Japan Railway History

Changes in Japan's Transport Market and JNR Privatization

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Transport Market in Postwar Japan

The railway virtually monopolized Japan's postwar transport market due to the lack of other means of transportation, representing 52% of freight and 92% of passenger transport in 1950(1). The economy began to pick up during the Korean War as a result of Japan's role as a staging post for UN forces, and then entered the rapid-growth period. The astonishing recovery was not entirely free of bottlenecks, such as freight backlog at railway stations because demand had exceeded JNR's capacity.

To reduce the backlog, the government started building expressways between Nagoya and Kobe, and Tokyo and Nagoya. At that time, roads in Japan were generally unpaved and narrow. The number of commercial trucks and buses rose during the 1950s and, by 1960, the railway's share fell to 39% of the freight market and 76% of the passenger market. Conversely, automobiles grew to 15% and 39%, respectively. However, the booming economy increased overall demand, so railway stations were still backlogged with freight and suffered from passenger congestion despite the railway's falling share. The railway's monopoly collapsed with the growth of the new automobile age. By 1970, its share was only 18% and 49% of the freight and passenger markets—automobiles had 39% and 48%, respectively.

Car Ownership and Rural Railways

Private vehicle ownership was becoming common in the 1970s as typified by the Japanized phrase 'mai kaa' (my car). Soon after the war, the fledgling Japanese auto industry was building vehicles under the license of British and French automakers, but by the late 1960s, it had sufficient capacity to expand sales in both the domestic and foreign markets, especially North America. Private cars formed 28% of the domestic passenger market, striking another blow to rural railways(2). Private railway lines were quickly replaced by private bus services but JNR lines could not be closed due to local resistance, although their unprofitability was obvious.

By 1980, the railway's share of domestic freight was just 8% and had even fallen to only 40% of the passenger market. It managed to hold on to a larger share of passengers because of the vast number of commuters in large cities, and the popular shinkansen between Tokyo and Osaka. Despite the rising income levels and the popularity of car ownership, people still used trains to commute, because of the shortage of parking spaces and traffic congestion in cities. Cars were mainly used for weekend outings.

As income rose, people in rural areas where there was no road congestion or shortage of parking spaces also bought cars and many households even had two or more cars. By 1980, private cars represented 39% of the passenger market.

Birth of JRs at Shiodome Freight Terminal on 1 April 1987 (Transportation News)

Decline and Fall of JNR

Although the Japanese transport market was experiencing massive structural changes, JNR still continued making profits through the 1950s and early 1960s, unlike the European railways which ran deficits from the mid-1950s. This was because Japan was 10 years behind Europe in entering the new age of car ownership. JNR stunned the world by opening the Tokaido Shinkansen in 1964 to upgrade the old Tokaido trunk line which was unable to meet demand. At that time, railways were generally viewed as a declining industry and the plan to construct the Tokaido Shinkansen was criticized by some as a foolish investment on a par with the Great Wall of China (which did not stop the Mongol hordes) and the battleship *Yamato* (the largest battleship ever built but which was sunk by aerial bombardment in WWII).

The 1964 Tokyo Olympics and the Tokaido Shinkansen symbolized Japan's postwar recovery and growth. Its success put an end to the criticism and the word shinkansen even became synonymous with high-speed trains in the English language. Although the Tokaido

