BLOOMSBURY
ACADEMIC COLLECTIONS
JAPANESE ECONOMICS
AND INDUSTRY

THE PRIVATISATION OF JAPANESE NATIONAL RAILWAYS

Railway management, market and policy

Mitsuhide Imashiro
and Tatsujiro Ishikawa

BLOOMSBURY

THE PRIVATISATION OF JAPANESE NATIONAL RAILWAYS

Railway management, market and policy

This page intentionally left blank

THE PRIVATISATION OF JAPANESE NATIONAL RAILWAYS

Railway management, market and policy

Tatsujiro Ishikawa and
Mitsuhide Imashiro

BLOOMSBURY ACADEMIC COLLECTIONS
Japanese Economics and Industry

BLOOMSBURY
LONDON • NEW DELHI • NEW YORK • SYDNEY

Bloomsbury Academic
An imprint of Bloomsbury Publishing Plc

50 Bedford Square
London
WC1B 3DP
UK

1385 Broadway
New York
10018
USA

www.bloomsbury.com

First published in 1998
This edition published in 2012 by Bloomsbury Publishing plc

© Tatsujiro Ishikawa and Mitsuhide Imashiro, 2012

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without prior permission in writing from the publishers.

Tatsujiro Ishikawa and Mitsuhide Imashiro have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as Author of this work.

No responsibility for loss caused to any individual or organization acting on or refraining from action as a result of the material in this publication can be accepted by Bloomsbury Academic or the author.

Bloomsbury Academic Collections
ISSN 2051-0012

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

ISBN: 9781780939278 (cloth)
ISBN: 9781780933252 (Bloomsbury Academic Collections: Japanese Economics and Industry)
ENTIRE COLLECTION ISBN: 9781780933184 (Bloomsbury Academic Collections: Economics, Politics and History of Japan)

Library of Congress Cataloging-in-Publication Data
A catalog record for this book is available from the Library of Congress.

Printed and Bound in Great Britain

Contents

This page intentionally left blank

Preface

Japanese National Railways have, under the 'public corporation' system, recovered from the damage suffered during the Second World War, and brought about a golden age of railway transportation in Japan. Under the same 'public corporation' system, however, it went into decline, and moved towards privatisation and its break-up into divisions.

I joined the national railway in autumn 1945, just after the Second World War. In those days, the organization was called the Ministry of Transport Railways Bureau [Tetsudo Sokyoku], and was operated by the government. The change to the public corporation, 'Japanese National Railways', came four years later.

Since then, I spent thirty years with JNR, with opportunities to participate in its various fields of business operation, both directly and indirectly. After retiring from JNR, I was able to spend another twenty years in a position where I could observe the operation of the railways by being a member of research institutes specialising in transport matters.

Within a 114 year history, it was only since 1981 that the national railways in Japan went into the red, in other words, failed to fund its operating costs from its revenue from fares. JNR had provided one hundred years of service in meeting the needs of the economy and the general public, as well as contributing to their development and progress, without receiving any financial support from government.

The root of the problem facing the railway industry in many countries was that the railways had come as the earliest means of transport. Initially, railways were expected to function as a major mode of transportation and railway networks extended to even the most remote places. As times changed and it became possible to choose between various means of transport, the need arose for railways to make adjustments with rival means of transport. Railways, in its search for survival, should take advantage of its special characteristics by focusing on mass transport. In the field of small-scale light traffic, railways should hand the task over to motor vehicles. Reviewing the functions of railways as well as reorganizing the railway network is more or less inevitable in almost any country; however, the difficulty in implementing change differs from country to country, with differing conditions.

JNR was privatised and broken up in 1987. It looks as though each of the new companies has set off to a good start. Nevertheless, not all the issues which led to JNR's decline have been solved.

This volume is a collection of essays written with the aim of clarifying the fundamental problems faced by JNR, and to deepen the general public's understanding of this subject. This has been achieved with the co-operation of Professor Mitsuhide Imashiro. The major part is made up of articles of mine entitled 'Nichiyo Hyoron' [The Sunday Column] which appeared every week in Kotsu Shinbun – a newspaper specialising in transport matters – for nearly seven years, up until a few months before JNR was transferred to JR. As a collection of newspaper columns, the issues are not presented systematically, but I feel, nonetheless, that by reading this material, people will be better able to grasp the nature of the problems that were present for JNR, some of which will perhaps persist for some time to come.

July, 1998
Tatsujiro Ishikawa

Acknowledgements

The chapters in this book are revised and modified versions of the following essays and articles. The Japanese titles are shown for the pieces of work which were originally written in Japanese.

Chapter 1: Imashiro, M Restructuring of the Japanese National Railways and its Problems, *Modern Business and Management: Some Aspects of Japanese Enterprise*, Institute of Business Research, Daito Bunka University March, 1992.

Chapter 2: Imashiro, M *Outcome of the Privatisation of the Japanese National Railways*, Research Papers No. 12, Institute of Business Research, Daito Bunka University March 1991.

Chapter 3: Ishikawa, T Kyodai Soshiki no Kokufuku: Kokutetsu ni Okeru Bunken Kanri no Keiken, *Unyu to Keizai* (Transportation and Economics), Vol. 43, No. 3, March, 1983.

Chapter 4: Imashiro, M *Provincial Railway Policy and the Third Sector Railways in Japan*, Research Papers No. 17, Institute of Business Research, Daito Bunka University March, 1993.

Chapter 5: Ishikawa, T Henka e no Taio, *Unyu to Keizai*, Vol. 48, No. 10, October, 1988. Imashiro, M Keiei no Shin-Kyokumen to Toumen no Syokadai, Unyu to Keizai, Vol. 48, No. 10, October, 1988.

Chapter 6: Ishikawa, T Nichiyo Hyoron, *Kotsu Shinbun*, 1980–1986.

Many people have helped in getting this book published – in particular, Fumiko Ishii, Ryoko Ishikawa, Kathrin Köster, Hanae Kudo, Ian Smith, and Akiko Yamada. Without the support of Kotsu Tokei Kenkyujyo (Institute of Transportation Statistics) it would have been impossible to get the book completed. Brian

Southam of The Athone Press waited patiently for the completion of the English manuscript. I wish to express my great appreciation to all these people.

