow through into the business's governance; otherwise, Governments will simply not sign 'blank cheques' to support operations of this nature.

5. CONCLUSION

For public policy to be effective, it has to be designed and applied against a clear target. The underlying reasons underlying rail privatisation in Great Britain were understood well enough at least in theory, but the structure which was adopted to apply the policy, did not match the underlying intent and in many ways made the perceived 'problem' worse. In New Zealand, while intent and application did match, the intent did not allow for two things. First, that a freight railway in New Zealand would eventually prove to be unsustainable, in strict commercial terms. Second, that once that situation was comprehended, that separate strategic issues would come into play which would mean the reversal of the eventual policy. As well, in neither the British nor the New Zealand case was the question asked, "what happens if this approach fails?" The risk of policy failure was not appreciated or even acknowledged, in either case, and it is likely that a more realistic risk assessment would have influenced the structure that was eventually adopted.

5.1 Afterword

Under the previous Government some significant amounts were invested in both the rail network, and then the rail operation – money that would never have been committed had either business remained in the private sector. However, and since this paper was originally conceived, a change of Government in New Zealand in November 2008 has led to a significant change of policy. This can be summarised as: moving from a view which saw a commitment to retaining all of the current network, and investing in at least some of it, to a view which is best defined as committing only to the main core of the freight system ²⁴. A substantial sum (\$NZ250m) has been committed for investment in the main network ²⁵, with the aim of making the rail commercially sustainable in the longer term (a sentiment which proves once and for all that there is truly 'nothing new under the sun!'). However, the investment is going to be focussed on just the main network, and it is also clear that no longer will the current Government support loss-making parts of the system. Already, one branch line has been mothballed when its reinstatement could not be justified on strict commercial terms. On top of this, the Government has also agreed to an increase in the maximum weight of trucks on the road, thus putting some rail loads at risk to increased competition ²⁶. The maximum has been increased from 44 to 53 tonnes, under certain strict conditions. This is of real concern to the railway operator, because of the risk to a large number of its traffics comprising about 15 percent of its revenue ²⁷.

Given the length of the network whose retention is now at risk, this could be the harbinger of the winding-down of most of the branch network and even some of the main railway network: the decisions that could not be taken in 1990 or even in 2004 are looking more likely in 2010 and beyond, especially as the commercial realities of the railway system are now accepted by the present Government in a way that previous Governments did not accept. The wheel has come full circle, and it is still turning.

References

Dave Heatley (2009), "The history and future of rail in New Zealand", *New Zealand Institute for the Study of Competition and Regulation*, Wellington: Victoria University of Wellington. A .pdf of the paper can be found here: [http://www.iscr.org.nz/f511,14914/14914 The history and future of rail in New Zealand RR .pdf](http://www.iscr.org.nz/f511,14914/14914%20The%20history%20and%20future%20of%20rail%20in%20New%20Zealand%20RR%20.pdf)

Endnotes

¹ An earlier version of this paper was presented in a staff seminar at Transport Scotland at the end of 2009, and some feedback given to that presentation, and the following discussion, has been incorporated in this paper. Thanks are also due to a former colleague who has provided some very helpful insight on the material.

² This writer worked for Tranz Rail between February 1996 and early 2005, at which point he left to come out to the UK. Prior to that, he worked for New Zealand's highways administration.

³ There are 4,100 km of line in New Zealand, although most of it is single-track, compared with 3,042 route-km operated by First Scotrail. Refer the *National Rail Trends* yearbook for 2008-9;

http://en.wikipedia.org/wiki/Rail_transport_in_New_Zealand; and,

Kiwirail's Annual Report for 2008/09:

[http://www.kiwirail.co.nz/uploads/Publications%20and%20Reports/KiwiRail%20Annual%20Report%2009%20\(web\).pdf](http://www.kiwirail.co.nz/uploads/Publications%20and%20Reports/KiwiRail%20Annual%20Report%2009%20(web).pdf). The total length of railway within Scotland proper has been reported at 1,520 route-miles by Network Rail (2,451 route-kilometres; the value for FirstScotrail quoted in this footnote includes the sleeper services which run from Scotland to Euston). Refer here, p14:

<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/scotland/scotland%20rus.pdf>

⁴ An extensive history of the railway network in New Zealand, especially in the context of this paper, is, Dave Heatley (2009), "The history and future of rail in New Zealand", *New Zealand Institute for the Study of Competition and Regulation*, Wellington: Victoria University of Wellington. A .pdf of the paper can be found here:

http://www.iscr.org.nz/f511,14914/14914_The_history_and_future_of_rail_in_New_Zealand_RR_.pdf

⁵ The land over which the railway ran was not included in the sale, but paid for annually under a 'peppercorn' lease. This was done for some legal reasons it is not within the scope of this paper to examine.

