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**CANADIAN TRANSPORTATION
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Intercity Motor Coach Deregulation in the United Kingdom—1980: Its Effects on Public Passenger Services (200-400 Mile Travel)

By David M. Cape, M.C.I.T.*

ABSTRACT

The U.K. intercity motor coach industry was deregulated in 1980. Its counterpart in the United States, the intercity express bus industry, was deregulated two years later. This paper reviews the impacts of the U.K. deregulation both intramodally and intermodally for relevance if similar deregulation should be contemplated for other jurisdictions concerned primarily with the 200-400 mile distance stage length, for example, a Canadian province.

The *a priori* expectation would be of increased competition and reduced prices. The paper concludes that the coach industry in the United Kingdom, by virtue of its own history, appears to have elements of a "natural monopoly", and therefore intra-modal competition did not increase following deregulation. Despite this, the motor coach industry rapidly adopted technology that was available elsewhere, and new pricing strategies seem to have been effective. The paper finds that British Rail responded successfully to minimize market share loss, and although the domestic air industry is not threatened by the coach industry, future changes in the air industry may not augur well for the long distance coach trade.

I. INTRODUCTION

To appreciate the state of the motor coach industry immediately prior to its deregulation in 1980, one must look back in time to the formative years prior to World War II. At that time half of the provincial bus and coach operators were at least partially owned by the four major privately owned railways, a full decade prior to their nationalization in 1947. This railway-owned share covered 30 out of 54 major carriers representing 13,921 out of 18,042 vehicles.¹

Prior to World War II, with the easing of the depressionary environment, more of the working class could afford to make trips but very few had their own means of transport—in short, the perfect environment for development of a new intercity coach network. This network was augmented by an extensive sightseeing tour industry which provided the operators with weekend and evening use for the vehicles used for intercity travel during the week. Technological change, in the form of pneumatic tires offering greater comfort and durability, and diesel engines—quieter and more powerful, cheaper and more reliable—provided the catalyst for increased demand.

During the late 1960's and 1970's, when intercity bus services were improving their service quality by adopting air suspension and air conditioning in North America, and entertainment as well in Europe, the British coach industry remained virtually static. So, on the brink of its deregulation the industry without these improvements remained anachronistic.

In October 1980 the long distance coach operations industry comprised basically National Express {NX}, (officially the intercity *marketing*, but not an operating division of National Bus Company {NBC}—the nationalized agglomeration formed in 1968), National Holidays {NH}, (the tour and excursion subsidiary of NBC), some sixty NBC operating subsidiaries (which operate bus and coach services *including* NX services),² and a handful of sizeable, but much smaller than NBC, independent operators. As intercity coach services are labelled NX, this paper will use NX when referring to such services.

II. PURPOSE AND DEFINITION OF DEREGULATION

The Secretary of State for Transport, quoted by Cross and Kilvington,³ stated that the main aims of deregulation were:

- * the removal of bureaucratic restriction,
- * the need to ensure that almost everyone gains good access to public transport
- * the provision of maximum choice to the user, by facilitating competition

Express was redefined as passenger carriage 30 miles or more, and any *coach operator* became entitled to enter (and leave) the sector at will.⁴ This implies a prospective entrant to the inter-city business had to be already an operator in the non intercity private area in hire, contract, tour or urban (stage carriage). There was no provision for a complete newcomer to provide intercity services without first operating as above.

III. CHRONOLOGY

Fifteen days prior to enactment of The Transport Act of 1980 on October 6, 1980, NX increased the frequencies on a number of its services and introduced "a wide range of greatly reduced fares. Some of these were ridiculously low",⁵ some almost halved. On deregulation day came "a flood of new express coach services by numerous operators . . . right from the start it was obvious that only a minor-

ity of these new ventures would survive."⁶ A consortium, British Coachways (BC), was formed of six major operators, later to become ten, to provide effective "no frills" competition for NX at even cheaper prices. Not to be outdone, NX resorted to gimmickry and price cutting; purchasers of ten HoVis products could buy two NX tickets for the price of one. Jenkinson notes many fares dropped to 1930's levels. Within four months NX reported ridership (number of journeys) increased by 55% accompanied by a 53% increase in revenue, and a 22% increase in mileage. These numbers imply a sizeable increase in short journeys, close to the 30 mile minimum, but apart from that are suspect in that they imply a price *increase*, not a decrease. NX had nevertheless apparently thwarted the efforts of BC. By April 1981 BC was losing members. Within one year, all threats from BC had disappeared. BC disappeared completely in January 1983.

IV. INTRAMODAL EFFECTS OF DEREGULATION

The greatest effect of deregulation would be expected within the coach industry itself. Standard economic theory expects that, given removal of constraints on entry and pricing, new entrants would innovate and bring operational efficiencies to allow them to offer lower prices, pre-supposing that existing suppliers cannot preclude new entrants from the network. It will be seen that the industry can and did control certain key components to the exclusion of new entrants.