Policies concerning railways in Japan are still in the course of change. This book discusses several issues regarding the fundamentals of railway operation. If readers have questions on problems which have arisen or may arise in the future, please contact Kotsu Tokei Kenkyujyo. We would like to answer them as far as we can.

July, 1998
Mitsuhide Imashiro

1

Restructuring of the Japanese National Railways and its Problems

1. INTRODUCTION

In April 1987, the JNR (Japanese National Railways) was privatised and reorganized into nine corporations, two special corporations and one foundation.

For more than a century, railways had been the backbone of domestic transport in Japan. With their vast size, they dominated the transport market. After the 1960s, however, the development of auto-transport quickly eroded their dominance. In the process, internal and external problems such as JNR's large debt, the decline of rural railway systems, the stagnant demand for rail freight services and restrictive government regulations bedeviled the railways.

On the other hand, while railways are no longer the supreme transportation method of our time, they are still the leader in urban and inter-city transportation, and here there is a need for more capacity and flexibility. Whether railways can fully exploit the advantages of their system in order to survive in a competitive market, will depend upon the effectiveness of JNR's new restructure along with both other policies of deregulation.

2. PRIVATISATION AND BREAK-UP OF JNR AND DEREGULATION

The eight Acts for the privatisation and break-up of JNR provided for the deregulation of the entire railway system including private railways. JNR was initially meant to provide for the welfare of the general public and the Railway Nationalisation Act denoted railways as 'the property of the nation'. JNR was a special public corporation (Tokushu houjin) established by the government, but to all intent and purpose it was the government itself or its alter ego.[1]

The restructuring of JNR changed this special nature of JNR, and the notion of a 'national' railway system was scrapped. The JNR Restructuring Act of 1986 (The 87th law), states its purpose as follows: 'The railway and related operations of JNR being out of control and the current management of the entire national system by a public corporation no longer assuring the appropriate and healthy operation of the business, it is vital to establish a new management system which is responsive to need. It is also vital that under this management JNR should fulfil the role of the basic method of transport in Japan, for it is imperative to stabilize the life and economy of our people. With this in mind, this law sets out the basic elements for the radical restructuring of JNR so as to create an effective and responsive manangement'.

'Improving the welfare of the general public' was replaced by 'responding to market needs and establishing effective management'. Another act was the Application Act of 1986 (93rd law). This repealed the JNR Act, the Railway Construction Act and the JNR Fare Act. The government's responsibility for constructing the rural railway system came to an end, and likewise the procedure about fares that involved the legislature (although spending on the construction of rural railways by the Railway Construction Act had been frozen since 1980). Even the procedure on fares was already less rigid after the revision of JNR Fare Act in December, 1977: however, JNR still had to obtain the approval of the Minister of Transport on fares and there was some limit on the fares it could propose.

Another of the restructuring acts was the Railway Business Act (the 92nd law) which repealed the Local Railway Act relating to private railways. The Act distinguished between those doing business with railways constructed or owned by themselves (first-class sectors), those doing business with railways owned by a third party (second-class), and those building railways with the purpose of selling them or providing the rights for their own use (third-class). Railways entail large amounts of track cost, and this lengthens the lead time of investment. This law expanded the scope for business enterprise by separating the track cost from the cost of running train services.

Most railways of the past were in the first-class category but Nihon Kamotsu Tetsudo (Japan Freight Railway) will be second-class. Tetsudo Kodan (Japan Railway Construction Corporation) and Hon-shi Kodan (Honshu-Shikoku Bridge Construction Corporation) would be third-class though they are exempt from the classification by law. The Railway Business Act also drastically simplified the rules of the Local Railway Act. The new Plan Manager System enabled qualified business personnel to carry out inspections in place of government or JNR personnel. The Railway Operating Act (Tetsudo Eigyo Ho) remained so that railways would then be governed by this Act and the Railway Business Acts.

3. FROM MONOPOLY TO COMPETITION

3.1 *The Collapse of JNR Finance*

The immediate reason that led to the privatisation and break-up of JNR was its massive deficit which stemmed from the rapid erosion of the monopoly JNR enjoyed. It was after 1964 that the financial condition of JNR got worse. A deficit of 30 billion yen that year was financed out of reserves, and could have been temporary. However, the deficit kept on growing and by 1966 the reserves had been used up.

In 1971, there was a huge operating loss of 234 billion yen and after the oil crisis deficits of about one trillion yen were regularly incurred. These were financed by borrowing. Funds for capital projects were also raised by borrowing, and long-term liabilities mounted. Because the ways of raising funds were limited, dependence on debt increased, and interest payments became a problem for JNR's management. The government suspended these interest payments in 1976 and in 1980, but this provided only temporary relief.

Meanwhile, three attempts to rescue JNR were made including a special act for JNR's financial recovery (JNR Rehabilitation Act). These included capital investment projects based on plans drawn up several years previously. The basic thinking was to invest for modernisation and bring costs down while improving the level of service to increase the volume of rail use. In the event, inflation and increasing labour costs pushed up total costs, growth in transport volume remained weak and competition from road and air services got fiercer.

Continuing with much the same capital investment during the 1970s as the way to recovery made things worse. JNR failed to adjust to the changing economic environment and stuck to expansion while most private companies were cutting back their operations. Another problem was that the investment plans were fragmented; there was no strategy of investing in fields which could exploit the specific advantages of railways.

From 1980, a new rescue plan – backed by the JNR Recovery Act and called the Management Improvement Plan – was launched. Unprofitable services such as rural lines were to be trimmed, discount fares introduced and the freight yard-system scaled down. This recovery plan was quite different from previous plans but still lacked the vision to revive the railway system as a whole.