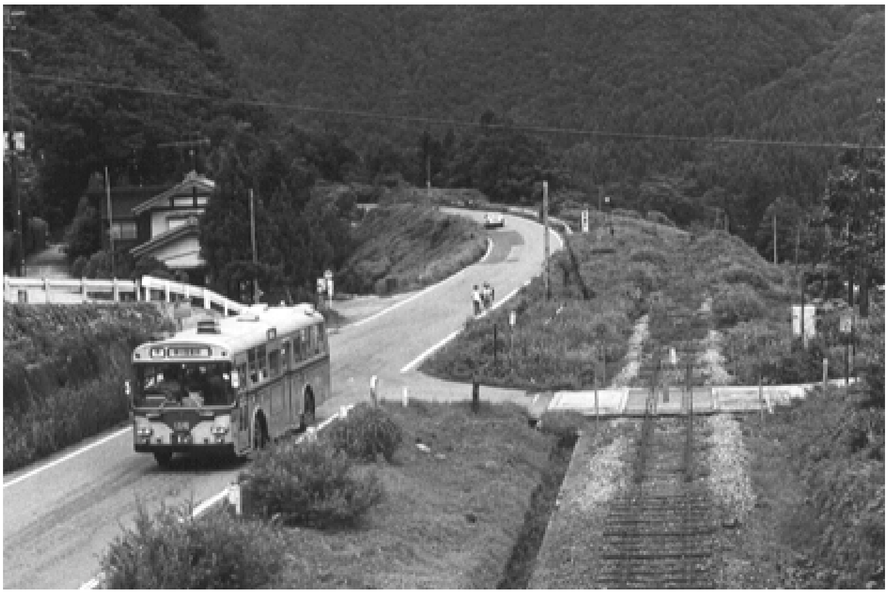
Shinkansen was a technological marvel and grew to become JNR's bread and butter, ironically, its opening marked the first year that JNR entered the red.
Attempts were made to stem the losses mainly in three directions: by raising fares to increase revenues; by reducing staff through mechanization of labour-intensive operations and closure of lightly-used freight stations, rural lines, etc., to improve productivity; and by seeking more financial support from the government.
However, higher fares were of course very unpopular, and as motor and air transport grew rapidly through the 1960s and 70s, fare hikes did not bring proportionally increased revenues. In particular, in 1976 when JNR raised passenger fares by 50%, the traffic volume fell very sharply, with many long- and medium-distance passengers shifting from rail to road and air.
Although no real labour dismissals were included in JNR's productivity measures, meaning only partial replacement of retiring employees, major trade unions stood firmly against the workforce reduction. Labour-management relations deteriorated year-by-year and there was an endless series of disputes, including long strikes from the late 1960s to early 80s.
The government was always reluctant to loosen the purse strings, and, to make matters worse, could no longer afford to support the railways after tax revenues fell as a result of the two world oil crises. Although the government provided some funding each year, it only covered part of the huge deficit; most of the losses were covered by private and government loans, which later accumulated enormous interest charges.
Despite the mounting problems, political pressures forced the JNR to continue making huge investments in infrastructure including new shinkansen financed by loans.
The annual losses continued growing year-on-year and by the late-1970s, had reached ¥1 trillion. They were generated both by the interest charges, as well as by operating losses from the freight sector, rural trunk and branch lines, and JNR bus and shipping operations. By 1987, the deficit totalled ¥25 trillion, similar to the combined national debts of several developing countries[3].

A session of the Supervisory Committee for JNR Reconstruction taking evidence from JNR Chairman Fumio Takagi (standing) *(Transportation News)*

Proposed JNR Division and Privatization

The division and privatization of JNR was first suggested in a proposal presented in 1982 by the Ad Hoc Commission on Administrative Reform, and the powerful Supervisory Committee for JNR Reconstruction was established in 1983. The committee announced a report in 1985 *Kokutetsu Kaikaku ni kansuru iken* (Opinions on the restructuring of JNR) which said, 'JNR's finances collapsed because it failed to respond correctly to the changes of the time by reforming its management or increasing productivity to meet the change in transportation structure. The cause of the failure to meet the change in transportation structure correctly is found in a structural issue contained in the style of management itself; JNR relied on centralized management of all railways in the country under the huge organization of a public corporation'[4].
The report also said, 'reconstruction under the existing system is no longer possible...' urging privatization and division to solve its problems. The proposal recommended privatizing and dividing JNR into six regional passenger railway companies (the JRs) and a freight company (JR Freight), and a number of smaller other companies in the information, telecommunications and R&D fields. It was realized that JR Hokkaido, JR Shikoku, and JR Kyushu, as well as JR Freight, would have problems maintaining profitability due to their small customer base, whereas JR East, JR Central, and JR West would be profitable due to the large number of commuters and customers using the shinkansen. For this reason, two measures were proposed to adjust profits between the companies: formation of a ¥1.3 trillion Management Stabilization Fund (MSF) for the three island companies, and formation of a Shinkansen Holding Corporation (SHC) to lease the Tokaido, Sanyo, Tohoku and Joetsu shinkansen to

The 1966 Toyota Corolla fuelled the 'My Car' boom *(Toyota Automobile Museum)*



Buses replaced rail services on the closed JNR Akaya Line (Transportation News)

the JRs. The details of the MSF and SHC as well as subsequent changes to the proposal have already been described in the previous issues of *JRTR*[5],[6]. A special measure comprised of fees calculated on the basis of avoidable costs was also introduced to lighten the burden of JR Freight.

Another government body, JNR Settlement Corporation (JNRSC) was established to assume and liquidate the old JNR debts by selling unused land, and to find jobs for employees surplus to the JR requirements[7],[8].

Although the original intent was to list all the JRs on the stock market, only JR East and JR West are listed at present and JR Central is preparing for listing.