This paper considers the effects of deregulation in terms of changes in five separate topics: infrastructure, industrial structure, frequency, quality, and price of service.

A. Changes in Infrastructure

The 1930 Road Traffic Act rationalized the industry and reduced competition. It did this by requiring all coach services to be properly licensed but it was silent on operator licensing and vehicular standards. In 1969 most of the coach industry was nationalized under the aegis of the National Bus Company, but several decades before this the industry had formed a loose network called Associated Motorways which proceeded to develop a common network of booking agents (ticketing facilities), and most importantly, a network of single termini in the main cities, the most important turned out to be the Victoria Coach Station in London, located just two blocks from Victoria Railway Station. Travelers could change coaches or switch to rail in London with relative convenience. Internal development at National Bus proceeded slowly until 1980. For a detailed review of this process see Jenkinson.⁷

The other infrastructure change that is pertinent prior to 1980 is the growth in the motorway (freeway) network, which allows through coaches to avoid the delays associated with the myriads of villages and towns, and sanctions speeds up to 70 mph for coaches, still far below the 110 and 125 mph speeds posted and attained by British Rail on its main line routes, one might add, relatively unencumbered by congestion.

B. Changes in Industrial Structure

Two results of deregulation have been a number of operating companies *joining* NX, and other operators declaring bankruptcy—three in October 1985, including Trathens of Yelverton. Only one new carrier, Stagecoach (Perth) successfully entered the long distance market since 1980.

Apart from the carriers, one must examine the equipment industry, the suppliers of new vehicles and the second hand market. As regards the latter, NBC joined forces with Stuart Johnson, a major vendor of used buses and coaches, to retain for NBC a larger revenue from the disposal of withdrawn equipment. Regarding the former, purchase of higher quality European vehicles from 1980 by certain carriers led the British manufacturers to develop their own versions of the luxury bus.

C. Changes in Frequency of Service

The flurry of new services mentioned above in aggregate disguises the fact that most of the growth in competition came, as one might expect, on the major trunk routes. Spectacular growth has been observed on motorway routes, but stagnation and, in some cases, decline in cross-country and seasonal express services.⁸

Table 1 shows the pattern of ridership served by the NBC in express services from 1975 to 1983.

TABLE 1

YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983
Ridership	13.0	12.0	11.7	10.7	10.4	9.2	12.0	14.0	13.3
(Millions)									

Source: D. Robbins & P. White. 1985. *Deregulation of express coach services: has the 1980 Act worked?*

Clearly, the industry was in decline up to deregulation, almost a 40% ridership fall in five years. When the 1984 and 1985 figures are available it will be interesting to see whether the decline recorded for 1983 is perpetuated. Robbins and White state that 40% of the growth has been at the expense of British Rail.⁹ Since 1982 NX has had an agreement for TNT, a world-wide motor truck carrier, to manage a bus parcels service which uses regular NX services, similar to the Bus Parcel Express service available in Canada where such service accounts for up to 15% of the operators' revenue base. Birks of NX advises that, until October 1985, the parcels service had contributed only negligible amounts to the NX revenue base. So far then, this effort to benefit from economies of scope is still in its infancy in the U. K.

D. Changes in Quality of Service

From its inception in 1968, NBC made a conscious effort to phase out its mixed, elderly stable of vehicles, and to maintain at a high standard fairly pedestrian type vehicles, this emphasis on quality continues. The flurry of non-price competition in late 1980 was manifest in many technical innovations to improve the service quality. Among these

one records BC providing newspaper-style magazines for passengers, Trathens (since bankrupt) joined forces with NX to provide "Rapide" luxury services using German double-deck coaches equipped with air suspension, on-board toilets, video TV, and a servery complete with hostess.¹⁰ Some of these vehicles are now equipped with wireless headsets. Trathens are now gone, but the "Rapide" concept lives on serving 80 communities on 28 routes at slight premium price. The rapid growth in demand meant that NX had to hire a number of high quality vehicles from non-NBC operators. Although the charter rate was only 1p per seat mile, there was no shortage of supply.¹¹ Computerised reservations systems and quick issue tickets have helped NX maintain an edge.

E. Changes in Pricing

Strong price competition led to very low fares on the trunk routes, some suspected as being merely promotional. Even now NX offers "Boomerang-Economy-Return" fares—a return ticket for the price of a standard single, Monday to Thursday in the off-season. BC's price-cutting was matched by NX which, in a classic case of competitive pricing, after the demise of BC promptly deleted the availability of its bargain-basement "Beeper" fares. Another innovation was the introduction of "stand-by" fares in July 1980, just prior to deregulation. As in many other countries, inter city bus travel draws a disproportionate ridership from women, youth and the elderly, the latter presumably not as time constrained as to need the extra speed of rail, the former probably in terms of perception of safety—a corporate official is always in the same vehicle, on the railway some vulnerability is likely perceived. Birks observes that NX main clientele is the "visiting friends and relatives". Fares are below those prevailing before deregulation in some cases in real terms.