Figure 1 shows the income expenditure outcome for 1985. The net loss was 1,850 billion yen, a staggering 5 billion yen per day. The outgoings include special labour costs and the Tohoku & Joetsu Shinkansen capital investment which were not the responsibility of JNR management: excluding these, the loss shrinks to 300 billion yen. The special labour cost was incurred by the JNR having to take on the former Colonial Railways employees, and the Shinkansen capital investment was one not sanctioned by JNR. These outlays were approved by the government though it is not clear if JNR can claim to be free of all the responsibility for them. The Special account in Figure 1 relates to past borrowings, the interest payment of 350 billion yen having an equivalent government subsidy.

Figure 2 shows the balance sheet for 1985. Long-term debt accounted for 88 per cent of the total liability, the result of financing not only the operating loss but also most of the investments. Paid-up capital was a small part of total liability for the government had been reluctant to provide any financial aid to JNR. The accumulated loss (including past debt) had reached 14,100 billion yen and long-term liabilities 23,600 billion yen. This meant that out of over 23 trillion yen of debt 14 trillion had already been used up to pay off losses; only the remaining 9 trillion represented real capital stock.

3.2 *Unprofitable Operations and the Source of Loss*

To see which operation caused the losses in 1985, Figure 3 shows the results of mainline, local and automative divisions. Main-line railways operate in and between major cities, comprising in length about half of the whole rail network and 90 per cent of the total

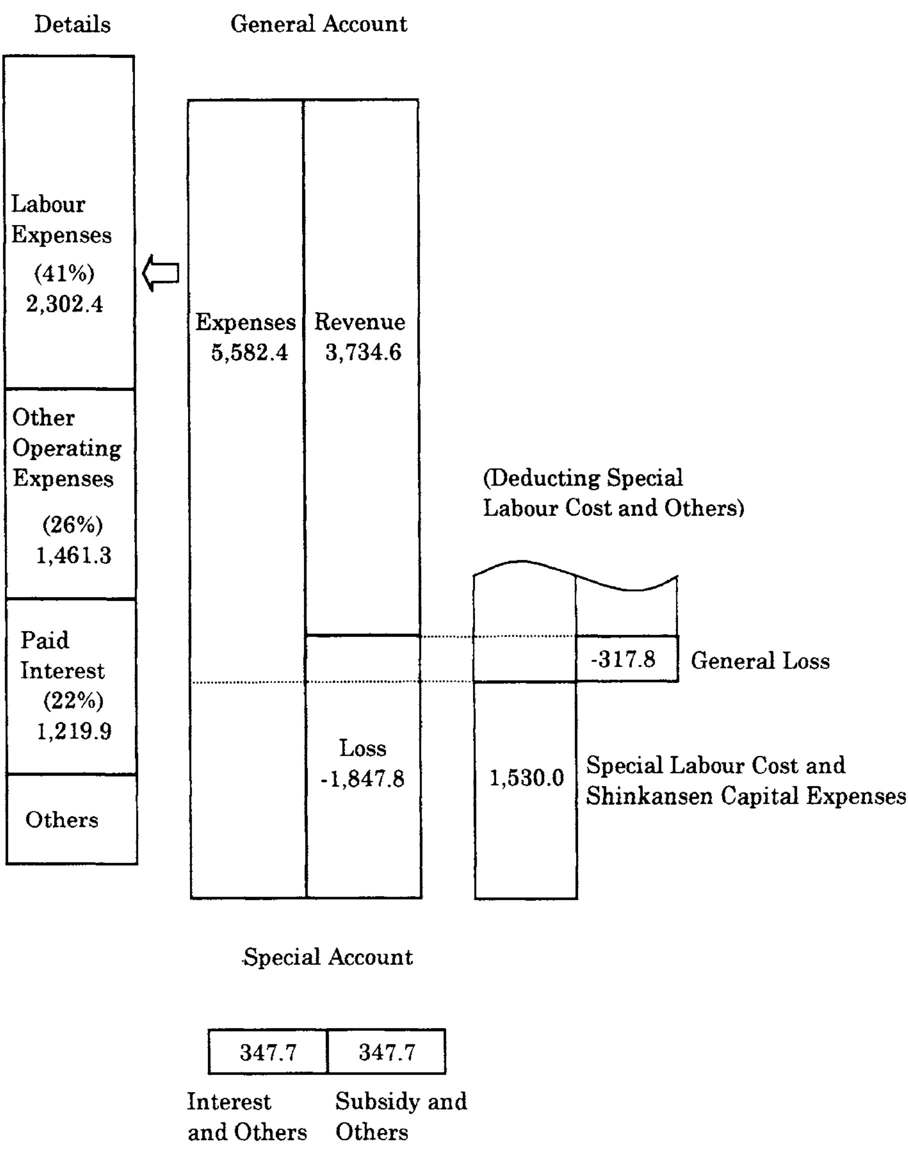

Figure 1: Overall Balance (billion yen)

volume of rail transport. While these are well placed to take advantage of the rail system, it is otherwise for local railways with their low transport density. This classification highlights the divisional differences and serves to indicate what needs to be done in running the railway system.

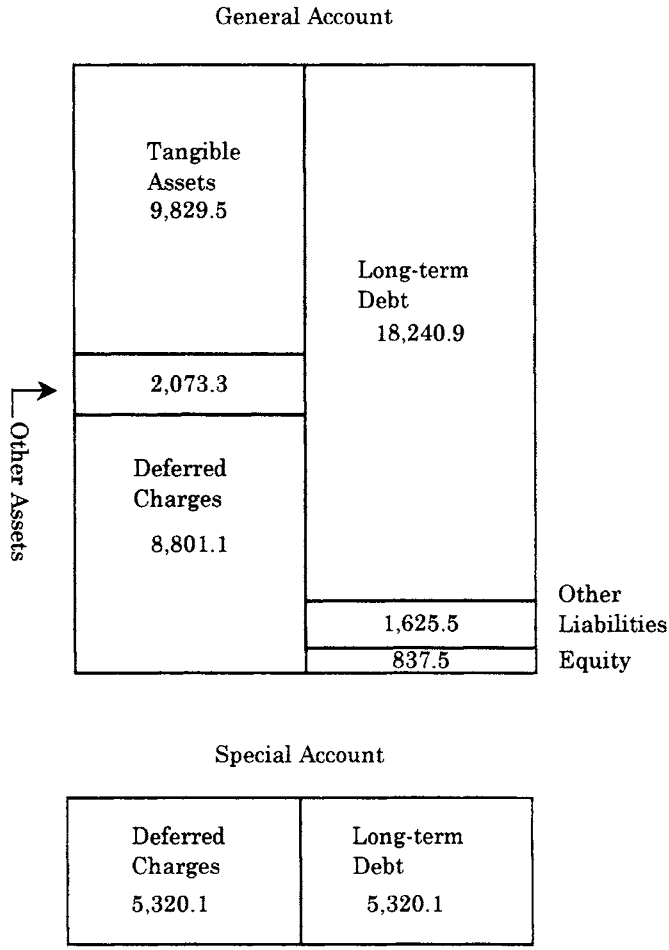

Figure 2: Balance Sheet (billion yen)