Birth of JRs

The new JRs became reality on 1 April 1987 and their operating balances soon improved dramatically compared to the JNR days. In their first year of operation, their combined operating profits totalled ¥340 billion, rising to ¥900 billion in 1992. The good results were due to four principal factors: 1. The steady growth in transport demand resulting from the economic boom at that time, 2. The release from the huge burden of the old JNR debt, 3. The positive business efforts of the JRs themselves, and 4. The reduced labour costs.

As a result, unlike in the JNR days, the JRs have managed to avoid genuine fare increases for a long time after privatization. The three island JRs increased their fares by 10% only once, which compares favourably to the numerous fare increases by private railway companies within the same time span. However, it should be noted that the JR fares were rather high in the first place.

The implemented reforms were changed after the privatization in two ways. First, the SHC system of leasing the shinkansen to the JRs was changed in 1991; JR East, JR Central and JR West were allowed to purchase the lines on deferred payment from the SHC. In fact, this idea had been proposed by the JRs originally because they feared that the leasing system would cause future problems with listing stocks. Purchasing the shinkansen lines, even by deferred payment, is imposing a heavier burden than the leasing programme, but was a wise choice from the longer perspective. The original concept of the JNR privatization of separating infrastructure from operations has still not been settled. Second, the plan for JNRSC to sell the unused JNR land was delayed because the government feared it would fuel sky-rocketing land prices.

The booming economy at the time of JNR privatization was lucky for the JRs, but the subsequent serious depression has made it impossible to sell the land held by JNRSC, delaying the debt redemption. This remains a serious issue and the current debt of ¥28 trillion is equivalent to approximately ¥200,000 for every man, woman, and child in Japan, or about 5% of the total national debt.

Komachi (Akita mini-shinkansen) and Yamabiko coupled on the Tohoku Shinkansen (JR East)

Future Challenges

The recession over the last 4 years has caused falling demand for railway transportation and consequent downward fluctuations in operating profits since 1992–93. In addition, the government's low interest rate policy to fight the recession has worsened the financial position of the three island JRs, which rely heavily on the working profits from the MSF to offset their operating losses. JR Freight is also suffering from the recession in competition with air and road.

The recession has revealed a number of problems that were hidden by the booming economy when the JRs were formed. We have reached the point where new discussions and solutions are needed.

The effect of deregulation at privatization was insufficient. Although the government has now accepted price cap regulation in addition to previously-used rate base regulation, it is still reluctant to eliminate the bureaucracy responsible for regulating the railways. Future deregulation of domestic air transport will probably create demand for further deregulation of railway operations.

In addition, the railways must survive the increasingly severe competition with air and road by investing selectively in markets where they excel other means of transportation. For example, the 1200-km trip between Tokyo and Sapporo in Hokkaido is dominated by air with a 95% market share. In contrast, the shinkansen enjoys the dominant share of the 350-km trip between Tokyo and Sendai, forcing out the airline companies[9]. JR East has recently begun competing aggressively with air transport by introducing new express services, such as the Akita mini-shinkansen[10].

In addition to competition, the railways must complement other transport modes—for example, by providing better access to airports, and supplementing rail services with car rentals. Other issues are the need for cost sharing by local communities. Cost sharing is now taken for granted in construction of mini-shinkansen running on conventional lines, as well as in extension of the shinkansen network.

At least, privatization has given the JRs the freedom to make these critical decisions without the political interference common during the JNR era. ■

A JR Shikoku expressway bus crossing the Seto Ohashi bridges (JR Shikoku)

Notes

(1) On passenger-kilometer and freight tonne-kilometer basis, Ministry of Transport, National Transportation Statistics Handbook, 1993, pp. 20–27.

(2) M. Imashiro, Maintaining Public Transport in Japan's Countryside—Burden Sharing and Subsidies, *JRTR* 9.

(3) M. Imashiro, Restructuring of the Japanese National Railways and Its Problems, *Outcome of the Privatization of the Japanese National Railways*, Institute of Business Research, Daito Bunka University, March 1992.

(4) Supervisory Committee for JNR Reconstruction, A View on JNR's Reform—Paving the Way for Railways in the Future, July 1985.

(5) Y. Okano, The Backdrop to Privatisation in Japan, *JRTR* 2.

(6) K. Nakamura, Privatization and Beyond: the JR Case, *JRTR* 8.

(7) S. Konno, JNR Privatization—The Last 10 Years and Future Perspectives, *JRTR* 13.

(8) I. Smith, 10 Years of JR Operation—The Explicit and Implicit Aims of JNR Privatization, *JRTR* 13.

(9) Ministry of Transport, Survey on Regional Passenger Flows, March 1996.

(10) Akita Shinkansen Opened, Photostory, *JRTR* 11.

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