V. INTERMODAL EFFECTS OF DEREGULATION

A. Railway

On the surface one might deduce initial scorn on the part of British Rail {BR} at the possibility of any market share loss to the coach industry as illustrated by the fact that, 55 days after deregulation, BR boosted its fares by 19% on average.¹² Also, as BR supplied over 90% of the seats on intercity expresses out of London, and as speed and comfort are generally inferior on coaches, BR need have little fear. Against this, however, one must observe strategic marketing ploys aimed squarely at the bus. These were the provision of the following:

- (a) reduced price railcards for families and students,
- (b) student fares to all under 24 years,
- (c) One pound day returns to anywhere for senior citizens (*de facto* this means also one pound single!—obviously non—compensatory), and
- (d) Directional price discrimination keyed to bus fares. The one pound fares lasted only one month, and NX discounted this as it "had long since realized that its principal market was the younger generation who continue to remain loyal for many

years"¹³ BR phased the latter move in after trials. BR's own estimate of its revenue loss attributable to deregulation in 1980 is 3%¹⁴, hardly a market decimation. The traveller appears to have ended up with greater choice.

Graham suggested a way that the two modes could benefit from co-operation in maintenance, centralized at the rail diesel multiple unit depots, as the coaches comprise the same engines, the same transmissions and, in some cases, the same body as their short haul rail equivalents. This could result in more efficient use of repair facilities. He also suggested that British Rail might be nervous of this as one third rail revenues come from commuters, and a fifty passenger bus can cover its cost with a load of fourteen passengers.¹⁵ Intermodal co-ordination is not big in the U.K. As an example, Crewe is the major rail connection point in the midlands. Crewe is not even served by the coach!

B. Air

No information has been uncovered regarding any impact on the air industry of coach deregulation. The impact is likely to go the other way as happened in the U.S. The expansion of Short Take-Off and Landing services may make in-roads into the market share of Rapide bus in the U.K.

VI. RATE STRUCTURES

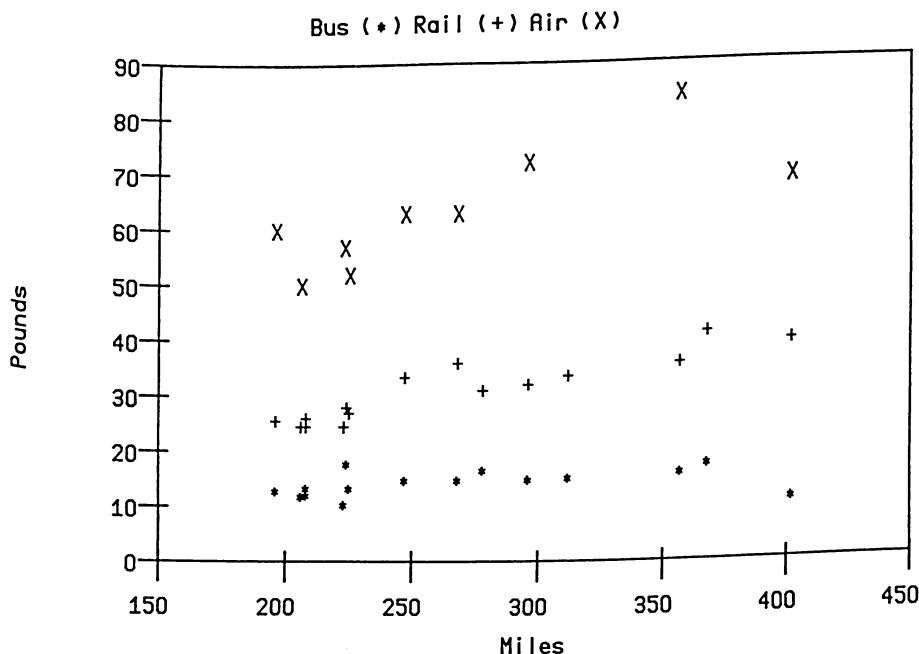
Chart 1 illustrates a selection of intercity single fares as at February 1986. As one might expect, rail fares are about double that of the coach, and air fares double that of rail. This would be expected in terms of travel time differentials and comfort variations. Chart 2 provides the return fares.

As this paper is designed for comparison with 200-400 mile intercity links, a sample of fifteen such links was taken, of which five were London based. If all fifteen records are included in a regression of bus fares against distance, the beta coefficient is insignificant. One may notice, however, one set of observations where the fare is inordinately low. The 402 mile distance (London-Glasgow), is highly competitive with 24 services per day (all modes), additionally, the service is provided jointly with Scottish Citylink although that factor seems to have little impact. If that observation is dropped for all modes, the beta coefficient becomes significant at the 5% level.