The absolute amount of loss is bigger with main-line railways but the proportion of the total loss is bigger in local railways. Excluding special labour costs, main-line railways can even generate an operating profit. The budgeted balance for main-line railways that was intended by the Management Improvement Plan was reached ahead of time and exceeded the financial goal. Contrary to the general belief that the plan's goal was unrealistic in view of past failures, JNR management undertook a determined attempt to rationalise its work. Local railways were up against a falling volume of transport and revenue fell more than

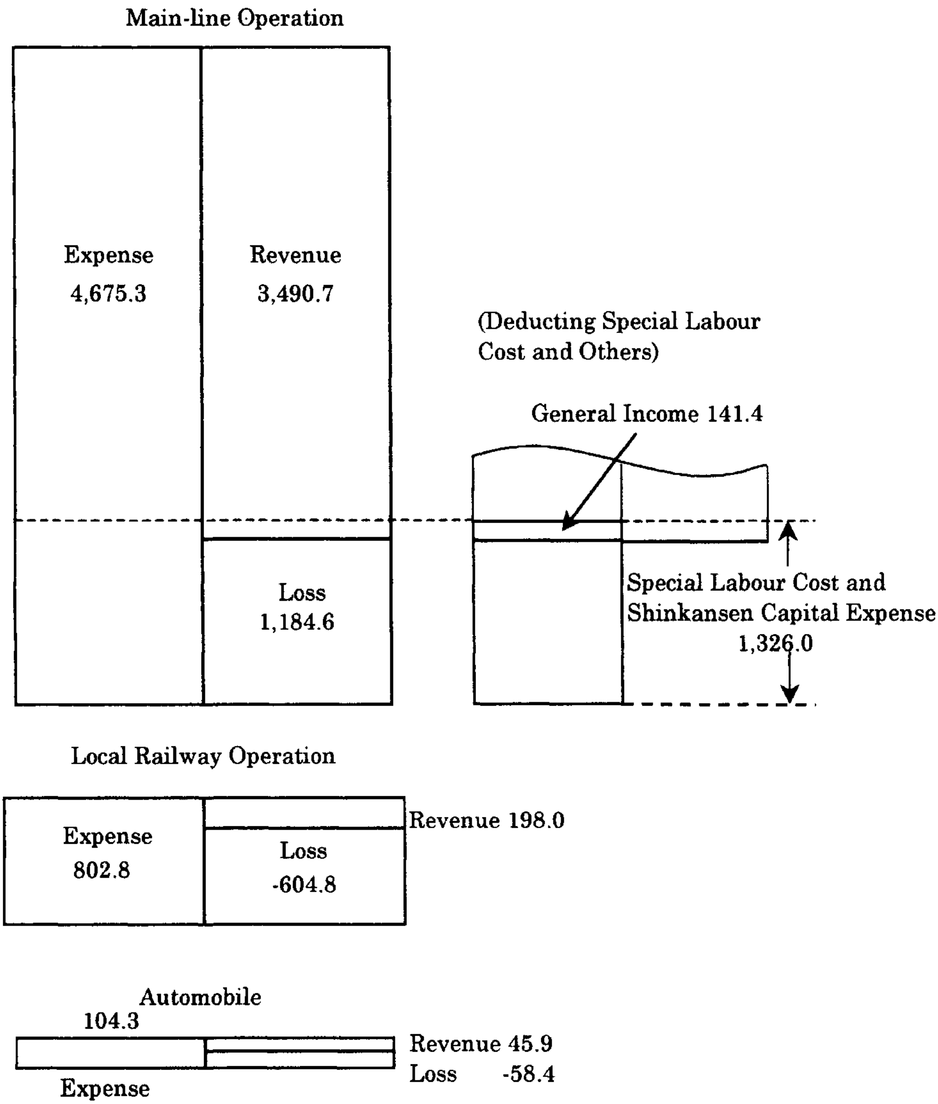

Figure 3: Railways Income (billion yen)

the cost-cutting effects of the rationalisation programme. In previous years, the loss incurred by local railways accounted for about 30 per cent of the total loss. The decline in the volume of transport in this sector was caused in part by the rapid growth and development of bus transport, but more so by the spread in the use of automobiles that began in the 1960s. Mass production reduced the relative price of cars and trucks which quickly spread into rural areas. Multi-vehicle households were not uncommon and price competition between manufacturers contributed to the popularity of motorbikes.

Railways and other public transport can not match the convenience of cars particularly in serving local needs. Vehicle owners generated the revenue to finance road construction, and thereby helped to create an automobile society. The monopoly that railways enjoyed all but disappeared. The change affected JNR, private railways and buses. Public transport was left to provide for poorer people, but even they had government subsidized alternatives such as school and hospital buses.

Deprived of its monopoly, local railways could not even make economies on account of the nation-wide unified fare system and ineffective management control. On the other hand, private railways survived for they switched some of their operations to buses at an early stage, and they could also vary their fares in different parts of the country.

Another loss-making service is freight. Separate financial results are made for passenger and freight services as shown in Figure 4 for 1985. (The figures are not 'Divisional' so the total is not the same as for JNR as a whole). Total expense is divided into passenger and freight operations along with 'common expense' which is then apportioned to passenger/freight expense. It will be seen in Figure 4 that neither passenger nor freight operations cover costs, and that freight cannot even cover its own proprietary costs.