⁶ Refer: <http://www.nzta.govt.nz/resources/research/reports/283/docs/283.pdf>

⁷ In New Zealand, trucks over 3.5 tonnes in weight pay "road user charges", which is a distance-weight tax, to contribute to their share of the costs of the roading network. This tax, along with a separate tax on petrol, is hypothecated to support the costs to the Government of the roading network. The distance-weight tax is calibrated against the weight on the axle, and is based on a principle of road engineering called the fourth-power rule – that is, if the weight at the axle is doubled, then the amount of road damage caused increases sixteenfold ($2^4 = 16$), for a given pavement strength. This has the effect that heavy truck loads pay a lot more per tonne carried than lighter truck loads, for a given distance travelled, and this regime also provides some *de facto* assistance to the railway network. More details are available from this writer. Refer also Heatley, *op. cit.*, p39.

⁸ This writer's personal recollection

⁹ Refer:

http://www.nzherald.co.nz/freight/news/article.cfm?c_id=500815&objectid=10404425.

This was not commercial grandstanding on Toll's part. Toll were quite seriously looking at abandoning services, including over large parts of the current 'main trunk' system, and including all the branch network. The Treasury's view of Toll's situation is discussed further in footnotes 24 and 25 below.

¹⁰ Refer "Coastal Shipping and modal freight choice", prepared for the New Zealand Transport Agency by Rockpoint Corporate Finance Ltd, p60. URL:

<http://www.rockpoint.co.nz/publications/Rockpoint%20Coastal%20Shipping.pdf>

¹¹ Refer, for example: <http://www.scoop.co.nz/stories/BU0708/S00315.htm>

¹² Refer: http://www.nzherald.co.nz/category/story.cfm?c_id=97&objectid=10508714

¹³ Refer comments by Gerald Corbett, as quoted by Alan Marshall in the November 2009 *Railnews*, p12.

¹⁴ Refer:

http://hial.rippleeffect.com/assets/files/documents/nov_09/hia_1259169411_Annual_Report_2008_09.pdf

¹⁵ Refer Tables 1.3a and 6.2a of the *National Rail Trends*, 2008/09 (published by the Office of Rail Regulation).

¹⁶ Refer Table 3, p68 of the Network Rail 2008/09 *Annual Report*

¹⁷ Refer: <http://www.sj.se/sj/jsp/polopoly.jsp?d=120&a=8175&l=en#> (Annual Report, in English, for 2008 of *Statens Järnvägar* (the main operating company)).

¹⁸ Refer "Airways seeks rise in charges to pay for gear", *New Zealand Herald*, 23 November 2009:

http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10610930

The ratio reported here of 25 percent (that is, of infrastructural costs to all costs) seems to be 'par for the course' in the short-haul aviation sector (that is, whose journey sectors lengths are comparable in length with long-distance rail within Great Britain). The ratio for longer-distance airline services is a lot lower again; about 5 percent of operating costs for a carrier like Singapore Air.

¹⁹ Refer: <http://www.transport.govt.nz/ourwork/Land/RoadUserCharges/>

²⁰ Refer *The Guardian*, April 1 2004 – "The £10 bn rail crash"; for more information: <http://www.guardian.co.uk/world/2004/apr/01/transport.politics>

²¹ Refer: <http://everything2.com/title/Railtrack>

²² This writer's personal recollection.

²³ For example, refer Hugh Heclo and Aaron Wildavsky, *The Private Government of Public Money*, Macmillan's, second edition 1981.

²⁴ More information on this can be found in the New Zealand Treasury papers on rail's refinancing. Allowing for some editing for "commercial – in confidence" considerations, they reflect the situation to June 2009, when these papers were released. Refer: <http://www.treasury.govt.nz/publications/informationreleases/rail/policy-kiwirail>.

²⁵ Refer: "\$750m over three years to bulk up Kiwirail" *New Zealand Herald*, 18th May 2010: http://www.nzherald.co.nz/rail/news/article.cfm?c_id=296&objectid=10645820.

Also refer to these 2010 Budget papers:

<http://www.treasury.govt.nz/publications/informationreleases/budget/2010/otherpapers> (and look under "Transport"). The \$250m relates to the money which has been formally committed.

²⁶ Refer "Change lifts truck load limit to 53 tonnes", *New Zealand Herald* 6 April 2010:

http://www.nzherald.co.nz/freight/news/article.cfm?c_id=500815&objectid=10636549.

Also, the following link has more stories:

http://www.nzherald.co.nz/freight/news/archive.cfm?c_id=500815

²⁷ Refer fn. 25 above, and also: *The Transport Worker*, June 2010 (published by the RMTU), pp 6,9,20,21). Refer:

<http://www.rmtunion.org.nz/publications/documents/TTW2-FINAL.pdf>