It was decided to focus on the non-peak return, not employing multiple use discounts. Full peak bus returns are basically 10% higher than off peak rounded up to the nearest 50p. The equations developed from the remaining fourteen data points are:

Single Bus Fare	=8.22	+	.024	(miles)
(t-values)	(3.65)		(2.86)	
Single Rail Fare	= 8.85	+	.083	(miles)
	(2.82)		(6.96)	
Single Air Fare	= 14.36	+	.191	(miles)
	(1.75)		(6.03)	
Return Bus Fare	= 11.16	+	.032	(miles)
	(3.51)		(2.69)	
Return Rail Fare	= 9.51	+	.129	(miles) ¹⁶
	(1.83)		(6.54)	

Chart 1
SINGLE FARES
(February 1986)



Interestingly, the bus and rail have comparable levels of the constant term in single fare equations. The same observation cannot be made in the case of return fares as the return rail fare constant is less than that for bus, although it is only significant at the 10% level. The distance coefficient of the return bus fare regression is only one quarter that of the rail return. This is partially accounted for by the bus practice of providing free returns Monday to Thursday on many routes. When averaged out, both coefficients for bus return are 33% greater than their single fare counterparts. In the case of rail, the return premium is 50% for distance and only 7% for the constant term. It would be interesting to find whether the railway perceives only slight extra fixed costs incurred for travellers with return bookings. If so, might the bus industry find similar economies?

VII. FINAL PERSPECTIVE

The British intercity express coach industry has not faced the stiff competition imposed by airline deregulation, such as has adversely affected the U.S. intercity bus industry, nor does it face a rail passenger industry subsidized to the extent of the Canadian rail passenger industry, 70%, which is considered by many to threaten the viability of the bus, and to be a significant drain on the taxpayer. It has, however, survived both its own deregulation,

and retaliatory measures taken by British Rail. How increased air competition may affect it is still open to question. The marginal changes in the *differentials* between bus and air since deregulation seems to have had little impact on the air industry.

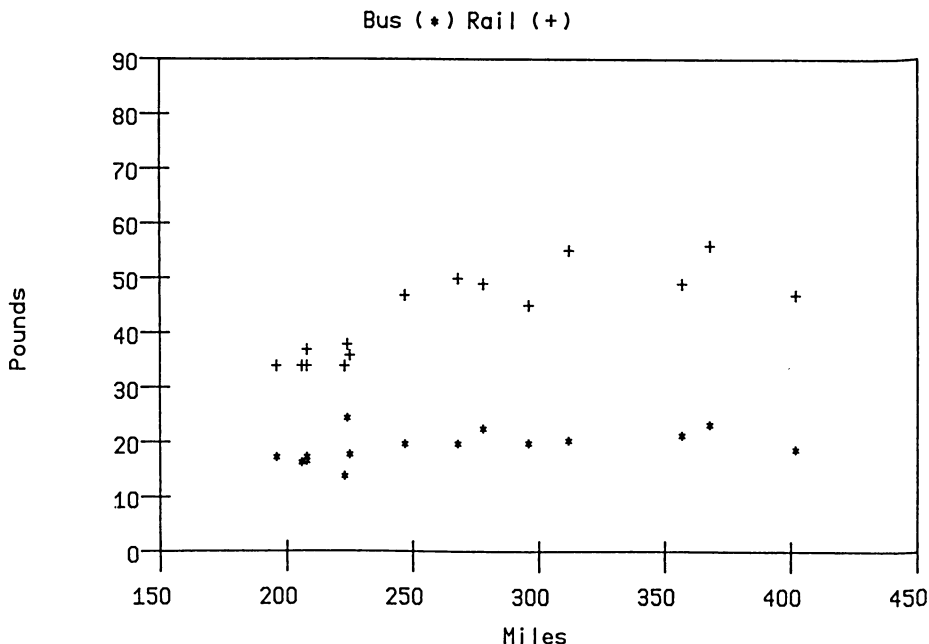
The same can be said, to a lesser extent, regarding the comparison with British Rail. It has been noted in this paper that bus deregulation attracted about 40% of its ridership growth from British Rail, but this change, according to British Rail, only had a 3% impact on its own profit picture. If so, BR may feel well rid of these passengers. Given that rail supplies ninety percent of the intercity seats out of London on a daily basis, one might more reasonably have expected a rail traffic loss of 4-5% and similar profit reduction.

On major links the rider has clearly gained from coach deregulation in terms of both price and options. On less heavily travelled routes, the options are now poorer, as theory would suggest.

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Chart 2
RETURN FARES
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ENDNOTES

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