Balancing the revenue and this proprietary expense was one objective of the Management Improvement Plan. It is of little significance that revenue should offset proprietary expense, given that this is only a part of the total expense, but that the revenue cannot even cover part of the expense tells how seriously unprofitable that operation was.

JNR used to dominate the market for domestic freight. Right after the war, with the shipping industry almost completely destroyed, railways were crucially important and it was put on the priority list of industrial development by the government along with coal and steel. With the recovery of shipping, the market for large-volume long-distance freight returned to it. The balance between shipping and land transport settled with each industry's

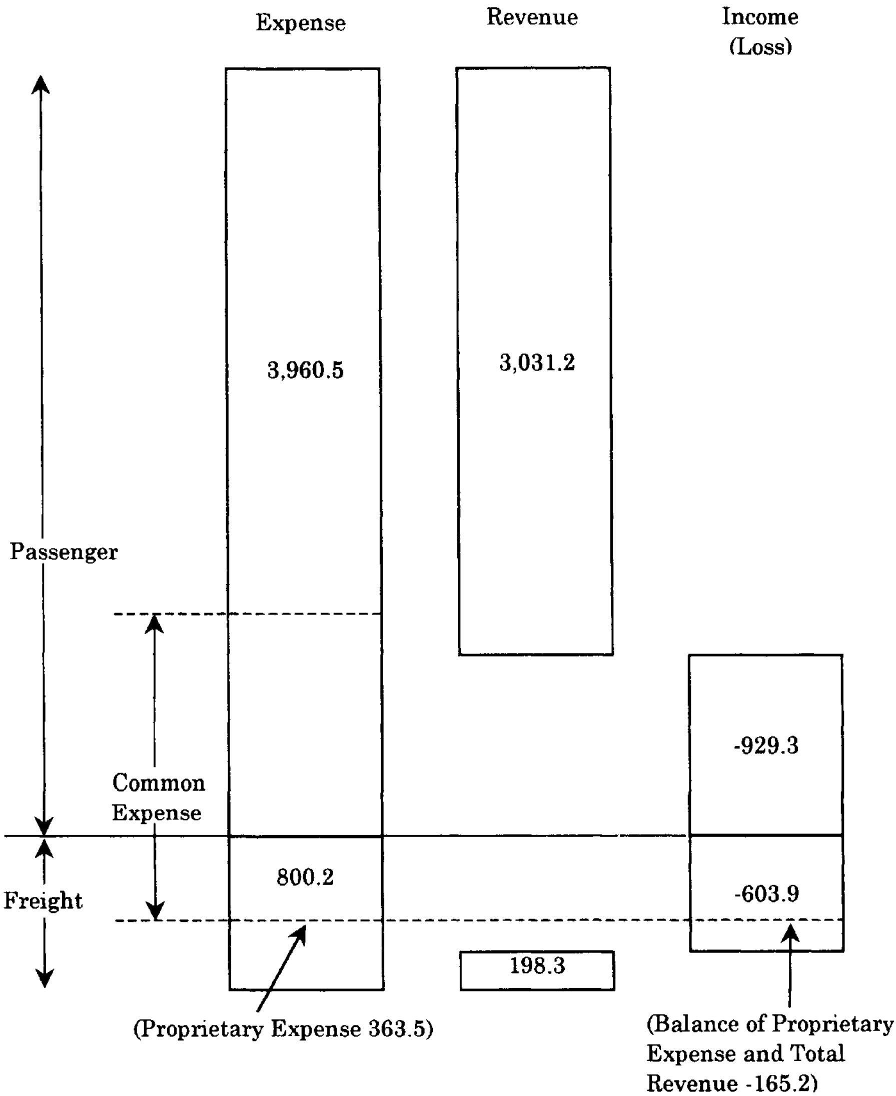

Figure 4: Income of Passenger/Freight Operation (billion yen)

share of the business set by the distance of freight markets. JNR still enjoyed leadership in the overland transport markets. However, once the economy started to grow rapidly, it did not have the capacity to deal with the sudden growth of freight, resulting in stocks piling up in rail-yards.

This dominance came to an end when private companies began to provide scheduled truck services and road construction began to take off. Since the truck transport business required only small amounts of capital, a highly competitive situation emerged. JNR freight based on a dominant market position, had little or no chance against the new type of service. Some counter-measures were taken but their competitiveness remained weak. Rail freight operations became unprofitable and shrank in size.

Rail passenger operations did not become unprofitable, but in inter-city transport monopoly gave way to competition. Rail dominance diminished as the domestic airline system and long-distance bus services flourished. A market in which railways are mainly dominant is limited to major cities. Cross-subsidization between profitable and unprofitable operations and between operations with market dominance and without, is now recognised as a problem for management.[2]

4. THE PROCESS OF JNR RESTRUCTURING

4.1 *Nationalisation and Reformation After the War*

The Government Railway, later renamed JNR, had been in existence for 114 years since the first railway was built. Then railways were not seen as the property of government and private as well as governmental railways were built and managed separately. The basic structure of JNR was established in 1906–07 when the railways were nationalised. It was government railway officials such as Masaru Inoue who stressed the need to integrate the railway system. The idea was to rationalise rail transport to achieve economies of scale and thereby lower costs and fares. The goal was to achieve greater efficiency, along with an expansion of the railway system.

The military authorities were also in favour of nationalisation, but their support was something akin to the Treasury supporting any plan that raises revenue rather than for any other reason. Among businesses, the Mitsubishi group opposed nationalisation and the Foreign Affairs Minister, Takaaki Kato, son-in-law of Mitsubishi's leader, Yatarou Iwasaki, resigned from the Cabinet in protest. Eiichi Shibusawa, the famous businessman in the Meiji era, also had reservations about nationalisation as it implied helping private companies.

However, the government was under pressure to reduce transport costs and hence export costs in order to improve the post-war overseas balance of payments with Russia. Mitsui group, another business group, recognized this need, and later on Shibusawa and others went along with nationalisation.

The price paid for the seventeen railway companies which were nationalised was quite high (though the proceeds were reinvested in electric utilities, in some of the heavy and other industries). Interest payments on the bonds issued for the purchase of the railway companies proved to be a heavy burden for the nationalised railways. At this stage Tetsudoin (Railway Agency) was created; Railway Accounting was separated from Government General Accounting under the Imperial Railway Accounting Act of 1909, and the basic structure of JNR was thereby established.

This accounting independence was threatened when the railway authority had to forfeit special military expenses during the Second World War. This expenditure along with the overloading of the system during and after the war as well as the damaged caused by bombing, brought several problems to JNR management after the war. At that time, institutions such as Mitsubishi Research Institute proposed to sell off JNR to the public but not enough support was forthcoming. A self-supporting plan similar to one in the Soviet Union and, reflecting the views of JNR officials, called for the financial independence which had been undermined by the special military expense. The idea of the plan was already incorporated and assured in the revision of the Imperial Railway Accounting Act and was continued in the debate concerning the conversion of JNR into a public corporation. (It had an effect outside JNR and was adopted in the internal management of the automotive industry).

Changes to the railways after the war were required in conjunction with the need to reorganize the Ministry of Transport of which the Bureau of Railways was one of the branch offices. In 1948 General MacArthur proposed that the railways, along with the salt and tobacco businesses, be managed as a public corporation. The concept of the public corporation was introduced in the 1920s in the U.K., and the New Deal policy in the U.S.A. took up the idea. The independence movement in Germany after the First World War and Trusts in the Soviet Union also held similar ideas of organization, albeit under different names.[3]

The experience in other countries helped to shape the concept and form of the public corporation in Japan. Its aim was to improve the efficiency of management by giving the organisation autonomy and excluding any direct involvement by politicians and government. For example, allowing management to make decisions on wage and labour conditions without involving the government. Separating ownership and management as in private companies, was to be attempted in the public sector.

However, in reality the public corporation in Japan was introduced so as to preserve the Japanese bureaucracy that existed before the war. Government structures were maintained and little effort made to change the old bureaucracy. The Japanese public corporation that was created did not have all that much autonomy and this gave rise to a series of problems for JNR.

4.2 *From the Rincho Report to Supervisory Committee's 'Opinion'*

It was at the end of 1980 when the second Rincho (Special Government Inspection Committee) was organized. It was formed to reduce spending because the government's budget was in trouble. Its promoters included Treasury staff, the head of the Government Management Agency (Gyosei Kanri Cho) Nakasone and business representatives who feared an increase in corporate tax. Each of them had differing interests but after the attempt to introduce a general sales tax failed (under the Ohira Administration), government reform became the big political issue of the time.

It was obvious that merely to reduce spending could not balance the budget. Though the business slogan of 'saving the budget without tax increases' was a popular one, it was impossible to do so without some kind of new tax. To balance the budget, a cut had to be made in the appropriation amounts which had kept on rising since 1965. The increased public investment that was meant to offset the recession of 1965 led to the issue of bonds to cover the interest payments. Issuing bonds to finance public investment to create jobs in recession and to recall bonds when the economy picks up can be held to be a basic function of government finance. In reality, public investment and subsidies are difficult to control.

Subsidies to specific areas or industries led to the formation of voting groups to elect Diet (Congress) members who would protect these subsidies. Diet was criticized for becoming a platform for its members simply to further special interests. This problem of representative democracy is not peculiar to Japan.

Rincho – with its business representatives – could not abolish subsidies. Though its chairman was a respected and popular businessman, he did not do anything that would harm his business nor could he. On the other hand, the Prime Minister (and ruling party leader), had to do something to convince the public of his commitment to reform. It was against this background that the ailing finances of JNR moved into the political limelight.

The national budget deficit was attributed to the three K's: (Kokutetsu=JNR, Kenpo=Health Care System, Kome=Food Management Law). Of these, JNR was the most attractive on account of its size and the public sentiment hostile to it. The privatisation and break-up of JNR became the biggest topic of the Rincho report.

When the restructuring of three public corporations, JNR, NTT (Nippon Telegraph & Telephone) and Tobacco & Salt Corp., was proposed, NTT was the first to accept privatisation while avoiding being broken up. The Tobacco & Salt Corp. did not resist privatisation either. JNR, however, resisted privatisation – in part to protect the interests of some party members.

Nevertheless, the JNR Restructuring Supervisory Committee – which was in charge of carrying out the wishes of Rincho – was set up. The committee was totally independent of JNR and worked under the guidance of the Ministry of Transport. In July 1985, it submitted a recommendation on privatisation/break up (Opinion on the Restructuring of JNR) similar to that of Rincho. For its part, JNR published its own reorganization plan (Basic Policy for Management Restructuring) in January 1985.

The JNR plan accepted the privatisation proposals but rejected the breaking up of the organization. Prime Minister Nakasone fired the JNR chairman, Nisugi, reshuffled more than half of the top officials at JNR and put Sugiura, a bureaucrat of the Ministry of Transport, in as Chairman. This altered the balance of power between JNR and the Ministry of Transport, and privatisation/break up went ahead.

Even if all the deficit of the 'three K's' were to disappear, the government budget could still not be balanced. Eliminating the loss of JNR would not alone balance the budget. The appropriate way to balance the budget would have been to examine the

JNR (Special Corporation) →

- East Japan JR (Corporation)
- Tokai JR (Corporation)
- West Japan JR (Corporation)
- Hokkaido JR (Corporation)
- Shikoku JR (Corporation)
- Kyushu JR (Corporation)
- JR Freight (Corporation)
- Shinkansen Holding Corporation (Special Corporation)
- JNR Settlement Corporation (Special Corporation)
- Others (Foundation, etc.)

Chart 1: Break-up of JNR

subsidy system. Instead, JNR became the scapegoat. It was akin to corporations talking the blame for the oil crisis in the 1970s.

JNR was attacked more directly, and lax office procedures and bureaucratic management provided the media with plenty of material to criticize. The issue won the support of the public who were unhappy with the amateurish attitude towards customer services and the JNR's relatively expensive fares in comparison with private railways.

4.3 *Outline and Problems of Restructuring*

The break-up was meant to solve the problems arising from the nationally unified system which was incapable of properly managing such a scale of operation and which led to unsound arrangements between its subdivisions. Privatisation was meant to cope with the defects of the public corporation structure. Six companies were to be created, three from Honshu Island and other three from the remaining three islands, each company becoming a corporation in which all of its shares would initially be in the hands of the government. The initial plan described in the 'Opinion' is shown in Chart 1 and Figure 5.

Why did JNR have to be broken up? What about just giving autonomy to each of its divisions? Is breaking up to six parts the only way? Can the problem not be solved by correcting the deficiencies of the public corporation structure? The 'Opinion' answered all these questions but its answers were not convincing. Essentially, we were at the stage of having to do something in order to make a proper break-through.

Breaking up JNR does not, by itself, reduce the deficit. What is necessary to reduce the deficit is to increase competitiveness and

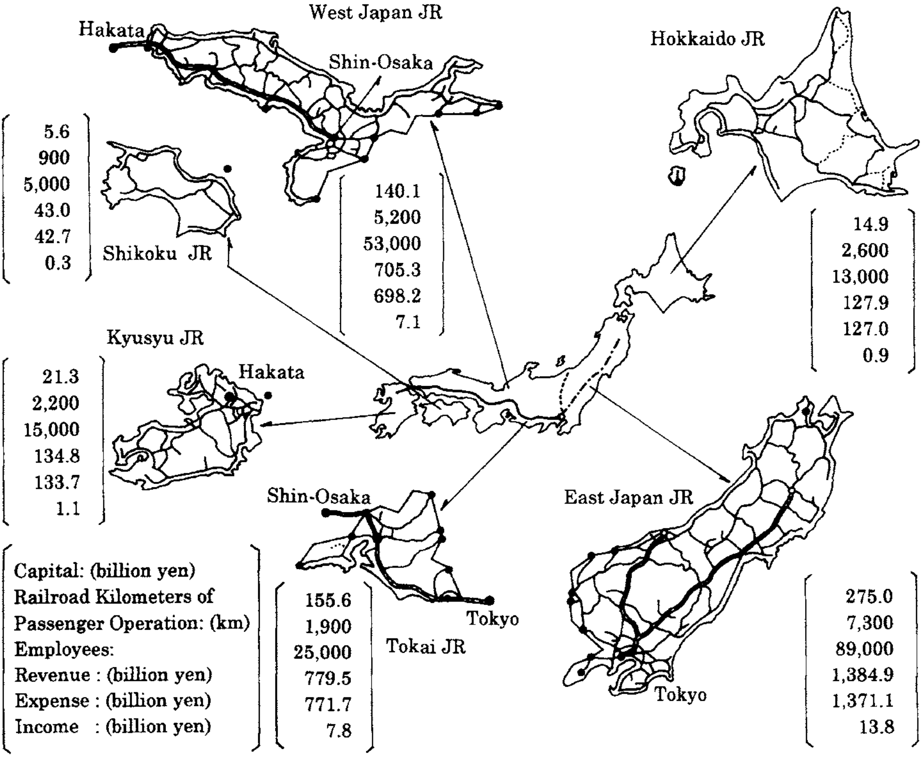

Figure 5: The Six JR's after the Break-up
(Source: Kato, J. (1985). Kokutetsu Saiken wa Kounarau, pp. 8–9)

to cut costs. That is what JNR in its current form was doing as shown in the improved finances of its main-line railways. Transport demand in this country differs from one region to another quite a lot. While the Tokai Corridor (Tokaido) is the busiest route, other markets have entirely different demands. For example, the Tokaido & Sanyo Shinkansen (bullet-train system) carried 35,200,000 passengers per kilometre in 1984 but Joetsu Shinkansen carried only about one-fifth of that number. Even within the same railways, Sanin-Honsen carried a mere fifteenth of Takasakisen's passengers. This difference is reflected in varying levels of profitability amongst the railways (Figure 6).

In breaking up JNR, the 'Opinion' tried to balance these descrepancies with two measures. One was to separate the parts in such a way as to maintain as much parity as possible in terms of profitability. Another was the profit adjustment measure which is

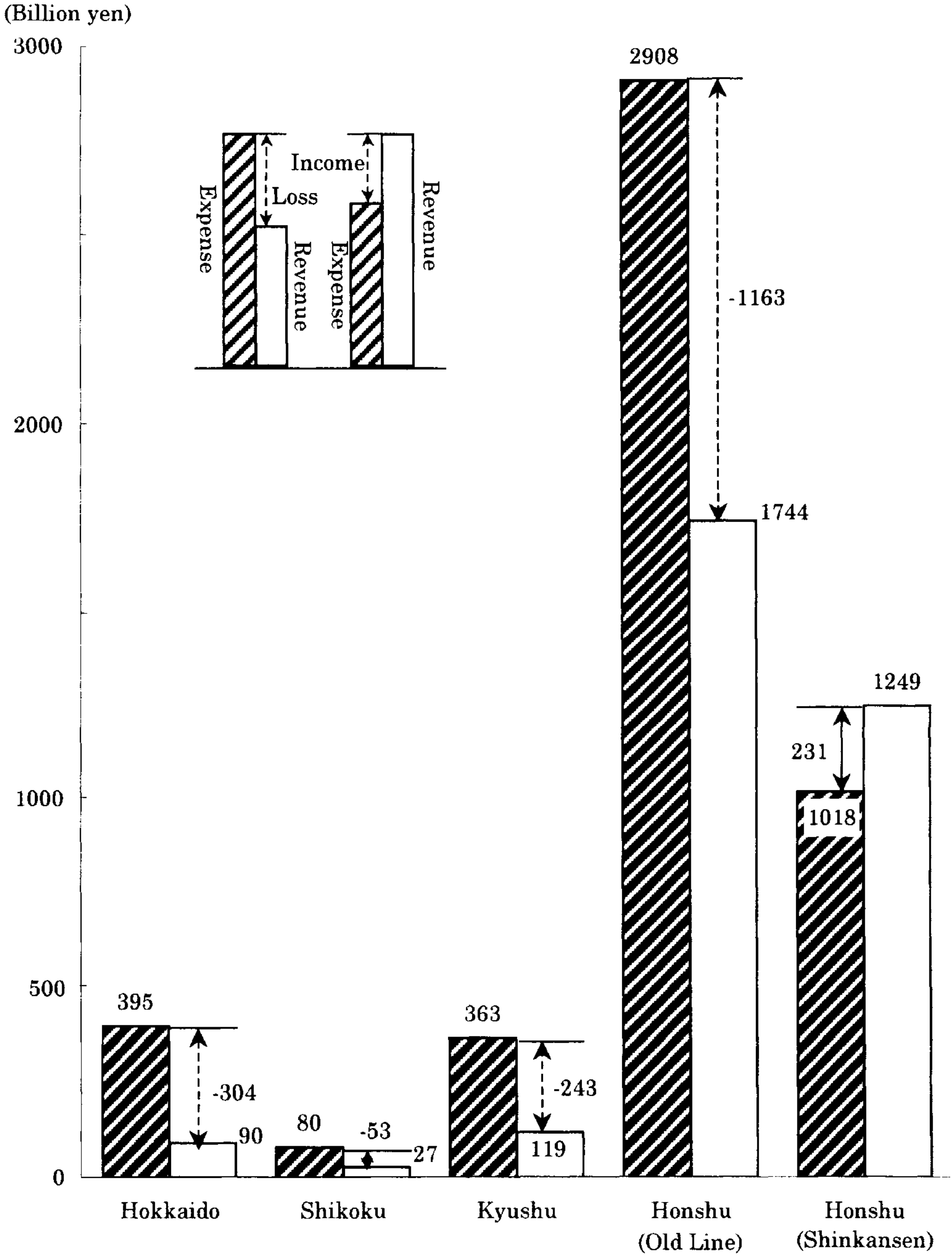

Figure 6: Operating Income by Region (Fiscal 1985)
(Source: Report of JNR Audit)

represented by the Shinkansen leasing system and the Three-Island Companies Fund (Management Stability Fund).

Shinkansen leasing means that the whole Shinkansen system is to be transferred to an independent special corporation from which all JR parts of JNR could lease and operate the system. The aim is to offset the losses of unprofitable parts such as Tohoku or Joetsu with the profitable Tokaido Shinkansen. Whether offsetting the regional discrepancies in this manner is a good measure or not remains to be seen: now that the construction of the Seibi Shinkansen (Planned Shinkansen) is getting the go-ahead, this internal subsidy may be a matter of controversy in the future.

The Three-Island Companies Fund was designed to help the railway operations of Hokkaido JR, Shikoku JR and Kyusyu JR – which have markets in which it is extremely difficult to make profits – with the fund's investment profits. The argument was that the fund would be more advantageous than a subsidy but it is really nothing more than consolation money. Even though the amount of the fund has been increased, it might not be enough. The Three-Island companies will have the fund but will assume no long-term liabilities.

Local railways will be maintained using the profits of main-line railways, some of them having already changed over to bus services. Local lines which escaped closure are also the subject of subsidies, but they should be better financed with other sources of income.

Another issue of JNR restructuring concerns surplus workers. The number of employees which once reached 420,000 is to fall to 270,000. Since the new JNR companies would accept only 215,000, 60,000 will be made redundant. It was assumed that 20,000 of them will retire and 40,000 will join the JNR Settlement Corporation (Kokutetsu Seisan Jigyodan) and wait for new jobs. The surplus work force is concentrated in rural areas where transport demand is weak. For example, one out of two JNR workers is said to be excess to requirements in Hokkaido, one of the regions with least job opportunities. Since the plans were drawn up, however, more workers than previously expected have retired and there are fewer workers out of a job, not that this makes it less painful for them.

4.4. *New Companies and Inter-city Transport*

It is obvious that railways have an advantage within major cities but are not suitable as a mass transit system in rural areas. The

	Passenger							Freight	Remarks
	Hokkai-do	East-Japan	Tokai	West-Japan	Shikoku	Kyushu	Total		
No. of Employees (×1000)	13.0	89.5	25.2	53.4	4.9	15.0	201.0	12.5	
Operating Kilometers (×1000)	2.5	7.5	2.0	5.1	0.8	2.1	20.0	9.9	
Volume (100 million passenger kilometers/million ton kilometers)	36	994	384	453	15	69	1,952	54	
Assets (billion yen)	293.2	3870.5	548.5	1312.2	114.4	349.1	6487.9	163.2	
Accepted Liability (billion yen)	-	3298.7	319.2	1015.9	-	-	4633.8	94.4	
Initial Fund (billion yen)	682.2	-	-	-	208.2	387.7	1278.1	-	
Capital (billion yen)	15.2	296.6	165.5	155.0	5.7	23.9	661.9	34.3	
Operating Revenues (billion yen)	86.1	1472.2	825.3	772.5	30.8	118.4	3305.3	171.5	
Operating Income (billion yen)	-49.5	248.4	26.4	80.5	-14.8	-27.0	264.0	8.2	Forecast for 1987
Net Income (billion yen)	0.9	14.8	8.3	7.8	0.3	1.2	33.3	1.7	

Chart 2: Outline of JNR Spin-offs (JR) (Part1)

question is whether they can succeed in the inter-city market where they compete with highways and air transport. Since 1970 with the construction of new highways and the improvements to local airports to accommodate jets, rivals to the railways are getting more and more competitive. Between Shinkansen and highways, the former (railway) still has a lead but between local railways and highways, the former is not competitive at all. The most critical area for the new railways management is where main-line railways are in competition with highway transport.

As highways can be built faster than new Shinkansen lines, the competition between main-line railways and highway transport will become much more widespread. While there is a speed limit on highways, the main-line railways can reach speeds of up to 160km/hour using the same track. Speed is one way to a better service and lower cost. On highways, scheduled bus services are being introduced, with low fares as a powerful attraction. With airlines, railways will have a more co-operative relationship.

Chart 2 relates to the new railway companies. Six JRs and the freight company are all special corporations. They will become